

# **APPENDIX A**

## **AIR QUALITY AND GHG MODELING RESULTS**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**Waterman Brinkman Project**  
**Sacramento Metropolitan AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	417.45	1000sqft	21.52	417,447.00	0
Parking Lot	572.00	Space	7.00	228,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	6			<b>Operational Year</b>	2023
<b>Utility Company</b>	Sacramento Municipal Utility District				
<b>CO2 Intensity (lb/MW hr)</b>	387.1	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 intensity factor adjusted per SMUD's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing based on applicant-provided AQ Questionnaire.

Grading -

Mobile Land Use Mitigation -

Energy Mitigation - Title 24 exceedance used to reflect compliance with the 2019 CBSC for non-residential buildings.

Water Mitigation - Water conservation strategy applied to reflect compliance with MWEL0 and CalGreen Code.

Operational Off-Road Equipment - Forklifts modeled per applicant-provided information.



## Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	280.00
tblConstructionPhase	NumDays	440.00	280.00
tblConstructionPhase	NumDays	45.00	20.00
tblConstructionPhase	NumDays	35.00	20.00
tblConstructionPhase	PhaseEndDate	7/17/2023	9/5/2022
tblConstructionPhase	PhaseEndDate	4/10/2023	8/22/2022
tblConstructionPhase	PhaseEndDate	8/2/2021	6/28/2021
tblConstructionPhase	PhaseEndDate	5/29/2023	7/26/2021
tblConstructionPhase	PhaseStartDate	5/30/2023	8/10/2021
tblConstructionPhase	PhaseStartDate	8/3/2021	7/27/2021
tblConstructionPhase	PhaseStartDate	4/11/2023	6/29/2021
tblLandUse	LotAcreage	9.58	21.52
tblLandUse	LotAcreage	5.15	7.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.1

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2021	8-31-2021	1.1964	1.1964
2	9-1-2021	11-30-2021	1.5677	1.5677
3	12-1-2021	2-28-2022	1.4924	1.4924
4	3-1-2022	5-31-2022	1.4883	1.4883
5	6-1-2022	8-31-2022	1.3919	1.3919
6	9-1-2022	9-30-2022	0.0285	0.0285
		Highest	1.5677	1.5677

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.8430	1.1000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0246	0.0246	6.0000e-005	0.0000	0.0262
Energy	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	260.9950	260.9950	0.0189	4.0800e-003	262.6833
Mobile	0.1975	0.8296	2.4570	8.3800e-003	0.7604	6.5000e-003	0.7669	0.2038	6.0600e-003	0.2099	0.0000	771.4079	771.4079	0.0341	0.0000	772.2598
Offroad	0.1066	0.9981	1.1906	1.5900e-003		0.0617	0.0617		0.0567	0.0567	0.0000	139.6630	139.6630	0.0452	0.0000	140.7922
Waste						0.0000	0.0000		0.0000	0.0000	79.6537	0.0000	79.6537	4.7074	0.0000	197.3386
Water						0.0000	0.0000		0.0000	0.0000	34.1543	84.4561	118.6105	0.1239	0.0756	144.2315
<b>Total</b>	<b>2.1482</b>	<b>1.8378</b>	<b>3.6687</b>	<b>0.0100</b>	<b>0.7604</b>	<b>0.0690</b>	<b>0.8294</b>	<b>0.2038</b>	<b>0.0636</b>	<b>0.2674</b>	<b>113.8080</b>	<b>1,256.5465</b>	<b>1,370.3545</b>	<b>4.9295</b>	<b>0.0797</b>	<b>1,517.3315</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.8430	1.1000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0246	0.0246	6.0000e-005	0.0000	0.0262
Energy	7.7000e-004	7.0200e-003	5.9000e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	252.0031	252.0031	0.0185	3.9300e-003	253.6349
Mobile	0.1923	0.7977	2.3233	7.8300e-003	0.7079	6.1000e-003	0.7140	0.1898	5.6900e-003	0.1955	0.0000	721.0937	721.0937	0.0322	0.0000	721.8978
Offroad	0.1066	0.9981	1.1906	1.5900e-003		0.0617	0.0617		0.0567	0.0567	0.0000	139.6630	139.6630	0.0452	0.0000	140.7922
Waste						0.0000	0.0000		0.0000	0.0000	79.6537	0.0000	79.6537	4.7074	0.0000	197.3386
Water						0.0000	0.0000		0.0000	0.0000	27.3235	67.5649	94.8884	0.0991	0.0605	115.3852
<b>Total</b>	<b>2.1427</b>	<b>1.8029</b>	<b>3.5324</b>	<b>9.4600e-003</b>	<b>0.7079</b>	<b>0.0684</b>	<b>0.7763</b>	<b>0.1898</b>	<b>0.0630</b>	<b>0.2528</b>	<b>106.9771</b>	<b>1,180.3492</b>	<b>1,287.3263</b>	<b>4.9024</b>	<b>0.0644</b>	<b>1,429.0747</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.26</b>	<b>1.90</b>	<b>3.71</b>	<b>5.68</b>	<b>6.90</b>	<b>0.91</b>	<b>6.40</b>	<b>6.90</b>	<b>0.94</b>	<b>5.48</b>	<b>6.00</b>	<b>6.06</b>	<b>6.06</b>	<b>0.55</b>	<b>19.16</b>	<b>5.82</b>

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2021	6/28/2021	5	20	
2	Building Construction	Building Construction	7/27/2021	8/22/2022	5	280	
3	Paving	Paving	6/29/2021	7/26/2021	5	20	
4	Architectural Coating	Architectural Coating	8/10/2021	9/5/2022	5	280	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 50**

**Acres of Paving: 7**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,171; Non-Residential Outdoor: 208,724; Striped Parking Area: 13,728 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	271.00	106.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	54.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

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**3.2 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0867	0.0000	0.0867	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.4640	0.3088	6.2000e-004		0.0199	0.0199		0.0183	0.0183	0.0000	54.4950	54.4950	0.0176	0.0000	54.9356
<b>Total</b>	<b>0.0419</b>	<b>0.4640</b>	<b>0.3088</b>	<b>6.2000e-004</b>	<b>0.0867</b>	<b>0.0199</b>	<b>0.1066</b>	<b>0.0360</b>	<b>0.0183</b>	<b>0.0542</b>	<b>0.0000</b>	<b>54.4950</b>	<b>54.4950</b>	<b>0.0176</b>	<b>0.0000</b>	<b>54.9356</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.5000e-004	5.0600e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2572	1.2572	3.0000e-005	0.0000	1.2580
<b>Total</b>	<b>6.9000e-004</b>	<b>4.5000e-004</b>	<b>5.0600e-003</b>	<b>1.0000e-005</b>	<b>1.4700e-003</b>	<b>1.0000e-005</b>	<b>1.4800e-003</b>	<b>3.9000e-004</b>	<b>1.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>1.2572</b>	<b>1.2572</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.2580</b>

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**3.2 Grading - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0867	0.0000	0.0867	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.4640	0.3088	6.2000e-004		0.0199	0.0199		0.0183	0.0183	0.0000	54.4949	54.4949	0.0176	0.0000	54.9355
<b>Total</b>	<b>0.0419</b>	<b>0.4640</b>	<b>0.3088</b>	<b>6.2000e-004</b>	<b>0.0867</b>	<b>0.0199</b>	<b>0.1066</b>	<b>0.0360</b>	<b>0.0183</b>	<b>0.0542</b>	<b>0.0000</b>	<b>54.4949</b>	<b>54.4949</b>	<b>0.0176</b>	<b>0.0000</b>	<b>54.9355</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.5000e-004	5.0600e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2572	1.2572	3.0000e-005	0.0000	1.2580
<b>Total</b>	<b>6.9000e-004</b>	<b>4.5000e-004</b>	<b>5.0600e-003</b>	<b>1.0000e-005</b>	<b>1.4700e-003</b>	<b>1.0000e-005</b>	<b>1.4800e-003</b>	<b>3.9000e-004</b>	<b>1.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>1.2572</b>	<b>1.2572</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.2580</b>



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**3.3 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1084	0.9936	0.9448	1.5300e-003		0.0546	0.0546		0.0514	0.0514	0.0000	132.0333	132.0333	0.0319	0.0000	132.8296
<b>Total</b>	<b>0.1084</b>	<b>0.9936</b>	<b>0.9448</b>	<b>1.5300e-003</b>		<b>0.0546</b>	<b>0.0546</b>		<b>0.0514</b>	<b>0.0514</b>	<b>0.0000</b>	<b>132.0333</b>	<b>132.0333</b>	<b>0.0319</b>	<b>0.0000</b>	<b>132.8296</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0190	0.6181	0.1652	1.4800e-003	0.0353	1.7100e-003	0.0370	0.0102	1.6300e-003	0.0118	0.0000	141.7723	141.7723	8.1100e-003	0.0000	141.9749
Worker	0.0535	0.0350	0.3910	1.0700e-003	0.1135	7.9000e-004	0.1142	0.0302	7.3000e-004	0.0309	0.0000	97.0966	97.0966	2.5500e-003	0.0000	97.1603
<b>Total</b>	<b>0.0725</b>	<b>0.6530</b>	<b>0.5562</b>	<b>2.5500e-003</b>	<b>0.1488</b>	<b>2.5000e-003</b>	<b>0.1513</b>	<b>0.0404</b>	<b>2.3600e-003</b>	<b>0.0427</b>	<b>0.0000</b>	<b>238.8689</b>	<b>238.8689</b>	<b>0.0107</b>	<b>0.0000</b>	<b>239.1352</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.3 Building Construction - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1084	0.9936	0.9448	1.5300e-003		0.0546	0.0546		0.0514	0.0514	0.0000	132.0331	132.0331	0.0319	0.0000	132.8294
<b>Total</b>	<b>0.1084</b>	<b>0.9936</b>	<b>0.9448</b>	<b>1.5300e-003</b>		<b>0.0546</b>	<b>0.0546</b>		<b>0.0514</b>	<b>0.0514</b>	<b>0.0000</b>	<b>132.0331</b>	<b>132.0331</b>	<b>0.0319</b>	<b>0.0000</b>	<b>132.8294</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0190	0.6181	0.1652	1.4800e-003	0.0353	1.7100e-003	0.0370	0.0102	1.6300e-003	0.0118	0.0000	141.7723	141.7723	8.1100e-003	0.0000	141.9749
Worker	0.0535	0.0350	0.3910	1.0700e-003	0.1135	7.9000e-004	0.1142	0.0302	7.3000e-004	0.0309	0.0000	97.0966	97.0966	2.5500e-003	0.0000	97.1603
<b>Total</b>	<b>0.0725</b>	<b>0.6530</b>	<b>0.5562</b>	<b>2.5500e-003</b>	<b>0.1488</b>	<b>2.5000e-003</b>	<b>0.1513</b>	<b>0.0404</b>	<b>2.3600e-003</b>	<b>0.0427</b>	<b>0.0000</b>	<b>238.8689</b>	<b>238.8689</b>	<b>0.0107</b>	<b>0.0000</b>	<b>239.1352</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1416	1.2961	1.3582	2.2400e-003		0.0672	0.0672		0.0632	0.0632	0.0000	192.3320	192.3320	0.0461	0.0000	193.4839
<b>Total</b>	<b>0.1416</b>	<b>1.2961</b>	<b>1.3582</b>	<b>2.2400e-003</b>		<b>0.0672</b>	<b>0.0672</b>		<b>0.0632</b>	<b>0.0632</b>	<b>0.0000</b>	<b>192.3320</b>	<b>192.3320</b>	<b>0.0461</b>	<b>0.0000</b>	<b>193.4839</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0257	0.8546	0.2218	2.1300e-003	0.0514	2.1800e-003	0.0536	0.0149	2.0900e-003	0.0170	0.0000	204.6257	204.6257	0.0115	0.0000	204.9124
Worker	0.0728	0.0458	0.5231	1.5100e-003	0.1652	1.1200e-003	0.1663	0.0439	1.0400e-003	0.0450	0.0000	136.3220	136.3220	3.3400e-003	0.0000	136.4054
<b>Total</b>	<b>0.0985</b>	<b>0.9003</b>	<b>0.7449</b>	<b>3.6400e-003</b>	<b>0.2166</b>	<b>3.3000e-003</b>	<b>0.2199</b>	<b>0.0588</b>	<b>3.1300e-003</b>	<b>0.0619</b>	<b>0.0000</b>	<b>340.9477</b>	<b>340.9477</b>	<b>0.0148</b>	<b>0.0000</b>	<b>341.3178</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1416	1.2961	1.3582	2.2400e-003		0.0672	0.0672		0.0632	0.0632	0.0000	192.3317	192.3317	0.0461	0.0000	193.4837
<b>Total</b>	<b>0.1416</b>	<b>1.2961</b>	<b>1.3582</b>	<b>2.2400e-003</b>		<b>0.0672</b>	<b>0.0672</b>		<b>0.0632</b>	<b>0.0632</b>	<b>0.0000</b>	<b>192.3317</b>	<b>192.3317</b>	<b>0.0461</b>	<b>0.0000</b>	<b>193.4837</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0257	0.8546	0.2218	2.1300e-003	0.0514	2.1800e-003	0.0536	0.0149	2.0900e-003	0.0170	0.0000	204.6257	204.6257	0.0115	0.0000	204.9124
Worker	0.0728	0.0458	0.5231	1.5100e-003	0.1652	1.1200e-003	0.1663	0.0439	1.0400e-003	0.0450	0.0000	136.3220	136.3220	3.3400e-003	0.0000	136.4054
<b>Total</b>	<b>0.0985</b>	<b>0.9003</b>	<b>0.7449</b>	<b>3.6400e-003</b>	<b>0.2166</b>	<b>3.3000e-003</b>	<b>0.2199</b>	<b>0.0588</b>	<b>3.1300e-003</b>	<b>0.0619</b>	<b>0.0000</b>	<b>340.9477</b>	<b>340.9477</b>	<b>0.0148</b>	<b>0.0000</b>	<b>341.3178</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.4 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	9.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0217</b>	<b>0.1292</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>6.7800e-003</b>	<b>6.7800e-003</b>		<b>6.2400e-003</b>	<b>6.2400e-003</b>	<b>0.0000</b>	<b>20.0235</b>	<b>20.0235</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1854</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	3.8000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9429	0.9429	2.0000e-005	0.0000	0.9435
<b>Total</b>	<b>5.2000e-004</b>	<b>3.4000e-004</b>	<b>3.8000e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>0.9429</b>	<b>0.9429</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9435</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.4 Paving - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	9.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0217</b>	<b>0.1292</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>6.7800e-003</b>	<b>6.7800e-003</b>		<b>6.2400e-003</b>	<b>6.2400e-003</b>	<b>0.0000</b>	<b>20.0235</b>	<b>20.0235</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1854</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	3.8000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9429	0.9429	2.0000e-005	0.0000	0.9435
<b>Total</b>	<b>5.2000e-004</b>	<b>3.4000e-004</b>	<b>3.8000e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>0.9429</b>	<b>0.9429</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9435</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0794	0.0945	1.5000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	13.2769	13.2769	9.1000e-004	0.0000	13.2997
<b>Total</b>	<b>0.7419</b>	<b>0.0794</b>	<b>0.0945</b>	<b>1.5000e-004</b>		<b>4.8900e-003</b>	<b>4.8900e-003</b>		<b>4.8900e-003</b>	<b>4.8900e-003</b>	<b>0.0000</b>	<b>13.2769</b>	<b>13.2769</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>13.2997</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7200e-003	6.3500e-003	0.0711	2.0000e-004	0.0206	1.4000e-004	0.0208	5.4900e-003	1.3000e-004	5.6200e-003	0.0000	17.6505	17.6505	4.6000e-004	0.0000	17.6621
<b>Total</b>	<b>9.7200e-003</b>	<b>6.3500e-003</b>	<b>0.0711</b>	<b>2.0000e-004</b>	<b>0.0206</b>	<b>1.4000e-004</b>	<b>0.0208</b>	<b>5.4900e-003</b>	<b>1.3000e-004</b>	<b>5.6200e-003</b>	<b>0.0000</b>	<b>17.6505</b>	<b>17.6505</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>17.6621</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.5 Architectural Coating - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7305					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0794	0.0945	1.5000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	13.2769	13.2769	9.1000e-004	0.0000	13.2997
<b>Total</b>	<b>0.7419</b>	<b>0.0794</b>	<b>0.0945</b>	<b>1.5000e-004</b>		<b>4.8900e-003</b>	<b>4.8900e-003</b>		<b>4.8900e-003</b>	<b>4.8900e-003</b>	<b>0.0000</b>	<b>13.2769</b>	<b>13.2769</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>13.2997</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7200e-003	6.3500e-003	0.0711	2.0000e-004	0.0206	1.4000e-004	0.0208	5.4900e-003	1.3000e-004	5.6200e-003	0.0000	17.6505	17.6505	4.6000e-004	0.0000	17.6621
<b>Total</b>	<b>9.7200e-003</b>	<b>6.3500e-003</b>	<b>0.0711</b>	<b>2.0000e-004</b>	<b>0.0206</b>	<b>1.4000e-004</b>	<b>0.0208</b>	<b>5.4900e-003</b>	<b>1.3000e-004</b>	<b>5.6200e-003</b>	<b>0.0000</b>	<b>17.6505</b>	<b>17.6505</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>17.6621</b>



Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.5 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0180	0.1240	0.1596	2.6000e-004		7.1900e-003	7.1900e-003		7.1900e-003	7.1900e-003	0.0000	22.4686	22.4686	1.4600e-003	0.0000	22.5052
<b>Total</b>	<b>1.2542</b>	<b>0.1240</b>	<b>0.1596</b>	<b>2.6000e-004</b>		<b>7.1900e-003</b>	<b>7.1900e-003</b>		<b>7.1900e-003</b>	<b>7.1900e-003</b>	<b>0.0000</b>	<b>22.4686</b>	<b>22.4686</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>22.5052</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6700e-003	0.1105	3.2000e-004	0.0349	2.4000e-004	0.0351	9.2800e-003	2.2000e-004	9.5000e-003	0.0000	28.8002	28.8002	7.0000e-004	0.0000	28.8178
<b>Total</b>	<b>0.0154</b>	<b>9.6700e-003</b>	<b>0.1105</b>	<b>3.2000e-004</b>	<b>0.0349</b>	<b>2.4000e-004</b>	<b>0.0351</b>	<b>9.2800e-003</b>	<b>2.2000e-004</b>	<b>9.5000e-003</b>	<b>0.0000</b>	<b>28.8002</b>	<b>28.8002</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>28.8178</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**3.5 Architectural Coating - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2362					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0180	0.1240	0.1596	2.6000e-004		7.1900e-003	7.1900e-003		7.1900e-003	7.1900e-003	0.0000	22.4686	22.4686	1.4600e-003	0.0000	22.5052
<b>Total</b>	<b>1.2542</b>	<b>0.1240</b>	<b>0.1596</b>	<b>2.6000e-004</b>		<b>7.1900e-003</b>	<b>7.1900e-003</b>		<b>7.1900e-003</b>	<b>7.1900e-003</b>	<b>0.0000</b>	<b>22.4686</b>	<b>22.4686</b>	<b>1.4600e-003</b>	<b>0.0000</b>	<b>22.5052</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.6700e-003	0.1105	3.2000e-004	0.0349	2.4000e-004	0.0351	9.2800e-003	2.2000e-004	9.5000e-003	0.0000	28.8002	28.8002	7.0000e-004	0.0000	28.8178
<b>Total</b>	<b>0.0154</b>	<b>9.6700e-003</b>	<b>0.1105</b>	<b>3.2000e-004</b>	<b>0.0349</b>	<b>2.4000e-004</b>	<b>0.0351</b>	<b>9.2800e-003</b>	<b>2.2000e-004</b>	<b>9.5000e-003</b>	<b>0.0000</b>	<b>28.8002</b>	<b>28.8002</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>28.8178</b>

**4.0 Operational Detail - Mobile**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1923	0.7977	2.3233	7.8300e-003	0.7079	6.1000e-003	0.7140	0.1898	5.6900e-003	0.1955	0.0000	721.0937	721.0937	0.0322	0.0000	721.8978
Unmitigated	0.1975	0.8296	2.4570	8.3800e-003	0.7604	6.5000e-003	0.7669	0.2038	6.0600e-003	0.2099	0.0000	771.4079	771.4079	0.0341	0.0000	772.2598

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	701.31	701.31	701.31	2,039,630	1,898,895
<b>Total</b>	<b>701.31</b>	<b>701.31</b>	<b>701.31</b>	<b>2,039,630</b>	<b>1,898,895</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	10.00	5.00	6.50	59.00	0.00	41.00	92	5	3

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Unrefrigerated Warehouse-No Rail	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	244.3622	244.3622	0.0183	3.7900e-003	245.9486
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	250.0794	250.0794	0.0187	3.8800e-003	251.7029
NaturalGas Mitigated	7.7000e-004	7.0200e-003	5.9000e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6409	7.6409	1.5000e-004	1.4000e-004	7.6863
NaturalGas Unmitigated	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.9155	10.9155	2.1000e-004	2.0000e-004	10.9804

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	204549	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.9155	10.9155	2.1000e-004	2.0000e-004	10.9804
<b>Total</b>		<b>1.1000e-003</b>	<b>0.0100</b>	<b>8.4200e-003</b>	<b>6.0000e-005</b>		<b>7.6000e-004</b>	<b>7.6000e-004</b>		<b>7.6000e-004</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>10.9155</b>	<b>10.9155</b>	<b>2.1000e-004</b>	<b>2.0000e-004</b>	<b>10.9804</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	143184	7.7000e-004	7.0200e-003	5.9000e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6409	7.6409	1.5000e-004	1.4000e-004	7.6863
<b>Total</b>		<b>7.7000e-004</b>	<b>7.0200e-003</b>	<b>5.9000e-003</b>	<b>4.0000e-005</b>		<b>5.3000e-004</b>	<b>5.3000e-004</b>		<b>5.3000e-004</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>7.6409</b>	<b>7.6409</b>	<b>1.5000e-004</b>	<b>1.4000e-004</b>	<b>7.6863</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	80080	14.0609	1.0500e-003	2.2000e-004	14.1522
Unrefrigerated Warehouse-No Rail	1.34418e+006	236.0185	0.0177	3.6600e-003	237.5507
<b>Total</b>		<b>250.0794</b>	<b>0.0187</b>	<b>3.8800e-003</b>	<b>251.7029</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	80080	14.0609	1.0500e-003	2.2000e-004	14.1522
Unrefrigerated Warehouse-No Rail	1.31162e+006	230.3013	0.0173	3.5700e-003	231.7964
<b>Total</b>		<b>244.3622</b>	<b>0.0183</b>	<b>3.7900e-003</b>	<b>245.9486</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.8430	1.1000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0246	0.0246	6.0000e-005	0.0000	0.0262
Unmitigated	1.8430	1.1000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0246	0.0246	6.0000e-005	0.0000	0.0262

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1700e-003	1.1000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0246	0.0246	6.0000e-005	0.0000	0.0262
<b>Total</b>	<b>1.8430</b>	<b>1.1000e-004</b>	<b>0.0126</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0246</b>	<b>0.0246</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0262</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6451					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1700e-003	1.1000e-004	0.0126	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0246	0.0246	6.0000e-005	0.0000	0.0262
<b>Total</b>	<b>1.8430</b>	<b>1.1000e-004</b>	<b>0.0126</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0246</b>	<b>0.0246</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0262</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy



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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	94.8884	0.0991	0.0605	115.3852
Unmitigated	118.6105	0.1239	0.0756	144.2315

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	96.5353 / 0	118.6105	0.1239	0.0756	144.2315
<b>Total</b>		<b>118.6105</b>	<b>0.1239</b>	<b>0.0756</b>	<b>144.2315</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	77.2283 / 0	94.8884	0.0991	0.0605	115.3852
<b>Total</b>		<b>94.8884</b>	<b>0.0991</b>	<b>0.0605</b>	<b>115.3852</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	79.6537	4.7074	0.0000	197.3386
Unmitigated	79.6537	4.7074	0.0000	197.3386

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	392.4	79.6537	4.7074	0.0000	197.3386
<b>Total</b>		<b>79.6537</b>	<b>4.7074</b>	<b>0.0000</b>	<b>197.3386</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	392.4	79.6537	4.7074	0.0000	197.3386
<b>Total</b>		<b>79.6537</b>	<b>4.7074</b>	<b>0.0000</b>	<b>197.3386</b>

**9.0 Operational Offroad**

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Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Annual

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	8	8.00	260	89	0.20	Diesel

**UnMitigated/Mitigated**

Equipment Type	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Forklifts	0.1066	0.9981	1.1906	1.5900e-003		0.0617	0.0617		0.0567	0.0567	0.0000	139.6630	139.6630	0.0452	0.0000	140.7922
<b>Total</b>	<b>0.1066</b>	<b>0.9981</b>	<b>1.1906</b>	<b>1.5900e-003</b>		<b>0.0617</b>	<b>0.0617</b>		<b>0.0567</b>	<b>0.0567</b>	<b>0.0000</b>	<b>139.6630</b>	<b>139.6630</b>	<b>0.0452</b>	<b>0.0000</b>	<b>140.7922</b>

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**Waterman Brinkman Project**  
**Sacramento Metropolitan AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	417.45	1000sqft	21.52	417,447.00	0
Parking Lot	572.00	Space	7.00	228,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	6			<b>Operational Year</b>	2023
<b>Utility Company</b>	Sacramento Municipal Utility District				
<b>CO2 Intensity (lb/MW hr)</b>	387.1	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - CO2 intensity factor adjusted per SMUD's RPS projections.
- Land Use - Lot acreage adjusted per site plan.
- Construction Phase - Construction phase timing based on applicant-provided AQ Questionnaire.
- Grading -
- Mobile Land Use Mitigation -
- Energy Mitigation - Title 24 exceedance used to reflect compliance with the 2019 CBSC for non-residential buildings.
- Water Mitigation - Water conservation strategy applied to reflect compliance with MWEL0 and CalGreen Code.
- Operational Off-Road Equipment - Forklifts modeled per applicant-provided information.

## Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	280.00
tblConstructionPhase	NumDays	440.00	280.00
tblConstructionPhase	NumDays	45.00	20.00
tblConstructionPhase	NumDays	35.00	20.00
tblConstructionPhase	PhaseEndDate	7/17/2023	9/5/2022
tblConstructionPhase	PhaseEndDate	4/10/2023	8/22/2022
tblConstructionPhase	PhaseEndDate	8/2/2021	6/28/2021
tblConstructionPhase	PhaseEndDate	5/29/2023	7/26/2021
tblConstructionPhase	PhaseStartDate	5/30/2023	8/10/2021
tblConstructionPhase	PhaseStartDate	8/3/2021	7/27/2021
tblConstructionPhase	PhaseStartDate	4/11/2023	6/29/2021
tblLandUse	LotAcreage	9.58	21.52
tblLandUse	LotAcreage	5.15	7.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.1

## 2.0 Emissions Summary

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Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
Energy	6.0400e-003	0.0549	0.0462	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003		65.9304	65.9304	1.2600e-003	1.2100e-003	66.3222
Mobile	1.3650	4.3729	15.3431	0.0499	4.3251	0.0356	4.3607	1.1560	0.0332	1.1892		5,052.3177	5,052.3177	0.2127		5,057.6340
Offroad	0.8203	7.6774	9.1583	0.0122		0.4744	0.4744		0.4365	0.4365		1,184.2466	1,184.2466	0.3830		1,193.8219
<b>Total</b>	<b>12.2928</b>	<b>12.1062</b>	<b>24.6486</b>	<b>0.0624</b>	<b>4.3251</b>	<b>0.5146</b>	<b>4.8397</b>	<b>1.1560</b>	<b>0.4742</b>	<b>1.6302</b>		<b>6,302.7113</b>	<b>6,302.7113</b>	<b>0.5975</b>	<b>1.2100e-003</b>	<b>6,318.0088</b>



Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
Energy	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003		46.1513	46.1513	8.8000e-004	8.5000e-004	46.4255
Mobile	1.3351	4.2114	14.4486	0.0466	4.0267	0.0334	4.0601	1.0762	0.0312	1.1074		4,722.0062	4,722.0062	0.2004		4,727.0156
Offroad	0.8203	7.6774	9.1583	0.0122		0.4744	0.4744		0.4365	0.4365		1,184.2466	1,184.2466	0.3830		1,193.8219
<b>Total</b>	<b>12.2610</b>	<b>11.9282</b>	<b>23.7402</b>	<b>0.0591</b>	<b>4.0267</b>	<b>0.5111</b>	<b>4.5378</b>	<b>1.0762</b>	<b>0.4709</b>	<b>1.5472</b>		<b>5,952.6206</b>	<b>5,952.6206</b>	<b>0.5848</b>	<b>8.5000e-004</b>	<b>5,967.4938</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.26</b>	<b>1.47</b>	<b>3.69</b>	<b>5.38</b>	<b>6.90</b>	<b>0.67</b>	<b>6.24</b>	<b>6.90</b>	<b>0.69</b>	<b>5.09</b>	<b>0.00</b>	<b>5.55</b>	<b>5.55</b>	<b>2.12</b>	<b>29.75</b>	<b>5.55</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2021	6/28/2021	5	20	
2	Building Construction	Building Construction	7/27/2021	8/22/2022	5	280	
3	Paving	Paving	6/29/2021	7/26/2021	5	20	
4	Architectural Coating	Architectural Coating	8/10/2021	9/5/2022	5	280	

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 50**

**Acres of Paving: 7**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,171; Non-Residential Outdoor: 208,724; Striped Parking Area: 13,728 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	271.00	106.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	54.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.2 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0410	0.5983	1.5400e-003	0.1521	1.0300e-003	0.1532	0.0404	9.5000e-004	0.0413		153.2958	153.2958	4.0800e-003		153.3978
<b>Total</b>	<b>0.0802</b>	<b>0.0410</b>	<b>0.5983</b>	<b>1.5400e-003</b>	<b>0.1521</b>	<b>1.0300e-003</b>	<b>0.1532</b>	<b>0.0404</b>	<b>9.5000e-004</b>	<b>0.0413</b>		<b>153.2958</b>	<b>153.2958</b>	<b>4.0800e-003</b>		<b>153.3978</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.2 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0802	0.0410	0.5983	1.5400e-003	0.1521	1.0300e-003	0.1532	0.0404	9.5000e-004	0.0413		153.2958	153.2958	4.0800e-003		153.3978
<b>Total</b>	<b>0.0802</b>	<b>0.0410</b>	<b>0.5983</b>	<b>1.5400e-003</b>	<b>0.1521</b>	<b>1.0300e-003</b>	<b>0.1532</b>	<b>0.0404</b>	<b>9.5000e-004</b>	<b>0.0413</b>		<b>153.2958</b>	<b>153.2958</b>	<b>4.0800e-003</b>		<b>153.3978</b>

**3.3 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.3 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3276	10.6467	2.7186	0.0262	0.6378	0.0292	0.6670	0.1835	0.0279	0.2115		2,771.6658	2,771.6658	0.1515		2,775.4529
Worker	1.0862	0.5560	8.1071	0.0209	2.0615	0.0139	2.0754	0.5468	0.0128	0.5597		2,077.1582	2,077.1582	0.0553		2,078.5400
<b>Total</b>	<b>1.4137</b>	<b>11.2027</b>	<b>10.8257</b>	<b>0.0470</b>	<b>2.6993</b>	<b>0.0431</b>	<b>2.7424</b>	<b>0.7304</b>	<b>0.0408</b>	<b>0.7711</b>		<b>4,848.8240</b>	<b>4,848.8240</b>	<b>0.2068</b>		<b>4,853.9929</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.3 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3276	10.6467	2.7186	0.0262	0.6378	0.0292	0.6670	0.1835	0.0279	0.2115		2,771.6658	2,771.6658	0.1515		2,775.4529
Worker	1.0862	0.5560	8.1071	0.0209	2.0615	0.0139	2.0754	0.5468	0.0128	0.5597		2,077.1582	2,077.1582	0.0553		2,078.5400
<b>Total</b>	<b>1.4137</b>	<b>11.2027</b>	<b>10.8257</b>	<b>0.0470</b>	<b>2.6993</b>	<b>0.0431</b>	<b>2.7424</b>	<b>0.7304</b>	<b>0.0408</b>	<b>0.7711</b>		<b>4,848.8240</b>	<b>4,848.8240</b>	<b>0.2068</b>		<b>4,853.9929</b>

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.3 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3039	10.1220	2.5049	0.0259	0.6378	0.0256	0.6633	0.1835	0.0245	0.2080		2,747.488 3	2,747.488 3	0.1471		2,751.166 1
Worker	1.0138	0.5001	7.4660	0.0201	2.0615	0.0136	2.0751	0.5468	0.0125	0.5593		2,002.666 3	2,002.666 3	0.0497		2,003.908 3
<b>Total</b>	<b>1.3178</b>	<b>10.6220</b>	<b>9.9709</b>	<b>0.0460</b>	<b>2.6993</b>	<b>0.0391</b>	<b>2.7384</b>	<b>0.7303</b>	<b>0.0370</b>	<b>0.7673</b>		<b>4,750.154 6</b>	<b>4,750.154 6</b>	<b>0.1968</b>		<b>4,755.074 5</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>



Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.3 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3039	10.1220	2.5049	0.0259	0.6378	0.0256	0.6633	0.1835	0.0245	0.2080		2,747.4883	2,747.4883	0.1471		2,751.1661
Worker	1.0138	0.5001	7.4660	0.0201	2.0615	0.0136	2.0751	0.5468	0.0125	0.5593		2,002.6663	2,002.6663	0.0497		2,003.9083
<b>Total</b>	<b>1.3178</b>	<b>10.6220</b>	<b>9.9709</b>	<b>0.0460</b>	<b>2.6993</b>	<b>0.0391</b>	<b>2.7384</b>	<b>0.7303</b>	<b>0.0370</b>	<b>0.7673</b>		<b>4,750.1546</b>	<b>4,750.1546</b>	<b>0.1968</b>		<b>4,755.0745</b>

**3.4 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.9170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.1726</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>		<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.4 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0308	0.4487	1.1500e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		114.9719	114.9719	3.0600e-003		115.0483
<b>Total</b>	<b>0.0601</b>	<b>0.0308</b>	<b>0.4487</b>	<b>1.1500e-003</b>	<b>0.1141</b>	<b>7.7000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>7.1000e-004</b>	<b>0.0310</b>		<b>114.9719</b>	<b>114.9719</b>	<b>3.0600e-003</b>		<b>115.0483</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.9170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.1726</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>	<b>0.0000</b>	<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.4 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0308	0.4487	1.1500e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		114.9719	114.9719	3.0600e-003		115.0483
<b>Total</b>	<b>0.0601</b>	<b>0.0308</b>	<b>0.4487</b>	<b>1.1500e-003</b>	<b>0.1141</b>	<b>7.7000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>7.1000e-004</b>	<b>0.0310</b>		<b>114.9719</b>	<b>114.9719</b>	<b>3.0600e-003</b>		<b>115.0483</b>

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>14.2666</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.5 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2164	0.1108	1.6154	4.1600e-003	0.4108	2.7700e-003	0.4136	0.1090	2.5600e-003	0.1115		413.8987	413.8987	0.0110		414.1740
<b>Total</b>	<b>0.2164</b>	<b>0.1108</b>	<b>1.6154</b>	<b>4.1600e-003</b>	<b>0.4108</b>	<b>2.7700e-003</b>	<b>0.4136</b>	<b>0.1090</b>	<b>2.5600e-003</b>	<b>0.1115</b>		<b>413.8987</b>	<b>413.8987</b>	<b>0.0110</b>		<b>414.1740</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>14.2666</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.5 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2164	0.1108	1.6154	4.1600e-003	0.4108	2.7700e-003	0.4136	0.1090	2.5600e-003	0.1115		413.8987	413.8987	0.0110		414.1740
<b>Total</b>	<b>0.2164</b>	<b>0.1108</b>	<b>1.6154</b>	<b>4.1600e-003</b>	<b>0.4108</b>	<b>2.7700e-003</b>	<b>0.4136</b>	<b>0.1090</b>	<b>2.5600e-003</b>	<b>0.1115</b>		<b>413.8987</b>	<b>413.8987</b>	<b>0.0110</b>		<b>414.1740</b>

**3.5 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>14.2523</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.5 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2020	0.0996	1.4877	4.0100e-003	0.4108	2.7000e-003	0.4135	0.1090	2.4900e-003	0.1115		399.0553	399.0553	9.9000e-003		399.3028
<b>Total</b>	<b>0.2020</b>	<b>0.0996</b>	<b>1.4877</b>	<b>4.0100e-003</b>	<b>0.4108</b>	<b>2.7000e-003</b>	<b>0.4135</b>	<b>0.1090</b>	<b>2.4900e-003</b>	<b>0.1115</b>		<b>399.0553</b>	<b>399.0553</b>	<b>9.9000e-003</b>		<b>399.3028</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>14.2523</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**3.5 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2020	0.0996	1.4877	4.0100e-003	0.4108	2.7000e-003	0.4135	0.1090	2.4900e-003	0.1115		399.0553	399.0553	9.9000e-003		399.3028
<b>Total</b>	<b>0.2020</b>	<b>0.0996</b>	<b>1.4877</b>	<b>4.0100e-003</b>	<b>0.4108</b>	<b>2.7000e-003</b>	<b>0.4135</b>	<b>0.1090</b>	<b>2.4900e-003</b>	<b>0.1115</b>		<b>399.0553</b>	<b>399.0553</b>	<b>9.9000e-003</b>		<b>399.3028</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3351	4.2114	14.4486	0.0466	4.0267	0.0334	4.0601	1.0762	0.0312	1.1074		4,722.006 2	4,722.006 2	0.2004		4,727.015 6
Unmitigated	1.3650	4.3729	15.3431	0.0499	4.3251	0.0356	4.3607	1.1560	0.0332	1.1892		5,052.317 7	5,052.317 7	0.2127		5,057.634 0

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	701.31	701.31	701.31	2,039,630	1,898,895
<b>Total</b>	<b>701.31</b>	<b>701.31</b>	<b>701.31</b>	<b>2,039,630</b>	<b>1,898,895</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	10.00	5.00	6.50	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Unrefrigerated Warehouse-No Rail	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817



Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003		46.1513	46.1513	8.8000e-004	8.5000e-004	46.4255
NaturalGas Unmitigated	6.0400e-003	0.0549	0.0462	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003		65.9304	65.9304	1.2600e-003	1.2100e-003	66.3222

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	560.408	6.0400e-003	0.0549	0.0462	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003		65.9304	65.9304	1.2600e-003	1.2100e-003	66.3222
<b>Total</b>		<b>6.0400e-003</b>	<b>0.0549</b>	<b>0.0462</b>	<b>3.3000e-004</b>		<b>4.1800e-003</b>	<b>4.1800e-003</b>		<b>4.1800e-003</b>	<b>4.1800e-003</b>		<b>65.9304</b>	<b>65.9304</b>	<b>1.2600e-003</b>	<b>1.2100e-003</b>	<b>66.3222</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.392286	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003		46.1513	46.1513	8.8000e-004	8.5000e-004	46.4255
<b>Total</b>		<b>4.2300e-003</b>	<b>0.0385</b>	<b>0.0323</b>	<b>2.3000e-004</b>		<b>2.9200e-003</b>	<b>2.9200e-003</b>		<b>2.9200e-003</b>	<b>2.9200e-003</b>		<b>46.1513</b>	<b>46.1513</b>	<b>8.8000e-004</b>	<b>8.5000e-004</b>	<b>46.4255</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
Unmitigated	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3600e-003	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
<b>Total</b>	<b>10.1014</b>	<b>9.2000e-004</b>	<b>0.1010</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2165</b>	<b>0.2165</b>	<b>5.7000e-004</b>		<b>0.2307</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3600e-003	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
<b>Total</b>	<b>10.1014</b>	<b>9.2000e-004</b>	<b>0.1010</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2165</b>	<b>0.2165</b>	<b>5.7000e-004</b>		<b>0.2307</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	8	8.00	260	89	0.20	Diesel

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Summer

**UnMitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.8203	7.6774	9.1583	0.0122		0.4744	0.4744		0.4365	0.4365		1,184.2466	1,184.2466	0.3830		1,193.8219
<b>Total</b>	<b>0.8203</b>	<b>7.6774</b>	<b>9.1583</b>	<b>0.0122</b>		<b>0.4744</b>	<b>0.4744</b>		<b>0.4365</b>	<b>0.4365</b>		<b>1,184.2466</b>	<b>1,184.2466</b>	<b>0.3830</b>		<b>1,193.8219</b>

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**Waterman Brinkman Project**  
**Sacramento Metropolitan AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	417.45	1000sqft	21.52	417,447.00	0
Parking Lot	572.00	Space	7.00	228,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	6			<b>Operational Year</b>	2023
<b>Utility Company</b>	Sacramento Municipal Utility District				
<b>CO2 Intensity (lb/MW hr)</b>	387.1	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - CO2 intensity factor adjusted per SMUD's RPS projections.
- Land Use - Lot acreage adjusted per site plan.
- Construction Phase - Construction phase timing based on applicant-provided AQ Questionnaire.
- Grading -
- Mobile Land Use Mitigation -
- Energy Mitigation - Title 24 exceedance used to reflect compliance with the 2019 CBSC for non-residential buildings.
- Water Mitigation - Water conservation strategy applied to reflect compliance with MWELo and CalGreen Code.
- Operational Off-Road Equipment - Forklifts modeled per applicant-provided information.

## Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	280.00
tblConstructionPhase	NumDays	440.00	280.00
tblConstructionPhase	NumDays	45.00	20.00
tblConstructionPhase	NumDays	35.00	20.00
tblConstructionPhase	PhaseEndDate	7/17/2023	9/5/2022
tblConstructionPhase	PhaseEndDate	4/10/2023	8/22/2022
tblConstructionPhase	PhaseEndDate	8/2/2021	6/28/2021
tblConstructionPhase	PhaseEndDate	5/29/2023	7/26/2021
tblConstructionPhase	PhaseStartDate	5/30/2023	8/10/2021
tblConstructionPhase	PhaseStartDate	8/3/2021	7/27/2021
tblConstructionPhase	PhaseStartDate	4/11/2023	6/29/2021
tblLandUse	LotAcreage	9.58	21.52
tblLandUse	LotAcreage	5.15	7.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.1

## 2.0 Emissions Summary

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Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
Energy	6.0400e-003	0.0549	0.0462	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003		65.9304	65.9304	1.2600e-003	1.2100e-003	66.3222
Mobile	1.0259	4.6960	13.8772	0.0450	4.3251	0.0359	4.3610	1.1560	0.0335	1.1895		4,567.0796	4,567.0796	0.2094		4,572.3155
Offroad	0.8203	7.6774	9.1583	0.0122		0.4744	0.4744		0.4365	0.4365		1,184.2466	1,184.2466	0.3830		1,193.8219
<b>Total</b>	<b>11.9537</b>	<b>12.4292</b>	<b>23.1826</b>	<b>0.0576</b>	<b>4.3251</b>	<b>0.5149</b>	<b>4.8400</b>	<b>1.1560</b>	<b>0.4745</b>	<b>1.6305</b>		<b>5,817.4732</b>	<b>5,817.4732</b>	<b>0.5943</b>	<b>1.2100e-003</b>	<b>5,832.6903</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
Energy	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003		46.1513	46.1513	8.8000e-004	8.5000e-004	46.4255
Mobile	0.9973	4.5113	13.1620	0.0421	4.0267	0.0338	4.0604	1.0762	0.0315	1.1077		4,268.7393	4,268.7393	0.1980		4,273.6883
Offroad	0.8203	7.6774	9.1583	0.0122		0.4744	0.4744		0.4365	0.4365		1,184.2466	1,184.2466	0.3830		1,193.8219
<b>Total</b>	<b>11.9233</b>	<b>12.2281</b>	<b>22.4537</b>	<b>0.0546</b>	<b>4.0267</b>	<b>0.5115</b>	<b>4.5381</b>	<b>1.0762</b>	<b>0.4712</b>	<b>1.5475</b>		<b>5,499.3537</b>	<b>5,499.3537</b>	<b>0.5824</b>	<b>8.5000e-004</b>	<b>5,514.1664</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.25</b>	<b>1.62</b>	<b>3.14</b>	<b>5.28</b>	<b>6.90</b>	<b>0.66</b>	<b>6.24</b>	<b>6.90</b>	<b>0.69</b>	<b>5.09</b>	<b>0.00</b>	<b>5.47</b>	<b>5.47</b>	<b>1.99</b>	<b>29.75</b>	<b>5.46</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/1/2021	6/28/2021	5	20	
2	Building Construction	Building Construction	7/27/2021	8/22/2022	5	280	
3	Paving	Paving	6/29/2021	7/26/2021	5	20	
4	Architectural Coating	Architectural Coating	8/10/2021	9/5/2022	5	280	

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 50**

**Acres of Paving: 7**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,171; Non-Residential Outdoor: 208,724; Striped Parking Area: 13,728 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	271.00	106.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	54.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>		<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.2 Grading - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0507	0.5103	1.3500e-003	0.1521	1.0300e-003	0.1532	0.0404	9.5000e-004	0.0413		134.6329	134.6329	3.5900e-003		134.7226
<b>Total</b>	<b>0.0738</b>	<b>0.0507</b>	<b>0.5103</b>	<b>1.3500e-003</b>	<b>0.1521</b>	<b>1.0300e-003</b>	<b>0.1532</b>	<b>0.0404</b>	<b>9.5000e-004</b>	<b>0.0413</b>		<b>134.6329</b>	<b>134.6329</b>	<b>3.5900e-003</b>		<b>134.7226</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
<b>Total</b>	<b>4.1912</b>	<b>46.3998</b>	<b>30.8785</b>	<b>0.0620</b>	<b>8.6733</b>	<b>1.9853</b>	<b>10.6587</b>	<b>3.5965</b>	<b>1.8265</b>	<b>5.4230</b>	<b>0.0000</b>	<b>6,007.0434</b>	<b>6,007.0434</b>	<b>1.9428</b>		<b>6,055.6134</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.2 Grading - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0507	0.5103	1.3500e-003	0.1521	1.0300e-003	0.1532	0.0404	9.5000e-004	0.0413		134.6329	134.6329	3.5900e-003		134.7226
<b>Total</b>	<b>0.0738</b>	<b>0.0507</b>	<b>0.5103</b>	<b>1.3500e-003</b>	<b>0.1521</b>	<b>1.0300e-003</b>	<b>0.1532</b>	<b>0.0404</b>	<b>9.5000e-004</b>	<b>0.0413</b>		<b>134.6329</b>	<b>134.6329</b>	<b>3.5900e-003</b>		<b>134.7226</b>

**3.3 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Building Construction - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3470	10.8218	3.1530	0.0255	0.6378	0.0310	0.6689	0.1835	0.0297	0.2132		2,700.3719	2,700.3719	0.1641		2,704.4731
Worker	1.0002	0.6867	6.9149	0.0183	2.0615	0.0139	2.0754	0.5468	0.0128	0.5597		1,824.2751	1,824.2751	0.0486		1,825.4905
<b>Total</b>	<b>1.3472</b>	<b>11.5085</b>	<b>10.0679</b>	<b>0.0438</b>	<b>2.6993</b>	<b>0.0449</b>	<b>2.7443</b>	<b>0.7304</b>	<b>0.0425</b>	<b>0.7729</b>		<b>4,524.6470</b>	<b>4,524.6470</b>	<b>0.2127</b>		<b>4,529.9636</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Building Construction - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3470	10.8218	3.1530	0.0255	0.6378	0.0310	0.6689	0.1835	0.0297	0.2132		2,700.3719	2,700.3719	0.1641		2,704.4731
Worker	1.0002	0.6867	6.9149	0.0183	2.0615	0.0139	2.0754	0.5468	0.0128	0.5597		1,824.2751	1,824.2751	0.0486		1,825.4905
<b>Total</b>	<b>1.3472</b>	<b>11.5085</b>	<b>10.0679</b>	<b>0.0438</b>	<b>2.6993</b>	<b>0.0449</b>	<b>2.7443</b>	<b>0.7304</b>	<b>0.0425</b>	<b>0.7729</b>		<b>4,524.6470</b>	<b>4,524.6470</b>	<b>0.2127</b>		<b>4,529.9636</b>

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>



Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Building Construction - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3221	10.2704	2.9079	0.0253	0.6378	0.0273	0.6650	0.1835	0.0261	0.2096		2,676.3780	2,676.3780	0.1594		2,680.3628
Worker	0.9354	0.6174	6.3410	0.0177	2.0615	0.0136	2.0751	0.5468	0.0125	0.5593		1,758.9569	1,758.9569	0.0436		1,760.0469
<b>Total</b>	<b>1.2574</b>	<b>10.8878</b>	<b>9.2489</b>	<b>0.0429</b>	<b>2.6993</b>	<b>0.0408</b>	<b>2.7401</b>	<b>0.7303</b>	<b>0.0386</b>	<b>0.7689</b>		<b>4,435.3348</b>	<b>4,435.3348</b>	<b>0.2030</b>		<b>4,440.4097</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Building Construction - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3221	10.2704	2.9079	0.0253	0.6378	0.0273	0.6650	0.1835	0.0261	0.2096		2,676.3780	2,676.3780	0.1594		2,680.3628
Worker	0.9354	0.6174	6.3410	0.0177	2.0615	0.0136	2.0751	0.5468	0.0125	0.5593		1,758.9569	1,758.9569	0.0436		1,760.0469
<b>Total</b>	<b>1.2574</b>	<b>10.8878</b>	<b>9.2489</b>	<b>0.0429</b>	<b>2.6993</b>	<b>0.0408</b>	<b>2.7401</b>	<b>0.7303</b>	<b>0.0386</b>	<b>0.7689</b>		<b>4,435.3348</b>	<b>4,435.3348</b>	<b>0.2030</b>		<b>4,440.4097</b>

**3.4 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.9170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.1726</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>		<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0380	0.3827	1.0100e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		100.9746	100.9746	2.6900e-003		101.0419
<b>Total</b>	<b>0.0554</b>	<b>0.0380</b>	<b>0.3827</b>	<b>1.0100e-003</b>	<b>0.1141</b>	<b>7.7000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>7.1000e-004</b>	<b>0.0310</b>		<b>100.9746</b>	<b>100.9746</b>	<b>2.6900e-003</b>		<b>101.0419</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.9170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.1726</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>	<b>0.0000</b>	<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0380	0.3827	1.0100e-003	0.1141	7.7000e-004	0.1149	0.0303	7.1000e-004	0.0310		100.9746	100.9746	2.6900e-003		101.0419
<b>Total</b>	<b>0.0554</b>	<b>0.0380</b>	<b>0.3827</b>	<b>1.0100e-003</b>	<b>0.1141</b>	<b>7.7000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>7.1000e-004</b>	<b>0.0310</b>		<b>100.9746</b>	<b>100.9746</b>	<b>2.6900e-003</b>		<b>101.0419</b>

**3.5 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>14.2666</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1993	0.1368	1.3779	3.6500e-003	0.4108	2.7700e-003	0.4136	0.1090	2.5600e-003	0.1115		363.5087	363.5087	9.6900e-003		363.7509
<b>Total</b>	<b>0.1993</b>	<b>0.1368</b>	<b>1.3779</b>	<b>3.6500e-003</b>	<b>0.4108</b>	<b>2.7700e-003</b>	<b>0.4136</b>	<b>0.1090</b>	<b>2.5600e-003</b>	<b>0.1115</b>		<b>363.5087</b>	<b>363.5087</b>	<b>9.6900e-003</b>		<b>363.7509</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>14.2666</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1993	0.1368	1.3779	3.6500e-003	0.4108	2.7700e-003	0.4136	0.1090	2.5600e-003	0.1115		363.5087	363.5087	9.6900e-003		363.7509
<b>Total</b>	<b>0.1993</b>	<b>0.1368</b>	<b>1.3779</b>	<b>3.6500e-003</b>	<b>0.4108</b>	<b>2.7700e-003</b>	<b>0.4136</b>	<b>0.1090</b>	<b>2.5600e-003</b>	<b>0.1115</b>		<b>363.5087</b>	<b>363.5087</b>	<b>9.6900e-003</b>		<b>363.7509</b>

**3.5 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>14.2523</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1864	0.1230	1.2635	3.5200e-003	0.4108	2.7000e-003	0.4135	0.1090	2.4900e-003	0.1115		350.4933	350.4933	8.6900e-003		350.7105
<b>Total</b>	<b>0.1864</b>	<b>0.1230</b>	<b>1.2635</b>	<b>3.5200e-003</b>	<b>0.4108</b>	<b>2.7000e-003</b>	<b>0.4135</b>	<b>0.1090</b>	<b>2.4900e-003</b>	<b>0.1115</b>		<b>350.4933</b>	<b>350.4933</b>	<b>8.6900e-003</b>		<b>350.7105</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.0477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>14.2523</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1864	0.1230	1.2635	3.5200e-003	0.4108	2.7000e-003	0.4135	0.1090	2.4900e-003	0.1115		350.4933	350.4933	8.6900e-003		350.7105
<b>Total</b>	<b>0.1864</b>	<b>0.1230</b>	<b>1.2635</b>	<b>3.5200e-003</b>	<b>0.4108</b>	<b>2.7000e-003</b>	<b>0.4135</b>	<b>0.1090</b>	<b>2.4900e-003</b>	<b>0.1115</b>		<b>350.4933</b>	<b>350.4933</b>	<b>8.6900e-003</b>		<b>350.7105</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network



Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9973	4.5113	13.1620	0.0421	4.0267	0.0338	4.0604	1.0762	0.0315	1.1077		4,268.739 3	4,268.739 3	0.1980		4,273.688 3
Unmitigated	1.0259	4.6960	13.8772	0.0450	4.3251	0.0359	4.3610	1.1560	0.0335	1.1895		4,567.079 6	4,567.079 6	0.2094		4,572.315 5

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	701.31	701.31	701.31	2,039,630	1,898,895
<b>Total</b>	<b>701.31</b>	<b>701.31</b>	<b>701.31</b>	<b>2,039,630</b>	<b>1,898,895</b>

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	10.00	5.00	6.50	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817
Unrefrigerated Warehouse-No Rail	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003		46.1513	46.1513	8.8000e-004	8.5000e-004	46.4255
NaturalGas Unmitigated	6.0400e-003	0.0549	0.0462	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003		65.9304	65.9304	1.2600e-003	1.2100e-003	66.3222

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	560.408	6.0400e-003	0.0549	0.0462	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003		65.9304	65.9304	1.2600e-003	1.2100e-003	66.3222
<b>Total</b>		<b>6.0400e-003</b>	<b>0.0549</b>	<b>0.0462</b>	<b>3.3000e-004</b>		<b>4.1800e-003</b>	<b>4.1800e-003</b>		<b>4.1800e-003</b>	<b>4.1800e-003</b>		<b>65.9304</b>	<b>65.9304</b>	<b>1.2600e-003</b>	<b>1.2100e-003</b>	<b>66.3222</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.392286	4.2300e-003	0.0385	0.0323	2.3000e-004		2.9200e-003	2.9200e-003		2.9200e-003	2.9200e-003		46.1513	46.1513	8.8000e-004	8.5000e-004	46.4255
<b>Total</b>		<b>4.2300e-003</b>	<b>0.0385</b>	<b>0.0323</b>	<b>2.3000e-004</b>		<b>2.9200e-003</b>	<b>2.9200e-003</b>		<b>2.9200e-003</b>	<b>2.9200e-003</b>		<b>46.1513</b>	<b>46.1513</b>	<b>8.8000e-004</b>	<b>8.5000e-004</b>	<b>46.4255</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
Unmitigated	10.1014	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3600e-003	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
<b>Total</b>	<b>10.1014</b>	<b>9.2000e-004</b>	<b>0.1010</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2165</b>	<b>0.2165</b>	<b>5.7000e-004</b>		<b>0.2307</b>

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0144					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3600e-003	9.2000e-004	0.1010	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2165	0.2165	5.7000e-004		0.2307
<b>Total</b>	<b>10.1014</b>	<b>9.2000e-004</b>	<b>0.1010</b>	<b>1.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>0.2165</b>	<b>0.2165</b>	<b>5.7000e-004</b>		<b>0.2307</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	8	8.00	260	89	0.20	Diesel

Waterman Brinkman Project - Sacramento Metropolitan AQMD Air District, Winter

**UnMitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.8203	7.6774	9.1583	0.0122		0.4744	0.4744		0.4365	0.4365		1,184.2466	1,184.2466	0.3830		1,193.8219
<b>Total</b>	<b>0.8203</b>	<b>7.6774</b>	<b>9.1583</b>	<b>0.0122</b>		<b>0.4744</b>	<b>0.4744</b>		<b>0.4365</b>	<b>0.4365</b>		<b>1,184.2466</b>	<b>1,184.2466</b>	<b>0.3830</b>		<b>1,193.8219</b>

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

**Waterman Brinkman Project**  
**Sacramento Metropolitan AQMD Air District, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	2	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	5	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00



Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	2.93800E-002	2.03340E-001	2.54110E-001	4.20000E-004	1.20800E-002	1.20800E-002	0.00000E+000	3.57456E+001	3.57456E+001	2.37000E-003	0.00000E+000	3.58049E+001
Cranes	4.76800E-002	5.45740E-001	2.36330E-001	7.10000E-004	2.24400E-002	2.06400E-002	0.00000E+000	6.20988E+001	6.20988E+001	2.00800E-002	0.00000E+000	6.26009E+001
Excavators	4.58000E-003	4.30700E-002	6.54400E-002	1.00000E-004	2.09000E-003	1.92000E-003	0.00000E+000	9.07533E+000	9.07533E+000	2.94000E-003	0.00000E+000	9.14871E+000
Forklifts	5.04000E-002	4.64300E-001	4.86980E-001	6.40000E-004	3.17100E-002	2.91800E-002	0.00000E+000	5.64024E+001	5.64024E+001	1.82400E-002	0.00000E+000	5.68584E+001
Generator Sets	4.77600E-002	4.23520E-001	5.15130E-001	9.20000E-004	2.17500E-002	2.17500E-002	0.00000E+000	7.91290E+001	7.91290E+001	3.87000E-003	0.00000E+000	7.92259E+001
Graders	4.53000E-003	5.92500E-002	1.76700E-002	7.00000E-005	1.88000E-003	1.73000E-003	0.00000E+000	5.82126E+000	5.82126E+000	1.88000E-003	0.00000E+000	5.86833E+000
Pavers	4.92000E-003	5.19000E-002	5.81000E-002	9.00000E-005	2.51000E-003	2.31000E-003	0.00000E+000	8.25649E+000	8.25649E+000	2.67000E-003	0.00000E+000	8.32324E+000
Paving Equipment	3.84000E-003	3.88100E-002	5.08300E-002	8.00000E-005	1.92000E-003	1.76000E-003	0.00000E+000	7.15688E+000	7.15688E+000	2.31000E-003	0.00000E+000	7.21475E+000
Rollers	3.79000E-003	3.84800E-002	3.76100E-002	5.00000E-005	2.35000E-003	2.16000E-003	0.00000E+000	4.61011E+000	4.61011E+000	1.49000E-003	0.00000E+000	4.64739E+000
Rubber Tired Dozers	1.04600E-002	1.09710E-001	4.03800E-002	9.00000E-005	5.32000E-003	4.90000E-003	0.00000E+000	7.50561E+000	7.50561E+000	2.43000E-003	0.00000E+000	7.56630E+000
Scrapers	1.85900E-002	2.14060E-001	1.40090E-001	3.00000E-004	8.33000E-003	7.66000E-003	0.00000E+000	2.66333E+001	2.66333E+001	8.61000E-003	0.00000E+000	2.68487E+001
Tractors/Loaders/Backhoes	6.76500E-002	6.86660E-001	8.70980E-001	1.20000E-003	3.85900E-002	3.55100E-002	0.00000E+000	1.05844E+002	1.05844E+002	3.42300E-002	0.00000E+000	1.06699E+002
Welders	4.02200E-002	2.07430E-001	2.38730E-001	3.60000E-004	9.53000E-003	9.53000E-003	0.00000E+000	2.63509E+001	2.63509E+001	3.27000E-003	0.00000E+000	2.64326E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.93800E-002	2.03340E-001	2.54110E-001	4.20000E-004	1.20800E-002	1.20800E-002	0.00000E+000	3.57455E+001	3.57455E+001	2.37000E-003	0.00000E+000	3.58049E+001
Cranes	4.76800E-002	5.45740E-001	2.36330E-001	7.10000E-004	2.24400E-002	2.06400E-002	0.00000E+000	6.20987E+001	6.20987E+001	2.00800E-002	0.00000E+000	6.26008E+001
Excavators	4.58000E-003	4.30700E-002	6.54400E-002	1.00000E-004	2.09000E-003	1.92000E-003	0.00000E+000	9.07532E+000	9.07532E+000	2.94000E-003	0.00000E+000	9.14870E+000
Forklifts	5.04000E-002	4.64300E-001	4.86980E-001	6.40000E-004	3.17100E-002	2.91800E-002	0.00000E+000	5.64023E+001	5.64023E+001	1.82400E-002	0.00000E+000	5.68583E+001
Generator Sets	4.77600E-002	4.23520E-001	5.15130E-001	9.20000E-004	2.17500E-002	2.17500E-002	0.00000E+000	7.91290E+001	7.91290E+001	3.87000E-003	0.00000E+000	7.92258E+001
Graders	4.53000E-003	5.92500E-002	1.76700E-002	7.00000E-005	1.88000E-003	1.73000E-003	0.00000E+000	5.82125E+000	5.82125E+000	1.88000E-003	0.00000E+000	5.86832E+000
Pavers	4.92000E-003	5.19000E-002	5.81000E-002	9.00000E-005	2.51000E-003	2.31000E-003	0.00000E+000	8.25648E+000	8.25648E+000	2.67000E-003	0.00000E+000	8.32323E+000
Paving Equipment	3.84000E-003	3.88100E-002	5.08300E-002	8.00000E-005	1.92000E-003	1.76000E-003	0.00000E+000	7.15688E+000	7.15688E+000	2.31000E-003	0.00000E+000	7.21474E+000
Rollers	3.79000E-003	3.84800E-002	3.76100E-002	5.00000E-005	2.35000E-003	2.16000E-003	0.00000E+000	4.61011E+000	4.61011E+000	1.49000E-003	0.00000E+000	4.64738E+000
Rubber Tired Dozers	1.04600E-002	1.09710E-001	4.03800E-002	9.00000E-005	5.32000E-003	4.90000E-003	0.00000E+000	7.50560E+000	7.50560E+000	2.43000E-003	0.00000E+000	7.56629E+000
Scrapers	1.85900E-002	2.14060E-001	1.40090E-001	3.00000E-004	8.33000E-003	7.66000E-003	0.00000E+000	2.66333E+001	2.66333E+001	8.61000E-003	0.00000E+000	2.68487E+001
Tractors/Loaders/Balkhoes	6.76500E-002	6.86660E-001	8.70980E-001	1.20000E-003	3.85900E-002	3.55100E-002	0.00000E+000	1.05843E+002	1.05843E+002	3.42300E-002	0.00000E+000	1.06699E+002
Welders	4.02200E-002	2.07430E-001	2.38730E-001	3.60000E-004	9.53000E-003	9.53000E-003	0.00000E+000	2.63509E+001	2.63509E+001	3.27000E-003	0.00000E+000	2.64325E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11902E-006	1.11902E-006	0.00000E+000	0.00000E+000	1.11717E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.28827E-006	1.28827E-006	0.00000E+000	0.00000E+000	1.27794E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10189E-006	1.10189E-006	0.00000E+000	0.00000E+000	1.09305E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24108E-006	1.24108E-006	0.00000E+000	0.00000E+000	1.23113E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13738E-006	1.13738E-006	0.00000E+000	0.00000E+000	1.13599E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.71784E-006	1.71784E-006	0.00000E+000	0.00000E+000	1.70406E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21117E-006	1.21117E-006	0.00000E+000	0.00000E+000	1.20146E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38605E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.15175E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33234E-006	1.33234E-006	0.00000E+000	0.00000E+000	1.32165E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12641E-006	1.12641E-006	0.00000E+000	0.00000E+000	1.11737E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13375E-006	1.13375E-006	0.00000E+000	0.00000E+000	1.21838E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13848E-006	1.13848E-006	0.00000E+000	0.00000E+000	1.51329E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.06	0.01	0.06	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.37	0.10	0.37	0.10	0.00	0.00
Grading	Fugitive Dust	0.09	0.04	0.09	0.04	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.29	2.29	2.30	2.32	2.29
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.62	3.84	5.44	6.56	6.15	6.11	0.00	6.52	6.52	5.63	0.00	6.52
Natural Gas	30.00	30.01	29.93	33.33	30.26	30.26	0.00	30.00	30.00	28.57	30.00	30.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.00	19.99	20.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.08	0.29		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.16	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.05			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.07		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	3.00		
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	5.00		
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## BREEZE AERMOD Model Results

### Max. Annual ( 4 YEARS) Results of Pollutant: PM25 (ug/m\*\*3)

Group ID	High	Avg. Conc.	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
			East (m)	North (m)					
ALL	1ST	0.01258	643218.10	4250908.50	0.00	0.00	1.80	DC	
	2ND	0.01229	643218.10	4250898.50	0.00	0.00	1.80	DC	
	3RD	0.01213	643208.10	4250938.50	0.00	0.00	1.80	DC	
	4TH	0.01199	643218.10	4250888.50	0.00	0.00	1.80	DC	
	5TH	0.01196	643208.10	4250928.50	0.00	0.00	1.80	DC	
	6TH	0.01188	643894.30	4250826.40	0.00	0.00	1.80	DC	
	7TH	0.01177	643208.10	4250918.50	0.00	0.00	1.80	DC	
	8TH	0.01172	643894.30	4250831.40	0.00	0.00	1.80	DC	
	9TH	0.01168	643218.10	4250878.50	0.00	0.00	1.80	DC	
	10TH	0.01156	643894.30	4250836.40	0.00	0.00	1.80	DC	

### Highest Results of Pollutant: PM25

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	1.51850	ug/m**3	15013009	643148.10	4251118.50	0.00	0.00	1.80	DC	

### Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
6	Warning Message(s)
996	Informational Message(s)
43680	Hours Were Processed
452	Calm Hours Identified
544	Missing Hours Identified ( 1.25 Percent)

### Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	CO	<a href="#">W276</a>	Special proc for 1h-NO2/SO2 24hPM25 NAAQS disabled PM25 H1H
WARNING	CO	<a href="#">W363</a>	Multiyr 24h/Ann PM25 processing not applicable for PM25 H1H

WARNING	ME	<a href="#">W186</a>	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
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[www.breeze-software.com](http://www.breeze-software.com)

# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Waterman Brinkman Project - Construction HRA
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM25 H1H
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.SFC
ME	PROFFILE	Profile met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.PFL
ME	SURFDATA	Surf met data info.	93225 2014
ME	UAIRDATA	U-Air met data info.	23230 2014
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	7
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU | DAYTABLE | Print summary opt.

## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
JWRKJ001	VOLUME		643720.2	4250626.7	0	0.00014152394625	(g/s)	5
JWRKJ002	VOLUME		643783.8	4250626.7	0	0.000141524	(g/s)	5
JWRKJ003	VOLUME		643720.2	4250690.3	0	0.00014152394625	(g/s)	5
JWRKJ004	VOLUME		643783.8	4250690.3	0	0.00014152394625	(g/s)	5
JWRKJ005	VOLUME		643720.2	4250753.9	0	0.00014152394625	(g/s)	5
JWRKJ006	VOLUME		643783.8	4250753.9	0	0.00014152394625	(g/s)	5
JWRKJ007	VOLUME		643656.6	4250817.6	0	0.00014152394625	(g/s)	5
JWRKJ008	VOLUME		643720.2	4250817.6	0	0.00014152394625	(g/s)	5
JWRKJ009	VOLUME		643783.8	4250817.6	0	0.00014152394625	(g/s)	5
JWRKJ00B	VOLUME		643382.5	4250875.6	0	0.00014152394625	(g/s)	5
JWRKJ00C	VOLUME		643446.1	4250875.6	0	0.00014152394625	(g/s)	5
JWRKJ00D	VOLUME		643509.8	4250875.6	0	0.00014152394625	(g/s)	5
JWRKJ00E	VOLUME		643573.4	4250875.6	0	0.00014152394625	(g/s)	5
JWRKJ00F	VOLUME		643637.0	4250875.6	0	0.00014152394625	(g/s)	5
JWRKJ00G	VOLUME		643318.9	4250939.2	0	0.00014152394625	(g/s)	5
JWRKJ00H	VOLUME		643382.5	4250939.2	0	0.00014152394625	(g/s)	5
JWRKJ00I	VOLUME		643446.1	4250939.2	0	0.00014152394625	(g/s)	5
JWRKJ00J	VOLUME		643509.8	4250939.2	0	0.00014152394625	(g/s)	5
JWRKJ00K	VOLUME		643573.4	4250939.2	0	0.00014152394625	(g/s)	5
JWRKJ00L	VOLUME		643637.0	4250939.2	0	0.00014152394625	(g/s)	5
JWRKJ00M	VOLUME		643318.9	4251002.8	0	0.00014152394625	(g/s)	5
JWRKJ00N	VOLUME		643382.5	4251002.8	0	0.00014152394625	(g/s)	5
JWRKJ00O	VOLUME		643446.1	4251002.8	0	0.00014152394625	(g/s)	5
JWRKJ00P	VOLUME		643509.8	4251002.8	0	0.00014152394625	(g/s)	5
JWRKJ00Q	VOLUME		643573.4	4251002.8	0	0.00014152394625	(g/s)	5
JWRKJ00R	VOLUME		643637.0	4251002.8	0	0.00014152394625	(g/s)	5
JWRKJ00S	VOLUME		643318.9	4251066.4	0	0.00014152394625	(g/s)	5
JWRKJ00T	VOLUME		643382.5	4251066.4	0	0.00014152394625	(g/s)	5
JWRKJ00U	VOLUME		643446.1	4251066.4	0	0.00014152394625	(g/s)	5
JWRKJ00V	VOLUME		643509.8	4251066.4	0	0.00014152394625	(g/s)	5
JWRKJ00W	VOLUME		643573.4	4251066.4	0	0.00014152394625	(g/s)	5
JWRKJ00X	VOLUME		643637.0	4251066.4	0	0.00014152394625	(g/s)	5

## Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev. (m)	Emiss. Rate (g/s)	Release Height (m)	Init. Lat. Dim. (m)	Init. Vert. Dim. (m)
		East (m)	North (m)					
JWRKJ001		643720.2	4250626.7	0	0.00014152394625	5	29.59	1
JWRKJ002		643783.8	4250626.7	0	0.000141524	5	29.59	1
JWRKJ003		643720.2	4250690.3	0	0.00014152394625	5	29.59	1
JWRKJ004		643783.8	4250690.3	0	0.00014152394625	5	29.59	1
JWRKJ005		643720.2	4250753.9	0	0.00014152394625	5	29.59	1
JWRKJ006		643783.8	4250753.9	0	0.00014152394625	5	29.59	1
JWRKJ007		643656.6	4250817.6	0	0.00014152394625	5	29.59	1
JWRKJ008		643720.2	4250817.6	0	0.00014152394625	5	29.59	1
JWRKJ009		643783.8	4250817.6	0	0.00014152394625	5	29.59	1
JWRKJ00B		643382.5	4250875.6	0	0.00014152394625	5	29.59	1
JWRKJ00C		643446.1	4250875.6	0	0.00014152394625	5	29.59	1
JWRKJ00D		643509.8	4250875.6	0	0.00014152394625	5	29.59	1
JWRKJ00E		643573.4	4250875.6	0	0.00014152394625	5	29.59	1
JWRKJ00F		643637.0	4250875.6	0	0.00014152394625	5	29.59	1
JWRKJ00G		643318.9	4250939.2	0	0.00014152394625	5	29.59	1
JWRKJ00H		643382.5	4250939.2	0	0.00014152394625	5	29.59	1
JWRKJ00I		643446.1	4250939.2	0	0.00014152394625	5	29.59	1
JWRKJ00J		643509.8	4250939.2	0	0.00014152394625	5	29.59	1
JWRKJ00K		643573.4	4250939.2	0	0.00014152394625	5	29.59	1
JWRKJ00L		643637.0	4250939.2	0	0.00014152394625	5	29.59	1
JWRKJ00M		643318.9	4251002.8	0	0.00014152394625	5	29.59	1
JWRKJ00N		643382.5	4251002.8	0	0.00014152394625	5	29.59	1
JWRKJ00O		643446.1	4251002.8	0	0.00014152394625	5	29.59	1
JWRKJ00P		643509.8	4251002.8	0	0.00014152394625	5	29.59	1
JWRKJ00Q		643573.4	4251002.8	0	0.00014152394625	5	29.59	1
JWRKJ00R		643637.0	4251002.8	0	0.00014152394625	5	29.59	1
JWRKJ00S		643318.9	4251066.4	0	0.00014152394625	5	29.59	1
JWRKJ00T		643382.5	4251066.4	0	0.00014152394625	5	29.59	1
JWRKJ00U		643446.1	4251066.4	0	0.00014152394625	5	29.59	1
JWRKJ00V		643509.8	4251066.4	0	0.00014152394625	5	29.59	1
JWRKJ00W		643573.4	4251066.4	0	0.00014152394625	5	29.59	1
JWRKJ00X		643637.0	4251066.4	0	0.00014152394625	5	29.59	1

\*HARP - HRACalc v19044 7/1/2021 12:33:30 PM - Cancer Risk - Input File: C:\Users\bshea\Desktop\HARP\waterman construction hra\_HRAInput

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK
1			9901	DieselExhPM	0.01258	3.66E-06	2YrCancerHighEnd_Inh_FAH3to70	*	3.66E-06	0.00E+00

.hra  
DERMAL\_RISK MMILK\_RISK WATER\_RISK FISH\_RISK CROP\_RISK BEEF\_RISK DAIRY\_RISK PIG\_RISK CHICKEN\_RISK EGG\_RISK 1ST\_DRIVER  
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 NA



2ND_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC
NA	0.00E+00	0.00E+00	0.00E+00

\*HARP - HRACalc v19044 7/1/2021 12:33:30 PM - Chronic Risk - Input File: C:\Users\bshea\Desktop\HARP\waterman construction hra\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV
1			9901	DieselExhPM	0.01258	NonCancerChronicHighEnd_Inh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

I  
REPRO/DEVEL RESP SKIN EYE BONE/TEETH ENDO BLOOD ODOR GENERAL DETAILS INH\_CONC SOIL\_DOSE  
0.00E+00 2.52E-03 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 \* 1.26E-02 0.00E+00



1ST_DRIVER	2ND_DRIVER	3RD_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC
INHALATION	NA	NA	0.00E+00	0.00E+00	0.00E+00

\*HARP - HRACalc v19044 7/1/2021 12:33:30 PM - Acute Risk - Input File: C:\Users\bshea\Desktop\HARP\waterman construction hra\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL
1			9901	DieselExhPM	1.5185	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



## BREEZE AERMOD Model Results

### Max. Annual ( 4 YEARS) Results of Pollutant: PM25 (ug/m\*\*3)

Group ID	High	Avg. Conc.	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
			East (m)	North (m)					
ALL	1ST	0.00366	643894.30	4250826.40	0.00	0.00	1.80	DC	
	2ND	0.00365	643894.30	4250831.40	0.00	0.00	1.80	DC	
	3RD	0.00365	643894.30	4250836.40	0.00	0.00	1.80	DC	
	4TH	0.00364	643894.30	4250841.40	0.00	0.00	1.80	DC	
	5TH	0.00340	643899.30	4250826.40	0.00	0.00	1.80	DC	
	6TH	0.00339	643899.30	4250831.40	0.00	0.00	1.80	DC	
	7TH	0.00339	643899.30	4250836.40	0.00	0.00	1.80	DC	
	8TH	0.00338	643899.30	4250841.40	0.00	0.00	1.80	DC	
	9TH	0.00317	643904.30	4250826.40	0.00	0.00	1.80	DC	
	10TH	0.00317	643904.30	4250831.40	0.00	0.00	1.80	DC	

### Highest Results of Pollutant: PM25

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	0.46195	ug/m**3	15012107	643894.30	4250826.40	0.00	0.00	1.80	DC	

### Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
6	Warning Message(s)
996	Informational Message(s)
43680	Hours Were Processed
452	Calm Hours Identified
544	Missing Hours Identified ( 1.25 Percent)

### Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	CO	<a href="#">W276</a>	Special proc for 1h-NO2/SO2 24hPM25 NAAQS disabled PM25 H1H
WARNING	CO	<a href="#">W363</a>	Multiyr 24h/Ann PM25 processing not applicable for PM25 H1H



WARNING	ME	<a href="#">W186</a>	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
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[www.breeze-software.com](http://www.breeze-software.com)

# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Waterman Brinkman Project
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM25 H1H
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.SFC
ME	PROFFILE	Profile met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.PFL
ME	SURFDATA	Surf met data info.	93225 2014
ME	UAIRDATA	U-Air met data info.	23230 2014
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	7
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU	DAYTABLE	Print summary opt.
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## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
JA9XB9HZ	POINT	idling spot 2 - vertical	643474.5	4250915.2	0	0.0001066991	(g/s)	3.84048
JA9XB9IO	POINT	idling spot 3 - vertical	643674.2	4250699.6	0	0.0001066991	(g/s)	3.84048
JA9XB9I1	POINT	idling spot 1 - vertical	643466.1	4251047.7	0	0.0001066991	(g/s)	3.84048
JA9XB9I6	POINT	idling spot 1 - horizontal low	643465.8	4251047.6	0	0.0001066991	(g/s)	0.18288
JA9XB9I7	POINT	idling spot 1 - horizontal high	643466.2	4251047.7	0	0.0001066991	(g/s)	3.84048
JA9XB9I8	POINT	idling spot 2 - horizontal low	643474.6	4250915.3	0	0.0001066991	(g/s)	0.18288
JA9XB9I9	POINT	idling spot 2 - horizontal high	643474.9	4250915.1	0	0.0001066991	(g/s)	3.84048
JA9XB9IA	POINT	idling spot 3 - horizontal low	643674.1	4250699.3	0	0.0001066991	(g/s)	0.18288
JA9XB9IB	POINT	idling spot 3 - horizontal high	643674	4250699.4	0	0.0001066991	(g/s)	3.84048
JA9XB9GZ	VOLUME	roadway segment	643823.8	4251431.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H0	VOLUME	roadway segment	643824.1	4251395.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H1	VOLUME	roadway segment	643824.4	4251359.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H2	VOLUME	roadway segment	643824.7	4251323.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H3	VOLUME	roadway segment	643825	4251287.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H4	VOLUME	roadway segment	643825.3	4251251.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H5	VOLUME	roadway segment	643825.6	4251215.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H6	VOLUME	roadway segment	643826	4251179.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H7	VOLUME	roadway segment	643826.3	4251143.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H8	VOLUME	roadway segment	643826.6	4251107.5	0	1.550218E-05	(g/s)	2.3
JA9XB9H9	VOLUME	roadway segment	643826.9	4251071.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HA	VOLUME	roadway segment	643827.2	4251035.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HB	VOLUME	roadway segment	643827.5	4250999.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HC	VOLUME	roadway segment	643827.8	4250963.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HD	VOLUME	roadway segment	643828.2	4250927.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HE	VOLUME	roadway segment	643828.5	4250891.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HF	VOLUME	roadway segment	643828.8	4250855.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HG	VOLUME	roadway segment	643829.1	4250819.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HH	VOLUME	roadway segment	643829.4	4250783.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HI	VOLUME	roadway segment	643829.7	4250747.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HJ	VOLUME	roadway segment	643830	4250711.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HK	VOLUME	roadway segment	643830.4	4250675.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HL	VOLUME	roadway segment	643830.7	4250639.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HM	VOLUME	roadway segment	643831	4250603.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HN	VOLUME	roadway segment	643831.3	4250567.5	0	1.550218E-05	(g/s)	2.3

JA9XB9HO	VOLUME	roadway segment	643831.6	4250531.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HP	VOLUME	roadway segment	643831.9	4250495.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HQ	VOLUME	roadway segment	643832.2	4250459.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HR	VOLUME	roadway segment	643832.6	4250423.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HS	VOLUME	roadway segment	643832.9	4250387.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HT	VOLUME	roadway segment	643833.2	4250351.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HU	VOLUME	roadway segment	643833.5	4250315.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HV	VOLUME	roadway segment	643833.8	4250279.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HW	VOLUME	roadway segment	643834.1	4250243.5	0	1.550218E-05	(g/s)	2.3
JA9XB9HX	VOLUME	roadway segment	643834.4	4250207.5	0	1.550218E-05	(g/s)	2.3

## Point Sources

Source ID / Pollutant ID	Description	UTM		Elev. (m)	Emiss. Rate (g/s)	Stack Height (m)	Stack Temp (K)	Stack Velocity (m/s)	Stack Diameter (m)
		East (m)	North (m)						
JA9XB9HZ	idling spot 2 - vertical	643474.5	4250915.2	0	0.0001066991	3.84048	366	50	0.1
JA9XB9IO	idling spot 3 - vertical	643674.2	4250699.6	0	0.0001066991	3.84048	366	50	0.1
JA9XB9I1	idling spot 1 - vertical	643466.1	4251047.7	0	0.0001066991	3.84048	366	50	0.1
JA9XB9I6	idling spot 1 - horizontal low	643465.8	4251047.6	0	0.0001066991	0.18288	366	0.001	0.1
JA9XB9I7	idling spot 1 - horizontal high	643466.2	4251047.7	0	0.0001066991	3.84048	366	0.001	0.1
JA9XB9I8	idling spot 2 - horizontal low	643474.6	4250915.3	0	0.0001066991	0.18288	366	0.001	0.1
JA9XB9I9	idling spot 2 - horizontal high	643474.9	4250915.1	0	0.0001066991	3.84048	366	0.001	0.1
JA9XB9IA	idling spot 3 - horizontal low	643674.1	4250699.3	0	0.0001066991	0.18288	366	0.001	0.1
JA9XB9IB	idling spot 3 - horizontal high	643674	4250699.4	0	0.0001066991	3.84048	366	0.001	0.1

## Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev. (m)	Emiss. Rate (g/s)	Release Height (m)	Init. Lat. Dim. (m)	Init. Vert. Dim. (m)
		East (m)	North (m)					
JA9XB9GZ	roadway segment	643823.8	4251431.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H0	roadway segment	643824.1	4251395.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H1	roadway segment	643824.4	4251359.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H2	roadway segment	643824.7	4251323.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H3	roadway segment	643825	4251287.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H4	roadway segment	643825.3	4251251.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H5	roadway segment	643825.6	4251215.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H6	roadway segment	643826	4251179.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H7	roadway segment	643826.3	4251143.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H8	roadway segment	643826.6	4251107.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9H9	roadway segment	643826.9	4251071.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HA	roadway segment	643827.2	4251035.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HB	roadway segment	643827.5	4250999.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HC	roadway segment	643827.8	4250963.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HD	roadway segment	643828.2	4250927.5	0	1.550218E-05	2.3	16.74419	2.139535

JA9XB9HE	roadway segment	643828.5	4250891.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HF	roadway segment	643828.8	4250855.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HG	roadway segment	643829.1	4250819.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HH	roadway segment	643829.4	4250783.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HI	roadway segment	643829.7	4250747.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HJ	roadway segment	643830	4250711.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HK	roadway segment	643830.4	4250675.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HL	roadway segment	643830.7	4250639.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HM	roadway segment	643831	4250603.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HN	roadway segment	643831.3	4250567.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HO	roadway segment	643831.6	4250531.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HP	roadway segment	643831.9	4250495.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HQ	roadway segment	643832.2	4250459.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HR	roadway segment	643832.6	4250423.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HS	roadway segment	643832.9	4250387.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HT	roadway segment	643833.2	4250351.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HU	roadway segment	643833.5	4250315.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HV	roadway segment	643833.8	4250279.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HW	roadway segment	643834.1	4250243.5	0	1.550218E-05	2.3	16.74419	2.139535
JA9XB9HX	roadway segment	643834.4	4250207.5	0	1.550218E-05	2.3	16.74419	2.139535

\*HARP - HRACalc v19044 1/29/2021 1:46:24 PM - Cancer Risk - Input File: C:\Users\bshea\Desktop\HARP\Waterman - unmit\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK
1			9901	DieselExhPM	0.00366	3.17E-06	30YrCancerHighEnd_Inh_FAH16to70	*	3.17E-06	0.00E+00

3.17



2ND_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC
NA	0.00E+00	0.00E+00	0.00E+00



\*HARP - HRACalc v19044 1/29/2021 1:46:24 PM - Chronic Risk - Input File: C:\Users\bshea\Desktop\HARP\Waterman - unmit\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV
1			9901	DieselExhPM	0.00366	NonCancerChronicHighEnd_Inh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	DETAILS	INH_CONC	SOIL_DOSE
0.00E+00	7.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	*	3.66E-03	0.00E+00



1ST_DRIVER	2ND_DRIVER	3RD_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC
INHALATION	NA	NA	0.00E+00	0.00E+00	0.00E+00

\*HARP - HRACalc v19044 1/29/2021 1:46:24 PM - Acute Risk - Input File: C:\Users\bshea\Desktop\HARP\Waterman - unmit\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL
1			9901	DieselExhPM	0.46195	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



# **APPENDIX B**

## **SMAQMD MINOR PROJECT HEALTH EFFECTS TOOL**



## Minor Project Health Effects Tool

Latitude	38.394465	<-- Step 1: Input latitude (Please chose a value between 38.0 and 39.7)
Longitude	-121.356008	<-- Step 2: Input longitude (Please chose a value between -122.5 and -120.0)

PM2.5 Health Endpoint	Age Range <sup>1</sup>	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year) <sup>2,5</sup>	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year) <sup>2</sup>	Percent of Background Health Incidences Across the 5-Air-District Region <sup>3</sup>	Total Number of Health Incidences Across the 5-Air-District Region (per year) <sup>4</sup>
		(Mean)	(Mean)		
<b>Respiratory</b>					
Emergency Room Visits, Asthma	0 - 99	0.83	0.75	0.0041%	18419
Hospital Admissions, Asthma	0 - 64	0.055	0.050	0.0027%	1846
Hospital Admissions, All Respiratory	65 - 99	0.27	0.23	0.0012%	19644
<b>Cardiovascular</b>					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.14	0.13	0.00054%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000068	0.000062	0.0016%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0061	0.0056	0.0018%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.016	0.014	0.0019%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.025	0.023	0.0019%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.090	0.082	0.0016%	5052
<b>Mortality</b>					
Mortality, All Cause	30 - 99	1.7	1.5	0.0034%	44766

Ozone Health Endpoint	Age Range <sup>1</sup>	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year) <sup>2,5</sup>	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year) <sup>2</sup>	Percent of Background Health Incidences Across the 5-Air-District Region <sup>3</sup>	Total Number of Health Incidences Across the 5-Air-District Region (per year) <sup>4</sup>
		(Mean)	(Mean)		
<b>Respiratory</b>					
Hospital Admissions, All Respiratory	65 - 99	0.060	0.048	0.00024%	19644
Emergency Room Visits, Asthma	0 - 17	0.31	0.26	0.0045%	5859
Emergency Room Visits, Asthma	18 - 99	0.48	0.40	0.0032%	12560
<b>Mortality</b>					
Mortality, Non-Accidental	0 - 99	0.037	0.031	0.00010%	30386

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.
2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or “background health incidence”) values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.
3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.
4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.
5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*.



# **APPENDIX C**

## **BIOLOGICAL RESOURCES ASSESSMENT (LOT A)**

# Waterman Brinkman Logistics Center Project (20.6-Acre)

## Biological Resources Assessment

January 2022 | 04501.00001.001

*Prepared for:*

**Pac West Fund B Development, LLC**  
555 Capitol Mall, Suite 900  
Sacramento, CA 95814

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
1677 Eureka Road, Suite 100  
Roseville, CA 95661

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# Waterman Brinkman Logistics Center Project (20.6-Acre)

## Biological Resources Assessment

*Prepared for:*

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555 Capitol Mall, Suite 900  
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1677 Eureka Road, Suite 100  
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January 2022 | 04501.00001.001

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# TABLE OF CONTENTS

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<b><u>Section</u></b>	<b><u>Page</u></b>
EXECUTIVE SUMMARY .....	ES-1
1.0 INTRODUCTION.....	1
1.1 Project Description .....	1
2.0 REGULATORY FRAMEWORK.....	1
2.1 Federal Regulations .....	1
2.1.1 Federal Endangered Species Act.....	1
2.1.2 Migratory Bird Treaty Act .....	2
2.1.3 The Bald and Golden Eagle Protection Act.....	2
2.2 State Jurisdiction.....	2
2.2.1 California Endangered Species Act .....	2
2.2.2 California Department of Fish and Game Codes .....	2
2.2.3 Native Plant Protection Act .....	3
2.3 Jurisdictional Waters.....	3
2.3.1 Federal Jurisdiction .....	3
2.3.2 State Jurisdiction.....	4
2.4 CEQA Significance .....	5
2.4.1 California Native Plant Society.....	6
2.4.2 California Department of Fish and Wildlife Species of Concern.....	7
2.5 City of Elk Grove.....	7
2.5.1 General Plan.....	7
2.5.2 Swainson’s Hawk Code .....	7
2.5.3 Tree Preservation and Protection Ordinance.....	8
3.0 METHODS.....	9
4.0 RESULTS .....	10
4.1 Site Location and Description .....	10
4.2 Physical Features .....	10
4.2.1 Topography and Drainage .....	10
4.2.2 Soils .....	10
4.3 Biological Communities .....	11
4.3.1 Barren .....	11
4.3.2 Developed.....	11
4.3.3 Ruderal/Disturbed .....	11
4.3.4 Non-Native Annual Grassland.....	12
4.3.5 Valley Oak Woodland .....	12
4.4 Aquatic Resources.....	12
4.4.1 Perennial Drainage (Elk Grove Creek).....	12
4.4.2 Depressional Seasonal Wetland .....	12
4.4.3 Constructed Basin.....	13

# TABLE OF CONTENTS (cont.)

---

<b><u>Section</u></b>	<b><u>Page</u></b>
4.5	Special-Status Species..... 13
4.5.1	Listed and Special-Status Plants ..... 14
4.5.2	Listed and Special-Status Wildlife ..... 17
4.6	Sensitive Habitats ..... 20
4.6.1	Potential Jurisdictional Waters of the U.S. and State..... 20
4.6.2	Protected Trees..... 21
4.6.3	Wildlife Migration Corridors ..... 21
5.0	CONCLUSIONS AND RECOMMENDATIONS..... 22
5.1	Recommendations ..... 22
5.1.1	Special-Status Plant Species..... 22
5.1.2	Swainson’s Hawk ..... 23
5.1.3	Burrowing Owl ..... 24
5.1.4	Giant Garter Snake..... 25
5.1.5	Western Pond Turtle..... 27
5.1.6	Protected Nesting Migratory Birds and Raptors..... 27
5.1.7	Aquatic Resources..... 28
5.1.8	Protected Trees..... 28
6.0	REFERENCES..... 30

## LIST OF APPENDICES

- A Applicable Sections of the City of Elk Grove General Plan
- B Regionally Occurring Listed and Special-Status Species
- C Plant and Wildlife Species Observed in the Study Area
- D Representative Site Photographs

# TABLE OF CONTENTS (cont.)

---

## LIST OF FIGURES

<u>No.</u>	<u>Title</u>	<u>Follows Page</u>
1	Vicinity Map .....	10
2	Project Site .....	10
3	Soil Types .....	10
4	Biological Communities .....	12



# ACRONYMS AND ABBREVIATIONS

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2012 Staff Report	CDFW Staff Report on Burrowing Owl Mitigation
BRA	Biological Resources Assessment
BMPs	best management practices
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CRZ	critical root zone
CWA	Clean Water Act
DBH	diameter at breast height
FESA	Federal Endangered Species Act
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Conservation
MBTA	Migratory Bird Treaty Act
MSL	mean sea level
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SSHCP	South Sacramento Habitat Conservation Plan
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

## EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) biologist Charlotte Marks conducted a Biological Resources Assessment (BRA) on November 6, 2019 for the Waterman Brinkman Logistics Center Project (project site) [Assessor's Parcel Numbers (APNs) 134-0100-084-0000 and 134-0100-084-0000]. A second site visit was conducted in March 2021 to assess a water line alignment in the northwest and southeast corners of the project site. The project site is located at 9195 Brinkman Court, City of Elk Grove, Sacramento County, California. The site is located within Township 6 North, Range 6 East, Section 6 of the USGS 7.5-minute series *Elk Grove* quadrangle. The approximate location of the Study Area is -121.357098° Longitude and 38.395658° Latitude.

The purpose of this BRA is to summarize the general biological resources on the site, to assess the suitability of the site to support special-status species and sensitive vegetation communities or habitats, and to provide recommendations for any regulatory permitting or further analysis that may be required prior to development activities occurring on the site.

The 25.3-acre Study Area includes the 20.6-acre work area (Project site) and a 50-foot buffer to the north, west and south, and to the fence line to the east. The site is undeveloped, but highly-disturbed from ongoing human activities (e.g., plowing). The Study Area contains approximately 16.4 acres of barren habitat, approximately 3.79 acres of ruderal/disturbed habitat, 0.90 acre of non-native annual grassland, 0.59 acre of valley oak woodland, 0.21 acre of developed land, and aquatic features including approximately 0.58 acre of Elk Grove Creek, 0.03 acre of depressional seasonal wetland, and approximately 2.25 acres of constructed basin. A formal aquatic resources delineation was conducted to accurately map the extent of aquatic resources on the site, and its details are contained under a separate cover (HELIX 2021). Surrounding land uses include undeveloped land, industrial complexes, railroad tracks, and residential subdivisions.

Known or potential biological constraints in the Study Area include:

- Potential habitat for special-status plants, including Bolander's water-hemlock (*Cicuta maculata* var. *bolanderi*), bristly sedge (*Carex comosa*), marsh skullcap (*Scutellaria galericulata*), Mason's lilaeopsis (*Lilaeopsis masonii*), Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*), saline clover (*Trifolium hydrophilum*), Sanford's arrowhead (*Sagittaria sanfordii*), side-flowering skullcap (*Scutellaria lateriflora*), watershield (*Brasenia schreberi*), and woolly rose-mallow (*Hibiscus lasiocarpus* var. *occidentalis*);
- Potential nesting and foraging habitat for migratory birds and birds of prey including, burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), Cooper's hawk (*Accipiter cooperii*), and white-tailed kite (*Elanus leucurus*);
- Potential aquatic and upland/overwintering habitat for special-status reptiles, including giant garter snake (*Thamnophis gigas*) and western pond turtle (*Actinemys marmorata*);
- Protected trees regulated by the City of Elk Grove; and
- Sensitive habitats, including waters of the U.S. and State, that are subject to regulation including habitats potentially subject to regulation by CDFW under Fish and Game Codes.

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# 1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the 20.6-acre Waterman Brinkman Logistics Center Project located within the City of Elk Grove, Sacramento County, California. This document addresses the site’s physical features, plant communities present, and plant and wildlife species occurring or potentially occurring in the Study Area. Furthermore, the suitability of habitats to support special-status species and sensitive habitats are analyzed, and recommendations are provided for any regulatory permitting or further analysis required prior to development activities occurring on the site.

## 1.1 PROJECT DESCRIPTION

Development within the Project Site is proposed to include the construction of a 252,547 square-foot one story distribution warehouse building, associated parking, and minor landscaping. A waterline alignment is proposed in the northwest and southeast corners of the Study Area. In addition, a flood basin is proposed to be constructed along the western portion of the Project Site. The constructed flood basin is proposed to replace all impacted areas of the 100-year floodplain within the Project Site and the 100-year floodplain will be remapped with FEMA. Additionally, an outfall associated with the flood basin is proposed to be constructed within the ordinary high water mark of Elk Grove Creek.

# 2.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

## 2.1 FEDERAL REGULATIONS

### 2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other

federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

### 2.1.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

### 2.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to *“take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.”* Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as *“to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”*

## 2.2 STATE JURISDICTION

### 2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), when preparing CEQA documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species. It also directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

### 2.2.2 California Department of Fish and Game Codes

A number of species have been designated “fully-protected” species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as *“hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”* Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests.

### 2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants protected under the NPPA. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

## 2.3 JURISDICTIONAL WATERS

### 2.3.1 Federal Jurisdiction

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

“Waters of the U.S.” are defined as: “All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; the territorial sea; or wetlands adjacent to these waters (33 Code of Federal Regulations [CFR] Part 328).”

Within non-tidal waters that meet the definition cited above and, in the absence of adjacent wetlands, the indicator used by the USACE to determine the lateral extent of its jurisdiction is the ordinary high water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, and/or the presence of litter and debris.

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE has determined that not all features which meet the wetland definition are, in fact, considered to be waters of the U.S. Normally, features not considered as waters of the U.S. include (a) non-tidal drainage and irrigation ditches excavated on dry land; (b) artificially irrigated areas which would revert to upland if the irrigation ceased; (c) artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing, (d) artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons, and (e) waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until

the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (see 33 CFR 328.3(a)). Other features may be excluded based on Supreme Court decisions (e.g. SWANCC and Rapanos) or by regulation.

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. must obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

### 2.3.2 State Jurisdiction

#### Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Office of Administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California’s statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

### California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will “*substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.*” Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

## 2.4 CEQA SIGNIFICANCE

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist contained in Appendix G of the State CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;



- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

#### 2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

- Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – A Review List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 plants be evaluated for consideration under CEQA. Furthermore, the CNPS Rare Plant Rankings include levels of threat for each species. These threat ranks include the following:

- 0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- 0.2 - Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat); and

0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully-considered during preparation of environmental documents under CEQA.

## 2.4.2 California Department of Fish and Wildlife Species of Concern

Some additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or are fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to “Species of Special Concern” (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as “California Special Animals” (CSA).

## 2.5 CITY OF ELK GROVE

### 2.5.1 General Plan

In addition to the federal and State regulations described above, the City of Elk Grove General Plan (General Plan) includes goals, policies, and actions regarding biological resources within the City limits (City of Elk Grove 2019a). Applicable sections of the General Plan are included in Appendix A.

### 2.5.2 Swainson’s Hawk Code

In 2003, the City of Elk Grove (City) adopted Chapter 16.130 Municipal Code (“Swainson’s Hawk Code”), which establishes Swainson’s Hawk Impact Mitigation policies tailored for projects in Elk Grove that have been determined through the CEQA process to result in a potential significant impact or potential significant cumulative impact on Swainson’s hawk foraging habitat (City of Elk Grove 2003). This Code applies to the following:

- Any request for a change in land use designation from an agricultural designation to an urban designation;
- Any request to subdivide five acres or more of contiguous land zoned AR-1 or AR-2;
- Any request for a land use entitlement for a non-agricultural use of land zoned with an agricultural designation;
- Any request for a land use entitlement for a non-agricultural use of land five acres or more in size zoned AR-1 or AR-2; and
- Any public improvement project proposed by any department or agency of the City of Elk Grove on land with an agricultural designation.

This code serves as a conservation strategy that is achieved through the selection of appropriate replacement lands and through management of suitable habitat value on those lands in perpetuity. This Code allows a project applicant to provide mitigation for the loss of foraging habitat within the City. Mitigation can be accomplished by one or a combination of the following options:

- Provide direct land preservation to the City by fee title or conservation easement on a per acre basis (one-to one mitigation ratio), including an endowment for easement monitoring. Interests in mitigation lands are to be held in trust by an entity acceptable to the City and/or the City in perpetuity;
- Pay Swainson’s Hawk impact mitigation fee on a per acre basis of habitat impacted; as of 2017, the fee is \$11,452 per acre. The City utilizes the fees collected to mitigate the project’s impacts by acquiring land in fee title and/or conservation easements on suitable Swainson’s hawk foraging habitat. Although the Swainson’s Hawk Code states that the payment of a mitigation fee is limited to projects less than 40 acres, the City Council has lifted the restriction in the interim to allow projects 40 acres and over the option to pay the mitigation fee;
- Purchase mitigation credits at an accredited mitigation bank that is acceptable to the City and California Department of Fish and Game;
- Purchase credits from a property owner with eligible credits for projects in Elk Grove that is acceptable to the City and California Department of Fish and Game; and/or
- Provide other instruments to preserve suitable habitat as determined by the California Department of Fish and Game (City of Elk Grove 2019b).

### 2.5.3 Tree Preservation and Protection Ordinance

The City regulates the removal, pruning, and impacts to protected trees under the Tree Preservation and Protection Ordinance (Chapter 19.12 of the Municipal Code). Protected trees include any trees of the following species with a single trunk, or multi-trunked trees with a combined DBH, of six inches or greater: coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), oracle oak (*Quercus X morehus*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans hindsii*). Additionally, designated Landmark trees, trees in the right-of way or on City property, and trees previously retained during development review or planted as mitigation, are protected. The critical root zone (CRZ) is defined as the existing dripline of the tree plus one foot. A Tree Permit is required prior to removal, pruning, or disturbance within the CRZ of any protected tree. Mitigation shall be provided at a ratio of one new inch DBH of tree for each inch of DBH lost (1 for 1 replacement) unless an alternative mitigation plan is approved by the City. Trees replaced shall be of the same species as those removed. On-site or off-site replacement shall specify where the trees shall be planted and how the trees shall be monitored and maintained for a minimum of five years. As an alternative to replacement plantings, payment of in-lieu fees can be deposited into the Tree Preservation Fund based on a rate established by the City Council.

## 3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed and all references reviewed for this assessment are listed in Section 6.0. The following site-specific published information was reviewed for this report:

- Barbour, Michael G., Todd Keeler-Wolf, and Allan A. Schoenherr, Editors. 2007. *Terrestrial Vegetation of California, Third Edition*. University of California Press, Berkeley and Los Angeles, California;
- California Department of Fish and Wildlife (CDFW). 2021. California Natural Diversity Data Base (CNDDDB); For: *Sacramento East, Carmichael, Buffalo Creek, Florin, Elk Grove, Sloughhouse, Bruceville, Galt, and Clay* U.S. Geological Survey (USGS) 7.5-minute series quadrangles (accessed November 24, 2021);
- California Native Plant Society (CNPS). 2021. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39) For *Sacramento East, Carmichael, Buffalo Creek, Florin, Elk Grove, Sloughhouse, Bruceville, Galt, and Clay* U.S. Geological Survey (USGS) 7.5-minute series quadrangles (accessed November 24, 2021);
- USDA, NRCS. 2019. *Web Soil Survey*. Available online at: <http://websoilsurvey.sc.egov.usda.gov>;
- U.S. Fish and Wildlife Service (USFWS). 2021. *Information for Planning and Conservation (IPaC) Elk Grove Project, California* (accessed November 24, 2021); and
- U.S. Geological Society (USGS). 2015. *Elk Grove, California*. 7.5-minute series topographic quadrangle. United States Department of Interior.

Existing information concerning known habitats and special-status species that may occur in the Study Area were reviewed. The results of the records search and five-mile radius CNDDDB query for the Study Area are summarized in Tables 1 through 3 of Appendix B. The field survey was conducted on November 6, 2019, by HELIX biologist Charlotte Marks. The weather during the field survey was sunny with temperatures between 58 degrees and 70 degrees Fahrenheit. The Study Area was systematically surveyed on foot, walking meandering transects, to ensure total search coverage, and special attention was given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Binoculars were used to further extend site coverage and identify species observed. Direct access to Elk Grove Creek and portions of the ruderal and non-native annual grassland vegetation communities within the Study Area was not possible during the site visit due to fencing along the Creek. All plant and animal species observed were recorded (Appendix C), and all biological communities occurring onsite were characterized. Resources of interest were mapped with Global Positioning System (GPS)-capable-Android phone equipped with GPS receivers running ESRI Collector for ArcGIS version 10.3.2 software. Following the field survey, the potential for each species identified in the records search to occur within the Study Area was determined based on the site survey, soils, habitats present within the survey area, and species-specific information, as shown in Appendix B.

## 4.0 RESULTS

### 4.1 SITE LOCATION AND DESCRIPTION

The 25.3-acre Study Area is located in the in the City of Elk Grove, Sacramento County, California (Figure 1, *Vicinity Map*). The Study Area is bound by Brinkman Court to the east, Southern Pacific Railroad tracks and a residential subdivision to the west, Elk Grove Creek, and an industrial complex to the north, and undeveloped land to the south. The parcels (APNs 134-0100-084-0000 and 134-0100-085-0000) for the project site are designated as urban and zoned as “Heavy Industrial (HI)” as per the Sacramento County Zoning Code. The Study Area is located within Township 6 North, Range 6 East, Section 6 of the USGS 7.5-minute series *Elk Grove* quadrangle. The approximate location of the Study Area is -121.357098° Longitude, and 38.395658° Latitude (Figure 1). An aerial of the Study Area is provided in Figure 2, *Project Site*.

### 4.2 PHYSICAL FEATURES

#### 4.2.1 Topography and Drainage

The general topography of the Study Area is flat, with no hills, but with a lower topographical area in the northwest portion of the Study Area. Elevations range from approximately 42 feet (13 meters) above mean sea level (MSL) along Elk Grove Creek in the north, to approximately 58 feet (18 meters) above MSL in the southeastern corner of the Study Area. The Study Area is located in the Lower Sacramento watershed, USGS Hydrologic Unit Code (HUC) 18020163.

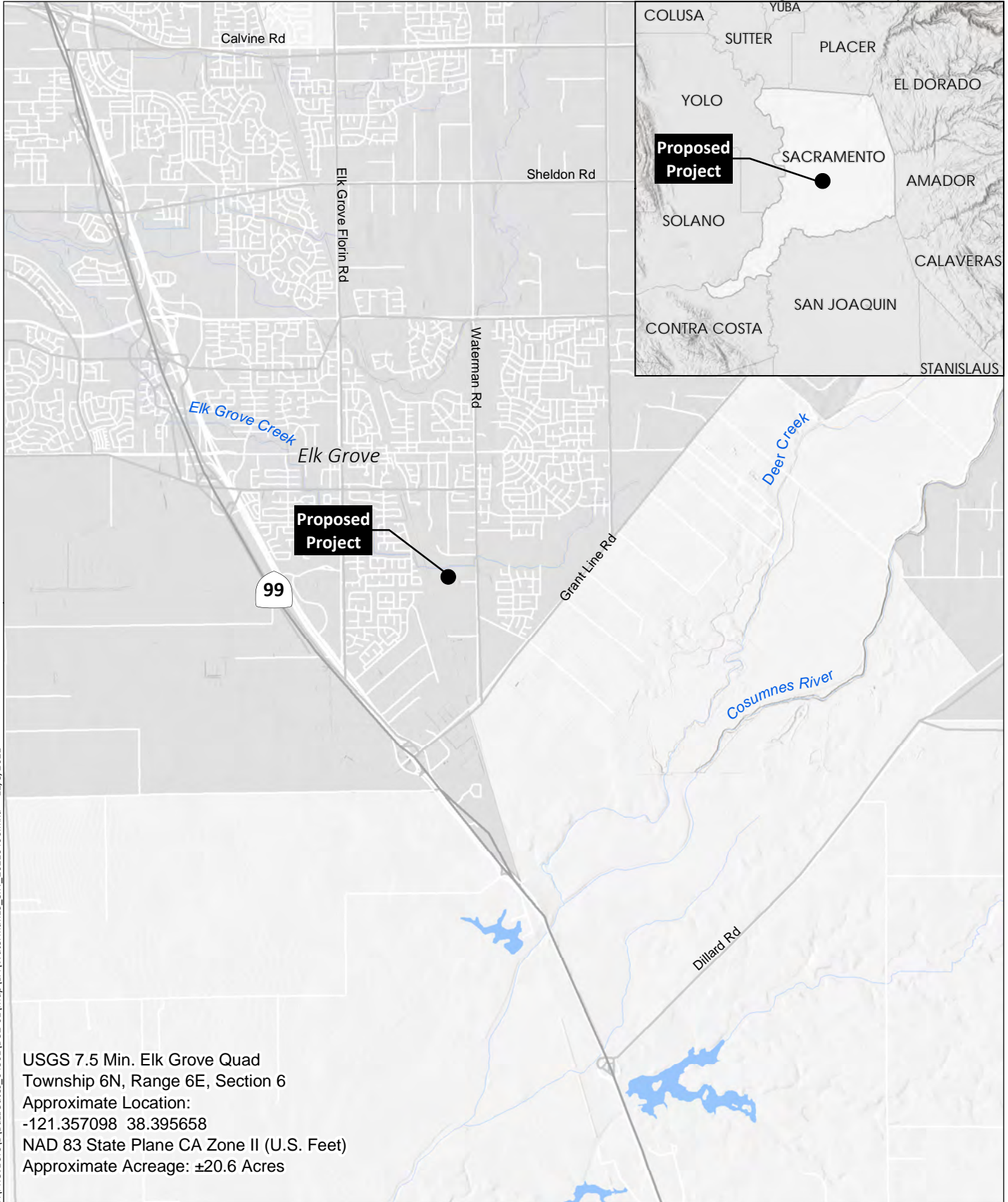
Historic aerial imagery shows a large, inundated area in the northwest portion of the Study Area, and several smaller drainages throughout the Study Area. However, due to the highly-disturbed nature of the site (i.e., regular plowing) the precise boundaries of these features were not well-defined during the biological survey. The hydrological regime onsite includes direct seasonal precipitation, and stormwater run-off from surrounding uplands during the wet season. Furthermore, the northwest portion of the Study Area is located within the 100-year floodplain as designated by FEMA Flood Maps.

#### 4.2.2 Soils

The Natural Resources Conservation Service has mapped three soil units within the Study Area and include, San Joaquin silt loam, leveled, 0 to 1 percent slopes, San Joaquin silt loam, 0 to 3 percent slopes, and Water (USDA, NRCS 2019) (Figure 3, *Soil Types*). The general characteristics and properties associated with these soil types are described below.

**(213) San Joaquin silt loam, leveled, 0 to 1 percent slopes:** This soil type is found in terraced landforms. This soil has parent material consisting of alluvium derived from granite. The available water holding capacity is low (about 3.4 inches). This soil is composed of 85 percent San Joaquin and other similar soils, three percent Bruella soil, three percent Durixeralfs soil, two percent Galt soil, two percent Hedge soil, two percent Kimball soil, two percent Xerarents soil, and one percent unnamed, rarely flooded soil. Overall, this soil type is not identified as hydric; however, the Galt soil minor component is rated as hydric and is found in depressional landforms (USDA, NRCS 2019). This soil type occurs in majority of the Study Area.

Waterman Brinkman Logistics Center Project (20.6-Acre)



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USGS 7.5 Min. Elk Grove Quad  
Township 6N, Range 6E, Section 6  
Approximate Location:  
-121.357098 38.395658  
NAD 83 State Plane CA Zone II (U.S. Feet)  
Approximate Acreage: ±20.6 Acres

Source: Base Map Layers (Esri, USGS, NGA, NASA)



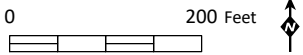
Legend

- Study Area - 25.3 Acres
- Project Site - 20.6 Acres

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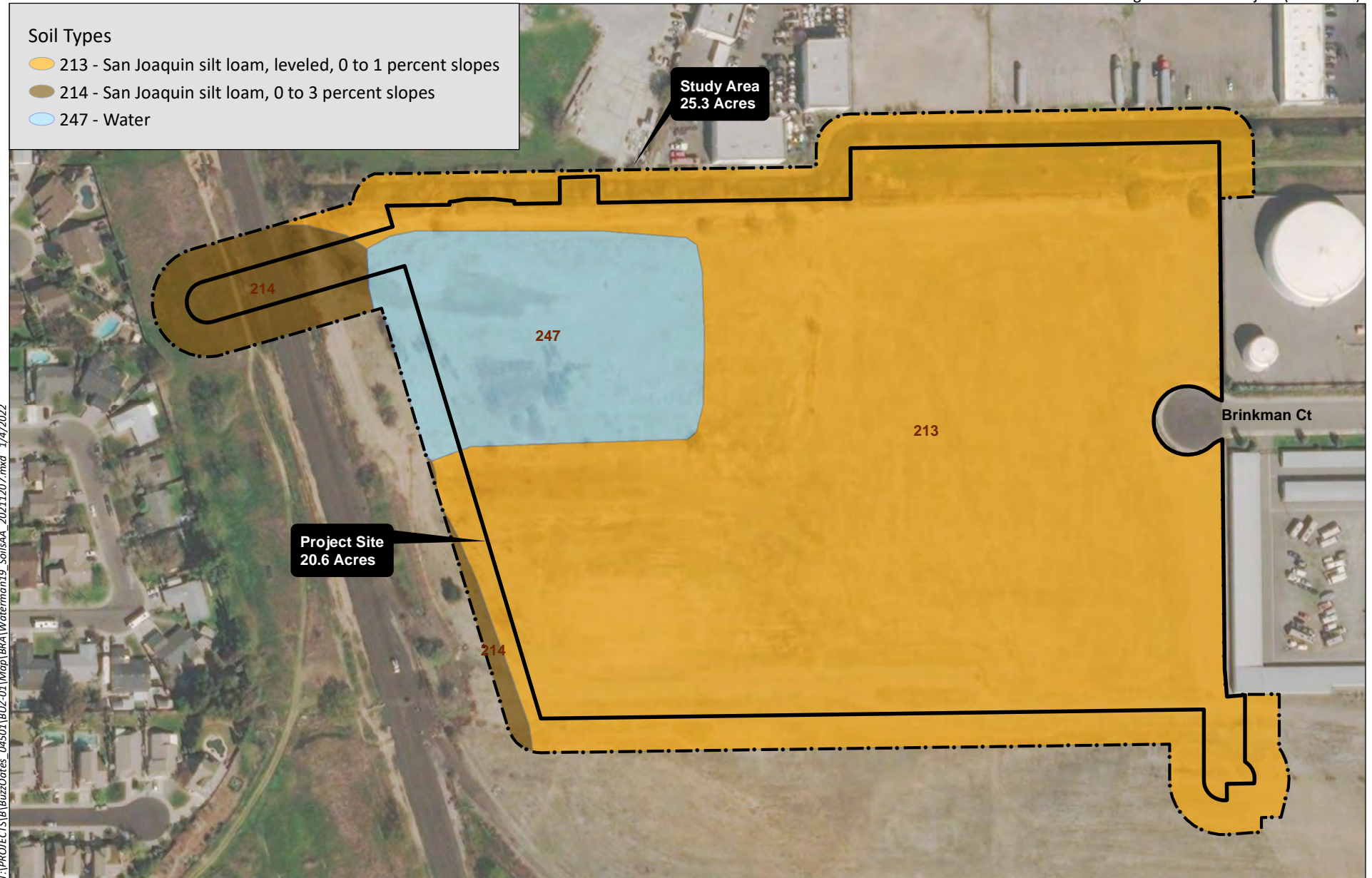
Source: Base Map Layers (DigitalGlobe, 3/4/2021)





Soil Types

- 213 - San Joaquin silt loam, leveled, 0 to 1 percent slopes
- 214 - San Joaquin silt loam, 0 to 3 percent slopes
- 247 - Water



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Source: Base Map Layers (DigitalGlobe, 3/4/2021; USGS Soil Survey, 2021)



**(214) San Joaquin silt loam, leveled, 0 to 3 percent slopes:** This soil type is found in terraced landforms. This soil has parent material consisting of alluvium derived from granite. The available water holding capacity is low (about 3.4 inches). This soil is composed of 85 percent San Joaquin and other similar soils, four percent Bruella soil, four percent Galt soil, three percent Hedge soil, three percent Kimball soil, and one percent of an unnamed, rarely flooded soil. Overall, this soil type is not identified as hydric; however, the Galt soil minor component is rated as hydric and is found in depressional landforms (USDA, NRCS 2019). This soil type occurs along the southwestern portion of the Study Area.

**(247) Water:** This soil type is composed of 100 percent water (USDA, NRCS 2019). This soil type occurs in the northwestern portion of the Study Area. While this area was dry during the biological survey, this soil type is located within a 100-year floodplain and areas within this soil type inundate on an annual basis based on a review of aerial photographs of the Study Area.

### 4.3 BIOLOGICAL COMMUNITIES

Five biological communities including, barren, developed, ruderal/disturbed, non-native annual grassland, and valley oak woodland, occur within the Study Area (Figure 4, *Biological Communities*). These communities are described in more detail below. A comprehensive list of all plant species observed within the Study Area is provided in Appendix C. Representative site photographs are included in Appendix D.

#### 4.3.1 Barren

A total of 16.40 acres of barren habitat occurs throughout the Study Area (Figure 4). In general, this habitat is defined by the absence of vegetation; or less than two percent of total herbaceous, desert, or non-wildland species and less than 10 percent cover of trees and shrubs. Various habitat types where this community may occur include deserts, alpine, sand dunes, rock outcrops, marine or estuarine habitats, or urban settings. Within the Study Area, this community is generally lacking vegetation, and is regularly plowed creating a highly-disturbed environment. The substrate consists primarily of gravel interspersed with soil, and some paved areas. Vegetation observed within this community included stinkwort (*Dittrichia graveolens*), tumbleweed (*Salsola tragus*), and horseweed (*Erigeron canadensis*).

#### 4.3.2 Developed

A total of 0.21 acre of developed land occurs in the northwestern portion of the Study Area (Figure 4). This is associated with an existing railroad track and has similar vegetation as the barren community described above.

#### 4.3.3 Ruderal/Disturbed

A total of 3.79 acres of ruderal/disturbed habitat occurs within the northwestern portion of the Study Area (Figure 4). This habitat is primarily characterized by an assemblage of ruderal herbs and forbs that colonize disturbed landscapes. The project site is a highly-disturbed environment, supporting several homeless encampments and trash, as well as several non-native and invasive plant species. Dominant vegetation within this community includes Italian thistle (*Carduus pycnocephalus* spp. *pycnocephalus*), stinkwort, tumbleweed, and horseweed (*Erigeron canadensis*). Interspersed throughout this community are valley oak (*Quercus lobata*), Fremont's cottonwood (*Populus fremontii*), and pistachio (*Pistacia*

*atlantica*) trees. A depressional seasonal wetland occurs within this community, and is further discussed below in Section 4.4.

#### 4.3.4 Non-Native Annual Grassland

A total of 0.90 acre of non-native annual grassland habitat occurs within the northeastern portion of the Study Area (Figure 4). This habitat is primarily characterized by an assemblage of non-native grasses and herbaceous species. Dominant vegetation within this community includes oat (*Avena* spp.), soft brome (*Bromus hordeaceus*), curly dock (*Rumex crispus*), and stinkwort. A portion of Elk Grove Creek occurs in the northern portion of this biological community. A detailed list of plant species identified within this community is limited due to site access restrictions (i.e., fenced private property) during the biological survey.

#### 4.3.5 Valley Oak Woodland

A total of 0.59 acre of valley oak woodland habitat occurs along Elk Grove Creek in the northern portion of the Study Area (Figure 4). This habitat is characterized primarily by valley oak and pistachio trees. Understory vegetation is comprised of Himalayan blackberry (*Rubus armeniacus*), wild grape (*Vitis californica*), and an assemblage of grasses identified within the non-native annual grassland habitat. A detailed list of plant species identified within in this community is limited due to site access restrictions (i.e., fenced private property) during the biological survey.

### 4.4 AQUATIC RESOURCES

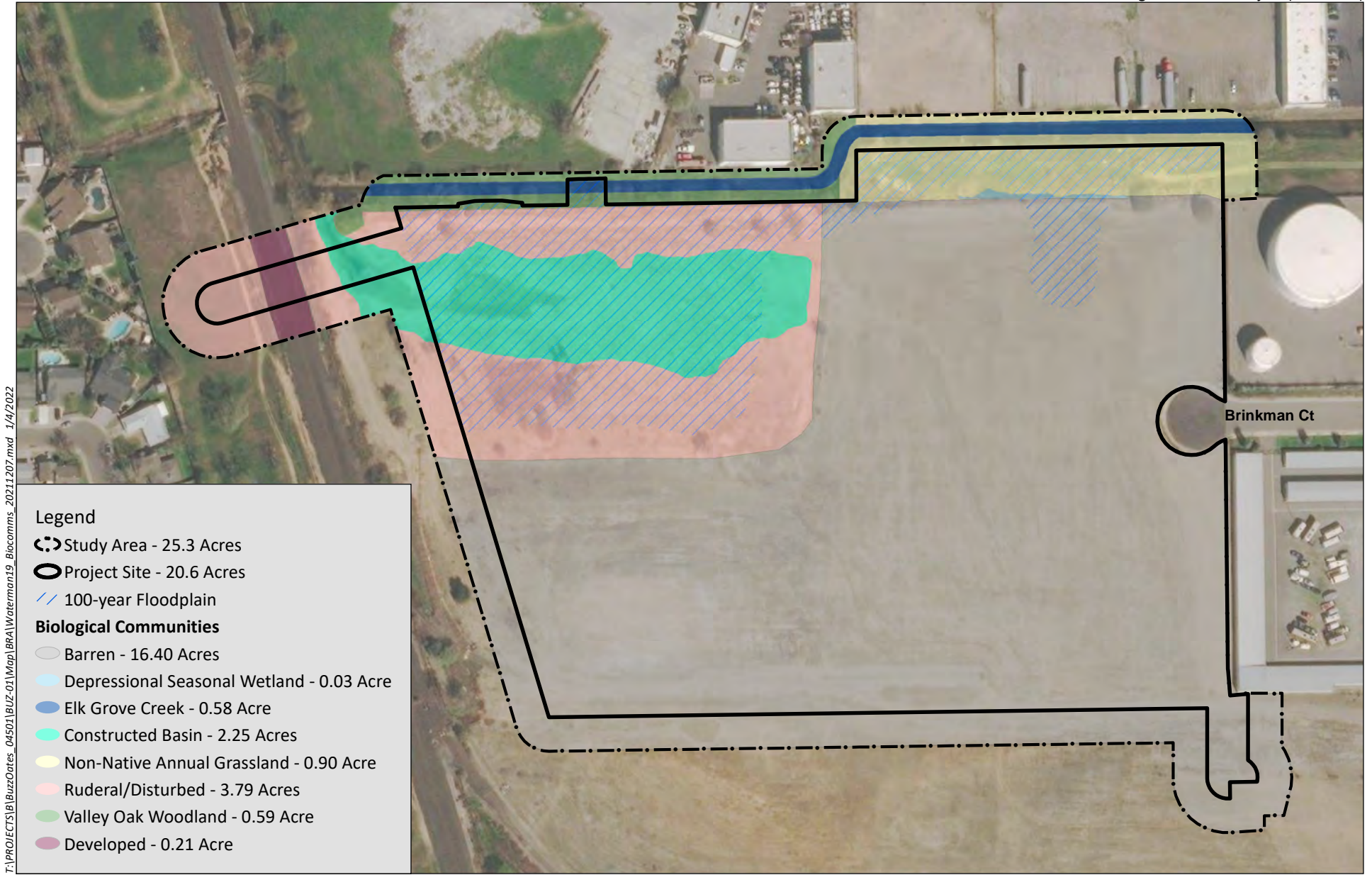
A formal aquatic resources delineation of the Project Site was conducted by HELIX on January 17 and 20, 2020, and two types of aquatic resources were identified within the Project site. The boundary of the Project site was expanded, and an additional aquatic resources delineation was conducted in March 2021 to assess the waterline alignment in the northwest and southeast corners of the project site and delineate the OHWM of Elk Grove Creek. Aquatic resources identified include one perennial drainage (Elk Grove Creek), one depressional seasonal wetland, and one constructed basin.

#### 4.4.1 Perennial Drainage (Elk Grove Creek)

A perennial drainage [Elk Grove Creek] within the northern portion of the Study Area occupies approximately 0.58 acre of the Study Area and is included in a small portion of the Project Site. The channel of Elk Grove Creek within the Study Area includes areas of riprap and concrete-lined banks and the natural floodplain has been channelized in this area. Emergent vegetation within the drainage consisted of broad-leaved cattail (*Typha latifolia*), dallis grass (*Paspalum dilatatum*), and tall flatsedge (*Cyperus eragrostis*). The banks of the drainage were lined primarily with non-native tree species but also had several native oak trees present.

#### 4.4.2 Depressional Seasonal Wetland

A depressional seasonal wetland (0.03 acre) was mapped within the northern portion of the Study Area (Figure 4). While this feature was not inundated at the time of the survey, it occurs in the 100-year floodplain as designated by FEMA Flood Maps, and historic aerial imagery depicts the inundation of this area on an annual basis during the wet season. It appears to receive water from direct precipitation, sheet flow from the surrounding upland topography, and overflow from Elk Grove Creek to the



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**Legend**

- Study Area - 25.3 Acres
- Project Site - 20.6 Acres
- 100-year Floodplain
- Biological Communities**
- Barren - 16.40 Acres
- Depressional Seasonal Wetland - 0.03 Acre
- Elk Grove Creek - 0.58 Acre
- Constructed Basin - 2.25 Acres
- Non-Native Annual Grassland - 0.90 Acre
- Ruderal/Disturbed - 3.79 Acres
- Valley Oak Woodland - 0.59 Acre
- Developed - 0.21 Acre



Source: Base Map Layers (DigitalGlobe, 3/4/2021)

northwest. This depressional seasonal wetland is a topographically-low area, that generally lacks vegetation. Areas mapped as seasonal wetland support a predominance of hydrophytic plant species such as Mediterranean barley (*Hordeum marinum*), willow (*Salix* sp.), and Italian ryegrass (*Festuca perennis*).

#### 4.4.3 Constructed Basin

The constructed basin within the Study Area is a constructed, unlined earthen basin approximately 2.25 acres in size (Figure 4). The basin is in the northwest portion of the Study Area and is adjacent to Elk Grove Creek that parallels the northern boundary of the Study Area. Historically, the location where this basin exists consisted of dryland grain crop fields, a mining operation and it is currently mapped as a tailings pond on USGS topographical maps. Per communication with the property owner, the basin was excavated in association with construction activity relating to a charcoal operation (HELIX 2021). The basin is sparsely vegetated and is dominated by small herbaceous hydrophytes such as toad rush (*Juncus bufonius*) and prostrate knotweed (*Polygonum aviculare*). Upland vegetation such as stinkwort and horseweed were also present in the constructed basin but were more common just outside of the basin. The basin does not have a clear and incised ordinary high water mark, but rather a gentle slope. The basin is fed by runoff as sheet flow during precipitation events from the surrounding uplands on the property, with constructed upland ditches that originate on the property and drain precipitation to this basin. The basin exits the site via an excavated trench through the bank of Elk Grove Creek northwest of the northwestern corner of the project boundary, where it enters Elk Grove Creek outside of the Study Area. The excavated trench is the only physical connection between Elk Grove Creek and the basin.

### 4.5 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., Migratory Bird Treaty Act);
- Included on the CDFW Special Animals List;
- Identified as Rare Plant Rank 1 to 3 by CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDDB, the USFWS IPaC list, and CNPS ranked plant species (online versions) for the *Elk Grove* USGS quadrangle and eight surrounding quadrangles. Appendix B includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

- **Present:** Species known to occur within the Study Area based on CNDDDB records and/or observed within the Study Area during the biological survey.

- **High:** Species known to occur on or in the vicinity of the Study Area (based on CNDDDB records within five miles and/or based on professional expertise specific to the Study Area or species) and there is suitable habitat within the Study Area.
- **Low:** Species known to occur in the vicinity of the Study Area and there is marginal habitat within the Study Area **-OR-** Species is not known to occur in the vicinity of the Study Area, however, there is suitable habitat on the Study Area.
- **None:** Species is not known to occur on or in the vicinity of the Study Area and there is no suitable habitat within the Study Area **-OR-** Species was surveyed for during the appropriate season with negative results **-OR-** The Study Area occurs outside of the known elevation or geographic ranges.

Only those species that are known to be *present* or have a *high* or *low* potential for occurrence are discussed further in the following sections.

#### 4.5.1 Listed and Special-Status Plants

According to the records search, 21 special-status plant species have the potential to occur on or in the vicinity of the Study Area. Based on field observations, site conditions and habitats, and literature review, one special-status plant species, Sanford's arrowhead, has a *high* potential to occur within the Study Area. However, the bank along Elk Grove Creek was surveyed during a time of year when *Sagittaria* species should have been observable, and none were observed which further reduces the likelihood that this species is present within the Study Area. Nine special-status plant species, Bolander's water-hemlock, bristly sedge, Mason's lilaeopsis, marsh skullcap, Peruvian dodder, saline clover, side-flowering skullcap, watershield, and woolly rose-mallow, have a *low* potential to occur within the Study Area.

#### Special-Status Plant Species with a High Potential for Occurrence

##### Sanford's Arrowhead

Sanford's arrowhead is ranked as a CNPS 1B species, which are plants that are rare, threatened or endangered in California and elsewhere. It is a perennial rhizomatous herb found in assorted shallow freshwater marshes and swamps from 0 to 2,133 feet (0 to 650 meters) above MSL. The identification period for this species is from May through October (CNPS 2021). There are eight documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). One historical occurrence (#74) is located approximately 170 feet northwest of the Study Area. This record documents a large colony of more than 1,000 plants seen in 1993. Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but the initial survey was conducted outside of the evident and identifiable period for this species. However, if *Sagittaria* species were present, they likely would have been observed during the site visits in 2021. Therefore, due to presence of suitable habitat and documented occurrences within close proximity to the site, Sanford's arrowhead has a *high* potential for occurrence within the Study Area.

## Special-Status Plant Species with a Low Potential for Occurrence

### Bolander's Water Hemlock

Bolander's water hemlock is a CNPS 2B species, which are plants that are rare, threatened or endangered in California, but more common elsewhere. It is a perennial herb found in fresh or brackish water marshes and coastal swamps from 0 to 656 feet (0 to 200 meters) above MSL. The identification period for this species is from July to September (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, Bolander's water hemlock has a *low* potential for occurrence within the Study Area.

### Bristly Sedge

Bristly sedge is ranked as a CNPS 2B species. This species is a perennial rhizomatous herb found in coastal prairies, marshes and swamps, and valley and foothill grasslands from 0 to 2,051 feet (0 to 625 meters) above MSL. The identification period for this species is from May through September (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). The non-native grassland within the Study Area and some areas along Elk Grove Creek provide suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property), and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, bristly sedge has a *low* potential for occurrence within the Study Area.

### Mason's Lilaeopsis

Mason's lilaeopsis is a State rare species and ranked as a CNPS 1B species. It is a perennial rhizomatous herb found in brackish and freshwater marshes and swamps, as well as riparian scrub from meters in elevation 0 to 33 feet (0 to 10 meters) above MSL. The identification period for this species is from April to November (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, Mason's lilaeopsis has a *low* potential for occurrence within the Study Area.

### Marsh Skullcap

Marsh skullcap is a CNPS 2B species. It is a perennial rhizomatous herb found in lower montane coniferous forest, moist meadows and seeps, and marshes and swamps from 0 to 6,890 feet (0 to 2,100 meters) above MSL. The identification period for this species is from June to September (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property)

to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, marsh skullcap has a *low* potential for occurrence within the Study Area.

### Peruvian Dodder

Peruvian dodder is ranked as a CNPS 2B species. It is an annual, parasitic vine found in freshwater marshes and swamps from 49 to 919 feet (15 to 280 meters) above MSL. The identification period for this species is from July to October (CNPS 2021). There is one documented CNDDDB record of this species occurring within five miles of the Study Area (CDFW 2021). One historical occurrence (#74) is located approximately 4.8 miles northwest of the Study Area; however, this occurrence was documented in 1995 and the specimen identification is questionable and requires further surveys to confirm the occurrence. Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, and a questionable documented occurrence within five miles of the site, Peruvian dodder has a *low* potential for occurrence within the Study Area.

### Saline Clover

Saline clover is a CNPS 1B species. It is an annual herb found in marshes and swamps, moist, alkaline valley and foothill grassland, and vernal pools from 0 to 984 feet (0 to 300 meters) above MSL. The identification period for this species is from April to June (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, saline clover has a *low* potential for occurrence within the Study Area.

### Side-Flowering Skullcap

Side-flowering skullcap is a CNPS 2B species. It is a perennial rhizomatous herb found in moist meadows and seeps as well as marshes and swamps from 0 to 1,640 feet (0 to 500 meters) above MSL. The identification period for this species is from July to September (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, side-flowering skullcap has a *low* potential for occurrence within the Study Area.

### Watershield

Watershield is a CNPS 2B species. It is a perennial rhizomatous herb found in freshwater marshes and swamps from in elevation 98 to 7,218 feet (30 to 2,200 meters) above MSL. The identification period for this species is from June to September (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological



survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, watershield has a *low* potential for occurrence within the Study Area.

### Woolly Rose-Mallow

Woolly rose-mallow is a CNPS 1B species. It is an emergent perennial rhizomatous herb found often in riprap on sides of levees and in freshwater marshes and swamps from 0 to 394 feet (0 to 120 meters) above MSL. The identification period for this species is from June to September (CNPS 2021). There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable habitat for this species. This species was not observed during the biological survey, but there was restricted access (private property) to Elk Grove Creek, and the survey was conducted outside of the evident and identifiable period for this species. Therefore, due to presence of suitable habitat, but lack of documented occurrences within close proximity to the site, woolly rose-mallow has a *low* potential for occurrence within the Study Area.

## 4.5.2 Listed and Special-Status Wildlife

According to the records search, 37 listed and special-status wildlife species have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2021). Based on field observations, published information, and literature review, Swainson's hawk, burrowing owl, tricolored blackbird, white-tailed kite, Cooper's hawk, western pond turtle, giant garter snake, and nesting migratory birds and raptors have a *high* potential to occur within the Study Area. No wildlife species have a *low* potential to occur within the Study Area.

### Special-Status Wildlife with a High Potential for Occurrence

#### Swainson's Hawk

Swainson's hawk is a State threatened species. This species is a long-distance migrant with nesting grounds in western North America. The Swainson's hawk population that nests in the Central Valley winters primarily in Mexico, while the population that nests in the interior portions of North America winters in South America (Bradbury et al., in prep.). Swainson's hawks arrive in the Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to late August, peaking in late May through July (Zeiner et al., 1988-1990). In the Central Valley, Swainson's hawks nest in isolated trees, small groves, or large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. In the Central Valley the most commonly used trees include Fremont cottonwood (*Populus fremontii*), willows (*Salix* sp.), sycamores (*Platanus* sp.), valley oaks (*Quercus lobata*), and walnut (*Juglans* sp.), and occasionally gum trees (*Eucalyptus* sp.), pines and redwoods (Woodbridge 1998). Nest locations are usually in close proximity (up to a 10-mile radius) to suitable foraging habitats, which include fallow fields, all types of grasslands, irrigated pastures, alfalfa and other hay crops, and low-growing row crops, especially post-harvest when the height of the vegetation is short and easy to observe prey (Bechard et al. 2010 and SAIC 2012). Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and Van De Water 1994).

There are 56 CNDDDB records of this species within five miles of the Study Area (CDFW 2021). Two historical occurrences (#2251 and #2250) are located within one mile of the Study Area. These records



document nesting Swainson's hawks in eucalyptus trees along Waterman Road and Grant Line Road in 2003. The nearest occurrence (#2251) is approximately 0.30 mile from the Study Area. This species was not observed during the biological survey; however, the site assessment was conducted when this species is not expected to be present within the Sacramento Valley. Therefore, since there are several documented occurrences for this species within the vicinity of the Study Area, and the Study Area provides suitable nesting and foraging habitat, this species has a *high* potential to occur within the Study Area.

### **Burrowing Owl**

Burrowing owl is a State Species of Special Concern as designated by the CDFW. The burrowing owl is a small ground-dwelling owl that occurs in western North America from Canada to Mexico and east to Texas and Louisiana. Although in certain areas of their range, burrowing owls are migratory, these owls are predominantly non-migratory in California. Burrowing owls generally inhabit gently-sloping areas, characterized by low, sparse vegetation (Poulin et al. 2011). The breeding season for burrowing owls is from February to August, peaking in April and May (Zeiner et al. 1988-1990). Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owls are also known to use artificial burrows including pipes, stockpiles, culverts, and nest boxes.

There are eight CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2021). The burrows within the Study Area provide nesting habitat, and the ground squirrels provide prey for this species. This species was not observed onsite during the biological survey. However, since there are several documented occurrences for this species within the vicinity of the Study Area, and the Study Area provides suitable nesting and foraging habitat, this species has a *high* potential to occur within the Study Area.

### **Tricolored Blackbird**

Tricolored blackbird is a State threatened species. It is a colonial species that occurs in pastures, dry seasonal pools, and agricultural fields in the Central Valley and the surrounding foothills. This species usually nests within dense cattails (*Typha* sp.) or tules (*Scirpus* sp.) in emergent wetlands. Tricolored blackbird also nests in thickets of blackberry (*Rubus* sp.), wild rose (*Rosa* sp.), willows, and tall herbs (Zeiner et al. 1988-1990). Nesting locations typically must be large enough to support a minimum colony of approximately fifty pairs (Zeiner et al. 1990). This species typically forages in open habitats, such as farm fields, pastures, cattle pens, and large lawns.

There are 16 CNDDDB records for this species within five miles of the Study Area (CDFW 2021). Although the vegetation along Elk Grove Creek (i.e., Himalayan blackberry) may provide nesting habitat for this species, it is marginal habitat since the extent of suitable nesting habitat vegetation is intermittent, and the vegetation is of low to medium density. However, the non-native annual grassland provides suitable foraging habitat for this species. No tricolored blackbirds were observed during the biological survey. However, since there are several documented occurrences for this species within the vicinity of the Study Area, and the Study Area provides marginal nesting and suitable foraging habitat, this species has a *high* potential to occur within the Study Area.

### **White-Tailed Kite**

White-tailed kite is classified as a Fully Protected species by CDFW. White-tailed kite is a year-round resident in coastal and valley lowlands in California. This species will inhabit a variety of habitat types

including but not limited to, savanna, open woodland, marshes, partially-cleared lands, and cultivated fields (Nature Serve 2019). They breed from February to October, peaking from May to August (Zeiner et al. 1988-1990). This species nests near the top of dense oaks, willows, or other large trees, especially near aquatic habitats. They typically forage within un-grazed or lightly-grazed fields, agricultural areas, and open grasslands, that support prey species including voles (*Microtus* sp.), mice (*Mus* sp.), and sometimes pocket gophers (*Reithrodontomys* sp.).

There is one record of this species within five miles of the Study Area (CDFW 2021). The trees within the Study Area provide suitable nesting habitat, and the presence of prey species (i.e., ground squirrels) provides foraging habitat for this species. This species was not observed during the biological survey. However, since there is a documented occurrence for this species within the vicinity of the Study Area, and the Study Area provides suitable nesting and foraging habitat, this species has a *high* potential to occur within the Study Area.

### Western Pond Turtle

Western pond turtle is a California Species of Special Concern. This species is typically found along quiet streams and ponds with basking sites and muddy bottoms, feeding on aquatic plants, fishes, and invertebrates (Zeiner et al. 1988-1990 and Rosenberg et al. 2009). They are generally associated with permanent or nearly permanent water sources (Zeiner et al. 1988-1990) and prefer areas of deep water with low velocity and high temperatures (Reese and Hartwell 1997a). Upland habitats adjacent to creeks and ponds are used throughout the year for nesting and overwintering. Turtles may also overwinter within a pond by burrowing into the mud on the pond bottom (Zeiner et al. 1988-1990 and Riensche et al. 2013). Although studies have shown that the typical terrestrial use area can extend up to 500 meters from the edge of the aquatic habitat, the weighted average of recorded terrestrial use is 94 meters, or approximately 300 feet. Western pond turtles prefer to overwinter in areas with moderate woody vegetation and leaf litter, and are unlikely to use annual grasslands (Reese and Hartwell 1997b, Davis 1998, Pilliod et al. 2013, and Rathbun et al. 2002). Eggs are laid between May and August and hatch in approximately 80 days. Hatchlings often stay in or around the nest through the winter. Nests are generally found within 100 feet (30 meters) of water in areas with little vegetative cover and good sun exposure (Rathbun et al. 2002). Little is known about dispersal patterns of western pond turtles, but genetic analysis shows most movement is along drainages (Riensche et al. 2013).

There are two documented CNDDDB records for this species within five miles of the Study Area (CDFW 2021). Elk Grove Creek within the Study Area provides suitable aquatic habitat, and the non-native annual grassland immediately adjacent to Elk Grove Creek provides suitable upland/overwintering habitat for his species. This species was not observed within the Study Area during the biological survey. However, due to the presence of suitable aquatic, and upland/overwintering habitat, and documented occurrences for this species within the vicinity of the Study Area, then this species has a *high* potential to occur within the Study Area.

### Giant Garter Snake

The giant garter snake is a federally and State threatened species. This species is found in several habitats including agricultural wetlands, irrigation and drainage canals, sloughs, pools, small lakes, low gradient streams and adjacent wetlands. Giant garter snakes' range is restricted to the Central Valley spanning from Sacramento County northward to southern Butte County, although there have been a few recent sightings in San Joaquin County and Chico. Giant garter snakes are a very aquatic species and are nearly always found within the immediate vicinity of permanent to semi-permanent water sources,

and rarely found away from water. Suitable upland habitat contains burrows or other crevices in the soil that are suitable for giant garter snakes to reside during their dormancy period (generally from October to April). While this species may be active during their dormancy period, the typical active period occurs from May to early October, when the days are warmer. Typical prey includes a wide variety of native and non-native aquatic species, such as fish (e.g., mosquitofish), and amphibians (USFWS 2017a).

The Recovery Plan for Giant Garter Snake (Recovery Plan) was created in order to reduce threats and improve the population status of this species in order to sufficiently warrant delisting. The Study Area is located within the Cosumnes-Mokelumne Basin Recovery Unit (Recovery Unit). There are management units defined within this Recovery Unit. Conservation land within this recovery Unit is mostly within the Cosumnes River Preserve. As of 2017, there are no conservation banks set up in this Recovery Unit for giant garter snake (USFWS 2017a).

There are six CNDDDB occurrences for this species within five miles of the Study Area (CDFW 2021). One historical occurrence (#169) is located within 0.13 mile of the Study Area. The record documents the observation of a giant garter snake in the confluence of a wetland swale and ditch along Waterman Road. This ditch is hydrologically connected to Elk Grove Creek that occurs immediately outside of the Study Area to the north. Elk Grove Creek in the northern portion of the Project Site provides marginally suitable aquatic habitat for this species. Additionally, underground burrows within the Study Area provide suitable upland/overwintering habitat for this species. Therefore, since there are documented occurrences for this species within the vicinity of the Study Area, and the Study Area provides marginally suitable upland and aquatic habitat within Elk Grove Creek, this species has a *high* potential to occur within the Study Area.

### Nesting Migratory Birds and Raptors

Migratory birds are protected under the MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10; this also includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All raptors, including Cooper's hawk, and common species not possessing special-status, are protected under the California Fish and Game Code (Section 3503, 3503.5 and 3513). Removal or destruction of an active raptor nest is considered a violation of this Fish and Game Code. Migratory birds and raptors have the potential to nest on or adjacent to the Study Area. Suitable nest locations may include, but are not limited to trees, shrubs, herbaceous vegetation, and bare ground.

## 4.6 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA. Riparian areas are regulated under Section 1600 of the California Fish and Game Code, wetlands and other waters of the U.S. are regulated under Sections 401 and 404 of the Clean Water Act and potentially Sections 1600-1602 of the California Fish and Game Code, and protected trees are regulated under the Tree Ordinance for the City of Elk Grove.

### 4.6.1 Potential Jurisdictional Waters of the U.S. and State

A depressional seasonal wetland, a constructed basin, and Elk Grove Creek were observed within the Study Area. As part of a formal wetland delineation of the Project Site, the constructed basin and

depressional seasonal wetland were formally delineated first and then a portion of Elk Grove Creek was added to the delineation map in 2021.

The results of the initial Aquatic Resources Delineation that did not include Elk Grove Creek were submitted to the USACE on June 1, 2020 along with a request for an Approved Jurisdictional Determination. The USACE determined the 0.03 acre of depressional seasonal wetland within the Project Site is considered a water of the U.S. regulated by Section 404 of the CWA. The constructed basin within the Project Site is not considered a water of the U.S. (SPK-2019-00152). However, the constructed basin is potentially considered a water of the State under current regulations.

Since the AJD was issued, the boundary of the project site has expanded to include a portion of Elk Grove Creek. A second aquatic resources delineation of the proposed Project Area was conducted in March 2021 to assess the waterline alignment in the northwest and southeast corners of the project site and delineate the OHWM of Elk Grove Creek, which is a perennial drainage. Approximately 0.58 acre of perennial drainage was delineated in the Study Area over approximately 651 linear feet, however only 0.03 acre of this feature is included in the Project Area. The perennial drainage is likely to be considered a water of the U.S. since it is a tributary to a navigable water (Sacramento River).

As discussed in Section 2.3, waters of the U.S. are subject to regulation Sections 404 and 401 of the CWA. Aquatic features not subject to regulation under the CWA may still be considered waters of the State regulated by the RWQCB. Prior to initiation of any construction activities which could result in impacts to potentially jurisdictional aquatic features, applicable 404 and 401 permit applications or potentially a waste discharge permit should be prepared and submitted to the regulatory agencies. Any conditions included in the final permits including, prescribed mitigation measures, would be required to be implemented prior to filling of these features. Aquatic features not deemed to be waters of the U.S. may still be considered waters of the State and subject to regulation by the RWQCB. Furthermore, as per the General Plan, (CAQ-20), no fill shall be placed in any 100-year floodplain as delineated FEMA Flood Maps, unless approval is received from the City (Elk Grove 2019a).

#### **4.6.2 Protected Trees**

Several valley oak trees occur within the Study Area. A formal arborist survey was not conducted during the November 6, 2019 biological survey. Tree location data was taken along Elk Grove Creek in March and November 2021 to support permit applications. As discussed in Section 2.5, the City evaluates any impacts to protected trees under the Tree Preservation and Protection Ordinance. If the proposed project will result in impacts to or removal of protected trees, the City will require a formal tree survey to inventory protected trees onsite, evaluate impacts to the protected trees as a result of the proposed project, and evaluate applicable mitigation.

#### **4.6.3 Wildlife Migration Corridors**

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by development creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange;

(2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs. The Study Area is a highly disturbed site. While there is undeveloped land immediately to the south, the project site is not linked to suitable wildlife habitat that would act as a migratory corridor. Wildlife movements would most likely occur along Elk Grove Creek or the railroad tracks that occur outside of the parcel boundaries. Impacts to surrounding habitats (i.e., Elk Grove Creek) will be assessed upon finalization of a project site design.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The 25.3-acre Study Area is comprised of approximately 16.4 acres of barren habitat, 3.79 acres of ruderal/disturbed habitat, 0.21 acre of developed land, 0.90 acre of non-native annual grassland, 0.59 acre of valley oak woodland, 0.58 acre of Elk Grove Creek, 0.03 acre of depressional seasonal wetland, and 2.25 acres of constructed basin. Sensitive resources that may be impacted depending on the footprint of a proposed project include potential wetlands and other waters, and protected trees.

No special-status plants or special-status wildlife were observed within the Study Area during the November 6, 2019 biological survey; however, special-status plant and wildlife species may occur within the Study Area. Recommendations, including avoidance and minimization measures to limit or avoid impacts to special-status plant and wildlife species that may occur within the Study Area are included in Section 5.1.

Known or potential biological constraints in the Study Area include the following:

- Potential habitat for special-status plants, including Bolander’s water-hemlock, bristly sedge, marsh skullcap, Mason’s lilaepsis, Peruvian dodder, saline clover, Sanford’s arrowhead, side-flowering skullcap, watershield, and woolly rose-mallow;
- Potential nesting and foraging habitat for migratory birds and birds of prey including, burrowing owl, Swainson’s hawk, tricolored blackbird, Cooper’s hawk, and white-tailed kite;
- Potential aquatic and upland/overwintering habitat for special-status reptiles, including, giant garter snake and western pond turtle;
- Protected trees regulated by the City of Elk Grove; and
- Sensitive habitats, including potential waters of the U.S. and State that are subject to regulation by USACE, RWQCB, and CDFW.

### 5.1 RECOMMENDATIONS

#### 5.1.1 Special-Status Plant Species

Prior to the initiation of ground disturbance on Lot A, a qualified botanist shall conduct a botanical survey within the evident and identifiable blooming period for Bolander’s water-hemlock (July to September), bristly sedge (May to September), marsh skullcap (June to September), Mason’s lilaepsis (April to November), Peruvian dodder (July to October), saline clover (April to June), Sanford’s

arrowhead (May to October), side-flowering skullcap (July to September), watershield (June to September), woolly rose-mallow (June to September). Two surveys, one conducted between May and June, and one conducted between July to September, will satisfy the blooming period for all twelve plant species. The targeted botanical survey shall focus along Elk Grove Creek and within the non-native annual grassland.

If no special-status plants are observed, the botanist shall document the findings in a letter report to be sent to Project proponent and City's Development Services Department, and no additional measures are recommended. If any of the twelve aforementioned special-status plants are identified within areas of potential construction disturbance, they shall be avoided to the greatest extent feasible, as determined by the City. If the plants cannot be avoided, then a qualified botanist shall prepare an avoidance and mitigation plan detailing protection and avoidance measures, transplanting procedures, success criteria, and long-term monitoring protocols for review and approval of the City's Development Services Department.

In addition, if special-status plants are observed, a pre-construction worker awareness training shall be conducted alerting workers to the presence of and protections for special-status plants.

### 5.1.2 Swainson's Hawk

Swainson's hawk has a *high* potential to occur due to the presence of suitable nesting habitat and known nesting occurrences within 10 miles of the Study Area. Although no Swainson's hawks were observed during the survey, the site assessment was conducted when this species is not expected to be present within the Sacramento Valley. Vegetation clearing and ground-disturbing construction activities would destroy potential nesting and foraging habitat for this species.

The project parcel is designated as Urban/Heavy Industrial, and therefore, the City's Swainson's Hawk Code for mitigation for project impacts to foraging habitat for this species does not apply to the proposed project. However, the site does provide suitable nesting and foraging habitat for Swainson's hawks and development of the site could potentially impact this species through loss of nesting and foraging habitat and disturbance to nesting pairs including potential nest abandonment if active nests are located within or nearby to the project site during construction.

The following measures are recommended to reduce potential impacts to Swainson's hawk:

Prior to the commencement of construction activities during the nesting season for Swainson's hawk (between March 1 and September 15), a qualified biologist shall conduct protocol-level preconstruction surveys within at least 2 (two) of the recommended survey periods within the nesting season that coincides with the commencement of construction activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). At least one survey shall be conducted within each survey period selected; the dates should be adjusted in consideration of early or late nesting seasons for the year in which the surveys are conducted. If the final survey is completed more than 14 days prior to initiation of construction, an additional survey shall be conducted within 14 days of the start of construction to ensure that nesting has not been initiated within the intervening time. The qualified biologist shall conduct surveys for nesting Swainson's hawk within 0.25 mile of the Project Site, where legally permitted. The qualified biologist shall use binoculars to visually determine whether Swainson's hawk nests occur within the 0.25-mile survey area, if access is denied on adjacent properties. If no active

Swainson's hawk nests are identified on or within 0.25 mile of the Project site within the recommended survey periods, a letter report summarizing the survey results shall be submitted to the City of Elk Grove within 30 days following the final survey, and no further avoidance and minimization measures for nesting habitat are required.

If active Swainson's hawk nests are found within 0.25-mile of construction activities, the qualified biologist shall contact the City of Elk Grove within one business day following the pre-construction survey to report the findings. For the purposes of this mitigation measure, construction activities are defined to include heavy equipment operation associated with vegetation clearing, grading, construction (use of cranes or draglines, new rock crushing) or other Project-related activities that could cause nest abandonment or forced fledging within 0.25-mile of a nest site between February 15 and August 31. Should an active nest be present within 0.25- mile of the construction area, the City of Elk Grove shall be consulted to establish take avoidance plan. Such a plan could include measures such as establishment of a construction setback, placement of high-visibility construction fencing along the setback boundaries, and monitoring of the nest during construction activities. The qualified biologist shall have the authority to stop construction activities if the hawks show signs of distress; if this occurs, construction may not resume until the City of Elk Grove is consulted and the construction setback is increased or other take avoidance measures are modified. A letter report summarizing the survey results and describing implementation of the take avoidance measures will be submitted to the City of Elk Grove within 30 days of the final monitoring event. No further avoidance and minimization measures for nesting habitat would be required after submittal of the report.

In the event that the City deems the SWHA mitigation exemption for the Urban/Heavy Industrial designated parcel inappropriate, then the project would require the following measures. Prior to initiation of construction activities, the Project applicant would be required mitigate for the loss of Swainson's hawk foraging habitat within the non-native annual grassland and ruderal/disturbed communities at a 1:1 ratio. Mitigation can be accomplished through payment of an in-lieu fee to the City or acquisition of a conservation easement(s) or other means suitable to preserve foraging habitat for the Swainson's hawk in accordance with either Section 16.130.040 or 16.130.110 of the Elk Grove Municipal Code.

### 5.1.3 Burrowing Owl

Burrowing owl has a *high* potential to occur within the ruderal/disturbed community due to the presence of suitable nesting (e.g., burrows) and foraging habitat and known occurrences within the vicinity of the Study Area. Although no burrowing owls were observed during the biological survey, the species could occupy the Study Area in the future.

The following measures are recommended to reduce potential impacts to burrowing owl:

During the non-breeding season (late September through the end of January), the Applicant shall conduct a survey for burrowing owls and burrows or debris that represent suitable nesting or refugia habitat for burrowing owls within areas of proposed ground disturbance. Should owls be present, construction activities shall avoid the refugia by 250 feet until the burrowing owl vacates the site. CDFW may provide authorization for the applicant to conduct activities (burrow exclusion, etc.) that may discourage owl use.

If clearing and construction activities are planned to occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct a targeted burrowing owl nest survey of all accessible areas within 500 feet of the proposed construction area within 14 days prior to construction initiation, as described in CDFG’s Staff Report on Burrowing Owl Mitigation, published March 7, 2012. Surveys shall be repeated if Project activities are suspended or delayed for more than 14 days during nesting season. The results of the surveys shall be submitted to the Development Services Department. If burrowing owls are not detected, further mitigation is not required.

If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until a qualified biologist determines that the young have fledged and adult has vacated, or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced.

If nesting burrowing owls are found during the pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of the active burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the Burrowing Owl Staff Report and may be accomplished within the Swainson’s hawk foraging habitat mitigation area for the Project if burrowing owls have been documented utilizing that area, or if the qualified biologist, the City, and CDFW collectively determine that the mitigation strategy is suitable for both species.

#### 5.1.4 Giant Garter Snake

This species has a *high* potential to occur within the Study Area, due to documented occurrences within the vicinity of the Study Area, and presence of suitable aquatic habitat along Elk Grove Creek, and suitable upland/overwintering habitat (i.e., burrows) immediately adjacent to Elk Grove Creek.

The following measures are recommended to reduce potential impacts to giant garter snake:

A qualified biologist shall conduct a field investigation on Lot A to delineate giant garter snake aquatic habitat within the Lot A footprint. Locations of delineated habitat may be noted on final site design plans in order to fully-avoid giant garter snake habitat.

If the proposed Project cannot fully avoid giant garter snake habitat, then work shall be conducted during the snake’s active season, between (May-September). During this period, the potential for direct mortality is reduced because snakes are expected to move and avoid danger. Construction and ground-disturbing activities within suitable giant garter snake habitat shall be initiated after May 1 and shall end prior to October 1. If it is anticipated that construction activities within potential giant garter snake habitat may extend beyond October 1, then the Project proponent shall coordinate with the USFWS and CDFW for additional measures to implement in order to minimize or avoid take.

If construction activities will occur within giant garter snake aquatic habitat, then the aquatic habitat shall be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of construction activities. Exclusion fencing shall be installed per the BMPs outlined below. If complete dewatering is not possible, then the Project proponent shall coordinate with the USFWS for additional measures to implement in order to minimize or avoid take.



Prior to the start of construction on Lot A, a qualified biologist shall conduct pre-construction clearance surveys using USFWS-approved methods within 24 hours prior to construction activities within identified upland/overwintering habitat. If construction activities stop for a period of two weeks or more, then another pre-construction clearance survey should be conducted within 24 hours prior to resuming construction activity.

Giant garter snake habitat, outside construction fencing and impacts associated with the proposed flood basin outfall, shall be avoided by all construction personnel. The fencing and the work area shall be inspected and maintained by the contractor until completion of the Project.

If a giant garter snake is encountered during construction activities, a qualified biologist shall notify the USFWS and the City's Development Services Department immediately. Construction activities shall be suspended in a 100-foot radius of the animal until the animal leaves the Project site on its own volition. If necessary, the biologist shall notify the USFWS to determine the appropriate procedures related to relocation. If the animal is handled, a report shall be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the giant garter snake within one business day to the USFWS. The biologist shall report any take of listed species to the USFWS, immediately. Any worker who inadvertently injures or kills a giant garter snake or who finds one dead, injured, or entrapped must immediately report the incident to the biologist.

Employ BMPs that are wildlife-friendly, in order to minimize disturbances to habitat. These may include, but are not limited to:

- Install exclusion fencing (after aquatic habitat has been dewatered 15 days prior to construction activities) that will be extended a minimum of 300 feet within the Lot A property line into adjacent uplands, or up to the construction footprint if the construction footprint is located within 300 feet of aquatic habitat to isolate both the aquatic and adjacent upland habitat. The exclusion fencing shall not impede use of the construction footprint. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction area.
- Do not use plastic, monofilament, jute, or similar erosion-control matting that could entangle snakes or other wildlife. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped. Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.
- Cover all excavated steep-walled holes and trenches more than 6 inches deep, with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the project superintendent each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within giant garter snake habitat will be inspected for presence of giant garter snake by the superintendent prior to being moved.

Prior to the initiation of construction on Lot A, the qualified biologist shall conduct an environmental awareness training for all construction personnel for the potential of the giant garter snake to occur onsite. Evidence of the training shall be submitted to the City's Development Services Department.

### 5.1.5 Western Pond Turtle

The western pond turtle has the potential to occur along Elk Grove Creek, and overwinter within the non-native annual grassland within the Study Area.

The following measures are recommended to reduce potential impacts to western pond turtle:

A qualified biologist shall conduct a preconstruction survey for western pond turtle on Lot A within 14 days prior to development or ground disturbing activities, including grading, vegetation clearing, tree removal, or construction, on Lot A. If western pond turtle is not observed on Lot A, a letter report shall be prepared to document the results of the survey and provided to the Project proponent and the City's Development Services Department, and no additional measures are recommended.

If development does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional survey of Lot A shall be conducted prior to resuming or starting work.

If western pond turtle is observed within Lot A, then a qualified biologist shall establish an appropriate no disturbance buffer around the area where it was observed (likely the intermittent stream) and wildlife exclusion fencing shall be installed. This fencing shall be comprised of silt fencing and shall be installed in an area recommended by the designated biologist. The fencing shall remain in place for the duration of construction and shall be removed upon the completion of construction. The qualified biologist shall also conduct an environmental awareness training for all construction personnel prior to the initiation of work. As applicable, the pre-construction survey and environmental training may be combined with other recommended surveys and trainings.

### 5.1.6 Protected Nesting Migratory Birds and Raptors

Migratory birds and raptors, including tricolored blackbird, Cooper's hawk, and white-tailed kite, have the potential to nest and forage within the Study Area. No active nests were observed at the time of the field survey, but the Study Area has the potential to support nesting birds within various trees and shrubs, bare ground, and herbaceous vegetation.

The following measures are recommended to reduce potential impacts to nesting migratory birds and raptors:

If vegetation clearing, grading and/or construction activities are planned to occur during the migratory bird nesting season (February 15 to August 30), a preconstruction survey to identify active migratory bird nests shall be conducted by a qualified biologist within three days prior to construction initiation. The survey shall be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within a 500-foot radius of proposed construction areas, where access is available. If a break in construction activity of more than two weeks occurs, then subsequent surveys shall be conducted.

If active raptor nests, not including Swainson's hawk, are found, construction activities shall not take place within 500 feet of the nest/s until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer shall be established. The no-disturbance buffers may be reduced if a smaller buffer is proposed by the qualified biologist and approved by the City (and CDFW if the species is a tricolored blackbird nesting colony) after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity,

and nest concealment (are there visual or acoustic barriers between the proposed activity and the nest). The qualified biologist shall visit the nest as needed to determine when the young have fledged the nest and are independent of the site, or the nest may be left undisturbed until the end of the nesting season.

Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior, or as otherwise required through consultation with CDFW and the City. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with CDFW and the City. Construction activities may only resume within the buffer zone after a follow-up survey by the qualified biologist has been conducted and a report has been prepared indicating that the nest(s) are no longer active, and that new nests have not been identified.

### 5.1.7 Aquatic Resources

The results of the initial Aquatic Resources Delineation that did not include Elk Grove Creek were submitted to the USACE on June 1, 2020 via an Approved Jurisdictional Determination. The USACE determined the 0.03 acre of depressional seasonal wetland within the Project Site is considered a water of the U.S. regulated by Section 404 of the CWA. The constructed basin within the Project Site is not considered a water of the U.S. (SPK-2019-00152). Due to the expansion of the Project boundary, the results of the second aquatic resources delineation for Elk Grove Creek, conducted in March 2021, will need to be submitted to the USACE as part of a permit application for a proposed outfall within the OHWM of Elk Grove Creek. Elk Grove Creek is likely to be considered a water of the U.S. since it is tributary to a navigable water (Sacramento River).

If aquatic features are determined not to be subject to regulation under the Clean Water Act, aquatic features may still be considered waters of the State and therefore subject to waste discharge requirements under the Porter-Cologne Water Quality Control Act. Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State (all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State. A report of waste discharge will be required for impacts to non-federal waters. Furthermore, approval from the City to fill within a 100-year floodplain would be required.

As a minimum mitigation standard, the project proponent will purchase aquatic resource mitigation credits at an agency-approved mitigation bank for impacts to jurisdictional aquatic resources at a minimum of a 1:1 ratio, or at an alternative ratio as determined by the appropriate regulatory agencies during the permitting process.

### 5.1.8 Protected Trees

Valley oak trees occur within the Study Area. If the proposed project will result in impacts to protected trees, then the City will require a formal tree survey be performed to inventory protected trees onsite, evaluate impacts to protected trees as a result of the proposed project, and implement applicable mitigation.

For all protected trees to be preserved within 20 feet of the impact area, then protection measures shall be implemented in order minimize impacts to protected trees. Protection measures include:

- Tree Protection Fencing, consisting of chain link or four-foot tall, brightly-colored, high-visibility plastic fencing, shall be placed around the perimeter of the CRZ or the dripline radius plus 1 foot, whichever is greater. This protection fencing should be placed as far outside of the CRZ as possible. Signs shall be placed along the fence denoting this as a “Tree Protection Zone” that shall not be moved until construction is complete. Trees or tree clusters with canopy extending beyond 50 feet from proposed project boundaries may be fenced only along sides facing the project. In cases where proposed work infringes on the CRZ, fence shall be placed at edge of work;
- Whenever possible, fence multiple trees together in a single CRZ;
- Tree protection fencing shall not be moved without prior authorization from the Project Arborist and the City of Elk Grove, as appropriate;
- No parking, portable toilets, dumping or storage of any construction materials, grading, excavation, trenching, or other infringement by workers or domesticated animals is allowed in the CRZ;
- No signs, ropes, cables, or any other items shall be attached to a protected tree, unless recommended by an ISA-Certified Arborist;
- No tree-toxic materials shall be dumped on the project site (e.g., gasoline, herbicide, salt);
- Prior to the installation of new asphalt, weed control chemicals shall not be applied where they can leach into the dripline of any protected tree;
- Underground utilities should be avoided in the CRZ, but, if necessary, shall be bored or drilled. If boring is impossible, all trenching will be done by hand under the supervision of an ISA-Certified Arborist;
- No cut or fill within the dripline of existing protected tree is permitted except as shown on the final development plans. If cut or fill within the dripline is unavoidable, any mitigation requirements shall be determined by the City of Elk Grove, as appropriate;
- Pruning of any retained tree shall be done under the supervision of an ISA-Certified Arborist and in accordance with current ISA standards and ANSI A300 standards;
- All wood plant material smaller than six inches in diameter shall be mulched on site. Resulting mulch shall be spread in a layer four to six inches deep in the CRZ of preserved trees. Mulch shall not be placed touching the trunk of preserved trees; and
- Appropriate fire prevention techniques shall be employed around all significant trees to be preserved. This includes cutting tall grass, removing flammable debris within the CRZ, and prohibiting the use of tools that may cause sparks, such as metal blade trimmers or mowers.

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# Appendix A

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Applicable Sections of the  
City of Elk Grove General Plan



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## **Appendix A**

### **Applicable Sections of the City of Elk Grove General Plan**

#### **CONSERVATION AND AIR ELEMENT**

##### **PROTECTION OF NATURAL ENVIRONMENT**

**GOAL 3-1:** Development which recognizes environmental constraints and is designed and operated to minimize impacts on the environment.

**GOAL 3-2:** Open space lands in proximity to Elk Grove that provide for agricultural use and habitat for native species.

**GOAL 3-3:** Natural resources managed and protected for the use and enjoyment of current and future generations.

**GOAL 3-4:** Preservation and enhancement of Elk Grove's natural areas, in particular the areas within the floodplain of the Cosumnes River.

##### **PRESERVATION AND ENHANCEMENT OF ELK GROVE'S UNIQUE HISTORIC AND NATURAL FEATURES**

**GOAL 4-2:** Preservation of the large oak and other tree species which are an important part of the City's historic and aesthetic character.

##### **PRESERVATION OF THE RURAL CHARACTER OF ELK GROVE**

**GOAL 5-2:** Maintenance of those features that provide the character of Elk Grove's rural areas, including: large oak and other trees, small local roadways, animal keeping and raising, equestrians, agriculture, and limited commercial opportunities.

#### **CONSERVATION OF WATER**

**Policy CAQ-1:** Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.

**CAQ 1 - Action 1:** Implement the City's Water Conservation Ordinance.

**CAQ 1 - Action 2:** Actively encourage water conservation by both agricultural and urban water users.

**CAQ 1 - Action 3:** Work with urban and agricultural water purveyors to establish long range conservation plans which set specific conservation objectives and utilize, to the extent possible, a common planning horizon, plan framework and estimating/ forecasting procedures.

**CAQ 1 - Action 4:** Promote the use of drought-tolerant vegetation to minimize water consumption by providing information to developers and designers.

## Appendix A (cont.) Applicable Sections of the City of Elk Grove General Plan

### CONSERVATION OF SOILS

**Policy CAQ-5:** Roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction.

### CONSERVATION OF NATIVE AND NON-NATIVE HABITATS, PLANTS, AND ANIMALS

**Policy CAQ-7:** Encourage development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. On-site resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.
4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

This policy shall not apply in the Rural Residential area east of State Route 99, where clustering of development is not permitted.

**Policy CAQ-8:** Large trees (both native and non-native) are an important aesthetic (and, in some cases, biological) resource. Trees which function as an important part of the City's or a neighborhood's aesthetic character or as natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures. If trees cannot be preserved onsite, offsite mitigation or payment of an in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees, which were removed. Trees that cannot be protected shall be replaced either on-site or off-site as required by the City:

**CAQ 4-Action 1:** When reviewing native or non-native trees for preservation, considering the following criteria:

- Aesthetic value
- Biological value
- Shade
- Water quality benefits
- Runoff reduction
- Air quality (pollutant reduction)
- Health of the tree(s)
- Suitability for preservation in place
- Safety hazards posed by the tree(s)

**CAQ 4-Action 2:** Develop a list of trees which shall be considered generally exempt from preservation. These may include trees, which pose a threat to public safety, to native trees, or to natural habitat.

## **Appendix A (cont.)**

### **Applicable Sections of the City of Elk Grove General Plan**

**CAQ 4-Action 3:** Develop a list of trees which may be used when providing replacement trees for the loss of native and non-native trees.

**CAQ 4-Action 4:** Implement the City's Tree Preservation Ordinance.

**CAQ 4-Action 5:** Amend the City's Tree Preservation Ordinance to conform with the policies of this General Plan and to expand protection to non-native trees.

**CAQ 4-Action 6:** Develop a list of trees that should not be planted due to their invasive nature (that is, their ability to escape cultivation or to dominate natural areas) and provide this information to the public and the development community.

**CAQ 4-Action 7:** Retain the services of a qualified arborist(s) under contract to the City to provide information to decisionmakers and staff on the suitability of trees for preservation.

**CAQ 4-Action 8:** Consider the use of revised standard roadway cross-sections which do not require the removal of trees in order to provide additional roadway capacity

**CAQ 4-Action 9:** Provide funds for education, programs, and materials emphasizing the value and importance of trees. Support private foundations with local funds for their tree planting efforts. Encourage the harvesting of native seeds and plants prior to the clearing of project sites.

**Policy CAQ-9:** Wetlands, vernal pools, marshland and riparian (streamside) areas are considered to be important resources. Impacts to these resources shall be avoided unless shown to be technically infeasible. The City shall seek to ensure that no net loss of wetland areas occurs, which may be accomplished by avoidance, re-vegetation and restoration onsite or creation of riparian habitat corridors.

**CAQ-9-Action 1:** As part of the development review process, ensure that all potentially affected wetland areas are identified, and provide mitigation to ensure that no net loss occurs. Mitigation should occur within the same watershed as the impact, where feasible.

**CAQ-9-Action 2:** Coordinate with the California Department of Fish and Game and the U.S. Fish and Wildlife Service in the review of development projects.

**Policy CAQ-10:** Consider the adoption of habitat conservation plans for rare, threatened, or endangered species.

**CAQ-10-Action 1:** As appropriate, work with the County of Sacramento and other agencies on a Habitat Conservation Plan or other mechanism to implement this policy.

**Policy CAQ 11:** The City shall seek to preserve areas, where feasible, where special-status plant and animal species and critical habitat areas are known to be present or potentially occurring based on City biological resource mapping and data provided in the General Plan EIR or other technical material that may be adversely affected by public or private development projects. Where preservation is not possible, appropriate mitigation shall be included in the public or private project. "Special-status"

## Appendix A (cont.)

### Applicable Sections of the City of Elk Grove General Plan

species are generally defined as species considered to be rare, threatened, endangered, or otherwise protected under local, state, and/or federal policies, regulations, or laws.

**CAQ-11 Action 1:** The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain special-status plant and animal species based on City biological resource mapping and data provided in the General Plan EIR or other technical material. The biological resources evaluation shall determine the presence/absence of these special-status plant and animal species on the site. The surveys associated with the evaluation shall be conducted during the appropriate seasons for proper identification of the species. Such evaluation will consider the potential for significant impact on special-status plant and animal species, and will identify feasible mitigation measures to mitigate such impacts to the satisfaction of the City and appropriate governmental agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Game and U.S. Army Corps of Engineers) where necessary (e.g., species listed under the State and/or Federal Endangered Species Act). Mitigation measures may include, but are not limited to, the following: For special-status plant species: On- or off-site preservation of existing populations from direct and indirect impacts, seed and soil collection or plant transplant that ensures that the plant population is maintained.

- For special-status animal species: avoidance of the species and its habitat as well as the potential provision of habitat buffers, avoidance of the species during nesting or breeding seasons, replacement or restoration of habitat on- or off-site, relocation of the species to another suitable habitat area, payment of mitigation credit fees.
- Participation in a habitat conservation plan.

#### PROTECTION OF WATER QUALITY AND SUPPLY

**Policy CAQ-12:** The City shall seek to ensure that the quality of groundwater and surface water is protected to the extent possible.

**CAQ-12-Action 1:** Continue to cooperate with the County, other cities, and the Regional Water Quality Control Board regarding compliance with the NPDES permit system, and support other water quality improvement projects in order to maintain compliance with the Basin Plan.

**CAQ-12-Action 2:** Implement the City's NPDES permit on all public and private development projects and activities.

**CAQ-12-Action 3:** Collect information on design, construction, and operation techniques which help prevent water pollution, and provide this information to the public and the development community.

**Policy CAQ-13:** Implement the City's NPDES permit through the review and approval of development projects and other activities regulated by the permit.

**Policy CAQ-14:** The city shall seek to minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.

## Appendix A (cont.)

### Applicable Sections of the City of Elk Grove General Plan

**Policy CAQ-15:** The City shall encourage water supply service providers and County Sanitation District 1 to design water supply and recycled water supply facilities in a manner that avoids and/or minimizes significant environmental effects. The City shall specifically encourage the Sacramento County Water Agency to design well facilities and operation to minimize surface flow effects to the Cosumnes River.

**Policy CAQ-16:** Future land uses that are anticipated to utilize hazardous materials or waste shall be required to provide adequate containment facilities to ensure that surface water and groundwater resources are protected from accidental releases. This shall include double containment, levees to contain spills, and monitoring wells for underground storage tanks, as required by local, state and federal standards.

#### FLOODING AND DRAINAGE

**Policy CAQ-17:** The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

**Policy CAQ-18:** Post-development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat.

**Policy CAQ-19:** Encourage the retention of natural stream corridors, and the creation of natural stream channels where improvements to drainage capacity are required.

**CAQ-19-Action 1:** Re-vegetation using native plant species shall be encouraged; use of non-native species shall be discouraged. Use of invasive species shall be prohibited.

**CAQ-19-Action 2:** The City shall permit stream channel realignment only:

- When necessary to eliminate flood hazards, after alternatives to provide flood capacity while protecting the natural alignment have been shown to be infeasible; or
- To protect and preserve natural features and vegetation which would otherwise be removed; or
- If the existing channel has been significantly disrupted by agricultural improvements or other man-made changes.

**CAQ-19-Action 3:** The City shall require, to the maximum extent practical, retention of topographic diversity and variation when channels are realigned or modified, including:

- “Self-sustaining” meander characteristics,
- Berms,
- Naturalized side slope, and
- Varied channel bottom elevation, consistent with the characteristics of the watershed, public safety, and other site-specific considerations.

**CAQ-19-Action 4:** Where existing streams support riparian vegetation, evaluate options for constructing secondary flood control channels or other facilities for flood control and water quality purposes.

## Appendix A (cont.) Applicable Sections of the City of Elk Grove General Plan

**CAQ-19-Action 5:** Channel lowering of existing natural streams shall occur only after consideration of alternatives (including surface drainage systems which do not require channel lowering) and only when it is necessary to accommodate the gravity drainage of storm runoff and/or accommodate flood flows under existing bridge structures.

**CAQ-19-Action 6:** All storm drainage improvements on natural streams shall be designed where feasible to maintain water flows necessary to protect and enhance existing fish habitat, native riparian vegetation, water quality, and/or ground water recharge.

**CAQ-19-Action 7:** Improvements in watercourses shall be designed for low maintenance, and to accommodate peak flows with vegetation (including mitigation plantings) in the channel. Channel modifications shall retain marsh and riparian vegetation whenever possible.

**CAQ-19-Action 8:** Development design shall maximize the total floodplain frontage that is open to public view. Development adjacent to stream corridors shall be encouraged to provide a public street paralleling at least one side of the corridor with vertical curbs, gutters, foot path, street lighting, and post and cable barriers to prevent vehicular entry.

**CAQ-19-Action 9:** Trails along stream corridors shall be located to minimize wildlife impacts and shall be restricted to non-motorized traffic.

**CAQ-19-Action 10:** Except where approved by the City as part of the development of a public or private development project, no grading, clearing, tree cutting, debris disposal or any other similar action shall be allowed in stream corridors except for normal channel maintenance.

**Policy CAQ-20:** Fill may not be placed in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City. No fill shall be permitted in wetland areas unless approved by the City and appropriate state and federal agencies.

**Policy CAQ-21:** Development adjacent to a natural stream(s) shall provide a “stream buffer zone” along the stream. “Natural streams” shall be generally considered to consist of the following, subject to site-specific review by the City:

- Deer Creek
- Elk Grove Creek
- Laguna Creek and its tributaries
- Morrison Creek
- Strawberry Creek
- White House Creek

The following are examples of desired features for this transition zone; the specific design for each transition zone shall be approved on a case-by-case basis by the City. Stream buffer zones should

## Appendix A (cont.) Applicable Sections of the City of Elk Grove General Plan

generally measure at least 50 (fifty) feet from the stream centerline (total width of 100) feet or more, depending on the characteristics of the stream, and shall include:

1. Sufficient width for a mowed firebreak (where necessary), access for channel maintenance and flood control, and for planned passive recreation uses.
2. Sufficient width to provide for:
  - a. Quality and quantity of existing and created habitat,
  - b. Presence of species as well as species sensitivity to human disturbance,
  - c. Areas for regeneration of vegetation,
  - d. Vegetative filtration for water quality,
  - e. Corridor for wildlife habitat linkage,
  - f. Protection from runoff and other impacts of urban uses adjacent to the corridor,
  - g. Trails and greenbelts.
3. The stream buffer zone should not include above ground water quality treatment structures designed to meet pollutant discharge requirements.

**Policy CAQ-22:** Stream crossings shall be minimized and be aesthetically compatible with the natural appearance of the stream channel. The use of bridges and other stream crossings with natural (unpaved) bottoms shall be encouraged to minimize impacts to natural habitat.

**Policy CAQ-23:** Uses in the stream corridors shall be limited to recreation and agricultural uses compatible with resource protection and flood control measures. Roads, parking, and associated fill slopes shall be located outside of the stream corridor, except at stream crossings.

**Policy CAQ-24:** Open space lands within a stream corridor shall be required to be retained as open space as a condition of development approval for projects that include a stream corridor. Unencumbered maintenance access to the stream shall be provided.



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## Appendix B

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### Regionally Occurring Listed and Special-Status Species

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## Appendix B Regionally Occurring Listed and Special-Status Species

Table 1 — Legally Protected Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Plants</b>				
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--; CE; --; 1B	Annual herb found on clay soils within shallow water and along margins of vernal pools and lakes from 10 to 2,375 meters in elevation (CNPS 2021).	April – August	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools, marshes or swamps) to support this species. There are two documented occurrences within five miles of the Study Area (CDFW 2021).
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE; CE; --; 1B	Annual herb found in deep vernal pools with extended inundation periods at elevations between 30 to 100 meters in elevation.	April – September	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT; CE; --; 1B	Annual herb found in vernal pools that are often gravelly, from 35 to 1,760 meters in elevation.	May – October	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Mason's lilaeopsis <i>Lilaeopsis masonii</i>	--; CR; --; 1B	Perennial rhizomatous herb found in marshes and swamps (brackish or freshwater) as well as riparian scrub from 0 to 10 meters in elevation.	April – November	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat to support this species.
<b>Invertebrate</b>				
Monarch butterfly <i>Danaus plexippus</i>	FC; --; --; --	In winter, western monarchs aggregate in clusters at forested groves scattered along 620 miles of the Pacific coast from Mendocino County to Baja California, Mexico. Small aggregations have also been reported in Inyo and Kern counties. In February and March, the surviving monarchs breed at the overwintering site before dispersing. During the spring and summer, an adult monarch spends its 2 to 5-week lifespan mating and foraging, with females searching for milkweed ( <i>Asclepias</i> spp.) upon which to lay their eggs. Multiple generations are produced during this time, with the final fall generation migrating to overwintering sites and living for 6 to 9 months. Adult females lay eggs singly on milkweed species, but occasionally on other closely related species as well, including <i>Gomphocarpus</i> spp. and <i>Calotropis</i> spp. which are critical for successful development of the caterpillar into an adult butterfly (Western Monarch Milkweed Mapper 2021).	Year-round	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Sole hosts are elderberry ( <i>Sambucus</i> sp.) shrubs usually associated with riparian areas. This species is known from portions of the Central Valley of California (also known as the Great Valley of California).	Adults emerge in spring until June.  Exit holes visible year-round.	<b>None.</b> Elderberry shrubs were not observed within the project site; however, the habitat along Elk Grove Creek was not entirely surveyed due to access restrictions. There is one documented occurrence within five miles of the Study Area (CDFW 2021). The Study Area is outside of the Designated Critical Habitat for this species.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT; --; --; --	Occurs in vernal pools, especially those with grassy or muddy substrates. Typically found in turbid water but also occurs in clear water with aquatic vegetation. Occur throughout elevations ranging from 10 to 1,159 meters (Eriksen and Belk 1999).	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area contains a depressional seasonal wetland, this aquatic feature does not provide suitable for this species due to (1) high-disturbance of the site; (2) lack of hydrophytic vegetation typical of vernal pools; (3) limited duration of inundation; and (4) not suitable water depth. There are 15 documented occurrences within five miles of the Study Area (CDFW 2021). The Study Area is outside of the Designated Critical Habitat for this species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE; --; --; --	Occurs in a variety of seasonally inundated habitats, particularly low-alkalinity seasonal pools in grasslands. Known to occur in vernal pools, wetlands, and other ephemeral freshwater habitats. Generally, occurs in larger, deeper features where dissolved oxygen levels are higher and features remain inundated for longer periods (Eriksen and Belk 1999).	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area contains a depressional seasonal wetland, this aquatic feature does not provide suitable for this species due to (1) high-disturbance of the site; (2) lack of hydrophytic vegetation typical of vernal pools; (3) limited duration of inundation; and (4) not suitable water depth.

**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
				There are six documented occurrences within five miles of the Study Area (CDFW 2021). The Study Area is outside of the Designated Critical Habitat for this species.
<b>Fish</b>				
Central Valley steelhead DPS <i>Oncorhynchus mykiss irideus</i>	FT; --; --; --	Found in cool, clear, fast-flowing permanent streams and rivers with riffles and ample cover from riparian vegetation or overhanging banks. Spawning occurs in streams with pool and riffle complexes. The species requires cold water and gravelly streambed to successfully breed. Spawn in the Fresno and San Joaquin rivers and tributaries before migrating to the Delta and Bay Area.	Spawns in winter and spring.	<b>None.</b> The Study Area does not contain suitable habitat for this species. There is one documented occurrence within five miles of the Study Area (CDFW 2021). The Study Area is outside of the Designated Critical Habitat for this species.
Delta smelt <i>Hypomesus transpacificus</i>	FT; CE; --; --	Found in estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta. Spawns in freshwater sloughs and channel edgewater. Spawning occurs between December to July. Known almost exclusively in the Fresno-San Joaquin estuary.	Year-Round	<b>None.</b> The Study Area does not contain suitable habitat for this species. The Study Area is outside of the Designated Critical Habitat for this species.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC; CT; --; --	Inhabits estuaries and bays in the Delta and Sacramento-San Joaquin Rivers. Migrate to freshwater to spawn.	(November) December – February (June)	<b>None.</b> The Study Area does not contain suitable habitat for this species.
<b>Amphibians/Reptiles</b>				
California red-legged frog <i>Rana draytonii</i>	FT; CSC; --; --	Breeding sites are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons from 3,936 feet (1,200 meters) above MSL. They also frequently breed in artificial impoundments, such as stock ponds. During overwintering, can be found up to 300 feet away from aquatic habitat, and may disperse up to 2 miles between suitable aquatic habitat.	November – March (Breeding)  June – August (Non-breeding)	<b>None.</b> Although the Study Area contains aquatic habitats these features do not support suitable conditions (i.e., inundation duration, and water depth) to support this species; Due to the high-disturbance of the site and no nearby documented occurrences, the Study Area does not provide suitable habitat. This species is also generally considered to be extirpated from the Central Valley.
Giant garter snake <i>Thamnophis gigas</i>	FT; CT; --; --	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid-March). This species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Dormancy period November-mid March  Active March – October	<b>High.</b> Elk Grove Creek in the northern portion of the Study Area, which also occupies a small portion of the Project Site, may provide suitable aquatic habitat for this species. Additionally, the underground burrows within the project site provide suitable upland/overwintering habitat for this species. There are six documented occurrences within five miles of the Study Area (CDFW 2021).
California tiger salamander, Central Population <i>Ambystoma californiense</i>	FT; CT; --; --	Found in grassland, oak savanna, edges of mixed woodland and lower elevation coniferous forests. Breeding site requirements include fish-free ephemeral ponds that are wet in winter and dry in the summer; however, some have been known to breed in slow streams and semi-permanent waters (e.g., cattle troughs) due to loss of habitat. Adults spend non-breeding season in small mammal burrows.	Drift fence studies during fall and winter for upland habitats.  November – February (adults)  March 15 – May 15 (larvae)	<b>None.</b> Although the Study Area contains aquatic habitats and mammal burrows, due to the high-disturbance of the site and no nearby documented occurrences, the Study Area does not provide suitable habitat to support this species.
<b>Birds</b>				
California black rail <i>Laterallus jamaicensis coturniculus</i>	FSC; CT; --	Inhabits saltwater, brackish, and freshwater marshes. Nesting occurs on the ground within dense vegetation in high spots of salt marshes (i.e., pickleweed), in shallow areas of freshwater marshes, in wet meadows and in flooded grassy vegetation.	Year-round	<b>None.</b> The Study Area does not contain suitable habitat for this species.
Bank swallow <i>Riparia riparia</i>	--; CT; --; -- Nesting	Found primarily in open riparian areas, grassland, brushland, wetlands, and cropland habitats. Nests in colonies within tunnels dug into sandy banks or cliffs near water. Forages over riparian areas and adjacent uplands.	February – October	<b>None.</b> The Study Area does not contain suitable habitat for this species.

**Appendix B (cont.)  
Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Swainson's hawk <i>Buteo swainsoni</i>	--; CT; --; --	Nest peripherally to Valley riparian systems lone trees or groves of trees in agricultural fields. Most commonly used nest trees in the Central Valley, include valley oak, Fremont cottonwood, walnut, and large willows, and occasionally eucalyptus, pine, and redwood trees. Forages in row, hay and grain agricultural crops, especially post-harvest when the height of the vegetation is short and easy to observe prey.	March – October (Breeding)	<b>High.</b> The trees within the Study Area provide nesting habitat, and presence of prey species (i.e., ground squirrels) provides foraging habitat for this species. There are 56 documented occurrences within five miles of the Study Area (CDFW 2021).
Tricolored blackbird <i>Agelaius tricolor</i>	--; CT; CSC; --	Breeding habitat is freshwater marshes that include cattails, tules, bulrushes and sedges. Nests are made in the dense vegetation of the marsh or thickets, and sometimes on the ground. In migration and winter, will inhabit open cultivated lands and pastures as well as marshes. Nests in large colonies of at least 50 pairs (up to thousands of individuals). Foraging occurs mostly in open habitats, such as farm fields, pastures, cattle pens, and large lawns.	Year - Round	<b>High.</b> Although the vegetation along Elk Grove Creek may provide nesting habitat for this species, it is marginal habitat since the extent of suitable nesting habitat vegetation is intermittent, and the vegetation is low to medium density. However, the non-native annual grassland provides suitable foraging habitat for this species. There are 16 documented occurrences within five miles of the Study Area (CDFW 2021).
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT; CE; --; --	Found in various types of forest, woodland, and scrub habitats. Breeding habitat is generally deciduous riparian woodland, including dense stands of cottonwood and willow, tamarisk, and mesquite. Dense riparian understory is a key factor in nest site selection. Cottonwood trees are key for foraging habitat.	Summer (Breeding)	<b>None.</b> The Study Area does not provide suitable habitat for this species.

Table 1 includes federal threatened or endangered species and eagles, and State threatened, endangered, or fully protected species.

**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

**Table 2 — Species Subject to CEQA Review**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
<b>Plants</b>				
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--; --; --; 1B	Annual herb found in mesic areas in valley and foothill grassland from 30 to 229 meters in elevation.	March – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Alkali-sink goldfields <i>Lasthenia chrysantha</i>	--; --; --; 1B.1	An annual herb found in vernal pools and wet saline flats from below 100 meters elevation.	February – April	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Bolander's water-hemlock <i>Cicuta maculata</i> var. <i>bolanderi</i>	--; --; --; 2B	Perennial herb found in fresh or brackish water marshes and coastal swamps from 0 to 200 meters.	July – September	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat to support this species.
Bristly sedge <i>Carex comosa</i>	--; --; --; 2B	Perennial rhizomatous herb found in coastal prairies, marshes and swamps, and valley and foothill grasslands from 0 to 625 meters.	May – September	<b>Low.</b> The non-native annual grassland within the Study Area provides suitable habitat to support this species.
Delta mudwort <i>Limosella australis</i>	--; --; --; 2B.1	A perennial stoloniferous herb found usually in mudbanks, but also in riparian scrub, and fresh and brackish water marshes and swamps from 0 to 3 meters in elevation.	May – August	<b>None.</b> The Study Area is outside of the elevational range for this species.
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	--; --; --; 1B	Perennial herb found in marshes and swamps (freshwater and brackish) from 0 to 5 meters.	May – September	<b>None.</b> The Study Area is outside of the elevational range for this species.
Dwarf downingia <i>Downingia pusilla</i>	--; --; --; 2B	Annual herb found occasionally in moist areas within valley and foothill grassland and vernal pools from 1 to 445 meters.	March – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species. There are three documented occurrences within five miles of the Study Area (CDFW 2021).
Heckard's peppergrass <i>Lepidium latipes</i> var. <i>heckardii</i>	--; --; --; 1B	Annual herb found on alkali flats within valley and foothill grassland, from 2 to 200 meters.	March – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Legenere <i>Legenere limosa</i>	--; --; --; 1B	Annual herb found in vernal pools from 1 to 880 meters.	April – June	<b>None.</b> The Study Area does not provide suitable habitat (i.e., vernal pools) to support this species. There are six documented occurrences within five miles of the Study Area (CDFW 2021).
Marsh skullcap <i>Scutellaria galericulata</i>	--; --; --; 2B	Perennial rhizomatous herb found in lower montane coniferous forest, moist meadows and seeps, and marshes and swamps from 0 to 2,100 meters.	June – September	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat for this species.
Northern California black walnut <i>Juglans hindsii</i>	--; --; --; 1B	Perennial deciduous tree found in riparian forest and riparian woodland from 0 to 440 meters.	April – May	<b>None.</b> This species was not observed within the Study Area during the biological survey.
Peruvian dodder <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	--; --; --; 2B	Annual, parasitic vine found in freshwater marshes and swamps from 15 to 280 meters.	July – October	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat for this species. There is one documented occurrence within five miles of the Study Area (CDFW 2021).
Saline clover <i>Trifolium hydrophilum</i>	--; --; --; 1B	Annual herb found in marshes and swamps, moist, alkaline valley and foothill grassland, and vernal pools from 0 to 300 meters.	April – June	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat for this species.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--; --; --; 1B	Perennial rhizomatous herb found in assorted shallow freshwater marshes and swamps from 0 to 650 meters.	May – October	<b>High.</b> Elk Grove Creek provides suitable habitat for this species within the Study Area. There are eight documented occurrences within five miles of the Study Area (CDFW 2021).
Side-flowering skullcap <i>Scutellaria lateriflora</i>	--; --; --; 2B	Perennial rhizomatous herb found in moist meadows and seeps as well as marshes and swamps from 0 to 500 meters.	July – September	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat for this species.
Watershield <i>Brasenia schreberi</i>	--; --; --; 2B	Perennial rhizomatous herb found in freshwater marshes and swamps from 30 to 2,200 meters in elevation.	June – September	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat for this species.
Woolly rose-mallow <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	--; --; --; 1B	An emergent perennial rhizomatous herb found often in riprap on sides of levees and in freshwater marshes and swamps from 0 to 120 meters.	June – September	<b>Low.</b> Elk Grove Creek within the Study Area provides suitable habitat for this species.
<b>Invertebrates</b>				
California linderiella <i>Linderiella occidentalis</i>	--; CSA; --; --	Found in a variety of landforms, geologic formations and soil types supporting vernal pools in California. Habitats are typically deeper, mud-bottom pools, that are vegetated, and contain clear tea-colored water. Are known to occur throughout elevations ranging from 10 to 1,159 meters (Eriksen and Belk 1999).	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area contains a depressional seasonal wetland, this aquatic feature does not provide suitable for this species due to (1) high-disturbance of the site; (2) lack of hydrophytic vegetation typical of vernal pools; (3) lack of mud-bottom substrate; (4) limited duration of inundation; and (5) not suitable water depth.



**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/Survey Period	Potential for Occurrence
				There are eleven documented occurrences within five miles of the Study Area (CDFW 2021).
Midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	--; CSA; --; --	Occurs in small, unpredictable, grass-bottomed vernal pools, and puddles in ephemeral seasonal wetlands. Occur throughout elevations ranging from 10 to 1,159 meters. Known to occur in the Central Valley within Sacramento, Solano, Merced, Madera, San Joaquin, Fresno, and Contra Costa counties (Eriksen and Belk 1999).	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area contains a depressional seasonal wetland, this aquatic feature does not provide suitable for this species due to (1) high-disturbance of the site; (2) lack of hydrophytic vegetation typical of vernal pools; (3) lack of vegetated substrate; (4) limited duration of inundation; and (5) not suitable water depth. There are six documented occurrences within five miles of the Study Area (CDFW 2021).
<b>Invertebrates</b>				
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	--; CSC; --; --	Inhabits the streams and tributaries of the Sacramento-San Joaquin Rivers in estuaries, marshes, and freshwater.	Spawns in spring (sometimes in winter and early summer).	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
<b>Amphibians/Reptiles</b>				
Western pond turtle <i>Emys marmorata</i>	--; CSC; --; --	Typically associated with permanent ponds, lakes, streams, irrigation ditches and canals, and marshes, or pools in intermittent drainages, usually lined with abundant vegetation and either rocky or muddy bottom substrates. Requires aquatic basking sites, such as logs, rocks, cattail mats or exposed banks. Turtles are active from February to November, in which breeding occurs from April to May. Overwintering occurs in upland terrestrial habitats (approximately 300 feet) close to water sources, in which they will bury themselves under loose soil.	Year – Round	<b>High.</b> Elk Grove Creek within the Study Area provides aquatic habitat for this species, and the non-native annual grassland provides upland/overwintering habitat for this species. There are two documented occurrences within five miles of the Study Area (CDFW 2021).
Western spadefoot <i>Spea hammondi</i>	--; CSC; --; --	Found in a variety of upland habitats, including lowlands, foothills, grasslands, open chaparral, and pine-oak woodlands. Habitat preferences include shortgrass plains, and sandy or gravelly soils for burrowing (e.g., alkali flats, washes, alluvial fans). Fossorial species that hibernates/aestivates for most of the year underground. Breeds temporary rain pools, and slow-moving streams (e.g., areas flooded by intermittent streams), and other artificial bodies of water as long as surrounding habitat is not developed or irrigated for agricultural purposes.	Breeding: January – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
<b>Birds</b>				
Black-crowned night heron <i>Nycticorax</i>	--; CSA; --; --	Found in saltwater, brackish and freshwater habitats that include marshes, swamps, wooded streams, mangroves, lake shores, ponds, and lagoons. Roosting occurs in mangrove forests or swampy woodlands. Nesting occurs in trees near coastal marshes or on marine islands, swamps, marsh vegetation, clumps of grass on the dry ground, orchards, etc. Nesting usually occurs with other heron species.	Winter (Non-breeding)	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Burrowing owl <i>Athene cunicularia</i>	--; CSC; --; -- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year-round	<b>High.</b> The burrows within the Study Area provide breeding habitat; and the presence of prey species (i.e., ground squirrels) provides foraging habitat for this species. There are eight documented occurrences within five miles of the Study Area (CDFW 2021).
Cooper's hawk <i>Accipiter cooperii</i>	--; CSA; --; --	Found in mature forests, open woodlands, woodland edges, and river groves. Nesting occurs in coniferous, deciduous and mixed woodlands that have tall trees with openings or edge habitat nearby. Can also be found in trees along rivers through open country, and in suburbs and cities. Overwintering usually occurs in fairly open country.	Year-round	<b>High.</b> The trees within the Study Area provide suitable nesting habitat to support this species. There is one documented occurrence within five miles of the Study Area (CDFW 2021).



**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Double-crested cormorant <i>Phalacrocorax auritus</i>	--; CSA; --; --	Colonia birds found near water that are large enough to support diet (fish). Roosting and breeding colonies may occur along smaller bodies of water such as ponds and lagoons. Foraging range is up to 40 miles. Habitat requires perches, such as rocks, wires, dead tree tops, ship masts, etc.	Migration	<b>None.</b> The Study Area does not contain habitat to support this species.
Golden eagle <i>Aquila chrysaetos</i>	--; CFP; --; -- (nesting and wintering)	Open and semi-open areas in the mountains up to 12,000 feet in elevation. They are also found in canyon lands, rimrock, terrain, and riverside cliffs and bluffs. Nest are built on cliffs and steep escarpments in grassland, in trees, chaparral, shrubland, forests and man-made structures within vegetated areas.	Year-round	<b>None.</b> The Study Area does not contain habitat to support this species.
Great blue heron <i>Ardea herodias</i>	--; CSA; --; -- (nesting)	Inhabits both freshwater and saltwater habitats and forages in grassland and agricultural field. Breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests.	Year – Round	<b>None.</b> The Study Area does not contain nesting habitat to support this species. There is one documented occurrence within five miles of the Study Area (CDFW 2021).
Great egret <i>Ardea alba</i>	--; CSA; --; -- (nesting)	Found in marshes, swampy woods, tidal estuaries, lagoons, mangroves, streams, lakes, ponds, fields, and meadows. Nests primarily in tall trees, or in woods or thickets near water.	Year – Round	<b>None.</b> The Study Area does not contain nesting habitat to support this species. There is one documented occurrence within five miles of the Study Area (CDFW 2021).
Ferruginous hawk <i>Buteo regalis</i>	BCC; CSA; --; --	Frequents open habitats including grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys and fringes of pinyon-juniper habitats. Preys on rodents and other vertebrates.	Winter (non-breeding)	<b>None.</b> The Study Area does not contain habitat to support this species.
Merlin <i>Falco columbarius</i>	--; CSA; --; --	Non-breeding habitats include a wide variety, such as marshes, deserts, sea coasts, near coastal lakes and lagoons, open woodlands, fields, etc. During winter, may roost in conifer trees.	Winter (non-breeding)	<b>None.</b> The Study Area does not contain habitat to support this species.
Purple martin <i>Progne subis</i>	--; CSC; --; --	Nests in wide variety of open and partly open habitats that are often near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans.	Summer (breeding)	<b>None.</b> The Study Area does not contain habitat to support this species.
Song sparrow <i>Melospiza melodia</i> (Modesto population)	--; CSC; --; --	Found in a wide range of habitats including forest, shrub, and riparian habitat. Early in the season will nest on the ground on clumps of dead grasses and weeds, and later in the season will nest in thorny bushes, willows, cattails, cordgrass, and small conifers (0.5-10 meters high).	Year-round	<b>None.</b> The Study Area does not contain habitat to support this species.
White-tailed kite <i>Elanus leucurus</i>	--; CFP; --; -- (nesting)	Inhabits savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. Nests in trees, often near a marsh in savanna, open woodland, partially cleared lands, and cultivated fields. Foraging occurs within ungrazed or lightly-grazed fields and pastures.	Year-round	<b>High.</b> The trees within the Study Area provide nesting habitat, and the presence of prey species (i.e., ground squirrels) provides foraging habitat for this species. There is one documented occurrence within five miles of the Study Area (CDFW 2021).
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	--; CSC; --; --	Breeding occurs in wetlands in prairies, mountain meadows, quaking aspen parklands, shallow areas of marshes, rivers, and ponds. Nesting habitat consists of cattails, bulrushes, or reeds adjacent to red-winged blackbirds. Foraging habitat consists of grassland, cropland, or savanna habitat adjacent to nesting sites.	Migration	<b>None.</b> The Study Area does not contain habitat to support this species.

**Appendix B (cont.)  
Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Mammals</b>				
American badger <i>Taxidea taxus</i>	--; CSC; --; --	Found in a variety of grassland, shrublands, and open woodlands throughout California. Prefers open areas, and may frequent brushlands, with minimal ground cover. Occurs from below sea level to 3,600 meters. Primarily nocturnal, but can be active at any time of day. Strong affinity to a home area (2 to 725 ha), especially in winter. Suitable burrowing habitat, to make dens and forage for prey, requires friable soils. The majority of their food is obtained by excavating burrows of fossorial rodents (ground squirrels, pocket gophers, kangaroo rats, prairie-dogs, and mice), but will also eat scorpions, insects, snakes, lizards, and birds.	Year-round	<b>None.</b> The Study Area does not contain habitat to support this species.

Table 2 includes state and federal species of concern and Rank 1 and 2 CNPS species.

**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

**Table 3 — Other Species of Interest**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Invertebrates</b>				
Blennosperma vernal pool andrenid bee <i>Andrena blennospermatis</i>	--; CSA; --	Found in upland areas near vernal pools on the stickyseed ( <i>Blennosperma</i> spp.) host plant. Known to occur in Solano, Sonoma, and Tehama counties. Populations historically found in Contra Costa, El Dorado, Lake, Sacramento, San Joaquin, and Yolo counties are possibly extirpated or extirpated.	Flight Period (females): February – April	<b>None.</b> The Study Area does not contain suitable (i.e., vernal pools) to support this species.
Hairy water flea <i>Dumontia oregonensis</i>	--; CSA; --	Small aquatic crustacean that is found in shallow ephemeral vernal pools, native wet prairies, seasonally wet meadows, managed agricultural fields and desert pools that fill with water in early-winter and dry out by late-winter. Seasonally wet habitats are typically underlain with poorly drained soils, shallow soils above bedrock, or exposed bedrock and are fed mainly by direct precipitation or shallow groundwater inflows, generally with no surface inflow channels. Typically found in habitats that have greater than 60 percent vegetation; associated species in California, include tall flatsedge ( <i>Cyperus eragrostis</i> ), common spikerush ( <i>Eleocharis macrostachya</i> ), and western mannagrass ( <i>Glyceria occidentalis</i> ) Found in Sacramento and Solano counties in California and into southern Oregon.	Wet-season	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	--; CSA; --	An endemic aquatic beetle known to occur in vernal pools that are inundated in winter and spring and dry during the summer months. Ideal habitat includes, neutral to slightly alkaline, clear, low dissolved salts, dominated with vernal pool plant species, and complex of vernal pool crustacean species. Known to occur in the Central Valley below 300 meters in elevation.	Year-round	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.

Table 3 includes non-listed invertebrates, which may not be subject to CEQA review.

## Appendix C

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Plant and Wildlife Species Observed  
in the Study Area

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## Appendix C

### Plant Species Observed in the Study Area

Family	Scientific Name	Common Name	Native(N) / Non-Native (NN) / Invasive (I)
Poaceae	<i>Avena</i> spp.	Oat	NN
Poaceae	<i>Briza minor</i>	Little quaking grass	N
Poaceae	<i>Bromus hordeaceus</i>	Soft brome	I
Asteraceae	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	I
Poaceae	<i>Crypsis schoenoides</i>	Swamp prickly grass	NN
Poaceae	<i>Deschampsia danthonioides</i>	Annual hair grass	N
Asteraceae	<i>Dittrichia graveolens</i>	Stinkwort	I
Onagraceae	<i>Epilobium brachycarpum</i>	Annual fireweed	N
Asteraceae	<i>Erigeron canadensis</i>	Canada horseweed	N
Euphorbiaceae	<i>Euphorbia</i> spp.	Spurge	--
Poaceae	<i>Festuca perennis</i>	Italian rye grass	I
Brassicaceae	<i>Hirschfeldia incana</i>	Wild mustard	I
Juncaceae	<i>Juncus bufonius</i>	Common toad rush	N
Lythraceae	<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	I
Anacardiaceae	<i>Pistacia atlantica</i>	Pistachio	NN
Poaceae	<i>Polypogon monspeliensis</i>	Rabbitsfoot grass	I
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood	N
Fagaceae	<i>Quercus lobata</i>	Valley oak	N
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	I
Polygonaceae	<i>Rumex crispus</i>	Curly dock	I
Salicaceae	<i>Salix</i> sp.	Willow	--
Chenopodiaceae	<i>Salsola tragus</i>	Tumbleweed	NN
Asteraceae	<i>Senecio vulgaris</i>	Common groundsel	NN
Euphorbiaceae	<i>Triadeca sebifera</i>	Chinese tallow	I
Vitaceae	<i>Vitis californica</i>	California wild grape	N

## Appendix C (cont.) Wildlife Species Observed in the Study Area

Order	Family	Scientific Name	Common Name
<b>Birds</b>			
Passeriformes	Corvidae	<i>Corvus brachyrhynchos</i>	American crow
Passeriformes	Corvidae	<i>Aphelocoma californica</i>	California scrub-jay
Passeriformes	Fringillidae	<i>Haemorhous mexicanus</i>	House finch
Charadriiformes	Charadriidae	<i>Charadrius vociferus</i>	Killdeer
Columbiformes	Columbidae	<i>Zenaida macroura</i>	Mourning dove
Piciformes	Picidae	<i>Colaptes auratus</i>	Northern flicker
Passeriformes	Mimidae	<i>Mimus polyglottos</i>	Northern mockingbird
Passeriformes	Tyrannidae	<i>Sayornis saya</i>	Say's phoebe
Passeriformes	Tyrannidae	<i>Tyrannis verticalis</i>	Western kingbird
Passeriformes	Icteridae	<i>Sturnella neglecta</i>	Western meadowlark
Passeriformes	Parulidae	<i>Setophaga coronata</i>	Yellow-rumped warbler
<b>Mammals</b>			
Rodentia	Sciuridae	<i>Otospermophilus beecheyi</i>	California ground squirrel
<b>Reptiles</b>			
Squamata	Phrynosomatidae	<i>Sceloporus occidentalis</i>	Western fence lizard

## Appendix D

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### Representative Site Photographs



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Photo 1. Looking northeast across the barren biological community from the southern portion of the Study Area.



Photo 2. Looking north along a drainage swale in the eastern portion of the Study Area.

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Photo 3. Looking southwest across the northcentral portion of the Study Area.



Photo 4. Looking northwest along the ephemeral drainage in the northcentral portion of the Study Area.

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Photo 5. Looking northwest along remnant Southern Pacific Railroad tracks in the southwestern portion of the Study Area.



Photo 6. Looking west along the northern border and part of the seasonal wetland in the northwestern portion of the Study Area.

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Photo 7. Looking east across the seasonal wetland in the northwestern portion of the Study Area.



Photo 8. Looking northwest at the non-native annual grassland habitat in the northern portion of the Study Area.

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# **APPENDIX D**

## **BIOLOGICAL RESOURCES ASSESSMENT (LOT B)**

# Waterman Brinkman Logistics Center Project (10.4-Acre)

## Biological Resources Assessment

January 2022 | 04501.00001.001

*Prepared for:*

**Pac West Fund B Development, LLC**  
555 Capitol Mall, Suite 900  
Sacramento, CA 95814

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
1677 Eureka Road, Suite 100  
Roseville, CA 95661

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# Waterman Brinkman Logistics Center Project (10.4-Acre)

## Biological Resources Assessment

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# TABLE OF CONTENTS

---

<b><u>Section</u></b>	<b><u>Page</u></b>
EXECUTIVE SUMMARY .....	ES-1
1.0 INTRODUCTION.....	1
1.1 Project Description .....	1
2.0 REGULATORY FRAMEWORK.....	1
2.1 Federal Regulations .....	1
2.1.1 Federal Endangered Species Act.....	1
2.1.2 Migratory Bird Treaty Act .....	2
2.1.3 The Bald and Golden Eagle Protection Act.....	2
2.2 State Jurisdiction.....	2
2.2.1 California Endangered Species Act .....	2
2.2.2 California Department of Fish and Game Codes .....	2
2.2.3 Native Plant Protection Act .....	3
2.3 Jurisdictional Waters.....	3
2.3.1 Federal Jurisdiction .....	3
2.3.2 State Jurisdiction.....	4
2.4 CEQA Significance .....	5
2.4.1 California Native Plant Society.....	6
2.4.2 California Department of Fish and Wildlife Species of Concern.....	6
2.5 City of Elk Grove.....	7
2.5.1 General Plan.....	7
2.5.2 Swainson’s Hawk Code .....	7
2.5.3 Tree Preservation and Protection Ordinance.....	8
3.0 METHODS.....	8
4.0 RESULTS .....	9
4.1 Site Location and Description .....	9
4.2 Physical Features .....	9
4.2.1 Topography and Drainage .....	9
4.2.2 Soils .....	10
4.3 Biological Communities .....	10
4.3.1 Ruderal/Disturbed .....	10
4.4 Aquatic Resources.....	11
4.5 Special-Status Species.....	11
4.5.1 Listed and Special-Status Plants .....	12
4.5.2 Listed and Special-Status Wildlife.....	12
4.6 Sensitive Habitats .....	14
4.6.1 Potential Jurisdictional Waters of the U.S. and State.....	14
4.6.2 Protected Trees.....	14
4.6.3 Wildlife Migration Corridors.....	14

# TABLE OF CONTENTS (cont.)

---

<b><u>Section</u></b>	<b><u>Page</u></b>
5.0 CONCLUSIONS AND RECOMMENDATIONS.....	15
5.1 Recommendations.....	15
5.1.1 Swainson’s Hawk .....	15
5.1.2 Burrowing Owl .....	17
5.1.3 Protected Nesting Migratory Birds and Raptors.....	17
5.1.4 Protected Trees.....	18
5.2 Summary of Avoidance and Minimization Measures.....	19
6.0 REFERENCES.....	21

## **LIST OF APPENDICES**

- A Applicable Sections of the City of Elk Grove General Plan
- B Regionally Occurring Listed and Special-Status Species
- C Plant and Wildlife Species Observed in the Study Area
- D Representative Site Photographs

# TABLE OF CONTENTS (cont.)

---

## LIST OF FIGURES

<u>No.</u>	<u>Title</u>	<u>Follows Page</u>
1	Vicinity Map .....	10
2	Project Site .....	10
3	Soils .....	10
4	Biological Communities .....	10
5	Impacts to Biological Communities .....	16

## ACRONYMS AND ABBREVIATIONS

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AMMs	Avoidance and Mitigation Measures
BRA	Biological Resources Assessment
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CRZ	critical root zone
CWA	Clean Water Act
DBH	diameter at breast height
FESA	Federal Endangered Species Act
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
MSL	mean sea level
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	ordinary high water mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SSHCP	South Sacramento Habitat Conservation Plan
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

## EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) biologist Charlotte Marks conducted a Biological Resources Assessment (BRA) on October 23, 2019 for the Waterman Brinkman Logistics Center Project (10.4-acre) (project site) [Assessor's Parcel Number (APN) 134-0181-041-0000]. The project site is located at 10000 Waterman Road, City of Elk Grove, Sacramento County, California. The site is located within Township 6 North, Range 6 East, Section 7 of the USGS 7.5-minute series *Elk Grove* quadrangle. The approximate location of the Study Area is  $-121.353467^{\circ}$  Longitude,  $38.392603^{\circ}$  Latitude.

The purpose of this BRA is to summarize the general biological resources on the site, to assess the suitability of the site to support special-status species and sensitive vegetation communities or habitats, and to provide recommendations for any regulatory permitting or further analysis that may be required prior to development activities occurring on the site.

The 12.3-acre Study Area includes the 10.4-acre project site, 50-foot buffers to the north and west, and buffers that extend up to the paved roads to the south and east (Waterman Road). The site is undeveloped, but highly-disturbed from ongoing human activities (i.e., plowing). The Study Area contains approximately 12.3 acres of ruderal/disturbed habitat. Surrounding land uses include undeveloped land, industrial complexes, railroad tracks, and residential subdivisions.

Known or potential biological constraints in the Study Area include:

- Presence of Northern California black walnut (*Juglans hindsii*);
- Potential nesting and foraging habitat for nesting migratory birds and birds of prey including, burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), Cooper's hawk (*Accipter cooperii*), and white-tailed kite (*Elanus leucurus*); and
- Protected trees regulated by the City of Elk Grove.

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# 1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the Waterman Road Project (Study Area) located within the City of Elk Grove, Sacramento County, California. This document addresses the site’s physical features, plant communities present, and the common plant and wildlife species occurring or potentially occurring in the Study Area. Furthermore, the suitability of habitats to support special-status species and sensitive habitats are analyzed, and recommendations are provided for any regulatory permitting or further analysis required prior to development activities occurring on the site.

## 1.1 PROJECT DESCRIPTION

The proposed project plans to develop the entire 10.4-acre parcel with a 183,250 square foot commercial building, including three depressed loading docks, and a parking lot containing 150 parking spaces.

# 2.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

## 2.1 FEDERAL REGULATIONS

### 2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

## 2.1.2 Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

## 2.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to *“take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.”* Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as *“to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”*

## 2.2 STATE JURISDICTION

### 2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the California Department of Fish and Wildlife (CDFW), when preparing CEQA documents. The purpose is to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species. It also directs CDFW to determine whether jeopardy would occur and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

### 2.2.2 California Department of Fish and Game Codes

A number of species have been designated “fully protected” species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as *“hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”* Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit the killing of birds or the destruction of bird nests.

### **2.2.3 Native Plant Protection Act**

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants protected under the NPPA. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

## **2.3 JURISDICTIONAL WATERS**

### **2.3.1 Federal Jurisdiction**

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

On April 21, 2020, the Environmental Protection Agency (EPA) and USACE published the Navigable Waters Protection Rule to define “Waters of the United States” in the Federal Register. On June 22, 2020, the Navigable Waters Protection Rule: Definition of “Waters of the United States” (NWPR) became effective in 49 states, including California, and in all US territories. However, the U.S. District Court for the District of Arizona invalidated the NWPR in August of 2021. The current administration is in the process of considering new definitions of waters of the U.S. In the interim, the pre 2015 definition of waters of the U.S. is considered in effect. The current definition of waters of the U.S. is expected to include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters;
- All impoundments of waters otherwise defined as waters of the U.S. under this definition;
- Tributaries of waters outlined above;
- Territorial seas; and
- Wetlands adjacent to jurisdictional waters.

### 2.3.2 State Jurisdiction

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal Clean Water Act. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

- I. A wetland definition;
- II. A framework for determining if a feature that meets the wetland definition is a water of the state;
- III. Wetland delineation procedures; and
- IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the State" includes all "Waters of the U.S."

More specifically, a wetland is defined as: "An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation." The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

#### California Department of Fish and Wildlife

The CDFW is a trustee agency that has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except

*when the department has been notified pursuant to Section 1601.*” Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends submitting an application for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

## 2.4 CEQA SIGNIFICANCE

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist contained in Appendix G of the State CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

### 2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

- Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – A Review List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. While only some of the plants ranked 3 meet the definitions of threatened or endangered species, the CNPS recommends that all Rank 3 plants be evaluated for consideration under CEQA. Furthermore, the CNPS Rare Plant Rankings include levels of threat for each species. These threat ranks include the following:

- 0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- 0.2 - Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat); and
- 0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully-considered during preparation of environmental documents under CEQA.

### 2.4.2 California Department of Fish and Wildlife Species of Concern

Some additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or are fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to “Species of Special Concern” (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDDB) but warrant no legal protection. These species are identified as “California Special Animals” (CSA).

## 2.5 CITY OF ELK GROVE

### 2.5.1 General Plan

In addition to the federal and State regulations described above, the City of Elk Grove General Plan (General Plan) includes goals, policies, and actions regarding biological resources within the City limits (City of Elk Grove 2019a). Applicable sections of the General Plan are included in Appendix A.

### 2.5.2 Swainson's Hawk Code

In 2003, the City of Elk Grove (City) adopted Chapter 16.130 Municipal Code ("Swainson's Hawk Code"), which establishes Swainson's Hawk Impact Mitigation policies tailored for projects in Elk Grove that have been determined through the CEQA process to result in a potential significant impact or potential significant cumulative impact on Swainson's hawk foraging habitat (City of Elk Grove 2003). This Code applies to the following:

- Any request for a change in land use designation from an agricultural designation to an urban designation;
- Any request to subdivide five acres or more of contiguous land zoned AR-1 or AR-2;
- Any request for a land use entitlement for a non-agricultural use of land zoned with an agricultural designation;
- Any request for a land use entitlement for a non-agricultural use of land five acres or more in size zoned AR-1 or AR-2; and
- Any public improvement project proposed by any department or agency of the City of Elk Grove on land with an agricultural designation.

This code serves as a conservation strategy that is achieved through the selection of appropriate replacement lands and through management of suitable habitat value on those lands in perpetuity. This Code allows a project applicant to provide mitigation for the loss of foraging habitat within the City. Mitigation can be accomplished by one or a combination of the following options:

- Provide direct land preservation to the City by fee title or conservation easement on a per acre basis (one-to-one mitigation ratio), including an endowment for easement monitoring. Interests in mitigation lands are to be held in trust by an entity acceptable to the City and/or the City in perpetuity;
- Pay Swainson's Hawk impact mitigation fee on a per acre basis of habitat impacted; as of 2017, the fee is \$11,452 per acre. The City utilizes the fees collected to mitigate the project's impacts by acquiring land in fee title and/or conservation easements on suitable Swainson's hawk foraging habitat. Although the Swainson's Hawk Code states that the payment of a mitigation fee is limited to projects less than 40 acres, the City Council has lifted the restriction in the interim to allow projects 40 acres and over the option to pay the mitigation fee;

- Purchase mitigation credits at an accredited mitigation bank that is acceptable to the City and California Department of Fish and Game;
- Purchase credits from a property owner with eligible credits for projects in Elk Grove that is acceptable to the City and California Department of Fish and Game; and/or
- Provide other instruments to preserve suitable habitat as determined by the California Department of Fish and Game (City of Elk Grove 2019b).

### 2.5.3 Tree Preservation and Protection Ordinance

The City regulates the removal, pruning, and impacts to protected trees under the Tree Preservation and Protection Ordinance (Chapter 19.12 of the Municipal Code). Protected trees include any trees of the following species with a single trunk, or multi-trunked trees with a combined DBH, of six inches or greater: coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), oracle oak (*Quercus X morehus*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans hindsii*). Additionally, designated Landmark trees, trees in the right-of way or on City property, and trees previously retained during development review or planted as mitigation, are protected. The critical root zone (CRZ) is defined as the existing dripline of the tree plus one foot. A Tree Permit is required prior to removal, pruning, or disturbance within the CRZ of any protected tree. Mitigation shall be provided at a ratio of one new inch DBH of tree for each inch of DBH lost (1 for 1 replacement) unless an alternative mitigation plan is approved by the City. Trees replaced shall be of the same species as those removed. On-site or off-site replacement shall specify where the trees shall be planted and how the trees shall be monitored and maintained for a minimum of five years. As an alternative to replacement plantings, payment of in-lieu fees can be deposited into the Tree Preservation Fund based on a rate established by the City Council.

## 3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed and all references reviewed for this assessment are listed in Section 6.0. The following site-specific published information was reviewed for this report:

- California Department of Fish and Wildlife (CDFW). 2021. California Natural Diversity Data Base (CNDDDB); For: *Sacramento East, Carmichael, Buffalo Creek, Florin, Elk Grove, Sloughhouse, Bruceville, Galt, and Clay* U.S. Geological Survey (USGS) 7.5-minute series quadrangles. [Accessed on October 27, 2021];
- California Native Plant Society (CNPS). 2021. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39) For *Sacramento East, Carmichael, Buffalo Creek, Florin, Elk Grove, Sloughhouse, Bruceville, Galt, and Clay* U.S. Geological Survey (USGS) 7.5-minute series quadrangles. [Accessed on October 27, 2021];
- USDA, NRCS. 2021. *Web Soil Survey*. Available online at: <http://websoilsurvey.sc.egov.usda.gov>. [Accessed on October 27, 2021];
- U.S. Fish and Wildlife Service (USFWS). 2021. *Information for Planning and Consultation (IPaC) Elk Grove Project, California*. [Accessed on October 27, 2021]; and



- U.S. Geological Society (USGS). 2015. *Elk Grove, California*. 7.5-minute series topographic quadrangle. United States Department of Interior.

Prior to conducting the field survey, existing information concerning known habitats and special-status species that may occur in the Study Area were reviewed. The results of the records search and five-mile radius CNDDDB query for the Study Area are summarized in Tables 1-3 of Appendix B. An updated records search was performed on October 27, 2021, and no new occurrences have been documented since the original records search performed in 2019. The field survey was conducted on October 23, 2019, by HELIX biologist Charlotte Marks. The weather during the field survey was sunny with temperatures between 63 degrees and 80 degrees Fahrenheit. The Study Area was systematically surveyed on foot, walking meandering transects, to ensure total search coverage, and special attention was given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Binoculars were used to further extend site coverage and identify species observed. All plant and animal species observed were recorded (Appendix C), and all biological communities occurring onsite were characterized. Resources of interest were mapped with Global Positioning System (GPS)-capable-Android phone equipped with GPS receivers running ESRI Collector for ArcGIS version 10.3.2 software.

Following the field survey, the potential for each species identified in the records search to occur within the Study Area was determined based on the site survey, soils, habitats present within the survey area, and species-specific information, as shown in Appendix B.

## 4.0 RESULTS

### 4.1 SITE LOCATION AND DESCRIPTION

The 12.3-acre Study Area is located in the in the City of Elk Grove, Sacramento County, California (Figure 1, *Vicinity Map*). The Study Area is bound by Waterman Road to the east, undeveloped land and Southern Pacific Railroad tracks to the west, industrial developments and Mosher Road to the south, and industrial developments and Brinkman Court to the north. The parcel (APN 134-0181-041-0000) for the project site is designated as urban and zoned as “Heavy Industrial (HI)” as per the Sacramento County Zoning Code. The Study Area is located within Township 6 North, Range 6 East, Section 7 of the USGS 7.5-minute series *Elk Grove* quadrangle. The approximate location of the Study Area is - 121.353467° Longitude, and 38.392603° Latitude (Figure 1). An aerial of the Study Area is provided in Figure 2, *Project Site*.

### 4.2 PHYSICAL FEATURES

#### 4.2.1 Topography and Drainage

The general topography of the Study Area is flat, with no undulations or hills. Elevations range from approximately 50 feet (15 meters) above mean sea level (MSL) in the northwestern corner to approximately 56 feet (17 meters) above MSL in the northeastern corner of the Study Area. The Study Area is located in the Lower Sacramento watershed, USGS Hydrologic Unit Code (HUC) 18020163.

Historic aerial imagery shows several inundated areas in the northern, eastern, and southern portions of the Study Area. However, due to the highly-disturbed nature of the site (i.e., regular plowing) the boundaries and depths of these features were not well-defined during the biological survey. The

hydrological regime onsite is direct seasonal precipitation, and areas of the site appear to become inundated during the wet season.

## 4.2.2 Soils

The Natural Resources Conservation Service has mapped two soil units within the Study Area and include, San Joaquin silt loam, leveled, 0 to 1 percent slopes, and Galt clay, leveled, 0 to 1 percent slopes of the U.S. Department of Agriculture (USDA, NRCS 2021) (Figure 3, *Soils*). The general characteristics and properties associated with these soil types are described below.

**(213) San Joaquin silt loam, leveled, 0 to 1 percent slopes:** This soil type is found in terraced landforms. This soil has parent material consisting of alluvium derived from granite. The available water holding capacity is low (about 3.4 inches). This soil is composed of 85 percent San Joaquin and other similar soils, three percent of Bruella soil, three percent of Durixeralfs soil, two percent of Galt soil, two percent of Hedge soil, two percent of Kimball soil, two percent of Xerarents soil, and one percent of unnamed, rarely flooded soil. Overall, this soil type is not identified as hydric; however, the Galt soil minor component is rated as hydric and is found in depressional landforms (USDA, NRCS 2021). This soil type occurs in the northern half of the Study Area.

**(151) Galt clay, leveled, 0 to 1 percent slopes:** This soil type is found in terraced landforms. This soil has parent material consisting of alluvium derived from granite. The available water holding capacity is low (about 4.3 inches). This soil is composed of 85 percent Galt and other similar soils, four percent Clear lake, four percent of San Joaquin soil, three percent of urban land soil, two percent of unnamed, overburden/hardpan soil, and two percent of unnamed, rarely flooded soil. Overall, this soil type is identified as hydric (USDA, NRCS 2021). This soil type occurs in the southern half of the Study Area.

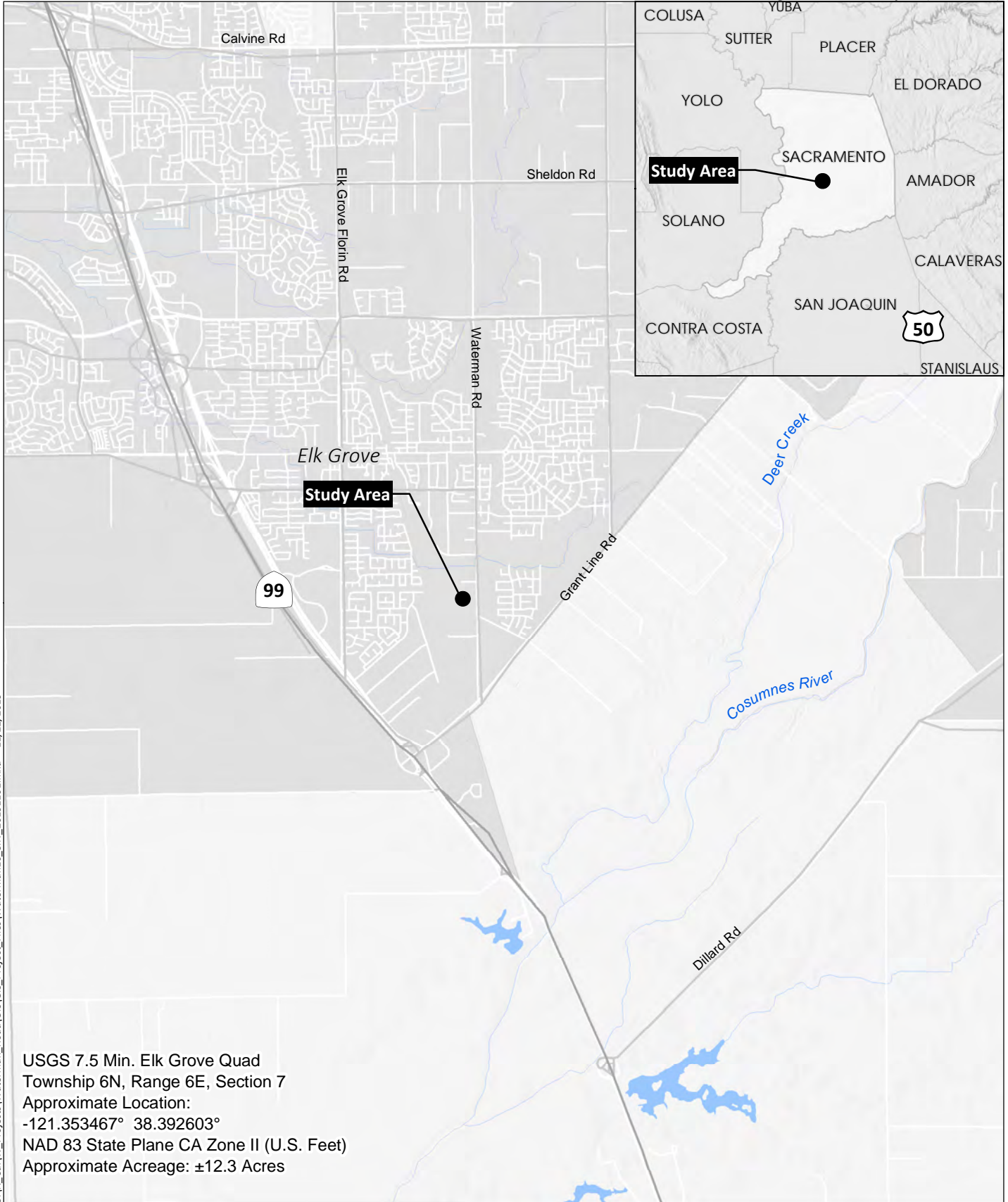
## 4.3 BIOLOGICAL COMMUNITIES

One biological community, ruderal/disturbed, occurs within the Study Area (Figure 4, *Biological Communities*). This community is described in more detail below. A comprehensive list of all plant species observed within the Study Area is provided in Appendix C. Representative site photographs are included in Appendix D.

### 4.3.1 Ruderal/Disturbed

A total of 12.3 acres of ruderal/disturbed habitat occurs throughout the Study Area (Figure 4). This habitat is primarily characterized by an assemblage of ruderal herbs and forbs that colonize disturbed landscapes. The Study Area is regularly tilled creating a highly-disturbed environment that supports several non-native and invasive plant species. Dominant vegetation within this community includes wild mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus* spp. *pycnocephalus*), stinkwort (*Dittrichia graveolens*), tumbleweed (*Salsola tragus*), horseweed (*Erigeron canadensis*), and prickly lettuce (*Lactuca serriola*). Herbaceous plant species comprise a small percentage of the overall vegetation within the Study Area. Interspersed throughout this community are trees, predominantly valley oaks (*Quercus lobata*).

Waterman Brinkman Logistics Center Project (10.4-Acre)





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Source: Base Map Layers (Esri, USGS, NGA, NASA)

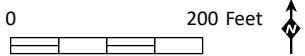


Legend

-  Study Area - 12.3 Acres
-  Project Site - 10.4 Acres



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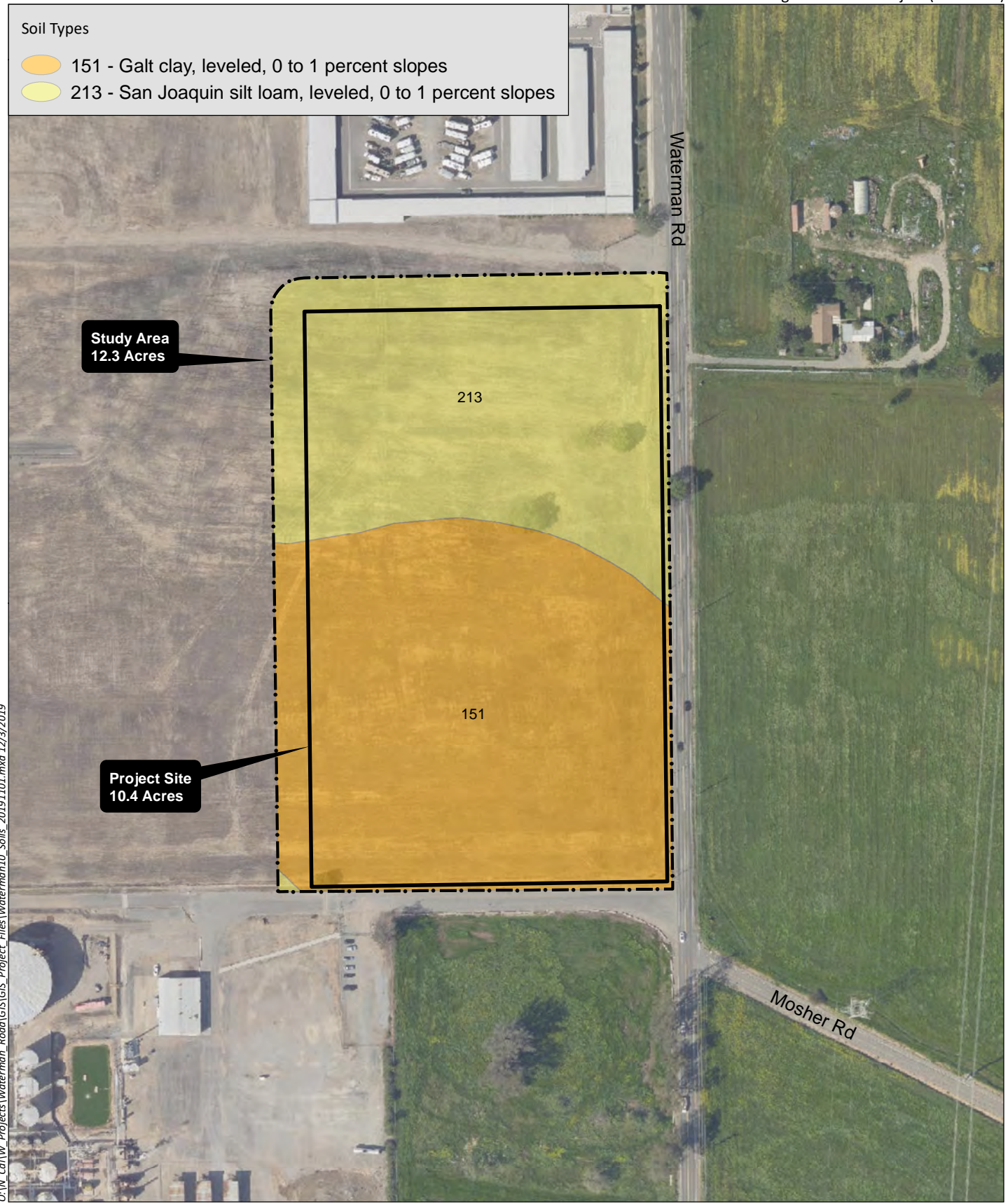


Source: Aerial (Sacramento County, 2018)



Soil Types

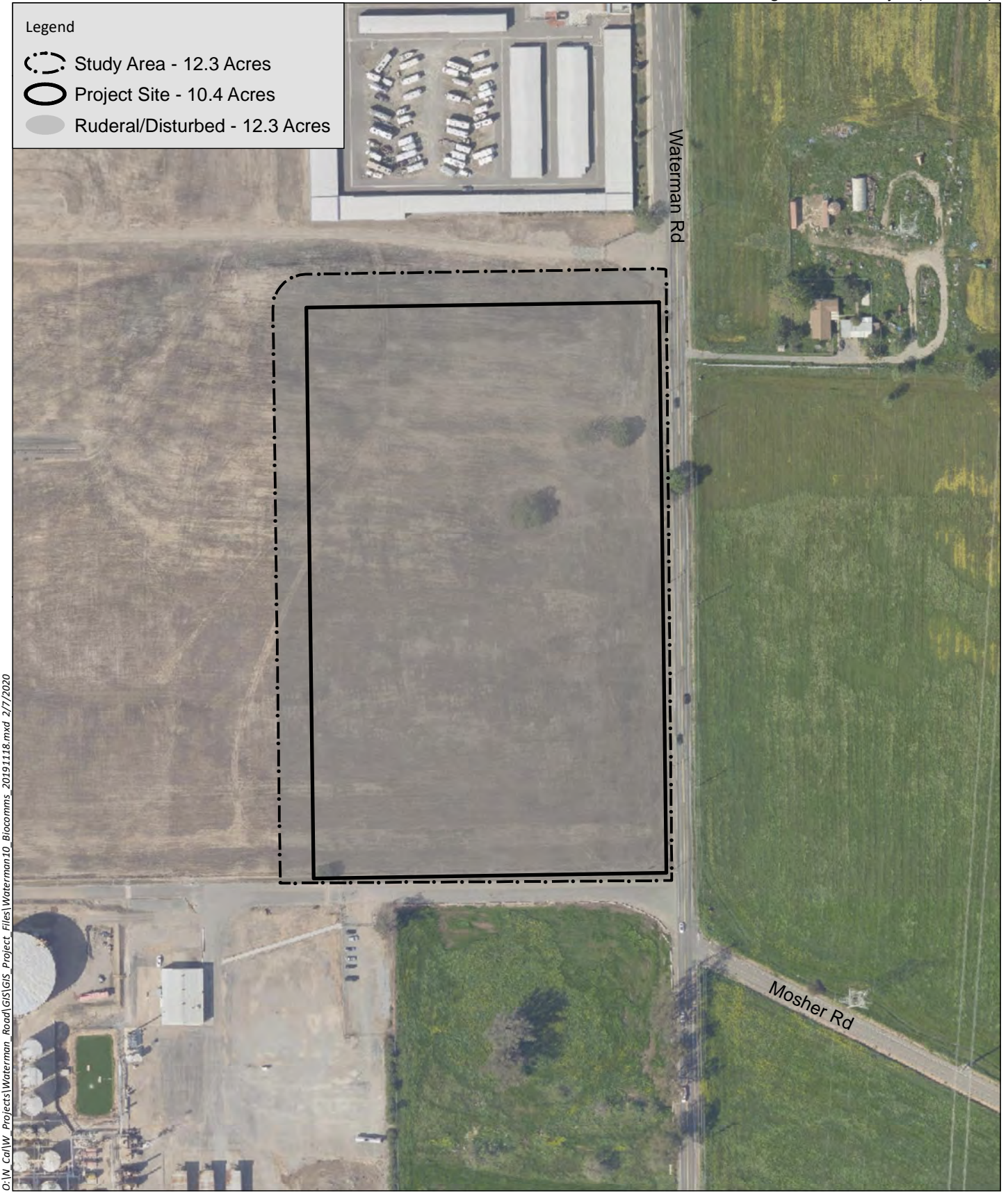
- 151 - Galt clay, leveled, 0 to 1 percent slopes
- 213 - San Joaquin silt loam, leveled, 0 to 1 percent slopes



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Source: USGS Soil Survey, 2018





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## 4.4 AQUATIC RESOURCES

A formal aquatic resources delineation was conducted by HELIX in January of 2020 and determined that no jurisdictional waters of the U.S. or State exist within the Study Area (HELIX 2020).

## 4.5 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition by federal, State, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., Migratory Bird Treaty Act);
- Included on the CDFW Special Animals List;
- Identified as Rare Plant Rank 1 to 3 by CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDDB, the USFWS IPaC list, and CNPS ranked plant species (online versions) for the *Elk Grove* USGS quadrangle and eight surrounding quadrangles. Appendix B includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

- **Present:** Species known to occur within the Study Area based on CNDDDB records and/or observed within the Study Area during the biological survey.
- **High:** Species known to occur on or in the vicinity of the Study Area (based on CNDDDB records within five miles and/or based on professional expertise specific to the Study Area or species) and there is suitable habitat within the Study Area.
- **Low:** Species known to occur in the vicinity of the Study Area and there is marginal habitat within the Study Area **-OR-** Species is not known to occur in the vicinity of the Study Area, however, there is suitable habitat on the Study Area.
- **None:** Species is not known to occur on or in the vicinity of the Study Area and there is no suitable habitat within the Study Area **-OR-** Species was surveyed for during the appropriate season with negative results **-OR-** The Study Area occurs outside of the known elevation or geographic ranges.

Only those species that are known to be *present* or have a *high* or *low* potential for occurrence are discussed further in the following sections.

### 4.5.1 Listed and Special-Status Plants

According to the records search, 20 special-status plant species have the potential to occur on or in the vicinity of the Study Area. Based on field observations, one species, Northern California black walnut, is present within the Study Area. No other special-status plant species have the potential to occur within the Study Area.

#### Special-Status Plant Species Present

##### Northern California Black Walnut

Northern California black walnut is ranked as a CNPS 1B species, which are plants that are rare, threatened or endangered in California and elsewhere. It is a perennial deciduous tree found naturally in riparian forests and riparian woodland habitats from 0 to 440 feet (0 to 134 meters) above MSL. There are no documented CNDDDB records of this species occurring within five miles of the Study Area (CDFW 2019). However, two Northern California black walnut trees were observed within the Study Area during the biological survey. Although black walnut trees occur within the Study Area, these trees do not occur as a natural grove or within their native riparian habitat. Furthermore, CNPS defines Northern California black walnut trees as a California native rare plant only if they germinated prior to 1840, otherwise, they are most likely a hybrid species (Friends of the Creeks 2015; CNPS 2021). The trees within the Study Area are located within ruderal/disturbed habitat along Waterman Road, did not germinate prior to 1840, are not part of a natural grove or located within riparian habitat, and thus are likely a hybrid species.

Therefore, rare plant protection is not considered to be warranted for these trees. However, this species is still subject to regulation under the City Tree Ordinance.

### 4.5.2 Listed and Special-Status Wildlife

According to the records search, 36 listed and special-status wildlife species have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2021). Based on field observations, published information, and literature review, Swainson's hawk, white-tailed kite, Cooper's hawk, and migratory nesting birds and raptors have a *high* potential to occur within the Study Area. Burrowing owls have a *low* potential to occur within the Study Area.

#### Special-Status Wildlife with a High Potential for Occurrence

##### Swainson's Hawk

Swainson's hawk is a State threatened species. This species is a long-distance migrant with nesting grounds in western North America. The Swainson's hawk population that nests in the Central Valley winters primarily in Mexico, while the population that nests in the interior portions of North America winters in South America (Bradbury et al., in prep.). Swainson's hawks arrive in the Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to late August, peaking in late May through July (Zeiner et al., 1988-1990). In the Central Valley, Swainson's hawks nest in isolated trees, small groves, or large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. In the Central Valley the most commonly used trees include Fremont cottonwood (*Populus fremontii*), willows (*Salix* sp.), sycamores (*Platanus* sp.), valley oaks (*Quercus lobata*), and walnut (*Juglans* sp.), and occasionally gum trees (*Eucalyptus* sp.), pines (*Pinus* spp.), and redwoods (*Sequoia* spp.) (Woodbridge 1998). Nest locations are usually in close proximity (up to a 10-mile radius) to



suitable foraging habitats, which include fallow fields, all types of grasslands, irrigated pastures, alfalfa and other hay crops, and low-growing row crops, especially post-harvest when the height of the vegetation is short and easy to observe prey (Bechard et al. 2010 and SAIC 2012). Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September (Bloom and Van De Water 1994).

There are 54 CNDDDB records of this species within five miles of the Study Area (CDFW 2021). Two historical occurrences (#2251 and #2250) located within 0.50 mile of the Study Area record nesting Swainson's hawks in eucalyptus (*Eucalyptus* sp.) trees along Waterman Road and Grant Line Road in 2003. The nearest occurrence (#2251) is located approximately 100 feet south of the Study Area. This species was not observed during the biological survey; however, the site assessment was conducted when this species is not expected to be present within the Sacramento Valley. Therefore, since there are several documented occurrences for this species within the vicinity of the Study Area, and the Study Area provides nesting and foraging habitat, this species has a *high* potential to occur within the Study Area.

### **White-Tailed Kite**

White-tailed kite is classified as a Fully-Protected species by CDFW. White-tailed kite is a year-round resident in coastal and valley lowlands in California. This species will inhabit a variety of habitat types including but not limited to, savanna, open woodland, marshes, partially-cleared lands, and cultivated fields (Nature Serve 2019). They breed from February to October, peaking from May to August (Zeiner et al. 1988-1990). This species nests near the top of dense oaks, willows, or other large trees, especially near aquatic habitats. They typically forage within un-grazed or lightly-grazed fields, agricultural areas, and open grasslands, that support prey species including voles (*Microtus* sp.), mice (*Mus* sp.), and sometimes pocket gophers (*Reithrodontomys* sp.).

There is one record of this species within five miles of the Study Area (CDFW 2021). This species was not observed during the biological survey. Therefore, since there is a documented occurrence for this species within the vicinity of the Study Area, and the Study Area provides nesting and foraging habitat, this species has a *high* potential to occur within the Study Area.

### **Nesting Migratory Birds and Raptors**

Migratory birds are protected under the MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10; this also includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All raptors, including Cooper's hawk and common species not possessing special-status, are protected under the California Fish and Game Code (Section 3503, 3503.5, and 3513). Removal or destruction of an active raptor nest is considered a violation of this Fish and Game Code. Migratory birds and raptors have the potential to nest on or adjacent to the Study Area. Suitable nest locations may include, but are not limited to trees, shrubs, herbaceous vegetation, and bare ground.

### **Special-Status Wildlife with a Low Potential for Occurrence**

#### **Burrowing Owl**

Burrowing owl is a State Species of Special Concern as designated by the CDFW. The burrowing owl is a small ground-dwelling owl that occurs in western North America from Canada to Mexico and east to

Texas and Louisiana. Although in certain areas of their range, burrowing owls are migratory, these owls are predominantly non-migratory in California. Burrowing owls generally inhabit gently-sloping areas, characterized by low, sparse vegetation (Poulin et al. 2011). The breeding season for burrowing owls is from February to August, peaking in April and May (Zeiner et al. 1988-1990). Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owls are also known to use artificial burrows including pipes, stockpiles, culverts, and nest boxes.

There are seven CNDDDB occurrence for this species within five miles of the Study Area (CDFW 2021). Underground burrows within the ruderal/disturbed habitat within the Study Area are small and limited in number. Therefore, these burrows may provide marginal breeding habitat. While no prey species were observed within the Study Area, ground squirrels were observed within the adjacent undeveloped land, which would provide prey for this species. This species was not observed onsite during the biological survey. Therefore, since there are several documented occurrences for this species within the vicinity of the Study Area, but the Study Area provides marginal breeding habitat, this species has a *low* potential to occur within the Study Area.

## **4.6 SENSITIVE HABITATS**

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA. Riparian areas are regulated under Section 1600 of the California Fish and Game Code, wetlands and other waters of the U.S. are regulated under Sections 401 and 404 of the Clean Water Act and potentially Sections 1600-1602 of the California Fish and Game Code, and protected trees are regulated under the Tree Ordinance for the City of Elk Grove.

### **4.6.1 Potential Jurisdictional Waters of the U.S. and State**

As previously mentioned, a formal aquatic resources delineation was conducted on the proposed project site by HELIX in January 2020. The delineation determined that no jurisdictional waters of the U.S. or State occur within the proposed project site.

### **4.6.2 Protected Trees**

A total of approximately six valley oak trees and two Northern California black walnut trees occur within the Study Area. A formal arborist survey was not conducted during the October 23, 2019 biological survey; however, it was observed that the trees had been recently tagged. As discussed in Section 2.5, the City evaluates any impacts to protected trees under the Tree Preservation and Protection Ordinance. If the proposed project will result in impacts to protected trees, the City will require a formal tree survey to inventory protected trees onsite, evaluate impacts to the protected trees as a result of the proposed project, and evaluate applicable mitigation.

### **4.6.3 Wildlife Migration Corridors**

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by development creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining

habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs. The Study Area is a highly-disturbed site. While there is undeveloped land immediately to the west, the site is not linked to suitable wildlife habitat that would act as a migratory corridor. The Study Area is disjunct from natural wildlife habitats, as a result of being surrounded by paved roadways, railroad tracks, residential subdivisions, and industrial complexes. Therefore, the Study Area would not be considered a wildlife migration corridor.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The 12.3-acre Study Area contains ruderal/disturbed habitat. Sensitive resources that may be impacted by the proposed project include Swainson's hawk, burrowing owl, protected nesting migratory birds and raptors, and protected trees. Proposed Project impacts are also illustrated in Figure 5, *Impacts to Biological Communities*.

No special-status plants or special-status wildlife were observed within the Study Area during the October 23, 2019 biological survey. However, special-status wildlife species may occur within the Study Area. Recommendations, including avoidance and minimization measures to limit or avoid impacts to special-status wildlife species that may occur are included in Section 5.1.

Known or potential biological constraints in the Study Area include the following:

- Potential nesting and foraging habitat for nesting migratory birds and birds of prey including: burrowing owl, Swainson's hawk, Cooper's hawk, and white-tailed kite; and
- Protected trees (i.e., valley oaks, and Northern California black walnut) regulated by the City of Elk Grove.

### 5.1 RECOMMENDATIONS

#### 5.1.1 Swainson's Hawk

Swainson's hawk has a *high* potential to occur due to the presence of suitable nesting habitat and known nesting occurrences within 10 miles of the Study Area. Although no Swainson's hawks were observed during the survey, the site assessment was conducted when this species is not expected to be present within the Sacramento Valley. Vegetation clearing and ground-disturbing construction activities would destroy potential nesting and foraging habitat for this species.

The project parcel is designated as Urban/Heavy Industrial, and therefore, the City's Swainson's Hawk Code for mitigation for project impacts to foraging habitat for this species does not apply to the proposed project. However, the site does provide suitable nesting and foraging habitat for Swainson's hawks and development of the site could potentially impact this species through loss of nesting and foraging habitat and disturbance to nesting pairs including potential nest abandonment if active nests are located within or nearby to the project site during construction.



The following measures are recommended to reduce potential impacts to Swainson's hawk:

Prior to the commencement of construction activities during the nesting season for Swainson's hawk (between March 1 and September 15), a qualified biologist shall conduct protocol-level preconstruction surveys within at least 2 (two) of the recommended survey periods within the nesting season that coincides with the commencement of construction activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). At least one survey shall be conducted within each survey period selected; the dates should be adjusted in consideration of early or late nesting seasons for the year in which the surveys are conducted. If the final survey is completed more than 14 days prior to initiation of construction, an additional survey shall be conducted within 14 days of the start of construction to ensure that nesting has not been initiated within the intervening time. The qualified biologist shall conduct surveys for nesting Swainson's hawk within 0.25 mile of the Project Site, where legally permitted. The qualified biologist shall use binoculars to visually determine whether Swainson's hawk nests occur within the 0.25-mile survey area, if access is denied on adjacent properties. If no active Swainson's hawk nests are identified on or within 0.25 mile of the Project site within the recommended survey periods, a letter report summarizing the survey results shall be submitted to the City of Elk Grove within 30 days following the final survey, and no further avoidance and minimization measures for nesting habitat are required.

If active Swainson's hawk nests are found within 0.25-mile of construction activities, the qualified biologist shall contact the City of Elk Grove within one business day following the pre-construction survey to report the findings. For the purposes of this mitigation measure, construction activities are defined to include heavy equipment operation associated with vegetation clearing, grading, construction (use of cranes or draglines, new rock crushing) or other Project-related activities that could cause nest abandonment or forced fledging within 0.25-mile of a nest site between February 15 and August 31. Should an active nest be present within 0.25- mile of the construction area, the City of Elk Grove shall be consulted to establish take avoidance plan. Such a plan could include measures such as establishment of a construction setback, placement of high-visibility construction fencing along the setback boundaries, and monitoring of the nest during construction activities. The qualified biologist shall have the authority to stop construction activities if the hawks show signs of distress; if this occurs, construction may not resume until the City of Elk Grove is consulted and the construction setback is increased or other take avoidance measures are modified. A letter report summarizing the survey results and describing implementation of the take avoidance measures will be submitted to the City of Elk Grove within 30 days of the final monitoring event. No further avoidance and minimization measures for nesting habitat would be required after submittal of the report.

In the event that the City deems the SWHA mitigation exemption for the Urban/Heavy Industrial designated parcel inappropriate, then the project would require the following measures. Prior to initiation of construction activities, the Project applicant would be required mitigate for the loss of 10.40 acres of Swainson's hawk foraging habitat at a 1:1 ratio. Mitigation can be accomplished through payment of an in-lieu fee to the City or acquisition of a conservation easement(s) or other means suitable to preserve foraging habitat for the Swainson's hawk in accordance with either Section 16.130.040 or 16.130.110 of the Elk Grove Municipal Code.

Legend

-  Study Area - 12.3 Acres
-  Project Site - 10.4 Acres

Impacts to Biological Communities

Biological Communities	Direct Impacts (Acres)*	Avoided (Acres)*	Total (Acres)*
Ruderal/Disturbed**	10.40	1.90	12.30
<b>TOTAL:</b>			
	<b>10.40</b>	<b>1.90</b>	<b>12.30</b>

\*\*Total impacts to potential seasonal wetlands will be assessed upon boundary verification by the Corps

\*Acreages are calculated to six significant figures and subsequently rounded to two significant figures. Total acreage is based on the sum of these amounts at two significant figures.

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Source: Aerial (Sacramento County, 2018)



### 5.1.2 Burrowing Owl

Burrowing owl has a *low* potential to occur within the ruderal/disturbed community due to the presence of marginal breeding habitat (i.e., relative low number of burrows of unsuitable size for owls). Although no burrowing owls were observed during the biological survey, the species could occupy the Study Area in the future.

The following measures are recommended to reduce potential impacts to burrowing owl:

During the non-breeding season (late September through the end of January), the Applicant shall conduct a survey for burrowing owls and burrows or debris that represent suitable nesting or refugia habitat for burrowing owls within areas of proposed ground disturbance. Should owls be present, construction activities shall avoid the refugia by 250 feet until the burrowing owl vacates the site. CDFW may provide authorization for the applicant to conduct activities (burrow exclusion, etc.) that may discourage owl use.

If clearing and construction activities are planned to occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct a targeted burrowing owl nest survey of all accessible areas within 500 feet of the proposed construction area within 14 days prior to construction initiation, as described in CDFG’s Staff Report on Burrowing Owl Mitigation, published March 7, 2012. Surveys shall be repeated if Project activities are suspended or delayed for more than 14 days during nesting season. The results of the surveys shall be submitted to the Development Services Department. If burrowing owls are not detected, further mitigation is not required.

If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest burrow until a qualified biologist determines that the young have fledged and adult has vacated, or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the City to determine if the nest buffer can be reduced.

If nesting burrowing owls are found during the pre-construction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of the active burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the Burrowing Owl Staff Report and may be accomplished within the Swainson’s hawk foraging habitat mitigation area for the Project if burrowing owls have been documented utilizing that area, or if the qualified biologist, the City, and CDFW collectively determine that the mitigation strategy is suitable for both species.

### 5.1.3 Protected Nesting Migratory Birds and Raptors

Migratory birds and raptors, including Cooper’s hawk and white-tailed kite, have the potential to nest and forage within the Study Area. No active nests were observed at the time of the field survey, but the Study Area has the potential to support nesting birds within various trees and shrubs, bare ground, and herbaceous vegetation.

Active nests and nesting birds are protected by the California Fish and Game Code Sections 3503, 3503.5, 3513 and the MBTA. Ground-disturbing and other development activities including grading, vegetation clearing, or tree removal, could impact nesting birds if these activities occur during the

nesting season (generally February 15 to August 30). To avoid impacts to nesting birds, all vegetation removal should be completed between August 31 and February 14, if feasible.

The following measures are recommended to reduce potential impacts to nesting migratory birds and raptors:

If vegetation clearing, grading and/or construction activities are planned to occur during the migratory bird nesting season (February 15 to August 30), a preconstruction survey to identify active migratory bird nests shall be conducted by a qualified biologist within three days prior to construction initiation. The survey shall be performed by a qualified biologist for the purposes of determining presence/absence of active nest sites within a 500-foot radius of proposed construction areas, where access is available. If a break in construction activity of more than two weeks occurs, then subsequent surveys shall be conducted.

If active raptor nests, not including Swainson's hawk, are found, construction activities shall not take place within 500 feet of the nest/s until the young have fledged. If active songbird nests are found, a 100-foot no disturbance buffer shall be established. The no-disturbance buffers may be reduced if a smaller buffer is proposed by the qualified biologist and approved by the City (and CDFW if the species is a tricolored blackbird nesting colony) after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, habituation to existing or ongoing activity, and nest concealment (are there visual or acoustic barriers between the proposed activity and the nest). The qualified biologist shall visit the nest as needed to determine when the young have fledged the nest and are independent of the site, or the nest may be left undisturbed until the end of the nesting season.

Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the agitated behavior, or as otherwise required through consultation with CDFW and the City. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with CDFW and the City. Construction activities may only resume within the buffer zone after a follow-up survey by the qualified biologist has been conducted and a report has been prepared indicating that the nest(s) are no longer active, and that new nests have not been identified.

#### **5.1.4 Protected Trees**

A total of approximately six valley oak trees and two Northern California black walnut trees occur within the Study Area. If the proposed project will result in impacts to protected trees, then the City will require a formal tree survey to inventory protected trees onsite, evaluate impacts to the protected trees as a result of the proposed project, and implement applicable mitigation. The trees have been recently tagged, so it is presumed that an arborist report has been prepared for the site.

For all protected trees to be preserved within 20 feet of the impact area, then protection measures shall be implemented in order minimize impacts to protected trees. Protection measures include:

- Tree Protection Fencing, consisting of chain link or four-foot tall, brightly-colored, high-visibility plastic fencing, shall be placed around the perimeter of the CRZ or the dripline radius plus 1 foot, whichever is greater. This protection fencing should be placed as far outside of the CRZ as possible. Signs shall be placed along the fence denoting this as a "Tree Protection Zone" that

shall not be moved until construction is complete. Trees or tree clusters with canopy extending beyond 50 feet from proposed project boundaries may be fenced only along sides facing the project. In cases where proposed work infringes on the CRZ, fence shall be placed at edge of work;

- Whenever possible, fence multiple trees together in a single CRZ;
- Tree protection fencing shall not be moved without prior authorization from the Project Arborist and the City of Elk Grove, as appropriate;
- No parking, portable toilets, dumping or storage of any construction materials, grading, excavation, trenching, or other infringement by workers or domesticated animals is allowed in the CRZ;
- No signs, ropes, cables, or any other items shall be attached to a protected tree, unless recommended by an ISA-Certified Arborist;
- No tree-toxic materials shall be dumped on the project site (e.g., gasoline, herbicide, salt);
- Prior to the installation of new asphalt, weed control chemicals shall not be applied where they can leach into the dripline of any protected tree;
- Underground utilities should be avoided in the CRZ, but, if necessary, shall be bored or drilled. If boring is impossible, all trenching will be done by hand under the supervision of an ISA-Certified Arborist;
- No cut or fill within the dripline of existing protected tree is permitted except as shown on the final development plans. If cut or fill within the dripline is unavoidable, any mitigation requirements shall be determined by the City of Elk Grove, as appropriate;
- Pruning of any retained tree shall be done under the supervision of an ISA-Certified Arborist and in accordance with current ISA standards and ANSI A300 standards;
- All wood plant material smaller than six inches in diameter shall be mulched on site. Resulting mulch shall be spread in a layer four to six inches deep in the CRZ of preserved trees. Mulch shall not be placed touching the trunk of preserved trees; and
- Appropriate fire prevention techniques shall be employed around all significant trees to be preserved. This includes cutting tall grass, removing flammable debris within the CRZ, and prohibiting the use of tools that may cause sparks, such as metal blade trimmers or mowers.

## 5.2 SUMMARY OF AVOIDANCE AND MINIMIZATION MEASURES

Implementation of the following measures prior to development is recommended to minimize impacts to biological resources within the Study Area:

- Conduct two pre-construction surveys (30 days and 3 days prior to construction) for nesting Swainson's hawks, if construction will occur during the nesting season;



- Conduct four burrowing owl surveys according to CDFW guidelines;
- Conduct a pre-construction survey for burrowing owl, if needed based on the results of the protocol survey, 24 hours prior to the initiation of construction or ground disturbing activities. If construction or ground disturbing activities do not commence within 14 days, or halt for more than seven days, then an additional survey should be conducted prior to resuming or starting work; Conduct pre-construction surveys for nesting migratory birds and raptors, including Cooper's hawk and white-tailed kite (during the nesting season) 14 days prior to the initiation of construction, or ground disturbing activities if construction will occur during the nesting season. This survey can be conducted concurrently with the pre-construction nest avoidance burrowing owl survey. If construction or ground disturbing activities do not commence within 14 days, or halt for more than seven days, then an additional survey should be conducted prior to resuming or starting work;
- Conduct a worker environmental awareness training for burrowing owl, Swainson's hawk, and nesting migratory birds and raptors, to all construction personnel prior to the initiation of work as applicable; and
- Determine final protected tree mitigation compensation based on arborist survey data and proposed tree removals, if any, and obtain a tree removal permit, as needed, and implement tree protection measures for all protected trees to be preserved onsite.

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# Appendix A

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Applicable Sections of the  
City of Elk Grove General Plan

## **Appendix A**

### **Applicable Sections of the City of Elk Grove General Plan**

#### **CONSERVATION AND AIR ELEMENT**

##### **PROTECTION OF NATURAL ENVIRONMENT**

**GOAL 3-1:** Development which recognizes environmental constraints and is designed and operated to minimize impacts on the environment.

**GOAL 3-2:** Open space lands in proximity to Elk Grove that provide for agricultural use and habitat for native species.

**GOAL 3-3:** Natural resources managed and protected for the use and enjoyment of current and future generations.

**GOAL 3-4:** Preservation and enhancement of Elk Grove's natural areas, in particular the areas within the floodplain of the Cosumnes River.

##### **PRESERVATION AND ENHANCEMENT OF ELK GROVE'S UNIQUE HISTORIC AND NATURAL FEATURES**

**GOAL 4-2:** Preservation of the large oak and other tree species which are an important part of the City's historic and aesthetic character.

##### **PRESERVATION OF THE RURAL CHARACTER OF ELK GROVE**

**GOAL 5-2:** Maintenance of those features that provide the character of Elk Grove's rural areas, including: large oak and other trees, small local roadways, animal keeping and raising, equestrians, agriculture, and limited commercial opportunities.

#### **CONSERVATION OF WATER**

**Policy CAQ-1:** Reduce the amount of water used by residential and non-residential uses by encouraging water conservation.

**CAQ 1 - Action 1:** Implement the City's Water Conservation Ordinance.

**CAQ 1 - Action 2:** Actively encourage water conservation by both agricultural and urban water users.

**CAQ 1 - Action 3:** Work with urban and agricultural water purveyors to establish long range conservation plans which set specific conservation objectives and utilize, to the extent possible, a common planning horizon, plan framework and estimating/ forecasting procedures.

**CAQ 1 - Action 4:** Promote the use of drought-tolerant vegetation to minimize water consumption by providing information to developers and designers.

**Appendix A (cont.)**  
**Applicable Sections of the City of Elk Grove General Plan**

**CONSERVATION OF SOILS**

**Policy CAQ-5:** Roads and structures shall be designed, built and landscaped so as to minimize erosion during and after construction.

**CONSERVATION OF NATIVE AND NON-NATIVE HABITATS, PLANTS, AND ANIMALS**

**Policy CAQ-7:** Encourage development clustering where clustering would facilitate on-site protection of woodlands, grasslands, wetlands, stream corridors, scenic areas, or other appropriate natural features as open space, provided that:

1. Urban infrastructure capacity is available for urban use.
2. On-site resource protection is appropriate and consistent with other General Plan Policies.
3. The architecture and scale of development is appropriate for the area.
4. Development rights for the open space area are permanently dedicated and appropriate long-term management is provided for by either a public agency, homeowners association, or other appropriate entity.

This policy shall not apply in the Rural Residential area east of State Route 99, where clustering of development is not permitted.

**Policy CAQ-8:** Large trees (both native and non-native) are an important aesthetic (and, in some cases, biological) resource. Trees which function as an important part of the City's or a neighborhood's aesthetic character or as natural habitat should be retained to the extent possible during the development of new structures, roadways (public and private, including roadway widening), parks, drainage channels, and other uses and structures. If trees cannot be preserved onsite, offsite mitigation or payment of an in-lieu fee may be required by the City. Where possible, trees planted for mitigation should be located in the same watershed as the trees, which were removed. Trees that cannot be protected shall be replaced either on-site or off-site as required by the City:

**CAQ 4-Action 1:** When reviewing native or non-native trees for preservation, considering the following criteria:

- Aesthetic value
- Biological value
- Shade
- Water quality benefits
- Runoff reduction
- Air quality (pollutant reduction)
- Health of the tree(s)
- Suitability for preservation in place
- Safety hazards posed by the tree(s)

**CAQ 4-Action 2:** Develop a list of trees which shall be considered generally exempt from preservation. These may include trees, which pose a threat to public safety, to native trees, or to natural habitat.



## **Appendix A (cont.)**

### **Applicable Sections of the City of Elk Grove General Plan**

**CAQ 4-Action 3:** Develop a list of trees which may be used when providing replacement trees for the loss of native and non-native trees.

**CAQ 4-Action 4:** Implement the City's Tree Preservation Ordinance.

**CAQ 4-Action 5:** Amend the City's Tree Preservation Ordinance to conform with the policies of this General Plan and to expand protection to non-native trees.

**CAQ 4-Action 6:** Develop a list of trees that should not be planted due to their invasive nature (that is, their ability to escape cultivation or to dominate natural areas) and provide this information to the public and the development community.

**CAQ 4-Action 7:** Retain the services of a qualified arborist(s) under contract to the City to provide information to decisionmakers and staff on the suitability of trees for preservation.

**CAQ 4-Action 8:** Consider the use of revised standard roadway cross-sections which do not require the removal of trees in order to provide additional roadway capacity

**CAQ 4-Action 9:** Provide funds for education, programs, and materials emphasizing the value and importance of trees. Support private foundations with local funds for their tree planting efforts. Encourage the harvesting of native seeds and plants prior to the clearing of project sites.

**Policy CAQ-9:** Wetlands, vernal pools, marshland and riparian (streamside) areas are considered to be important resources. Impacts to these resources shall be avoided unless shown to be technically infeasible. The City shall seek to ensure that no net loss of wetland areas occurs, which may be accomplished by avoidance, re-vegetation and restoration onsite or creation of riparian habitat corridors.

**CAQ-9-Action 1:** As part of the development review process, ensure that all potentially affected wetland areas are identified, and provide mitigation to ensure that no net loss occurs. Mitigation should occur within the same watershed as the impact, where feasible.

**CAQ-9-Action 2:** Coordinate with the California Department of Fish and Game and the U.S. Fish and Wildlife Service in the review of development projects.

**Policy CAQ-10:** Consider the adoption of habitat conservation plans for rare, threatened, or endangered species.

**CAQ-10-Action 1:** As appropriate, work with the County of Sacramento and other agencies on a Habitat Conservation Plan or other mechanism to implement this policy.

**Policy CAQ 11:** The City shall seek to preserve areas, where feasible, where special-status plant and animal species and critical habitat areas are known to be present or potentially occurring based on City biological resource mapping and data provided in the General Plan EIR or other technical material that may be adversely affected by public or private development projects. Where preservation is not possible, appropriate mitigation shall be included in the public or private project. "Special-status"

## **Appendix A (cont.)**

### **Applicable Sections of the City of Elk Grove General Plan**

species are generally defined as species considered to be rare, threatened, endangered, or otherwise protected under local, state, and/or federal policies, regulations or laws.

**CAQ-11-Action 1:** The City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain special-status plant and animal species based on City biological resource mapping and data provided in the General Plan EIR or other technical material. The biological resources evaluation shall determine the presence/absence of these special-status plant and animal species on the site. The surveys associated with the evaluation shall be conducted during the appropriate seasons for proper identification of the species. Such evaluation will consider the potential for significant impact on special-status plant and animal species, and will identify feasible mitigation measures to mitigate such impacts to the satisfaction of the City and appropriate governmental agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Game and U.S. Army Corps of Engineers) where necessary (e.g., species listed under the State and/or Federal Endangered Species Act). Mitigation measures may include, but are not limited to, the following: For special-status plant species: On- or off-site preservation of existing populations from direct and indirect impacts, seed and soil collection or plant transplant that ensures that the plant population is maintained.

- For special-status animal species: avoidance of the species and its habitat as well as the potential provision of habitat buffers, avoidance of the species during nesting or breeding seasons, replacement or restoration of habitat on- or off-site, relocation of the species to another suitable habitat area, payment of mitigation credit fees.
- Participation in a habitat conservation plan.

### **PROTECTION OF WATER QUALITY AND SUPPLY**

**Policy CAQ-12:** The City shall seek to ensure that the quality of groundwater and surface water is protected to the extent possible.

**CAQ-12-Action 1:** Continue to cooperate with the County, other cities, and the Regional Water Quality Control Board regarding compliance with the NPDES permit system, and support other water quality improvement projects in order to maintain compliance with the Basin Plan.

**CAQ-12-Action 2:** Implement the City's NPDES permit on all public and private development projects and activities.

**CAQ-12-Action 3:** Collect information on design, construction, and operation techniques which help prevent water pollution, and provide this information to the public and the development community.

**Policy CAQ-13:** Implement the City's NPDES permit through the review and approval of development projects and other activities regulated by the permit.

**Appendix A (cont.)**  
**Applicable Sections of the City of Elk Grove General Plan**

**Policy CAQ-14:** The city shall seek to minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.

**Policy CAQ-15:** The City shall encourage water supply service providers and County Sanitation District 1 to design water supply and recycled water supply facilities in a manner that avoids and/or minimizes significant environmental effects. The City shall specifically encourage the Sacramento County Water Agency to design well facilities and operation to minimize surface flow effects to the Cosumnes River.

**Policy CAQ-16:** Future land uses that are anticipated to utilize hazardous materials or waste shall be required to provide adequate containment facilities to ensure that surface water and groundwater resources are protected from accidental releases. This shall include double containment, levees to contain spills, and monitoring wells for underground storage tanks, as required by local, state and federal standards.

**FLOODING AND DRAINAGE**

**Policy CAQ-17:** The City recognizes the value of naturally vegetated stream corridors, commensurate with flood control and public acceptance, to assist in removal of pollutants, provide native and endangered species habitat and provide community amenities.

**Policy CAQ-18:** Post-development peak storm water runoff discharge rates and velocities shall be designed to prevent or reduce downstream erosion, and to protect stream habitat.

**Policy CAQ-20:** Fill may not be placed in any 100-year floodplain as delineated by currently effective FEMA Flood Insurance Rate Maps or subsequent comprehensive drainage plans unless specifically approved by the City. No fill shall be permitted in wetland areas unless approved by the City and appropriate state and federal agencies.

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## Appendix B

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### Regionally Occurring Listed and Special-Status Species

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**Appendix B**  
**Regionally Occurring Listed and Special-Status Species**

**Table 1 — Legally Protected Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Plants</b>				
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--; CE; --; 1B	Annual herb found on clay soils in vernal pools and along the lake margins of marshes and swamps from 10 to 2,375 meters in elevation.	April – August	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools, marshes or swamps) to support this species. There are two documented occurrences within five miles of the Study Area (CDFW 2019).
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE; CE; --; 1B	Annual herb found in deep vernal pools with extended inundation periods at elevations between 30 to 100 meters in elevation.	April – September	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT; CE; --; 1B	Annual herb found in vernal pools that are often gravelly, from 35 to 1,760 meters in elevation.	May – October	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Mason’s lilaeopsis <i>Lilaeopsis masonii</i>	--; CR; --; 1B	Perennial rhizomatous herb found in marshes and swamps (brackish or freshwater) as well as riparian scrub from 0 to 10 meters in elevation.	April – November	<b>None.</b> The Study Area does not contain suitable habitat (i.e., marshes, swamps or riparian scrub) to support this species.
<b>Invertebrate</b>				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Sole hosts are elderberry ( <i>Sambucus</i> sp.) shrubs usually associated with riparian areas. This species is known from portions of the Central Valley of California (also known as the Great Valley of California).	Adults emerge in spring until June.  Exit holes visible year-round.	<b>None.</b> The Study Area does not contain elderberry shrubs. There is one documented occurrence within five miles of the Study Area (CDFW 2019). The Study Area is outside of the Designated Critical Habitat for this species.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kings, Madera, Merced, Monterey, Napa, Placer, Riverside, Sacramento, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Ventura, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area likely contains seasonal depressions, due to the high-disturbance of the site, these features do not support suitable conditions (i.e., inundation duration, and water depth) to support this species. There are 15 documented occurrences within five miles of the Study Area (CDFW 2019). The Study Area is outside of the Designated Critical Habitat for this species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kings, Merced, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area likely contains seasonal depressions, due to the high-disturbance of the site, these features do not support suitable conditions (i.e., inundation duration, and water depth) to support this species. There are six documented occurrences within five miles of the Study Area (CDFW 2019). The Study Area is outside of the Designated Critical Habitat for this species.
<b>Fish</b>				
Central Valley steelhead DPS <i>Oncorhynchus mykiss irideus</i>	FT; --; --; --	Found in cool, clear, fast-flowing permanent streams and rivers with riffles and ample cover from riparian vegetation or overhanging banks. Spawning occurs in streams with pool and riffle complexes. The species requires cold water and gravelly streambed to successfully breed. Spawn in the Fresno and San Joaquin rivers and tributaries before migrating to the Delta and Bay Area.	Spawns in winter and spring.	<b>None.</b> The Study Area does not contain suitable habitat for this species. There is one documented occurrence within five miles of the Study Area (CDFW 2019). The Study Area is outside of the Designated Critical Habitat for this species.
Delta smelt <i>Hypomesus transpacificus</i>	FT; CE; --; --	Found in estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta. Spawns in freshwater sloughs and channel edgewaters. Spawning occurs between December to July. Known almost exclusively in the Fresno-San Joaquin estuary.	Year-round	<b>None.</b> The Study Area does not contain suitable habitat for this species. The Study Area is outside of the Designated Critical Habitat for this species.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC; CT; --; --	Inhabits estuaries and bays in the Delta and Sacramento-San Joaquin Rivers. Migrate to freshwater to spawn.	(November) December – February (June)	<b>None.</b> The Study Area does not contain suitable habitat for this species.

**Appendix B (cont.)  
Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Amphibians/ Reptiles</b>				
California red-legged frog <i>Rana draytonii</i>	FT; CSC; --; --	Breeding sites are in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons from 3,936 feet (1,200 meters) above MSL. They also frequently breed in artificial impoundments, such as stock ponds. During overwintering, can be found up to 300 feet away from aquatic habitat, and may disperse up to 2 miles between suitable aquatic habitat.	November – March (Breeding)  June – August (Non-breeding)	<b>None.</b> The Study Area does not contain suitable habitat for this species.
Giant garter snake <i>Thamnophis gigas</i>	FT; CT; --; --	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid-March). This species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Dormancy period November-mid March  Active March – October	<b>None.</b> Although there is a documented occurrence in close proximity to the Study Area, no aquatic habitat occurs within the Study Area, and any potential upland/overwintering habitat within underground burrows is impeded by moderate to heavy traffic along Waterman Road; therefore, the Study Area does not provide suitable habitat for this species. There are six documented occurrences within five miles of the Study Area (CDFW 2019).
California tiger salamander, Central Population <i>Ambystoma californiense</i>	FT; CT; --; --	Found in grassland, oak savanna, edges of mixed woodland and lower elevation coniferous forests. Breeding site requirements include fish-free ephemeral ponds that are wet in winter and dry in the summer; however, some have been known to breed in slow streams and semi-permanent waters (e.g., cattle troughs) due to loss of habitat. Adults spend non-breeding season in small mammal burrows.	Drift fence studies during fall and winter for upland habitats.  November – February (adults)  March 15 – May 15 (larvae)	<b>None.</b> The Study Area does not contain suitable habitat for this species.
<b>Birds</b>				
California black rail <i>Laterallus jamaicensis coturniculus</i>	FSC; CT; --	Inhabits saltwater, brackish, and freshwater marshes. Nesting occurs on the ground within dense vegetation in high spots of salt marshes (i.e., pickleweed), in shallow areas of freshwater marshes, in wet meadows and in flooded grassy vegetation.	Year-round	<b>None.</b> The Study Area does not contain suitable habitat for this species.
Bank swallow <i>Riparia</i>	--; CT; --; -- Nesting	Found primarily in open riparian areas, grassland, brushland, wetlands, and cropland habitats. Nests in colonies within tunnels dug into sandy banks or cliffs near water. Forages over riparian areas and adjacent uplands.	February – October	<b>None.</b> The Study Area does not contain suitable habitat for this species.
Swainson's hawk <i>Buteo swainsoni</i>	--; CT; --; --	Nest peripherally to Valley riparian systems lone trees or groves of trees in agricultural fields. Most commonly used nest trees in the Central Valley, include valley oak, Fremont cottonwood, walnut, and large willows, and occasionally eucalyptus, pine and redwood trees. Forages in row, hay and grain agricultural crops, especially post-harvest when the height of the vegetation is short and easy to observe prey.	March – October (Breeding)	<b>High.</b> The trees within the Study Area provide nesting habitat, and the adjacent undeveloped land supports prey species (i.e., ground squirrels) that provide foraging habitat for this species. There are 54 documented occurrences within five miles of the Study Area (CDFW 2019).
Tricolored blackbird <i>Agelaius tricolor</i>	--; CT; CSC; --	Breeding habitat is freshwater marshes that include cattails, tules, bulrushes and sedges. Nests are made in the dense vegetation of the marsh or thickets, and sometimes on the ground. In migration and winter, will inhabit open cultivated lands and pastures as well as marshes. Nests in large colonies of at least 50 pairs (up to thousands of individuals).	Year-round	<b>None.</b> The Study Area does not contain suitable foraging and nesting habitat for this species. There are 15 documented occurrences within five miles of the Study Area (CDFW 2019).
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT; CE; --; --	Found in various types of forest, woodland and scrub habitats. Breeding habitat is generally deciduous riparian woodland, including dense stands of cottonwood and willow, tamarisk and mesquite. Dense riparian understory is a key factor in nest site selection. Cottonwood trees are key for foraging habitat.	Summer (Breeding)	<b>None.</b> The Study Area does not contain suitable habitat for this species.

Table 1 includes federal threatened or endangered species and eagles, and State threatened, endangered, or fully protected species.



**Appendix B (cont.)  
Regionally Occurring Listed and Special-Status Species**

**Table 2 — Species Subject to CEQA Review**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Plants</b>				
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--; --; --; 1B	Annual herb found in mesic areas in valley and foothill grassland from 30 to 229 meters in elevation.	March – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Bolander's water-hemlock <i>Cicuta maculata</i> var. <i>bolanderi</i>	--; --; --; 2B	Perennial herb found in fresh or brackish water marshes and coastal swamps from 0 to 200 meters.	July – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Bristly sedge <i>Carex comosa</i>	--; --; --; 2B	Perennial rhizomatous herb found in coastal prairies, marshes and swamps, and valley and foothill grasslands from 0 to 625 meters.	May – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Delta mudwort <i>Limosella australis</i>	--; --; --; 2B.1	A perennial stoloniferous herb found usually in mudbanks, but also in riparian scrub, and fresh and brackish water marshes and swamps from 0 to 3 meters in elevation.	May – August	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Delta tule pea <i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	--; --; --; 1B	Perennial herb found in marshes and swamps (freshwater and brackish) from 0 to 5 meters.	May – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Dwarf downingia <i>Downingia pusilla</i>	--; --; --; 2B	Annual herb found occasionally in moist areas within valley and foothill grassland and vernal pools from 1 to 445 meters.	March – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species. There are three documented occurrences within five miles of the Study Area (CDFW 2019).
Heckard's peppergrass <i>Lepidium latipes</i> var. <i>heckardii</i>	--; --; --; 1B	Annual herb found on alkali flats within valley and foothill grassland, from 2 to 200 meters.	March – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Legenere <i>Legenere limosa</i>	--; --; --; 1B	Annual herb found in vernal pools from 1 to 880 meters.	April – June	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species. There are six documented occurrences within five miles of the Study Area (CDFW 2019).
Marsh skullcap <i>Scutellaria galericulata</i>	--; --; --; 2B	Perennial rhizomatous herb found in lower montane coniferous forest, moist meadows and seeps, and marshes and swamps from 0 to 2,100 meters.	June – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Northern California black walnut <i>Juglans hindsii</i>	--; --; --; 1B	Perennial deciduous tree found in riparian forest and riparian woodland from 0 to 440 meters.	April – May	<b>Present.</b> Two trees were observed within the Study Area during the biological survey. However, these trees are not defined as a California native rare plant by CNPS, since they were not germinated prior to 1840, do not occur as a natural grove or within their native riparian habitat, and therefore are most likely hybrid species.
Peruvian dodder <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	--; --; --; 2B	Annual, parasitic vine found in freshwater marshes and swamps from 15 to 280 meters.	July – October	<b>None.</b> The Study Area does not contain suitable habitat to support this species. There is one documented occurrence within five miles of the Study Area (CDFW 2019).
Saline clover <i>Trifolium hydrophilum</i>	--; --; --; 1B	Annual herb found in marshes and swamps, moist, alkaline valley and foothill grassland, and vernal pools from 0 to 300 meters.	April – June	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--; --; --; 1B	Perennial rhizomatous herb found in assorted shallow freshwater marshes and swamps from 0 to 650 meters.	May – October	<b>None.</b> The Study Area does not contain suitable habitat to support this species. There are seven documented occurrences within five miles of the Study Area (CDFW 2019).
Side-flowering skullcap <i>Scutellaria lateriflora</i>	--; --; --; 2B	Perennial rhizomatous herb found in moist meadows and seeps as well as marshes and swamps from 0 to 500 meters.	July – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Watershield <i>Brasenia schreberi</i>	--; --; --; 2B	Perennial rhizomatous herb found in freshwater marshes and swamps from 30 to 2,200 meters in elevation.	June – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Woolly rose-mallow <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	--; --; --; 1B	An emergent perennial rhizomatous herb found often in riprap on sides of levees and in freshwater marshes and swamps from 0 to 120 meters.	June – September	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
<b>Invertebrates</b>				
California linderiella <i>Linderiella occidentalis</i>	--; CSA; --; --	Found in most landforms, geologic formations and soil types supporting vernal pools in California. They are typically found in deeper vernal pools throughout elevations ranging from 10 to 1,159 meters.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area may contain seasonal depressions, the site does not support suitable habitat (i.e., vernal pools) to support this species. There are eleven documented occurrences within five miles of the Study Area (CDFW 2019).

**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	--; CSA; --; --	Vernal pools in the Central Valley in Sacramento, Solano, Merced, Madera, San Joaquin, Fresno, and Contra Costa counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	<b>None.</b> Although the Study Area may contain seasonal depressions, the site does not support suitable habitat (i.e., vernal pools) to support this species. There are five documented occurrences within five miles of the Study Area (CDFW 2019).
<b>Invertebrates</b>				
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	--; CSC; --; --	Inhabits the streams and tributaries of the Sacramento-San Joaquin Rivers in estuaries, marshes, and freshwater.	Spawns in spring (sometimes in winter and early summer).	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
<b>Amphibians/ Reptiles</b>				
Western pond turtle <i>Emys marmorata</i>	--; CSC; --; --	Typically associated with permanent ponds, lakes, streams, irrigation ditches and canals, and marshes, or pools in intermittent drainages, usually lined with abundant vegetation and either rocky or muddy bottom substrates. Requires aquatic basking sites, such as logs, rocks, cattail mats or exposed banks. Turtles are active from February to November, in which breeding occurs from April to May. Overwintering occurs in upland terrestrial habitats (approximately 300 feet) close to water sources, in which they will bury themselves under loose soil.	Year-round	<b>None.</b> The Study Area does not contain suitable habitat to support this species. There are two documented occurrences within five miles of the Study Area (CDFW 2019).
Western spadefoot <i>Spea hammondi</i>	--; CSC; --; --	Found in a variety of upland habitats, including lowlands, foothills, grasslands, open chaparral, and pine-oak woodlands. Habitat preferences include shortgrass plains, and sandy or gravelly soils for burrowing (e.g., alkali flats, washes, alluvial fans). Fossorial species that hibernates/aestivates for most of the year underground. Breeds temporary rain pools, and slow-moving streams (e.g., areas flooded by intermittent streams), and other artificial bodies of water as long as surrounding habitat is not developed or irrigated for agricultural purposes.	Breeding: January – May	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
<b>Birds</b>				
Black-crowned night heron <i>Nycticorax nycticorax</i>	--; CSA; --; --	Found in saltwater, brackish and freshwater habitats that include marshes, swamps, wooded streams, mangroves, lake shores, ponds, and lagoons. Roosting occurs in mangrove forests or swampy woodlands. Nesting occurs in trees near coastal marshes or on marine islands, swamps, marsh vegetation, clumps of grass on the dry ground, orchards, etc. Nesting usually occurs with other heron species.	Winter (Non-breeding)	<b>None.</b> The Study Area does not contain suitable habitat to support this species.
Burrowing owl <i>Athene cunicularia</i>	--; CSC; --; -- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year-round	<b>Low.</b> The burrows within the ruderal/disturbed habitat within the Study Area may provide marginal breeding habitat; and the presence of prey species (i.e., ground squirrels) on the adjacent undeveloped land provides foraging habitat for this species. There are seven documented occurrences within five miles of the Study Area (CDFW 2019).
Cooper's hawk <i>Accipiter cooperii</i>	--; CSA; --; --	Found in mature forests, open woodlands, woodland edges, near water. Nesting occurs in coniferous, deciduous and mixed woodlands that have tall trees with openings or edge habitat nearby. Can also be found in trees along rivers through open country, and in suburbs and cities. Overwintering usually occurs in fairly open country. Prey species include small birds, reptiles and amphibians.	Year-round	<b>High.</b> The trees within the Study Area provide suitable nesting habitat for this species. There is one documented occurrence within five miles of the Study Area (CDFW 2019).

**Appendix B (cont.)**  
**Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Double-crested cormorant <i>Phalacrocorax auritus</i>	--; CSA; --; --	Colonia birds found near water that are large enough to support diet (fish). Roosting and breeding colonies may occur along smaller bodies of water such as ponds and lagoons. Foraging range is up to 40 miles. Habitat requires perches, such as rocks, wires, dead tree tops, ship masts, etc.	Migration	<b>None.</b> The Study Area does not contain habitat to support this species.
Golden eagle <i>Aquila chrysaetos</i>	--; CFP; --; -- (nesting and wintering)	Open and semi-open areas in the mountains up to 12,000 feet in elevation. They are also found in canyon lands, rimrock, terrain, and riverside cliffs and bluffs. Nest are built on cliffs and steep escarpments in grassland, in trees, chaparral, shrubland, forests and man-made structures within vegetated areas.	Year-round	<b>None.</b> The Study Area does not contain habitat to support this species.
Great blue heron <i>Ardea herodias</i>	--; CSA; --; -- (nesting)	Inhabits both freshwater and saltwater habitats and forages in grassland and agricultural field. Breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests.	Year-round	<b>None.</b> The Study Area does not contain suitable nesting habitat to support this species. There is one documented occurrence within five miles of the Study Area (CDFW 2019).
Great egret <i>Ardea alba</i>	--; CSA; --; -- (nesting)	Found in marshes, swampy woods, tidal estuaries, lagoons, mangroves, streams, lakes, ponds, fields and meadows. Nests primarily in tall trees, or in woods or thickets near water.	Year-round	<b>None.</b> The Study Area does not contain suitable nesting habitat to support this species. There is one documented occurrence within five miles of the Study Area (CDFW 2019).
Ferruginous hawk <i>Buteo regalis</i>	BCC; CSA; --; --	Frequents open habitats including grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys and fringes of pinyon-juniper habitats. Preys on rodents and other vertebrates.	Winter (non-breeding)	<b>None.</b> The Study Area does not contain habitat to support this species.
Merlin <i>Falco columbarius</i>	--; CSA; --; --	Non-breeding habitats include a wide variety, such as marshes, deserts, sea coasts, near coastal lakes and lagoons, open woodlands, fields, etc. During winter, may roost in conifer trees.	Winter (non-breeding)	<b>None.</b> The Study Area does not contain habitat to support this species.
Purple martin <i>Progne subis</i>	--; CSC; --; --	Nests in wide variety of open and partly open habitats that are often near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans.	Summer (breeding)	<b>None.</b> The Study Area does not contain habitat to support this species.
Song sparrow <i>Melospiza melodia</i> (Modesto population)	--; CSC; --; --	Found in a wide range of habitats including forest, shrub, and riparian habitat. Early in the season will nest on the ground on clumps of dead grasses and weeds, and later in the season will nest in thorny bushes, willows, cattails, cordgrass, and small conifers (0.5 to 10 meters high).	Year-round	<b>None.</b> The Study Area does not contain habitat to support this species.
White-tailed kite <i>Elanus leucurus</i>	--; CFP; --; -- (nesting)	Inhabits savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. Nests in trees, often near a marsh in savanna, open woodland, partially cleared lands, and cultivated fields. Foraging occurs within ungrazed or lightly-grazed fields and pastures.	Year-round	<b>High.</b> The trees within the Study Area provide nesting habitat, and the adjacent undeveloped land supports prey species (i.e., ground squirrels) that provide foraging habitat for this species. There is one documented occurrence within five miles of the Study Area (CDFW 2019).
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	--; CSC; --; --	Breeding occurs in wetlands in prairies, mountain meadows, quaking aspen parklands, shallow areas of marshes, rivers and ponds. Nesting habitat consists of cattails, bulrushes, or reeds adjacent to red-winged blackbirds. Foraging habitat consists of grassland, cropland or savanna habitat adjacent to nesting sites.	Migration	<b>None.</b> The Study Area does not contain habitat to support this species.

**Appendix B (cont.)  
Regionally Occurring Listed and Special-Status Species**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Mammals</b>				
American badger <i>Taxidea taxus</i>	--; CSC; --; --	Found in a variety of grassland, shrublands, and open woodlands throughout California. Prefers open areas, and may frequent brushlands, with minimal ground cover. Occurs from below sea level to 3,600 meters. Primarily nocturnal, but can be active at any time of day. Strong affinity to a home area (2 to 725 ha), especially in winter. Suitable burrowing habitat, to make dens and forage for prey, requires friable soils. The majority of their food is obtained by excavating burrows of fossorial rodents (ground squirrels, pocket gophers, kangaroo rats, prairie-dogs, and mice), but will also eat scorpions, insects, snakes, lizards, and birds.	Year-round	<b>None.</b> The Study Area does not contain habitat to support this species.

Table 2 includes state and federal species of concern and Rank 1 and 2 CNPS species.

**Appendix B (cont.)  
Regionally Occurring Listed and Special-Status Species**

**Table 3 — Other Species of Interest**

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
<b>Invertebrates</b>				
Blennosperma vernal pool andrenid bee <i>Andrena blennospermatis</i>	--; CSA; --	Found in upland areas near vernal pools on the stickyseed ( <i>Blennosperma</i> spp.) host plant. Known to occur in Solano, Sonoma, and Tehama counties. Populations historically found in Contra Costa, El Dorado, Lake, Sacramento, San Joaquin, and Yolo counties are possibly extirpated or extirpated.	Flight Period (females): February – April	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Hairy water flea <i>Dumontia oregonensis</i>	--; CSA; --	Small aquatic crustacean that is found in shallow ephemeral vernal pools, native wet prairies, seasonally wet meadows, managed agricultural fields and desert pools that fill with water in early-winter and dry out by late-winter. Seasonally wet habitats are typically underlain with poorly drained soils, shallow soils above bedrock, or exposed bedrock and are fed mainly by direct precipitation or shallow groundwater inflows, generally with no surface inflow channels. Typically found in habitats that have greater than 60 percent vegetation; associated species in California, include tall flatsedge ( <i>Cyperus eragrostis</i> ), common spikerush ( <i>Eleocharis macrostachya</i> ), and western mannagrass ( <i>Glyceria occidentalis</i> ) Found in Sacramento and Solano counties in California and into southern Oregon.	Wet-season	<b>None.</b> The Study Area does not contain suitable habitat (i.e., vernal pools) to support this species.
Ricksecker's water scavenger beetle <i>Hydrochara rickseckeri</i>	--; CSA; --	An aquatic beetle known to occur in shallow lacustrine waters of creeks, artificial ponds, springs and brooks. Known to occur along the San Francisco Bay within Alameda, Marin, San Mateo and Sonoma counties. Can also be found in Lake, Placer, Sacramento, San Joaquin, and Solano counties.	Year-round	<b>None.</b> The Study Area does not contain suitable habitat for this species.

Table 3 includes non-listed invertebrates, which may not be subject to CEQA review.

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## Appendix C

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Plant and Wildlife Species Observed  
in the Study Area

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**Appendix C**  
**Plant Species Observed in the Study Area**

Family	Scientific Name	Common Name	Native(N) / Non-Native (NN) / Invasive (I)
Poaceae	<i>Avena</i> spp.	Oat	NN
Asteraceae	<i>Baccharis pilularis</i>	Coyote brush	N
Poaceae	<i>Briza minor</i>	Little quaking grass	N
Poaceae	<i>Bromus</i> spp.	Brome	NN
Asteraceae	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	I
Asteraceae	<i>Centromadia fitchii</i>	Spikeweed	N
Poaceae	<i>Cynodon dactylon</i>	Bermuda grass	I
Cyperaceae	<i>Cyperus eragrostis</i>	Tall flatsedge	N
Poaceae	<i>Deschampsia danthonioides</i>	Annual hair grass	N
Asteraceae	<i>Dittrichia graveolens</i>	Stinkwort	I
Onagraceae	<i>Epilobium brachycarpum</i>	Annual fireweed	N
Asteraceae	<i>Erigeron canadensis</i>	Canada horseweed	N
Myrtaceae	<i>Eucalyptus</i> spp.	Gum tree	NN
Euphorbiaceae	<i>Euphorbia</i> spp.	Spurge	--
Poaceae	<i>Festuca perennis</i>	Italian rye grass	I
Brassicaceae	<i>Hirschfeldia incana</i>	Wild mustard	I
Poaceae	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley	I
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut	N
Juncaceae	<i>Juncus bufonius</i>	Common toad rush	N
Asteraceae	<i>Lactuca serriola</i>	Prickly wild lettuce	NN
Lythraceae	<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	I
Oleaceae	<i>Olea europaea</i>	Olive	NN/I
Poaceae	<i>Phalaris aquatica</i>	Harding grass	NN/I
Anacardiaceae	<i>Pistacia atlantica</i>	Pistachio	NN
Polygonaceae	<i>Polygonum aviculare</i>	Prostrate knotweed	NN
Poaceae	<i>Polypogon monspeliensis</i>	Rabbitsfoot grass	I
Asteraceae	<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	NN
Fagaceae	<i>Quercus lobata</i>	Valley oak	N
Chenopodiaceae	<i>Salsola tragus</i>	Tumbleweed	NN
Asteraceae	<i>Senecio vulgaris</i>	Common groundsel	NN
Asteraceae	<i>Silybum marianum</i>	Milk thistle	I
Ulmaceae	<i>Ulmus</i> spp.	Elm	NN

**Appendix C (cont.)**  
**Wildlife Species Observed in the Study Area**

Order	Family	Scientific Name	Common Name
<b>Birds</b>			
Passeriformes	Tyrannidae	<i>Sayornis nigricans</i>	Black phoebe
Passeriformes	Corvidae	<i>Aphelocoma californica</i>	California scrub-jay
Anseriformes	Anatidae	<i>Branta canadensis</i>	Canada goose
Passeriformes	Fringillidae	<i>Haemorhous mexicanus</i>	House finch
Charadriiformes	Charadriidae	<i>Charadrius vociferus</i>	Killdeer
Columbiformes	Columbidae	<i>Zenaida macroura</i>	Mourning dove
<b>Mammals</b>			
Carnivora	Canidae	<i>Canis latrans</i>	Coyote
<b>Reptiles</b>			
Squamata	Phrynosomatidae	<i>Sceloporus occidentalis</i>	Western fence lizard

## Appendix D

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### Representative Site Photographs

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Photo 1. Looking west across the site in the northeastern portion of the Study Area.



Photo 2. Looking east across the site along the southern border of the Study Area.

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Photo 3. Looking east across the site in the southern portion of the Study Area.



Photo 4. Looking west across the site in the northern portion of the Study Area.

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# **APPENDIX E**

## **AQUATIC RESOURCES DELINEATION (LOT A)**

# Waterman Road (20.5-Acres)

Aquatic Resources Delineation Report

APNs: 134-0100-084-0000 and 134-0100-085-0000

April 2021 | BUZ-01

*Prepared for:*

**Logan James**  
**Buzz Oates**

555 Capitol Mall, Suite 900  
Sacramento, CA 95814

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
1677 Eureka Road, Suite 100  
Roseville, CA 95661





# Waterman Road (20.5 Acres)

## Aquatic Resources Delineation Report

APNs: 134-0100-084-0000 and 134-0100-085-0000

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April 2021 | BUZ-01

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# TABLE OF CONTENTS

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<b><u>Section</u></b>	<b><u>Page</u></b>
1.0 INTRODUCTION.....	1
1.1 Project Location .....	1
1.2 Driving Directions.....	1
1.3 Agent Contact Information.....	1
1.4 Regulatory Setting.....	2
1.4.1 Waters of the U.S.....	2
1.4.2 Waters of the State.....	3
2.0 ENVIRONMENTAL SETTING .....	4
2.1 Location Description .....	4
2.2 Existing Conditions.....	4
2.3 Field Conditions .....	4
2.4 Interstate or Foreign Commerce Connection.....	5
3.0 METHODS.....	5
3.1 Data Gathering.....	5
3.2 Boundaries of the Delineation .....	5
3.3 Determination Procedures .....	5
3.3.1 Delineation Methods .....	5
3.3.2 Determination of Potential Jurisdiction .....	6
3.3.3 Plant/Habitat Nomenclature .....	8
4.0 RESULTS .....	8
4.1 Vegetation Communities/Habitat Types .....	8
4.1.1 Barren .....	8
4.1.2 Ruderal/Disturbed .....	8
4.1.3 Non-native Annual Grassland .....	9
4.1.4 Valley Oak Woodland .....	9
4.2 Soils.....	9
4.3 Hydrology.....	9
4.4 USFWS National Wetlands Inventory .....	10
5.0 AQUATIC RESOURCES .....	10
5.1 Seasonal Wetland .....	10
5.2 Constructed Basin.....	10
5.3 Jurisdictional Waters.....	11
5.4 Potential Waters of the State .....	11
6.0 SUMMARY.....	12
7.0 REFERENCES.....	13

# TABLE OF CONTENTS (cont.)

---

## LIST OF APPENDICES

- A Figures
- B Aquatic Resources Delineation Map
- C Plant Species Observed in the Project Site
- D Ground Photographs
- E Data Sheets
- F Aquatic Resources Excel Spreadsheet

## LIST OF TABLES

<b>No.</b>	<b><u>Title</u></b>	<b><u>Page</u></b>
1	Aquatic Resources in the Project Site .....	11

# 1.0 INTRODUCTION

On behalf of Buzz Oates, HELIX Environmental Planning, Inc. (HELIX) has prepared this aquatic resource delineation report in support of the Waterman Road Project (project) to document potential jurisdictional wetlands and other waters of the U.S. and State on an approximately 20.5-acre project site located in the City of Elk Grove, Sacramento County, California. The proposed project currently does not have a finalized site plan. The purpose of the delineation was to identify aquatic resources on the project site that potentially qualify as Waters of the U.S. (WOUS) and/or waters of the State of California. WOUS and State on the site are subject to regulatory jurisdiction by the U.S. Army Corps of Engineers (USACE), the Central Valley Regional Water Quality Control Board (CVRWQCB), and/or the California Department of Fish and Wildlife (CDFW). Impacts to such resources would require obtaining permits from some or all these agencies. The results presented in this document are preliminary unless and until concurrence is received from the USACE, the CVRWQCB, and/or CDFW.

## 1.1 PROJECT LOCATION

The approximately 20.5-acre project site is comprised of Assessor's Parcel Numbers (APNs) 134-0100-084-0000 and 134-0100-085-0000 at the western terminus of Brinkman Court west of Waterman Road in the City of Elk Grove, Sacramento County, California (Appendix A; Figure 1). The site is situated in Section 6 of Township 06 North and Range 06 East, Mount Diablo Meridian, and is depicted on the U.S. Geological Survey (USGS) "Elk Grove, CA" 7.5-minute quadrangle map (Appendix A; Figure 2). The approximate center of the project site is at latitude 38.395658 and longitude -121.357098, NAD 83, and approximately 40 to 60 feet above mean sea level (amsl).

## 1.2 DRIVING DIRECTIONS

From downtown Sacramento, travel south on State Route 99, toward Fresno and exit on Kammerer Road toward Grant Line Road (Exit 284). Travel northeast turn left on Waterman Road and travel north 0.7 mile to the project site. The site can be accessed via a private gate on the west side of Waterman Road.

## 1.3 AGENT CONTACT INFORMATION

Logan James  
Buzz Oates  
555 Capitol Mall, Suite 900  
Sacramento, CA 95814

## 1.4 REGULATORY SETTING

### 1.4.1 Waters of the U.S.

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in “waters of the U.S.,” including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

On April 21, 2020, the Environmental Protection Agency (EPA) and USACE published the Navigable Waters Protection Rule to define “Waters of the United States” in the Federal Register. On June 22, 2020, the Navigable Waters Protection Rule: Definition of “Waters of the United States” (NWPR) became effective in 49 states, including California, and in all US territories.

The NWPR regulates traditional navigable waters and perennial or intermittent tributary systems, and defines four categories of regulated waters including:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries to those waters;
- Certain lakes, ponds, and impoundments; and
- Wetlands adjacent to jurisdictional waters.

The NWPR also defines 12 categories of exempted aquatic resources:

- Waters not listed as WOTUS
- Groundwater
- Ephemeral features
- Diffuse stormwater run-off
- Ditches not identified as WOTUS
- Prior converted cropland (PCC)
- Artificially irrigated areas
- Artificial lakes and ponds
- Water-filled depressions incidental to mining or construction activity
- Stormwater control features
- Groundwater recharge, water reuse, and wastewater recycling structures
- Waste treatment systems

With non-tidal waters, in the absence of adjacent wetlands, the extent of USACE jurisdiction extends to the ordinary high water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined in 33 CFR Part 328 as:

“those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

Clean Water Act (33 USC 1251-1376). The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there is no practicable alternative that would have less adverse impacts.

#### **1.4.2 Waters of the State**

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal Clean Water Act. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

- I. A wetland definition;
- II. A framework for determining if a feature that meets the wetland definition is a water of the state;
- III. Wetland delineation procedures; and
- IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.



Under the Procedures and the State Water Code (Water Code §13050(e)), “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” “Waters of the State” includes all “Waters of the U.S.”

More specifically, a wetland is defined as: “An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.” The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

## **2.0 ENVIRONMENTAL SETTING**

### **2.1 LOCATION DESCRIPTION**

The project site is located in a rural residential area of Sacramento County within the Sacramento-Roseville-Arden-Arcade region, which is developing rapidly overall with suburban residential, commercial, and light industrial uses. Land uses surrounding the project site are rural residential single-family residences, commercial and agriculture, such as vineyard and livestock grazing. Elk Grove Creek crosses the northern boundary of the project site and drains the project site. Terrain in the immediate vicinity of the project site is generally flat with mild elevation fluctuations. The elevation on the site is approximately 40 to 60 feet amsl. Appendix A, Figure 3 is an aerial photograph of the project site and vicinity.

### **2.2 EXISTING CONDITIONS**

The project site is undeveloped but has been denuded and the site consists almost entirely of bare ground with the exception of some scattered oak trees, shrubs, and annual herbaceous vegetation.

### **2.3 FIELD CONDITIONS**

Fieldwork for the aquatic resource delineation was conducted on January 17 and 20, 2020 and the weather during the site visit was foggy and cold. A second site visit was conducted in March 2021 to assess the waterline alignment in the northwest and southeast corners of the project site. The climate of Sacramento County is Mediterranean, characterized by wet, cool winters and dry, hot summers. The nearest weather station is the Sacramento Executive Airport weather station in Sacramento, California, located approximately 11 miles northwest of the project site. Average daily maximum and minimum temperatures are 92° and 59° Fahrenheit (F) in July and 56° and 39° F in January (NRCS 2020a). The mean annual precipitation is 17.8 inches, with 100 percent occurring as rain from September through May. The weather station received approximately 6.14 inches of rainfall this rain season starting in October (NRCS 2020a). In the previous year, the weather station received 24.6 inches, which is 138% of normal (NRCS 2020a).

## 2.4 INTERSTATE OR FOREIGN COMMERCE CONNECTION

The project site drains northwest through Elk Grove Creek to Laguna Creek. Elk Grove Creek is a perennial drainage that terminates at its confluence with Laguna Creek, which is tributary to the Sacramento River. The Sacramento River is a traditional navigable water used in interstate and foreign commerce. There is no interstate or foreign commerce associated with the aquatic resources that are found on the site. The project site is located in the Lower Sacramento watershed, USGS Hydrologic Unit Code (HUC) 18020163.

## 3.0 METHODS

### 3.1 DATA GATHERING

The following sources were used in preparation of this jurisdictional delineation:

- Aerial photography taken March 26, 2018 downloaded from Esri®,
- U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory online wetland mapper (USFWS 2020),
- Natural Resources Conservation Service (NRCS) web soil survey (NRCS 2020b),
- Corps of Engineers Wetlands Delineation Manual (USACE 1987),
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008),
- Field Indicators of Hydric Soils in the United States (Version 8.2) (NRCS 2018), and
- USACE 2016 National Wetland Plant List for the Arid West (USACE 2016).

### 3.2 BOUNDARIES OF THE DELINEATION

The delineation area includes the entire approximately 20.5-acre project site. Refer to the delineation map in Appendix B for the limits of the delineation.

### 3.3 DETERMINATION PROCEDURES

#### 3.3.1 Delineation Methods

Fieldwork for the jurisdictional delineation was conducted by HELIX biologist Patrick Martin in accordance with the Corps of Engineers *Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008). Vegetation, soils, and hydrologic characteristics were visually assessed by walking meandering transects through the entire project site to obtain 100 percent visual coverage. The plant species identifiable at the time of the survey were recorded (refer to Appendix C for the list of plants

observed with the wetland indicator status for each species). Representative photographs are included as Appendix D.

The three-parameter method was used to determine the presence/absence of wetlands, which involves identifying indicators of hydrophytic vegetation, hydric soils, and wetland hydrology according to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008) and the *Arid West 2016 Regional Wetland Plant List* (USACE 2016). A total of 39 data points were taken throughout the site to classify the site's soils, vegetation, and hydrologic characteristics and the accompanying data forms are included in Appendix E. The extent of wetlands and other waters in the project site were mapped in the field with sub-meter accuracy using a Trimble GeoXT. These data were exported into ArcMap 10.3.1® and used to produce the map of aquatic features in the delineation area and calculate the acreage of each aquatic feature.

### 3.3.2 Determination of Potential Jurisdiction

#### Waters of the U.S.

Under the NWPR, the USACE and EPA regulate traditional navigable waters and perennial or intermittent tributary systems. The four categories of regulated waters include:

- I. The territorial seas and traditional navigable waters;
- II. Perennial and intermittent tributaries to those waters;
- III. Certain lakes, ponds, and impoundments; and
- IV. Wetlands adjacent to jurisdictional waters.

The NWPR excludes from the definition of “waters of the United States” all waters or features not mentioned above. In addition to this general exclusion, the NWPR clarifies that waters of the U.S. do not include the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- Ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- Diffuse stormwater runoff and directional sheet flow over upland;
- Ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- Prior converted cropland;
- Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

- Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
- Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- Waste treatment systems.

## **Waters of the State**

The RWQCB will assert jurisdiction over any waters of the State, including wetlands, regardless of whether or not the feature qualifies as waters of the U.S. Under the Procedures and the State Water Code (Water Code §13050(e)), “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” “Waters of the State” includes all “Waters of the U.S.” The following wetlands are waters of the State:

1. Natural wetlands,
2. Wetlands created by modification of a surface water of the state,
3. Artificial wetlands that meet any of the following criteria:
  - a. Approved by an agency as compensatory mitigation for impacts to other Waters of the State, except where the approving agency explicitly identifies the mitigation as being of limited duration;
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
  - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not Waters of the State unless they also satisfy the criteria set forth in 2, 3a, or 3b):
    - i. Industrial or municipal wastewater treatment or disposal,
    - ii. Settling of sediment,
    - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial 58 stormwater permitting program,
    - iv. Treatment of surface waters,
    - v. Agricultural crop irrigation or stock watering,
    - vi. Fire suppression,
    - vii. Industrial processing or cooling,
    - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
    - ix. Log storage,
    - x. Treatment, storage, or distribution of recycled water,
    - xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits), or
    - xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not Waters of the State.

### 3.3.3 Plant/Habitat Nomenclature

Habitat nomenclature is generally derived from A Guide to Wildlife Habitats of California (Mayer and Laudenslayer 1988). Plant nomenclature is taken from The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al. 2012).

## 4.0 RESULTS

### 4.1 VEGETATION COMMUNITIES/HABITAT TYPES

Terrestrial biological habitats and land covers present in the project site consist of barren land, ruderal/disturbed, non-native annual grassland, and valley oak woodland. Terrestrial habitats/land covers are described below. Aquatic resources are described in Section 5.0.

#### 4.1.1 Barren

A total of 14.37 acres of barren habitat occurs throughout the project site. In general, this habitat is defined by the absence of vegetation; or less than two percent of total herbaceous, desert, or non-wildland species and less than 10 percent cover of trees and shrubs. Various habitat types where this community may occur include deserts, alpine, sand dunes, rock outcrops, marine or estuarine habitats, or urban settings. Within the project site, this community is generally lacking vegetation, appears to be composed of imported soil, and is regularly plowed or treated to remove vegetation creating a highly disturbed environment. The substrate consists primarily of gravel interspersed with soil, and some paved areas. Vegetation observed within this community included stinkwort (*Dittrichia graveolens*) (--)<sup>1</sup>, tumbleweed (*Salsola tragus*) (FACU), and horseweed (*Erigeron canadensis*) (FACU). Within this community are constructed upland ditches (represented by sampling points 2b, 3b, 10b – 17b, and 22b – 24b as documented in Appendix E.

#### 4.1.2 Ruderal/Disturbed

A total of 3.04 acres of ruderal/disturbed habitat occurs within the northwestern portion of the project site. This habitat is primarily characterized by an assemblage of ruderal herbs and forbs that colonize disturbed landscapes. The project site is a highly disturbed environment, supporting several homeless encampments and trash, as well as several non-native and invasive plant species. Dominant vegetation within this community includes Italian thistle (*Carduus pycnocephalus* spp. *pycnocephalus*) (--), stinkwort, tumbleweed, and horseweed (*Erigeron canadensis*) (FACU). Interspersed throughout this community are valley oak (*Quercus lobata*) (FACU), Fremont's cottonwood (*Populus fremontii*) (FAC), and pistachio (*Pistacia atlantica*) (-- ) trees. A large constructed basin that supports sparse vegetation and a limited variety of hydrophytes is in this community and is further discussed below in Section 5.0.

<sup>1</sup> Wetland rating according to the 2016 Arid West Wetland Plant List: OBL = nearly always occurs in wetlands; FACW = usually occurs in wetlands; FAC = equally likely to occur in wetlands and uplands; FACU = usually occurs in uplands; UPL = nearly always occurs in uplands; -- = not listed in the 2016 Arid West Wetland Plant List but considered to be UPL.

### 4.1.3 Non-native Annual Grassland

A total of 0.90 acre of non-native annual grassland habitat occurs within the northeastern portion of the project site. This habitat is primarily characterized by an assemblage of non-native grasses and herbaceous species. Dominant vegetation within this community includes wild oat (*Avena fatua*) (--), soft brome (*Bromus hordeaceus*) (FACU), curly dock (*Rumex crispus*) (FAC), and stinkwort. A portion of Elk Grove Creek occurs in the northern portion of this biological community outside of the project site.

### 4.1.4 Valley Oak Woodland

A total of 0.059 acre of valley oak woodland habitat occurs along Elk Grove Creek in the northern portion of the project site. This habitat is characterized primarily by valley oak and pistachio trees. Understory vegetation is comprised of Himalayan blackberry (*Rubus armeniacus*) (FAC), wild grape (*Vitis californica*) (FACU), and an assemblage of grasses identified within the non-native annual grassland habitat.

## 4.2 SOILS

The project site consists of two soil map units (NRCS 2020b): San Joaquin silt loam, leveled, 0 to 1 percent slopes; and San Joaquin silt loam, 0 to 3 percent slopes (Appendix A; Figure 4). Both soil units are considered hydric (NRCS 2020c).

San Joaquin silt loam, leveled, 0 to 1 percent slopes occurs on terraces between 20 and 500 feet amsl and consists of alluvium derived from granite parent material (NRCS 2020b). A typical soil profile is silt loam from 0 to 23 inches, clay loam from 23 to 28 inches, indurated from 28 to 54 inches, and stratified sandy loam to loam from 54 to 60 inches. San Joaquin silt loam, leveled, 0 to 1 percent slopes, is a moderately well-drained soil with a frequency of ponding of “none” and a depth to water table of more than 80 inches (NRCS 2020b).

San Joaquin silt loam, 0 to 3 percent slopes occurs on terraces between 20 and 500 feet amsl and consists of alluvium derived from granite parent material (NRCS 2020b). A typical soil profile is silt loam from 0 to 23 inches, clay loam from 23 to 28 inches, indurated from 28 to 54 inches, and stratified sandy loam to loam from 54 to 60 inches. San Joaquin silt loam, 0 to 3 percent slopes, is a moderately well-drained soil with a frequency of ponding of “none” and a depth to water table of more than 80 inches (NRCS 2020b).

## 4.3 HYDROLOGY

The project site is in the Morrison Creek watershed (HUC10 1802016304). The project site drains generally to the north to the Sacramento River via Elk Grove Creek, which passes across the northern boundary of the site. The site has no other apparent natural source of water other than direct precipitation, which collects in low lying areas on the project site. The site is currently a denuded vacant lot that does not appear to have any functional use.

## 4.4 USFWS NATIONAL WETLANDS INVENTORY

The USFWS National Wetlands Inventory online database<sup>2</sup> was reviewed to determine if there are any wetlands or other waters of the U.S. mapped by the USFWS in the project site or vicinity. The National Wetlands Inventory identifies two artificially flooded freshwater ponds that were previously excavated and a segment of Elk Grove Creek on the project site. Off-site there are other similar NWI mapped features near the project site (Appendix A; Figure 5).

## 5.0 AQUATIC RESOURCES

Aquatic resources on the project site consist of a seasonal wetland and a constructed basin. Aquatic resources are depicted on the Aquatic Resources Delineation Map in Appendix B.

### 5.1 SEASONAL WETLAND

A seasonal wetland (approximately 0.035 acre) was observed within the northern portion of the project site (Appendix B). While this feature was not inundated at the time of the survey, it occurs in the 100-year floodplain as designated by FEMA Flood Maps, and historic aerial imagery depicts the inundation of this area during the wet season. It appears to receive water from direct precipitation and sheet flow from the surrounding topography. Areas mapped as seasonal wetland support a predominance of hydrophytic plant species such as Mediterranean barley (*Hordeum marinum*) (FAC) and Italian ryegrass (*Festuca perennis*) (FAC). Wetland hydrological indicators included oxidized rhizospheres and inundation visible on aerial imagery dated March 30, 2011. Hydric soil in the seasonal wetland includes a redox dark surface (Appendix E; Datasheets 5a, 6a and 7a). The seasonal wetland was dry during the site visit on January 17, 2020.

### 5.2 CONSTRUCTED BASIN

Constructed basin 1 is a constructed, unlined earthen basin approximately 2.050 acres in size. The basin is in the northwest portion of the project site and is adjacent to Elk Grove Creek that parallels the northern boundary of the project site. Historically, the location where this basin exists consisted of dryland grain crop fields, a mining operation and it is currently mapped as a tailings pond on USGS topographical maps (Appendix A; Figure 2). Per communication with the property owner, the basin was excavated in association with construction activity relating to a charcoal operation. Vegetation in the basin is sparsely vegetated and is dominated by small herbaceous hydrophytes such as toad rush (*Juncus bufonius*) (FACW) and prostrate knotweed (*Polygonum aviculare*) (FAC). Upland vegetation such as stinkwort and horseweed were also present in the constructed basin but were more common just outside of the basin. The basin does not have a clear and incised ordinary high-water mark, but rather a gentle slope. The basin meets all three wetland criteria to qualify as a wetland with hydric soils and wetland hydrology present. Hydric soils were fulfilled by either a depleted matrix or redox dark surface. Wetland hydrology was fulfilled by either saturated soil, a high-water table, drift deposits or aerial imagery that showed the basin was inundated on March 30, 2011 (Google Earth 2020). In most years, this basin appears to be dry and poorly defined on aerial imagery during the summer and fall, however some water is usually visible in the basin during the winter and spring with the March 2011 aerial

<sup>2</sup> National Wetlands Inventory online database at <http://www.fws.gov/wetlands/Wetlands-Mapper.html> accessed August 19, 2019.

imagery showing the most water present in the basin (Appendix E; Datasheets 21a, 25a, 26a, 27a, 28a, 29a, 30a, and 31a). The basin is fed by runoff as sheetflow during precipitation events from the surrounding uplands on the property, with constructed upland ditches that originate on the property and drain precipitation to this basin. The basin exits the site via an excavated trench through the bank of Elk Grove Creek northwest of the northwestern corner of the project boundary, where it enters Elk Grove Creek outside of the project site. The excavated trench is the only physical connection between Elk Grove Creek and the basin.

### 5.3 JURISDICTIONAL WATERS

The results of the Aquatic Resources Delineation were submitted to the USACE on June 1, 2020 via an Approved Jurisdictional Determination. The USACE determined the 0.035 acre of depressional seasonal wetland within the project site is considered a water of the U.S. regulated by Section 404 of the CWA. The constructed basin within the project site is not considered a water of the U.S. (SPK-2019-00152).

Seasonal wetland 1 listed in Table 1 is a water of the U.S. The total area of waters of the U.S. is 0.035 acre.

**Table 1  
AQUATIC RESOURCES IN THE PROJECT SITE**

Feature	Latitude	Longitude	Cowardin Code <sup>1</sup>	Area (ac.) <sup>2</sup>	Area (sq. ft.) <sup>2</sup>	Length (ft.) <sup>2</sup>	Avg. Width (ft.)
<b>Wetlands</b>							
Seasonal Wetland 1	38.396628	-121.355855	PEM2	0.035	1,525	--	--
<b>Wetlands Total</b>				<b>0.035</b>	<b>1,525</b>	--	--
<b>Non-Waters</b>							
Constructed Basin	38.396199	-121.358239	PUBKx	2.050	89,298	--	--
<b>Non-Waters Total</b>				<b>2.050</b>	<b>89,298</b>	--	--
<b>Total Aquatic Resources</b>				<b>2.085</b>	<b>90,823</b>	--	--

<sup>1</sup> Cowardin Codes for Wetlands: System (P = Palustrine) – Subsystem (2 = Nonpersistent) – Class (UB = Unconsolidated Bottom; EM = Emergent) Water Regime — (K = artificially flooded)— Modifiers (x = excavated).

<sup>2</sup> Totals may not add due to rounding.

### 5.4 POTENTIAL WATERS OF THE STATE

Seasonal wetland 1 listed in Table 1 and the constructed basin are potential waters of the state. Waters of the state include natural and artificial ponds and wetlands and streams. All aquatic resources regulated under Section 404 of the CWA are also regulated under Section 401; waters of the state not regulated under the CWA are still regulated under California Water Code Section 13260. The constructed basin is constructed and is actively maintained to control vegetation similar to the rest of the property, but it is not maintained for its original function for fire protection for a charcoal operation. This basin meets the three-parameter criteria to be considered a wetland, was artificially created, is not subject to ongoing operation and maintenance activities, and has become a relatively permanent part of the natural landscape. Based on these findings, the constructed basin may qualify as a waters of the State as defined in SWRCB adopted Resolution 2019-0015 since it is an artificial wetland. The total area of potential waters of the state in the delineation area is 2.085 acres of seasonal wetland and constructed basin.



## 6.0 SUMMARY

HELIX conducted an aquatic resources delineation of the 20.5-acre project site comprised of APNs 134-0100-084-0000 and 134-0100-085-0000 at the western terminus of Brinkman Court in the City of Elk Grove in Sacramento County. A total of 2.085 acres of aquatic resources were delineated on the project site consisting of seasonal wetland and constructed basin. Only the seasonal wetland (0.035 acre) delineated on the property is considered a water of the U.S. subject to USACE and CVRWQCB jurisdiction under Section 404 and 401 of the CWA. Both the constructed basin and the seasonal wetland are considered a potential water of the State. This updated aquatic resource delineation is preliminary and subject to verification by the resource agencies.

## 7.0 REFERENCES

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- 2020c. National List of Hydric Soils. Available online at: [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcseprd1316620.html](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html) <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>. Accessed January 10, 2020.
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2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). J.S. Wakeley, R.W. Lichvar, and C.V. Noble, eds., Technical Report prepared for the U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- U.S. Fish and Wildlife Service (USFWS). 2020. National Wetlands Inventory. Accessed online January 10, 2020 at <http://www.fws.gov/wetlands/Data/mapper.html>.

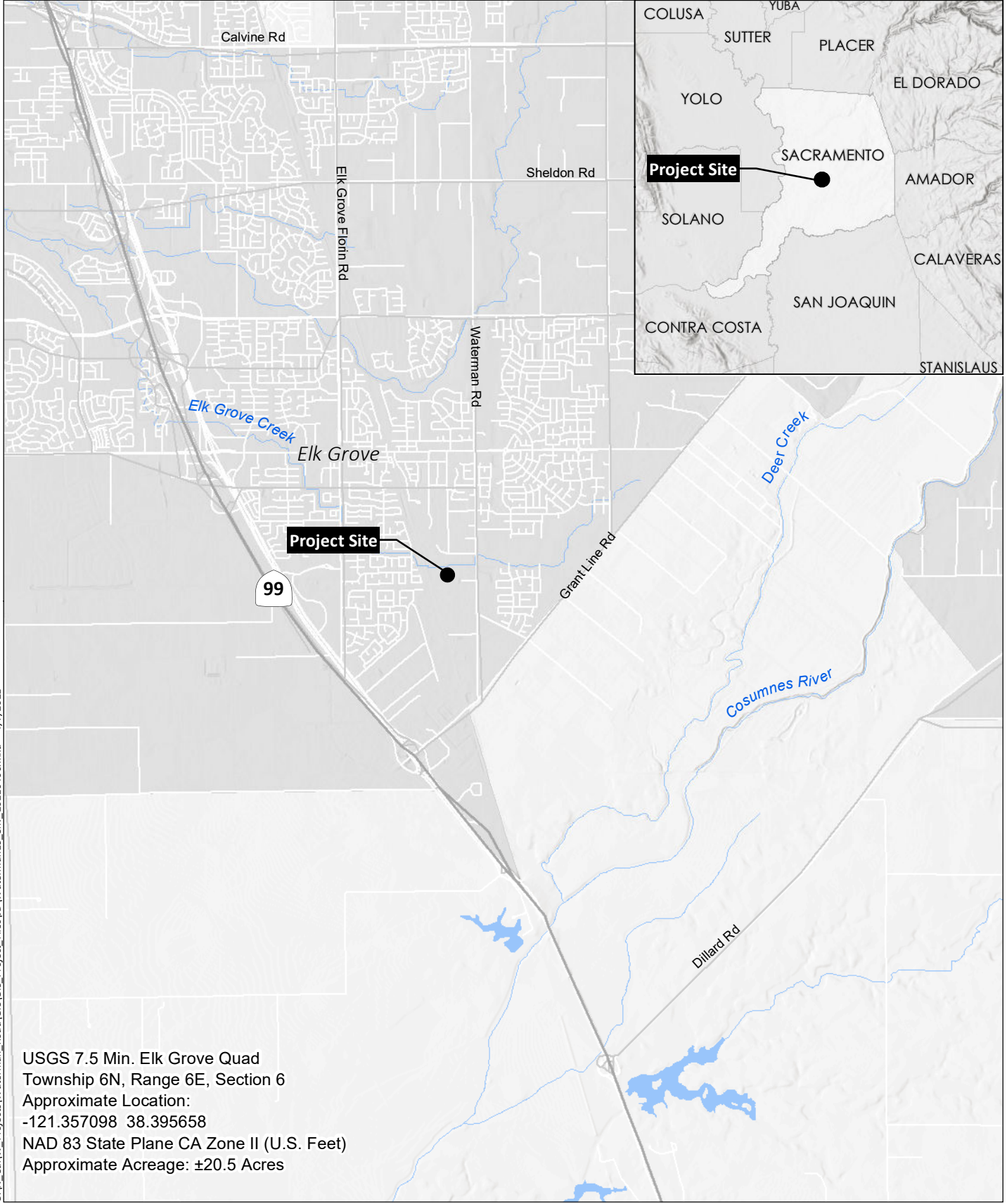
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# Appendix A

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Figures

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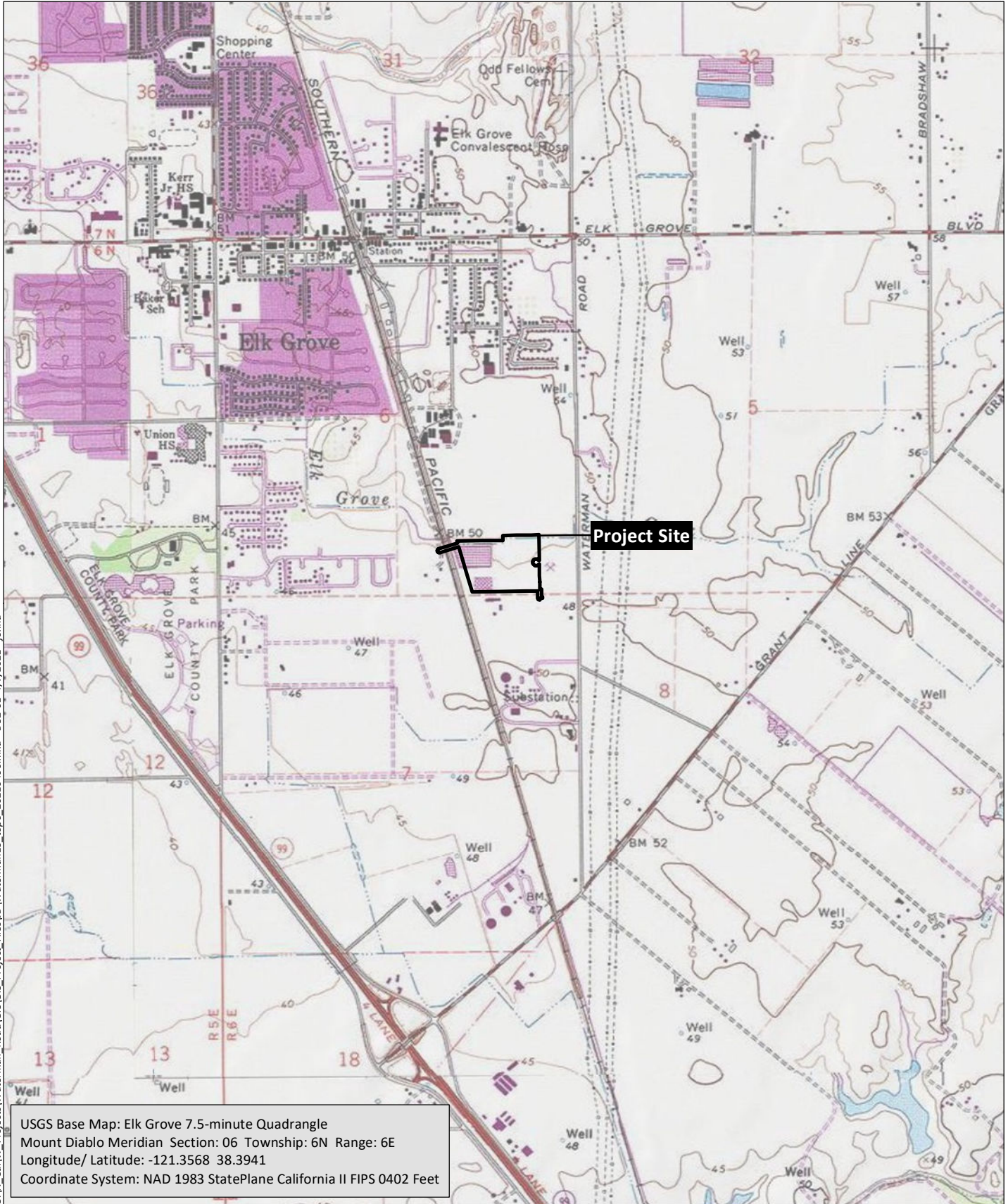
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USGS 7.5 Min. Elk Grove Quad  
 Township 6N, Range 6E, Section 6  
 Approximate Location:  
 -121.357098 38.395658  
 NAD 83 State Plane CA Zone II (U.S. Feet)  
 Approximate Acreage: ±20.5 Acres



Source: Base Map Layers (Esri, USGS, NGA, NASA)

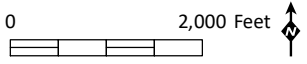




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USGS Base Map: Elk Grove 7.5-minute Quadrangle  
 Mount Diablo Meridian Section: 06 Township: 6N Range: 6E  
 Longitude/ Latitude: -121.3568 38.3941  
 Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Source: Base Map Layers (USGS, NGS)





Legend  
○ Project Site - 20.5 Acres



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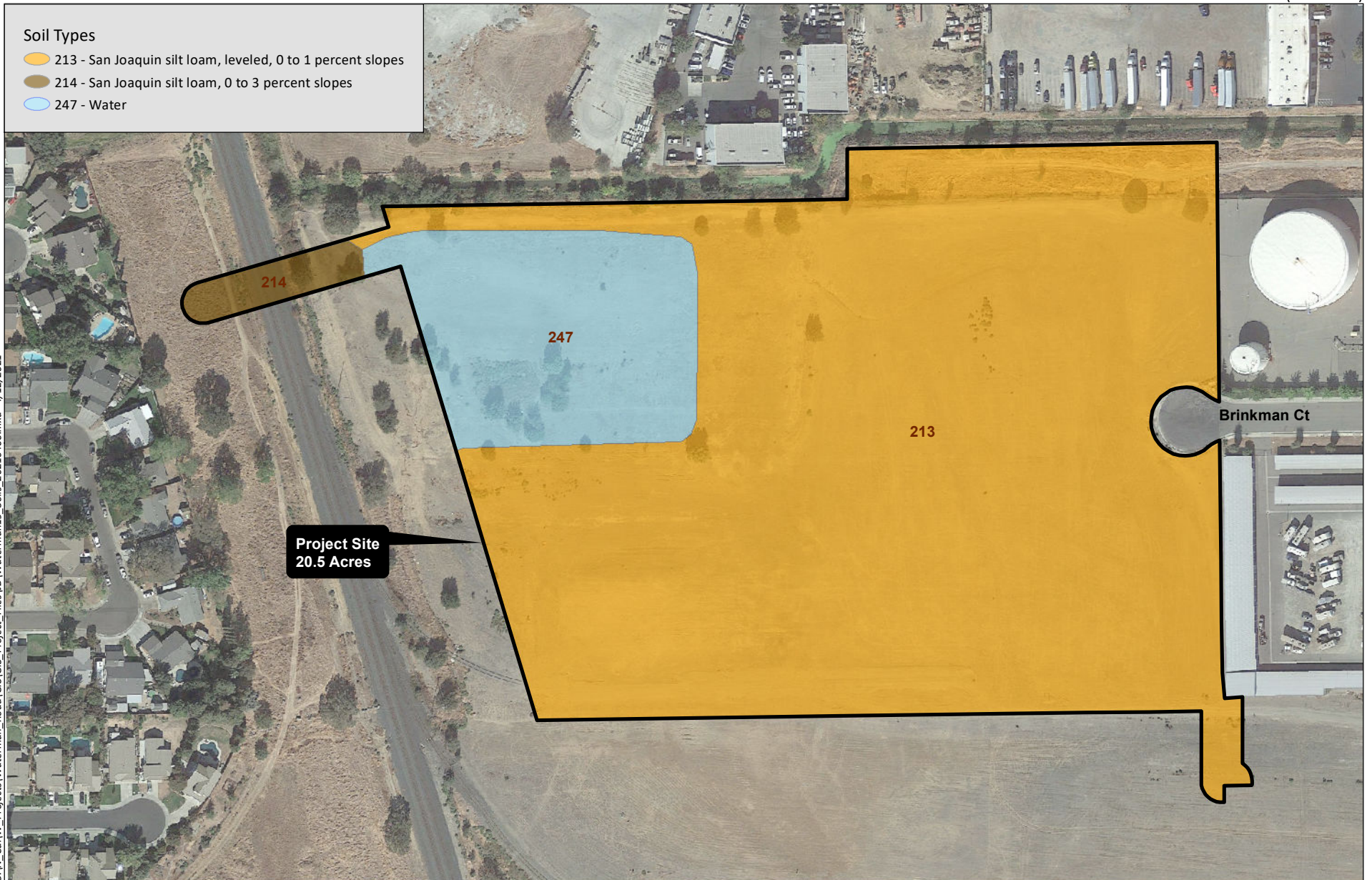


Source: Base Map Layers (GoogleEarth, 10/22/2020)



Soil Types

- 213 - San Joaquin silt loam, leveled, 0 to 1 percent slopes
- 214 - San Joaquin silt loam, 0 to 3 percent slopes
- 247 - Water



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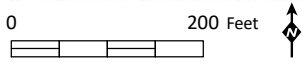
Project Site  
20.5 Acres

214

247

213

Brinkman Ct



Source: Base Map Layers (GoogleEarth 10/22/2020; USGS Soil Survey, 2021)





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Source: Base Map Layers (GoogleEarth 10/22/2020; USFWS, 2021)

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## Appendix B

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### Aquatic Resources Delineation Map

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**Aquatic Resources**

Seasonal Wetland			
Label	Acres	Latitude	Longitude
1	0.035	38.396619	-121.355886
<b>Subtotal:</b>	<b>0.035</b>		

**Other Features**

-  Project Site (±20.5 Acres)
-  Constructed Basin (±2.05 Acres)
-  Culvert

**Data Point**

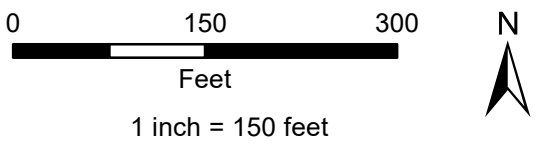
-  Wetland
-  Upland

**NOTES**

- Aquatic resources are subject to U.S. Army Corps of Engineers verification.
- Aquatic resources were mapped by HELIX Environmental using a Trimble Global Positioning System
- Delineated By: C. Marks and P. Martin on 01/18/2020 and 3/24/2021
- This delineation utilizes the Corps' 1987 three-parameter methodology and Arid West Supplement to delineate jurisdictional waters of the U.S.
- The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.
- Coordinate System: California State Plane Zone II.
- Projection: Lambert Conformal Conic.
- Datum: North American Datum 1983.

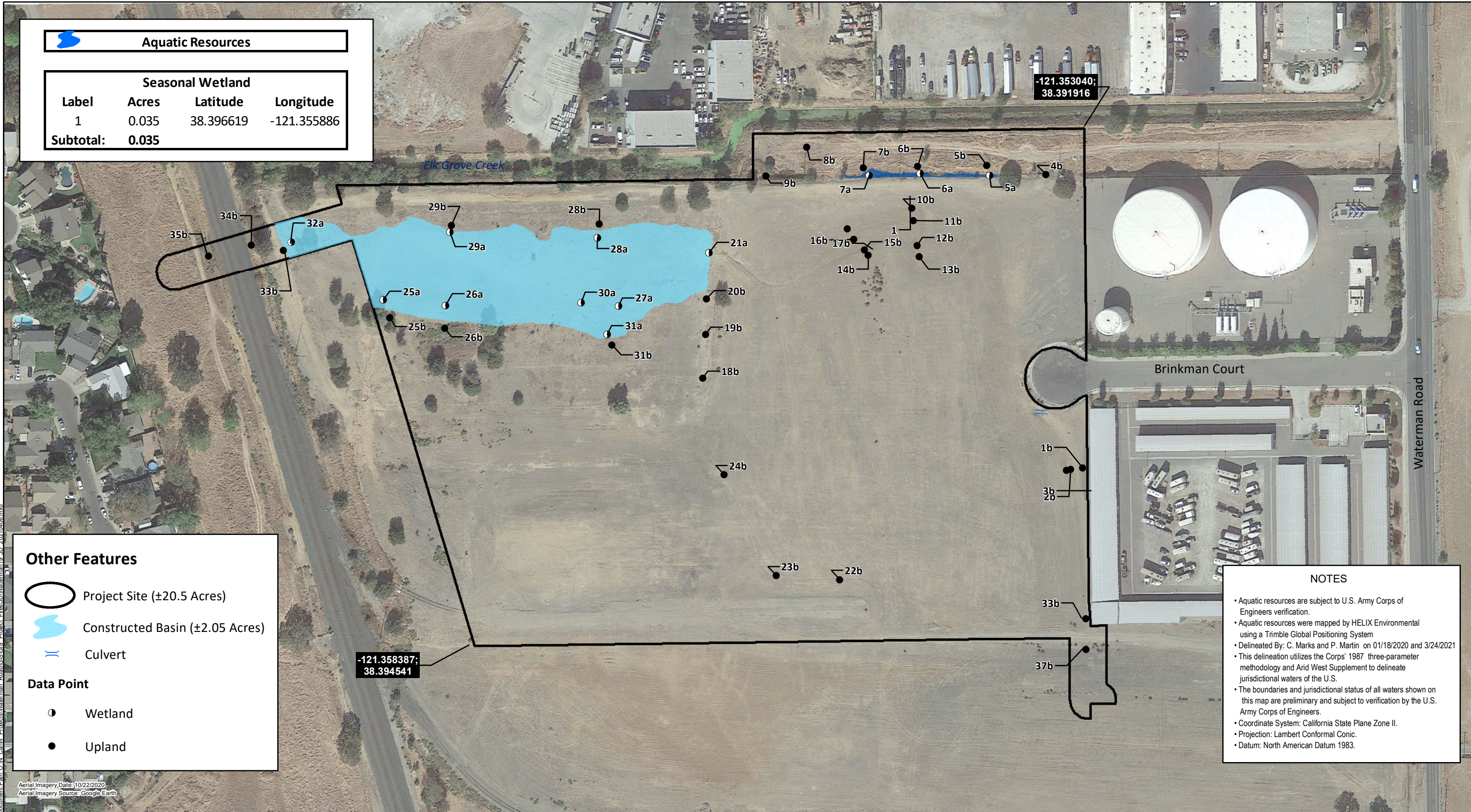
USACE REGULATORY FILE #: SPK-2019-00152  
 VERIFIED BY: Peck Ha  
 DATE OF VERIFICATION: June 15, 2020

REVISIONS		
DATE	DESCRIPTION	BY
4/6/2021	Boundary Expansion	JCD



**AQUATIC RESOURCES DELINEATION MAP**  
 Waterman Road (20.5-Acre)  
 Sacramento County, California  
 April 6, 2021

**APPENDIX B**





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# Appendix C

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## Plant Species Observed in the Project Site



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## Appendix C Plant Species Observed in the Project Site

Family	Species Name	Common Name	Rating*
<b>Native</b>			
Asteraceae	<i>Erigeron canadensis</i>	Canada horseweed	FACU
Fagaceae	<i>Quercus lobata</i>	Valley oak	FACU
Juncaceae	<i>Juncus bufonius</i>	Toad rush	FACW
Onagraceae	<i>Epilobium brachycarpum</i>	Annual fireweed	--
Poaceae	<i>Deschampsia danthonioides</i>	Annual hair grass	FACW
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood	FAC
	<i>Salix</i> spp.	willow	FACW
Vitaceae	<i>Vitis californica</i>	California wild grape	FACU
<b>Non-native</b>			
Anacardiaceae	<i>Pistacia atlantica</i>	Pistachio	--
Asteraceae	<i>Dittrichia graveolens</i>	Stinkwort	--
Brassicaceae	<i>Hirschfeldia incana</i>	Wild mustard	--
Chenopodiaceae	<i>Salsola tragus</i>	Tumbleweed	FACU
Convolvulaceae	<i>Convolvulus arvensis</i>	bindweed	--
Euphorbiaceae	<i>Euphorbia</i> spp.	Spurge	UPL
	<i>Triadeca sebifera</i>	Chinese tallow	--
Lythraceae	<i>Lythrum hyssopifolium</i>	Hyssop loosestrife	OBL
Poaceae	<i>Avena fatua</i>	wild oats	--
	<i>Briza minor</i>	little quaking grass	FAC
	<i>Bromus hordeaceus</i>	soft brome	FACU
	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	--
	<i>Festuca perennis</i>	Italian ryegrass	FAC
	<i>Hordeum marinum</i>	Seaside barley	FAC
	<i>Hordeum murinum</i>	Foxtail barley	FACU
	<i>Polypogon monspeliensis</i>	Annual beard grass	FACW
Polygonaceae	<i>Rumex crispus</i>	curly dock	FAC
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	FAC

Scientific and common names from:

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley

or

U.S. Army Corps of Engineers Cold Regions Research and Engineering Laboratory, *Arid West 2016 Regional Wetland Plant List* (USACE 2016)

\* Acronyms: FAC – facultative, FACU – facultative upland, FACW – facultative wetland, UPL – upland, OBL – obligate, -- Not Listed, considered upland

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# Appendix D

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## Ground Photographs

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**Photo 1.** Representative view of Sampling Point 1b and 2b along an upland facing north. Photo date 1/17/2020.



**Photo 2.** View of Sampling Point 4b in a puddle in uplands looking west. Photo date 1/17/2020.





**Photo 3.** Representative view of seasonal wetland 1 and Sampling Point 5a facing west. Photo date 1/17/2020.



**Photo 4.** Representative view of Sampling Points 14b, 15b, 16b and 17b located in a puddle in uplands facing northeast. Photo date 1/17/2020.





**Photo 5.** View of Sampling Point 23b located in a constructed upland swale in uplands facing northwest. Photo date 1/20/2020.



**Photo 6.** View of Sampling Points 29a and 29b marking the upland and wetland boundary in a constructed basin facing west. Photo date 1/20/2020.





**Photo 7.** View of Sampling Point 26b located in upland outside of a constructed basin facing east. Photo date 1/20/2020.



**Photo 8.** View of Sampling Point 26a located in a constructed basin with wetlands facing east. Photo date 1/20/2020.

# Appendix E

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Data Sheets

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**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 1B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.395304 Long: -121.354911 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: No vegetation present. This data point represents a puddle.	

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
	<u>0</u>	= Total Cover		UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
<u>Herb Stratum</u> (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>100</u>	% Cover of Biotic Crust <u>0</u>			<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 No vegetation present.

**SOIL**

Sampling Point: 1B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 3/3	100						loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

No hydric soil indicators. Gravel present throughout soil pit.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No \_\_\_\_\_ Depth (inches): 0  
 Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

This data point is a puddle.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 2B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.395303 Long: -121.355012 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: No vegetation present. Data point represents a ditch in uplands that drains uplands to a culvert.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>0</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>NaN</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 No vegetation present.

**SOIL**

Sampling Point: 2B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 4/2	90	7.5 YR 4/6	10	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features in a depleted matrix fulfill Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe)    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 3B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.395299 Long: -121.355037 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: No vegetation present. Upland area above upland ditch.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
	<u>0</u>	= Total Cover		UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>100</u>	% Cover of Biotic Crust <u>0</u>			

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 No vegetation present.



**SOIL**

Sampling Point: 3B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/3	100						loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 0  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches):

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 4B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C Lat: 38.396621 Long: -121.355142 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:  Low lying area along a fence line that is dominated entirely by Festuca perennis. Low lying area is located between a developed pad and an area vegetated by upland annual grasses.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
0 = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>100</u> x 3 = <u>300</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
0 = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>100</u> (A) <u>300</u> (B)
				Prevalence Index = B/A = <u>3</u>
Herb Stratum (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Festuca perennis</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	<input checked="" type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
100 = Total Cover				
Woody Vine Stratum (Plot size: _____)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks:  
 Dominated by a single hydrophyte.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 5A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C Lat: 38.396618 Long: -121.355461 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Low lying area along a fence line that is dominated entirely by Festuca perennis. Low lying area is located between a developed pad and an area vegetated by upland annual grasses. This data point represents a seasonal wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>100</u> x 3 = <u>300</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>300</u> (B) Prevalence Index = B/A = <u>3</u>
0 = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Festuca perennis</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
100 = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 Dominated by a single hydrophyte.

**SOIL**

Sampling Point: 5A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 3/1	97	7.5 YR 4/6	3	C	PL		loamy clay
6-13	10 YR 3/4	100						loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils <sup>3</sup> :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface located along pore linings of living root channels fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Data point is in a topographically low area conducive to ponding water seasonally. Inundated on aerial imagery dated 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 5B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396632 Long: -121.355466 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area located adjacent to seasonal wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
<u>0</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species _____ x 4 = <u>0</u> UPL species <u>95</u> x 5 = <u>475</u> Column Totals: <u>100</u> (A) <u>490</u> (B) Prevalence Index = B/A = <u>4.9</u>
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Avena fatua</u>	<u>95</u>	<u>Yes</u>	<u>UPL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Festuca perennis</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>100</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
<u>0</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Dominated by upland vegetation.

**SOIL**

Sampling Point: 5B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 3/3	100						loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 6A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C Lat: 38.396628 Long: -121.355855 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Low lying area along a fence line that is dominated entirely by Festuca perennis. Low lying area is located between a developed pad and an area vegetated by upland annual grasses. This data point represents a seasonal wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____				
3. _____				
4. _____				
	<u>0</u>	= Total Cover		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>88</u> x 3 = <u>264</u> FACU species _____ x 4 = <u>0</u> UPL species <u>12</u> x 5 = <u>60</u> Column Totals: <u>100</u> (A) <u>324</u> (B) Prevalence Index = B/A = <u>3.24</u>
<b>Sapling/Shrub Stratum</b> (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	= Total Cover		
<b>Herb Stratum</b> (Plot size: _____)				
1. <u>Festuca perennis</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Hordeum marinum</u>	<u>8</u>	<u>No</u>	<u>FAC</u>	
3. <u>Dittrichia graveolens</u>	<u>12</u>	<u>No</u>	<u>UPL</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>100</u>	= Total Cover		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____				
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				
<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Remarks:  
 Dominated by a single hydrophyte.



**SOIL**

Sampling Point: 6A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 3/2	95	7.5 YR 4/6	5	C	M		loamy clay
						PL		
6-12	10 YR 3/4	100						loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface located along pore linings of living root channels fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Data point is in a topographically low area conducive to ponding water seasonally. Inundated on aerial imagery dated 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 6B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396639 Long: -121.355858 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area located adjacent to seasonal wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
<u>0</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>2</u> x 3 = <u>6</u> FACU species <u>8</u> x 4 = <u>32</u> UPL species <u>90</u> x 5 = <u>450</u> Column Totals: <u>100</u> (A) <u>488</u> (B) Prevalence Index = B/A = <u>4.88</u>
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Avena fatua</u>	<u>90</u>	<u>Yes</u>	<u>UPL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Lactuca serriola</u>	<u>8</u>	<u>No</u>	<u>FACU</u>	
3. <u>Hordeum marinum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>100</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 Dominated by upland vegetation.

**SOIL**

Sampling Point: 6B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10 YR 3/3	100						silt loam
2-12	10 YR 3/3	90	7.5 YR 3/4	10	C	M		silt loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils <sup>3</sup> :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
No hydric soil indicators detected.

**HYDROLOGY**

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
Remarks:  
No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 7A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR): C Lat: 38.396620 Long: -121.356173 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Low lying area along a fence line that is dominated entirely by Festuca perennis. Low lying area is located between a developed pad and an area vegetated by upland annual grasses. This data point represents a seasonal wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>95</u> x 3 = <u>285</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>295</u> (B) Prevalence Index = B/A = <u>2.95</u>
<u>0</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Cyperus eragrostis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
2. <u>Hordeum marinum</u>	<u>83</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Festuca perennis</u>	<u>12</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>100</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 Dominated by a single hydrophyte.

**SOIL**

Sampling Point: 7A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 3/2	93	7.5 YR 4/6	7	C	M		loamy clay
						PL		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface located along pore linings of living root channels fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Data point is in a topographically low area conducive to ponding water seasonally. Inundated on aerial imagery dated 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 7B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396655 Long: -121.356178 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area located adjacent to seasonal wetland.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>90</u> x 5 = <u>450</u> Column Totals: <u>100</u> (A) <u>485</u> (B) Prevalence Index = B/A = <u>4.85</u>
<u>0</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Avena fatua</u>	<u>90</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Lactuca serriola</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. <u>Erodium botrys</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>100</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____				
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>		

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 Dominated by upland vegetation.

**SOIL**

Sampling Point: 7B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10 YR 3/3	100						silt loam
2-12	10 YR 3/3	90	7.5 YR 3/4	10	C	M		silt loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 8B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396750 Long: -121.356498 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area with some hydrophytes and a slight depression.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>22</u> x 3 = <u>66</u> FACU species <u>13</u> x 4 = <u>52</u> UPL species <u>65</u> x 5 = <u>325</u> Column Totals: <u>100</u> (A) <u>443</u> (B) Prevalence Index = B/A = <u>4.43</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Festuca perennis</u>	<u>12</u>	<u>No</u>	<u>FAC</u>	
2. <u>Rumex crispus</u>	<u>8</u>	<u>No</u>	<u>FAC</u>	
3. <u>Lactuca serriola</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Cynodon dactylon</u>	<u>8</u>	<u>No</u>	<u>FACU</u>	
5. <u>Geranium molle</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
6. <u>Hordeum marinum</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
7. <u>Avena fatua</u>	<u>60</u>	<u>Yes</u>	<u>UPL</u>	
8. _____	_____	_____	_____	
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 Dominated by upland vegetation.



**SOIL**

Sampling Point: 8B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 3/2	98	7.5 YR 4/6	2				clay loam
8-14	10 YR 3/2	80	7.5 YR 4/6	20	C	M		clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

Prominent redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 9B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396623 Long: -121.356730 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area with Rubus armeniacus along the bank near Elk Grove Creek.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____				
3. _____				
4. _____				
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>60</u> x 3 = <u>180</u> FACU species _____ x 4 = <u>0</u> UPL species <u>35</u> x 5 = <u>175</u> Column Totals: <u>95</u> (A) <u>355</u> (B)  Prevalence Index = B/A = <u>3.736842105</u>
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	= Total Cover		
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Epilobium brachycarpum</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Avena fatua</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Geranium molle</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>35</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rubus armeniacus</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____				
	<u>60</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>65</u> % Cover of Biotic Crust <u>0</u>				
Remarks: Dominated by upland vegetation.				

**SOIL**

Sampling Point: 9B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 3/3	100						clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 10B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396475 Long: -121.355904 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point just outside of a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
	<u>0</u>	= Total Cover		UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b>
1. _____	_____	_____	_____	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 10B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 3/3	100						clay loam with rock

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

Remarks:

No hydric soil indicators detected. Impenetrable rocky soil at 8 inches.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 11B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.396419 Long: -121.355895 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 11B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/1	95	10 YR 3/4	5	C	M		clay loam with rock

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

**Remarks:**

Distinct redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 0  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

Low lying depressional area pools water for a short duration.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 12B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.396306 Long: -121.355875 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 No vegetation.



**SOIL**

Sampling Point: 12B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 3/1	95	10 YR 3/4	5	C	M		clay loam with rock

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

Distinct redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 0  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Low lying depressional area pools water for a short duration. Soil below surface was moist.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 13B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.396256 Long: -121.355864 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 13B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 3/1	98	10 YR 3/4	2	C	M		clay loam with rock

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

Distinct redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 0  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 0

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Low lying depressional area pools water for a short duration.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 14B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396267 Long: -121.356152 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>NaN</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 14B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10 YR 3/2	95	10 YR 3/4	5	C	M		clay loam with rock

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

**Remarks:**

Distinct redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

Low lying depressional area pools water for a short duration.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 15B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396290 Long: -121.356174 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>0</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 15B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 3/2	95	10 YR 3/4	5	C	M		clay loam
6-12	10 YR 3/1	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

Distinct redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 7  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 7

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Low lying depressional area pools water for a short duration.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 16B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396337 Long: -121.356234 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>3</u> x 2 = <u>6</u> FAC species _____ x 3 = <u>0</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>8</u> (A) <u>26</u> (B) Prevalence Index = B/A = <u>3.25</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. <u>Erigeron canadensis</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Juncus bufonius</u>	<u>3</u>	<u>Yes</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>8</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>92</u> % Cover of Biotic Crust <u>0</u>				
Remarks: No vegetation.				



**SOIL**

Sampling Point: 16B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/2	95	10 YR 3/4	5	C	M		clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

Remarks:

Distinct redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 8

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Low lying depressional area pools water for a short duration.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 17B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396385 Long: -121.356271 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a large puddle.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)  
 Total Number of Dominant Species Across All Strata: 0 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species \_\_\_\_\_ x 1 = 0  
 FACW species 0 x 2 = 0  
 FAC species \_\_\_\_\_ x 3 = 0  
 FACU species 0 x 4 = 0  
 UPL species \_\_\_\_\_ x 5 = 0  
 Column Totals: 0 (A) 0 (B)  
 Prevalence Index = B/A = NaN

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 17B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 3/3	95	10 YR 3/4	5	C	M		loamy clay
6-12	10 YR 3/1							

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rocky  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 18B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.395722 Long: -121.357096 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a low lying basin area. Drift deposits appear to be from water sheeting across the surface into the basin. This area is topographically lower than the surrounded area and it appears to be excavated. Vegetation is absent.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: \_\_\_\_\_ (A)  
 Total Number of Dominant Species Across All Strata: \_\_\_\_\_ (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species \_\_\_\_\_ x 1 = 0  
 FACW species \_\_\_\_\_ x 2 = 0  
 FAC species \_\_\_\_\_ x 3 = 0  
 FACU species \_\_\_\_\_ x 4 = 0  
 UPL species \_\_\_\_\_ x 5 = 0  
 Column Totals: 0 (A) 0 (B)  
 Prevalence Index = B/A = NaN

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
**No vegetation.**

**SOIL**

Sampling Point: 18B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10 YR 3/3	95	10 YR 4/6	5	C	M		loamy clay
7-14	10 YR 2/1	90	10 YR 4/6	10	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 No wetland hydrology indicators detected. Drift deposits were observed but appear to be washed into the data point as sheet flow from uplands and not as a result of drifting debris in a pond.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 19B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.395918 Long: -121.357080 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a low lying basin area. Drift deposits appear to be from water sheeting across the surface into the basin. This area is topographically lower than the surrounded area and it appears to be excavated. Vegetation is absent.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>NaN</u>
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks:  
**No vegetation.**

**SOIL**

Sampling Point: 19B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/1	93	10 YR 4/6	7	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

Prominent redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected. Drift deposits were observed but appear to be washed into the data point as sheet flow from uplands and not as a result of drifting debris in a pond.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 20B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396076 Long: -121.357072 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a low lying basin area. Drift deposits appear to be from water sheeting across the surface into the basin. This area is topographically lower than the surrounded area and it appears to be excavated. Vegetation is absent.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)  Total Number of Dominant Species Across All Strata: _____ (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> _____ Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>NaN</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
**No vegetation.**



**SOIL**

Sampling Point: 20B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/1	93	10 YR 4/6	7	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface located in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 No wetland hydrology indicators detected. Drift deposits were observed but appear to be washed into the data point as sheet flow from uplands and not as a result of drifting debris in a pond.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 21A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396281 Long: -121.357056 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Upland data point in a low lying basin area. Drift deposits appear to be from water sheeting across the surface into the basin. This area is topographically lower than the surrounding area and it appears to be excavated. Vegetation is absent.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>5</u> x 2 = <u>10</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>5</u> (A) <u>10</u> (B)
				Prevalence Index = B/A = <u>2</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Juncus bufonius</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>5</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b>
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>95</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Some Juncus bufonius from last seasons growth.

**SOIL**

Sampling Point: 21A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 4/2	95	10 YR 4/6	5	C	M		sandy clay
12-14	2.5 Y 3/1	100						sandy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a depleted surface in the matrix fulfill Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Soil is saturated. Data point is located at the outfall of a ditch that drains uplands onsite to this location.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 22B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.394818 Long: -121.356328 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a low area that drains uplands to uplands. Vegetation is absent.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>NaN</u>
0 = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover				
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u>0</u>		

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 22B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-13	10 YR 4/2	90	10 YR 4/6	10	C	M		loamy clay, mixed soil

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a depleted surface in the matrix fulfill Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Low lying area that is depressional. No evidence of flowing water. This feature is a constructed upland swale.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 23B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.394838 Long: -121.356687 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a low area that drains uplands to uplands. Vegetation is absent.	

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
	<u>0</u>	= Total Cover		UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
<u>Herb Stratum</u> (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>100</u>	% Cover of Biotic Crust <u>0</u>			

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
**No vegetation.**

**SOIL**

Sampling Point: 23B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-13	10 YR 4/2	90	10 YR 4/6	10	C	M		loamy clay, mixed soil

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

Prominent redoximorphic features on a depleted surface in the matrix fulfill Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Low lying area that is depressional. Some evidence of sediment deposits and drift deposits (leaves) indicate water flows here. This feature is a constructed upland swale.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 24B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.394838 Long: -121.356687 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland data point in a low area that drains uplands to uplands. Vegetation is absent. This feature is an upland swale and it terminates at this data point.	

**VEGETATION – Use scientific names of plants.**

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)
4. _____	_____	_____	_____	
0 = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
0 = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
<u>Herb Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks:  
 No vegetation.



**SOIL**

Sampling Point: 24B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 2/1	100						clay
6-13	10 YR 3/2	95	10 YR 3/6	5	C	M		clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

Prominent redoximorphic features on a depleted surface in the matrix fulfill Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 25A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396082 Long: -121.358907 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Outfall of ditch into detention basin. Ditch originates in uplands along railroad tracks.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>5</u> x 2 = <u>10</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>5</u> (A) <u>10</u> (B)
				Prevalence Index = B/A = <u>2</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Juncus bufonius</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>5</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Present?</b>
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>95</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Dominated by wetland vegetation. Juncus is last years growth. No new growth.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 25B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396003 Long: -121.358871 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland point along detention basin.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Populus fremontii</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>20</u>	<u>= Total Cover</u>		<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>30</u> (A) <u>105</u> (B) Prevalence Index = B/A = <u>3.5</u>
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. <u>Quercus lobata</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
	<u>5</u>	<u>= Total Cover</u>		
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Hirschfeldia incana</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
	<u>5</u>	<u>= Total Cover</u>		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
	<u>0</u>	<u>= Total Cover</u>		
% Bare Ground in Herb Stratum <u>95</u> % Cover of Biotic Crust <u>0</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks:  
 Dominated by upland vegetation. Juncus is last years growth. No new growth.

**SOIL**

Sampling Point: 25B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10 YR 4/2	93	10 YR 3/6	7	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a depleted surface in the matrix fulfill Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input checked="" type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input checked="" type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Site is inundated on aerial imagery dated 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 26A  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396055 Long: -121.358553 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Outfall of ditch into detention basin. Ditch originates in uplands along railroad tracks.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>30</u> (A) <u>95</u> (B) Prevalence Index = B/A = <u>3.1666666666</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Juncus bufonius</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Polygonum aviculare</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Carduus pycnocephalus</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
4. <u>Hordeum murinum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>30</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>70</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Dominated by wetland vegetation. Juncus is last years growth. No new growth.

**SOIL**

Sampling Point: 26A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10 YR 3/2	90	10 YR 3/6	10	C	M		loamy clay
8-12	10 YR 4/4	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils <sup>3</sup> :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Non-jurisdictional detention basin that collects water from uplands on the property and drains to Elk Grove Creek. Observed inundated on 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 26B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.395954 Long: -121.358559 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area dominated by stinkwork. Established homeless encampment also present at this location.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>15</u> x 3 = <u>45</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>40</u> x 5 = <u>200</u> Column Totals: <u>60</u> (A) <u>265</u> (B) Prevalence Index = B/A = <u>4.4166666666666666</u>	
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
<u>0</u> = Total Cover					
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
1. <u>Dittrichia graveolens</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>		
2. <u>Polygonum aviculares</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>		
3. <u>Hirschfeldia incana</u>	<u>10</u>	<u>No</u>	<u>UPL</u>		
4. <u>Erigeron canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
<u>60</u> = Total Cover					
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>					

Remarks:  
 Dominated by upland vegetation. All vegetation is from last seasons growth.



**SOIL**

Sampling Point: 26B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 3/2	90	10 YR 3/6	10	C	M		loamy clay
6-10	10 YR 2/2	95	10 YR 3/6	5	C	M		loamy clay
10-16	10 YR 4/4	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

Prominent redoximorphic features on a dark surface in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site is inundated on aerial imagery dated 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 27A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396046 Long: -121.357572 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Detention basin with wetland vegetation.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>12</u> x 5 = <u>60</u> Column Totals: <u>47</u> (A) <u>150</u> (B) Prevalence Index = B/A = <u>3.1914893617</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>Dittrichia graveolens</u>	<u>12</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Polygonum aviculare</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Juncus bufonius</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	
4. <u>Erigeron canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>47</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>53</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Dominated by wetland vegetation. All vegetation except for *Dittrichia graveolens* is from last seasons growth.



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 28A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396352 Long: -121.357690 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Detention basin with wetland vegetation.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____				
3. _____				
4. _____				
	<u>0</u>	= Total Cover		
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>12</u> x 2 = <u>24</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>22</u> (A) <u>54</u> (B)  Prevalence Index = B/A = <u>2.4545454545</u>
2. _____				
3. _____				
4. _____				
5. _____				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Juncus bufonius</u>	<u>12</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Polygonum aviculare</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>22</u>	= Total Cover		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>78</u> % Cover of Biotic Crust <u>0</u>				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Remarks:  
 Dominated by wetland vegetation.

**SOIL**

Sampling Point: 28A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/2	90	10 YR 3/6	10	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a depleted matrix fulfill hydric soil criteria for Depleted Matrix (F3).  
 Distinct redoximorphic features on a dark surface in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input checked="" type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 The site is inundated on aerial imagery 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 28B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396415 Long: -121.357678 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area dominated by stinkwort. Established homeless encampment also present at this location.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>8</u> x 3 = <u>24</u> FACU species <u>12</u> x 4 = <u>48</u> UPL species <u>20</u> x 5 = <u>100</u> Column Totals: <u>40</u> (A) <u>172</u> (B) Prevalence Index = B/A = <u>4.3</u>
0 = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Dittrichia graveolens</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Juncus bufonius</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Erigeron canadensis</u>	<u>12</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
40 = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>40</u>		% Cover of Biotic Crust <u>0</u>		

Remarks:  
 Dominated by upland vegetation. All vegetation is from last seasons growth.

**SOIL**

Sampling Point: 28B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/3	95	10 YR 4/6	5	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks:

High chroma in the presence of redox concentrations in the matrix do not fulfill hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site is inundated on 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 29A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396383 Long: -121.358526 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Detention basin with wetland vegetation.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Juncus bufonius</u>	10	Yes	FACW	
2. <u>Polygonum aviculare</u>	5	Yes	FAC	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>85</u> % Cover of Biotic Crust <u>0</u>				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  
 Total Number of Dominant Species Across All Strata: 2 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species \_\_\_\_\_ x 1 = 0  
 FACW species 10 x 2 = 20  
 FAC species 5 x 3 = 15  
 FACU species \_\_\_\_\_ x 4 = 0  
 UPL species \_\_\_\_\_ x 5 = 0  
 Column Totals: 15 (A) 35 (B)  
 Prevalence Index = B/A = 2.333333333

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 Dominated by wetland vegetation.



**SOIL**

Sampling Point: 29A

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 4/2	93	10 YR 3/6	7	C	M		loamy clay
8-12	5 Y 3/1	95	10 YR 3/4	5	C	M		clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

Prominent redoximorphic features on a depleted matrix fulfill hydric soil criteria for Depleted Matrix (F3). Distinct redoximorphic features on a dark surface in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): 8  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 8

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The site is inundated on aerial imagery 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 29B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396404 Long: -121.358518 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland area dominated by stinkwort. Established homeless encampment also present at this location.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species _____ x 3 = <u>0</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>25</u> x 5 = <u>125</u> Column Totals: <u>40</u> (A) <u>175</u> (B) Prevalence Index = B/A = <u>4.375</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>Dittrichia graveolens</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Juncus bufonius</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
3. <u>Erigeron canadensis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
4. <u>Hirschfeldia incana</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>40</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust <u>0</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 Dominated by upland vegetation. All vegetation is from last seasons growth except the Dittrichia graveolens.

**SOIL**

Sampling Point: 29B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10 YR 3/3	95	10 YR 3/6	5	C	M		loamy clay, gravelly

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>Rocky</u> Depth (inches): <u>9</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 High chroma in the presence of redox concentrations in the matrix do not fulfill hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Site is inundated on 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 30A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.396061 Long: -121.357784 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Detention basin with wetland vegetation.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____				
3. _____				
4. _____				
	<u>0</u>	= Total Cover		
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>12</u> x 2 = <u>24</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>22</u> (A) <u>54</u> (B)  Prevalence Index = B/A = <u>2.4545454545</u>
2. _____				
3. _____				
4. _____				
5. _____				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Juncus bufonius</u>	<u>12</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Polygonum aviculare</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>22</u>	= Total Cover		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>78</u> % Cover of Biotic Crust <u>0</u>				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

Remarks:  
 Dominated by wetland vegetation.

**SOIL**

Sampling Point: 30A

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 4/2	93	10 YR 3/6	7	C	M		loamy clay
8-12	10 YR 3/1	97	10 YR 3/6	5	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:

Prominent redoximorphic features on a dark surface and on a depleted matrix fulfill Redox Dark Surface (F6) and Depleted Matrix (F3) hydric soil criteria.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 10

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Soil is saturated at 10 inches. The site is inundated on aerial imagery 3/30/2011.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 31A  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.395921 Long: -121.357637 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Detention basin with wetland vegetation.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
2. _____				
3. _____				
4. _____				
<u>0</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>12</u> x 3 = <u>36</u> FACU species <u>8</u> x 4 = <u>32</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>50</u> (A) <u>158</u> (B) Prevalence Index = B/A = <u>3.16</u>
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Juncus bufonius</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Polygonum aviculare</u>	<u>12</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Dittrichia graveolens</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	
4. <u>Erigeron canadensis</u>	<u>8</u>	<u>No</u>	<u>FACU</u>	
5. _____				
6. _____				
7. _____				
8. _____				
<u>50</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>85</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Dominated by wetland vegetation.

**SOIL**

Sampling Point: 31A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/2	93	10 YR 3/6	7	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Remarks:  
 Prominent redoximorphic features on a dark surface in the matrix fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input checked="" type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 The site is inundated on aerial imagery 3/30/2011. Drift deposits are located upslope of this point and appear to associated with ponding of the detention basin.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/20/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 31B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: 38.395875 Long: -121.357611 Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Upland edge of detention basin.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____					
	<u>0</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:	
1. _____				Total % Cover of: _____ Multiply by: _____	
2. _____				OBL species _____ x 1 = <u>0</u>	
3. _____				FACW species <u>5</u> x 2 = <u>10</u>	
4. _____				FAC species <u>10</u> x 3 = <u>30</u>	
5. _____				FACU species _____ x 4 = <u>0</u>	
	<u>0</u>	= Total Cover			
Herb Stratum (Plot size: _____)				UPL species <u>20</u> x 5 = <u>100</u>	
1. <u>Dittrichia graveolens</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	Column Totals: <u>35</u> (A) <u>140</u> (B)	
2. <u>Juncus bufonius</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	Prevalence Index = B/A = <u>4</u>	
3. <u>Polygonum aviculare</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
	<u>35</u>	= Total Cover			
Woody Vine Stratum (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>	
1. _____				<input type="checkbox"/> Dominance Test is >50%	
2. _____				<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
	<u>0</u>	= Total Cover			<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust <u>0</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks:  
 Dominated by upland vegetation. All vegetation is from last seasons growth except the Dittrichia graveolens.



**SOIL**

Sampling Point: 31B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/2	95	10 YR 3/6	5	C	M		loamy clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>Rocky</u> Depth (inches): <u>9</u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 Prominent redoximorphic features on a dark surface fulfill Redox Dark Surface (F6) hydric soil criteria.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Site is inundated on 3/30/2011.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 3/24/2021  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 32B  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland area along railroad tracks.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				<b>Prevalence Index worksheet:</b>
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b>
1. <u>Cynodon dactylon</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Dittrichia graveolens</u>	<u>10</u>	<u>No</u>	<u>UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Erodium botrys</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>Erodium moschatum</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>Avena fatua</u>	<u>5</u>	_____	<u>UPL</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>60</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>				
				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>

Remarks:  
 Dominated by upland vegetation.



## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 3/24/2021  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 33B  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland area along railroad tracks.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>NaN</u>
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. <u>Quercus lobata</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Festuca perennis</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Dittrichia graveolens</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>75</u>		% Cover of Biotic Crust <u>0</u>		<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>				

Remarks:  
 Dominated by upland vegetation.

**SOIL**

Sampling Point: 33B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	7.5 YR 3/4	100						sandy clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: N/A  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology detected.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 3/24/2021  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 34a  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: Basin with wetland characteristics. This is a constructed feature.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix sp.</u>	<u>10</u>	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				
	<u>10</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = <u>0</u>
3. _____				FACW species _____ x 2 = <u>0</u>
4. _____				FAC species _____ x 3 = <u>0</u>
5. _____				FACU species _____ x 4 = <u>0</u>
	<u>0</u>	= Total Cover		UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____				<input checked="" type="checkbox"/> Dominance Test is >50%
2. _____				<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____				<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
	<u>0</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____

Remarks:  
 Mostly barren except for a willow tree.

**SOIL**

Sampling Point: 34a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	7.5 YR 3/2	95	7.5 YR 4/4	5	C	M		sandy clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>N/A</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Redoximorphic features present in the matrix.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input checked="" type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input checked="" type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
  
Remarks:  
Basin has wetland hydrology indicators and was mapped to the extent of drift deposits. There is no clear OHWM. An algal mat is present as are surface soil cracks.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 3/24/2021  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 34B  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, 0 to 3 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland area along edge of basin. No evidence of water. Land is barren.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks:  
 No vegetation.



**SOIL**

Sampling Point: 34B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	7.5 YR 3/4	100						sandy clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Rock  
 Depth (inches): 6

**Hydric Soil Present?** Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology detected.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 3/24/2021  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 35B  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland area in a low area. Heavily disturbed.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <u>Erigeron canadensis</u>	3	Yes	FACU	
2. <u>Silybum marianum</u>	3	Yes	UPL	
3. _____	_____	_____	_____	
4. _____	_____	_____	UPL	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>94</u> % Cover of Biotic Crust <u>0</u>				

**Dominance Test worksheet:**  
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)  
 Total Number of Dominant Species Across All Strata: 2 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**  
 Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_  
 OBL species \_\_\_\_\_ x 1 = 0  
 FACW species \_\_\_\_\_ x 2 = 0  
 FAC species \_\_\_\_\_ x 3 = 0  
 FACU species \_\_\_\_\_ x 4 = 0  
 UPL species \_\_\_\_\_ x 5 = 0  
 Column Totals: 0 (A) 0 (B)  
 Prevalence Index = B/A = NaN

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ Dominance Test is >50%  
 \_\_\_ Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks:  
 Dominated by upland vegetation.

**SOIL**

Sampling Point: 35B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	black asphalt	90						black asphalt
	7.5 YR 3/4	10						sandy clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: N/A  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No

**Remarks:**

No hydric soil indicators detected. Soil is heavily disturbed and mixed up with old asphalt.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

**Primary Indicators (minimum of one required; check all that apply)**

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

**Secondary Indicators (2 or more required)**

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes \_\_\_\_\_ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

No wetland hydrology indicators detected.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (19-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 3/24/2021  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 36B  
 Investigator(s): Patrick Martin Section, Township, Range: S6 T6N R6E  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR): C Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: NAD 83  
 Soil Map Unit Name: San Joaquin silt loam, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland area in a low area. Heavily disturbed.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species _____ x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
<u>0</u> = Total Cover				UPL species _____ x 5 = <u>0</u>
				Column Totals: <u>0</u> (A) <u>0</u> (B)
				Prevalence Index = B/A = <u>NaN</u>
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%
2. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>0</u>				

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks:  
 No vegetation.

**SOIL**

Sampling Point: 36B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	black asphalt	10						black asphalt
	7.5 YR 3/4	90						sandy clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils <sup>3</sup> :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)					

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>N/A</u> Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <input checked="" type="checkbox"/>
---	--

Remarks:  
 No hydric soil indicators detected. Soil is heavily disturbed and mixed up with old asphalt.

**HYDROLOGY**

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 No wetland hydrology indicators detected.

# Appendix F

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Aquatic Resources Excel  
Spreadsheet

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## Appendix F Aquatic Resources Excel Spreadsheet

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
SW1	CALIFORNIA	PEM		Area	0.034555	ACRE	DELINEATE	38.39661900	-121.35588600	



# **APPENDIX F**

## **AQUATIC RESOURCES DELINEATION (LOT B)**

# Waterman Road (10-Acre)

Aquatic Resources Delineation Report

APN: 134-0181-041-0000

February 2020 | BUZ-01

*Prepared for:*

**Mr. Logan James**  
**Buzz Oates**

555 Capitol Mall, Suite 900  
Sacramento, CA 95814

*Prepared by:*

**HELIX Environmental Planning, Inc.**  
1677 Eureka Road, Suite 100  
Roseville, CA 95661



# Waterman Road (10-Acre)

## Aquatic Resources Delineation Report

APN: 134-0181-041-0000

*Prepared for:*

**Mr. Logan James**

**Buzz Oates**

555 Capitol Mall, Suite 900

Sacramento, CA 95814

*Prepared by:*

**HELIX Environmental Planning, Inc.**

1677 Eureka Road, Suite 100

Roseville, CA 95661

February 2020 | BUZ-01

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# TABLE OF CONTENTS

---

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION.....	1
1.1 Project Location .....	1
1.2 Driving Directions.....	1
1.3 Agent Contact Information.....	1
1.4 Regulatory Setting.....	2
2.0 ENVIRONMENTAL SETTING .....	3
2.1 Location Description .....	3
2.2 Existing Conditions.....	3
2.3 Field Conditions .....	3
2.4 Interstate or Foreign Commerce Connection .....	4
3.0 METHODS.....	4
3.1 Data Gathering.....	4
3.2 Boundaries of the Delineation .....	4
3.3 Determination Procedures .....	4
3.3.1 Delineation Methods .....	4
3.3.2 Determination of Potential Jurisdiction .....	5
3.3.3 Plant/Habitat Nomenclature .....	6
4.0 RESULTS .....	6
4.1 Vegetation Communities/Habitat Types .....	6
4.1.1 Ruderal/Disturbed .....	6
4.2 Soils.....	7
4.3 Hydrology.....	7
4.4 USFWS National Wetlands Inventory .....	7
5.0 AQUATIC RESOURCES .....	7
5.1 Potential Waters of the U.S. ....	7
5.2 Potential Waters of the State .....	8
5.3 Potential CDFW Jurisdiction.....	8
6.0 SUMMARY.....	8
7.0 REFERENCES.....	9

## TABLE OF CONTENTS (cont.)

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### LIST OF APPENDICES

- A Figures
- B Aquatic Resources Delineation Map
- C Plant Species Observed in the Project Site
- D Ground Photographs
- E Data Sheets

# 1.0 INTRODUCTION

On behalf of Buzz Oates, HELIX Environmental Planning, Inc. (HELIX) has prepared this aquatic resource delineation report in support of the Waterman Road Project (project) to document potential jurisdictional wetlands and other waters of the U.S. and State on an approximately 10.4-acre project site located at 10000 Waterman Road in the City of Elk Grove, Sacramento County, California. The proposed project includes development of the entire 10.4-acre parcel with a 183,250 square foot commercial building, including three depressed loading docks, and a parking lot containing 150 parking spaces. The purpose of the delineation was to identify aquatic resources on the project site that potentially qualify as waters of the U.S. (WOUS) and/or waters of the State of California. Waters of the U.S. and State on the site are subject to regulatory jurisdiction by the U.S. Army Corps of Engineers (USACE), the Central Valley Regional Water Quality Control Board (CVRWQCB), and/or the California Department of Fish and Wildlife (CDFW). Impacts to such resources would require obtaining permits from some or all these agencies. The results presented in this document are preliminary unless and until concurrence is received from the USACE, the CVRWQCB, and CDFW.

## 1.1 PROJECT LOCATION

The approximately 10.4-acre project site is comprised of Assessor's Parcel Number (APN) 134-0181-041-0000 at 10000 Waterman Road in the City of Elk Grove, Sacramento County, California. The site is located along the western side of Waterman Road in an area surrounded by agriculture, commercial and residences (Appendix A; Figure 1). The site is situated in Section 7 of Township 06 North and Range 06 East, Mount Diablo Meridian, and is depicted on the U.S. Geological Survey (USGS) "Elk Grove, CA" 7.5-minute quadrangle map (Appendix A; Figure 2). The approximate center of the project site is at latitude 38.392603 and longitude -121.353467, NAD 83, and approximately 50 feet above mean sea level (AMSL).

## 1.2 DRIVING DIRECTIONS

From downtown Sacramento, travel south on State Route 99, toward Fresno and exit on Kammerer Road toward Grant Line Road (Exit 284). Travel northeast, turn left on Waterman Road and travel north 0.7 mile to the project site. The site can be accessed via a private gate on the west side of Waterman Road.

## 1.3 AGENT CONTACT INFORMATION

Mr. Logan James  
Buzz Oates  
555 Capitol Mall, Suite 900  
Sacramento, CA 95814



## 1.4 REGULATORY SETTING

Any person, firm, or agency planning to alter or work in WOUS, including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 United States Code [USC] 1344). Waters of the U.S. are defined as: (a) all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (b) all interstate waters including interstate wetlands; (c) all other waters such as intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate commerce; (d) impoundments of these waters; (e) tributaries of these waters; or (f) wetlands adjacent to these waters (33 Code of Federal Regulations [CFR] Part 328). Within non-tidal waters that meet the definition given above, and in the absence of adjacent wetlands, the indicator used by the USACE to determine the lateral extent of its jurisdiction is the ordinary-high-water mark (OHWM), which is defined as the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, and/or the presence of litter and debris.

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE has determined that not all features which meet the WOUS definition are, in fact, considered WOUS. Normally, features not considered WOUS include: (a) non-tidal drainage and irrigation ditches excavated on dry land; (b) artificially irrigated areas which would revert to upland if the irrigation ceased; (c) artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; (d) artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons, and (e) water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel, unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of WOUS (see 33 CFR 328.3(a)). Other features may be excluded based on Federal court rulings (e.g., SWANCC and Rapanos) or by regulation.

Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable WOUS without a permit from the USACE (33 USC 403). The CDFW requires notification prior to commencement, and possibly a Streambed Alteration Agreement (SAA) pursuant to California Fish and Game Code Subsection 1600 et seq., if a proposed activity would result in the alteration of a stream, river, or lake in California.

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification from the RWQCB. If a water body does not meet the criteria to be considered WOUS but is considered waters of the State, a Report of Waste Discharge (ROWD) is required to be submitted to the appropriate RWQCB pursuant to California Water Code Section 13260. The term “waters of the state” is defined by California Water Code as “any surface water

or groundwater, including saline waters, within the boundaries of the state” (California Water Code Section 13050(e)). The State Water Resources Control Board has defined a wetland as the following:

*An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area either lacks vegetation or the vegetation is dominated by hydrophytes.*

Section 1600 et seq. of the Fish and Game Code regulates activities affecting rivers, streams, and lakes where fish or wildlife resources may be adversely affected. A lake under CDFW jurisdiction is defined as “a permanent natural body of water of any size or an artificially impounded body of water of at least one acre, isolated from the sea, and having an area of open water of sufficient depth and permanency to prevent complete coverage by rooted aquatic plants” (CCR Vol. 18 Title 14, Section 1562.1). Streambeds within CDFW jurisdiction are based on the definition of a stream as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life” (CCR Vol. 18 Title 14, Section 1.72). CDFW jurisdiction extends landward to the limits of associated riparian vegetation.

## **2.0 ENVIRONMENTAL SETTING**

### **2.1 LOCATION DESCRIPTION**

The project site is located in a rural residential area of Sacramento County within the Sacramento-Roseville-Arden-Arcade region, which is developing rapidly overall with suburban residential, commercial, and light industrial uses. Land uses surrounding the project site are rural residential single-family residences, commercial, and agriculture, such as vineyard and livestock grazing. Terrain in the immediate vicinity of the project site is generally flat with mild elevation fluctuations. The elevation on the site is approximately 50 feet AMSL. Appendix A, Figure 3 is an aerial photograph of the project site and vicinity.

### **2.2 EXISTING CONDITIONS**

The project site is undeveloped but has been denuded and the site consists almost entirely of bare ground except for some scattered oak trees, shrubs and annual herbaceous vegetation.

### **2.3 FIELD CONDITIONS**

Fieldwork for the aquatic resource delineation was conducted on January 16 and 17, 2020 and the weather during the site visit was foggy and cold. The climate of Sacramento County is Mediterranean, characterized by wet, cool winters and dry, hot summers. The nearest weather station is the Sacramento Executive Airport weather station in Sacramento, California, located approximately 11 miles northwest of the project site. Average daily maximum and minimum temperatures are 92° and 59° Fahrenheit (F) in July and 56° and 39° F in January (NRCS 2020a). The mean annual precipitation is 17.8 inches, with 100 percent occurring as rain from September through May. The weather station received approximately 6.14 inches of rainfall this rain season starting in October (NRCS 2020a). In the previous year, the weather station received 24.6 inches, which is 138% of normal (NRCS 2020a).

## 2.4 INTERSTATE OR FOREIGN COMMERCE CONNECTION

The project site is generally flat, but likely drains northwest through Elk Grove Creek to Laguna Creek. Elk Grove Creek is a perennial drainage that terminates at its confluence with the Laguna Creek, which is tributary to the Sacramento River. The Sacramento River is a traditional navigable water used in interstate and foreign commerce. There is no interstate or foreign commerce associated with aquatic resources as none were found on the site. The project site is located in the Lower Sacramento watershed, USGS Hydrologic Unit Code (HUC) 18020163.

## 3.0 METHODS

### 3.1 DATA GATHERING

The following sources were used in preparation of this jurisdictional delineation:

- Aerial photography taken March 26, 2018 downloaded from Esri®,
- USFWS’s National Wetland Inventory online wetland mapper (USFWS 2020),
- Natural Resources Conservation Service (NRCS) web soil survey (NRCS 2020b),
- Corps of Engineers Wetlands Delineation Manual (USACE 1987),
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008),
- Field Indicators of Hydric Soils in the United States (Version 8.2) (NRCS 2018), and
- USACE 2016 National Wetland Plant List for the Arid West (USACE 2016).

### 3.2 BOUNDARIES OF THE DELINEATION

The delineation area includes the entire approximately 10.4-acre project site. Refer to the delineation map in Appendix B for the limits of the delineation.

### 3.3 DETERMINATION PROCEDURES

#### 3.3.1 Delineation Methods

Fieldwork for the jurisdictional delineation was conducted by HELIX biologists Patrick Martin and Charlotte Marks in accordance with the Corps of Engineers *Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008). Vegetation, soils, and hydrologic characteristics were visually assessed by walking meandering transects through the entire project site to obtain 100 percent visual coverage. The plant species identifiable at the time of the survey were recorded (refer to Appendix C for the list of plants observed with the wetland indicator status for each species). Representative photographs are included as Appendix D.

The three-parameter method was used to determine the presence/absence of wetlands, which involves identifying indicators of hydrophytic vegetation, hydric soils, and wetland hydrology according to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008) and the *Arid West 2016 Regional Wetland Plant List* (USACE 2016). A total of six data points were taken throughout the site to classify the site's soils, vegetation, and hydrologic characteristics and the accompanying data forms are included in Appendix E. The extent of wetlands and other waters in the project site were mapped in the field with sub-meter accuracy using a Trimble GeoXT. These data were exported into ArcMap 10.3.1® and used to produce the map of aquatic features in the delineation area and calculate the acreage of each aquatic feature.

### 3.3.2 Determination of Potential Jurisdiction

#### Waters of the U.S.

Typically, the USACE and the U.S. Environmental Protection Agency (EPA) will assert jurisdiction over the following waters:

- Traditional navigable waters (TNW),
- Wetlands adjacent to TNWs,
- Non-navigable tributaries of TNWs that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and
- Wetlands directly abutting such tributaries (i.e., wetlands that have continuous surface connection).

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent,
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent, and
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow), and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

*“A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.”*

### **Waters of the State**

The CVRWQCB will assert jurisdiction over any waters of the state, including wetlands, regardless of whether or not the feature qualifies as a WOUS. Waters of the State include but are not limited to natural and artificial ponds, rivers and streams, ditches and canals, wetlands, and vernal pools.

### **3.3.3 Plant/Habitat Nomenclature**

Habitat nomenclature is generally derived from A Guide to Wildlife Habitats of California (Mayer and Laudenslayer 1988). Plant nomenclature is taken from The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al. 2012).

## **4.0 RESULTS**

### **4.1 VEGETATION COMMUNITIES/HABITAT TYPES**

Terrestrial biological habitats and land covers present in the project site include ruderal/disturbed. Terrestrial habitats/land covers are described below. Aquatic resources are described in Section 5.0.

#### **4.1.1 Ruderal/Disturbed**

A total of 10.4 acres of ruderal/disturbed habitat occurs throughout the project site. This habitat is primarily characterized by an assemblage of ruderal herbs and forbs that colonize disturbed landscapes. The project site is regularly tilled or disturbed creating a highly disturbed environment that supports several non-native and invasive plant species. Dominant vegetation within this community includes wild mustard (*Hirschfeldia incana*) (--)<sup>1</sup>, Italian thistle (*Carduus pycnocephalus* spp. *pycnocephalus*) (--), stinkwort (*Dittrichia graveolens*) (--), tumbleweed (*Salsola tragus*) (FACU), horseweed (*Erigeron canadensis*) (FACU), and prickly lettuce (*Lactuca serriola*) (FACU). The site supports only a few of hydrophytic wetland plants such as Italian ryegrass (*Festuca perennis*) (FAC), tall flatsedge (*Cyperus eragrostis*) (FACW), prostrate knotweed (*Polygonum aviculare*) (FAC), annual rabbitsfoot grass (*Polypogon monspeliensis*) (FACW) which were sparsely dispersed throughout the site amongst a dominance of upland vegetation. Interspersed throughout this community are trees, predominantly valley oaks (*Quercus lobata*) (FACU).

<sup>1</sup> Wetland rating according to the 2016 Arid West Wetland Plant List: OBL=nearly always occurs in wetlands; FACW=usually occurs in wetlands; FAC=equally likely to occur in wetlands and uplands; FACU=usually occurs in uplands; UPL=nearly always occurs in uplands; -- = not listed in the 2016 Arid West Wetland Plant List but considered to be UPL.

## 4.2 SOILS

The project site consists of two soil map units (NRCS 2020b): San Joaquin silt loam, leveled, 0 to 1 percent slopes; and Galt clay, leveled, 0 to 1 percent slopes (Appendix A; Figure 4). Both soil units are considered hydric (NRCS 2020c).

San Joaquin silt loam, leveled, 0 to 1 percent slopes occurs on terraces between 20 and 500 feet AMSL and consists of alluvium derived from granite parent material (NRCS 2020b). A typical soil profile is silt loam from 0 to 23 inches, clay loam from 23 to 28 inches, indurated from 28 to 54 inches, and stratified sandy loam to loam from 54 to 60 inches. San Joaquin silt loam, leveled, 0 to 3 percent slopes, is a moderately well-drained soil with a frequency of ponding of “none” and a depth to water table of more than 80 inches (NRCS 2020b).

Galt clay, leveled, 0 to 1 percent slopes occurs on terraces between 10 and 150 feet AMSL and consists of alluvium derived from granite parent material (NRCS 2020b). A typical soil profile is clay from 0 to 13 inches, clay from 13 to 32 inches, and cemented from 32 to 60 inches. Galt clay, leveled, 0 to 1 percent slopes, is a moderately well-drained soil with a frequency of ponding of “none” and a depth to water table of more than 80 inches (NRCS 2020b).

## 4.3 HYDROLOGY

The project site is in the Morrison Creek watershed (HUC10 1802016304). The project site drains generally to the north to the Sacramento River via Elk Grove Creek, which passes from east to west approximately 800 feet north of the site. The site has no other apparent natural source of water other than direct precipitation, which collects in low lying areas on the project site. The site is currently a denuded vacant lot that does not appear to have any functional use.

## 4.4 USFWS NATIONAL WETLANDS INVENTORY

The USFWS National Wetlands Inventory online database<sup>2</sup> was reviewed to determine if there are any wetlands or other waters of the U.S. mapped by the USFWS in the project site or vicinity. The National Wetlands Inventory does not identify any potential wetlands or other waters on the project site (Appendix A; Figure 5).

## 5.0 AQUATIC RESOURCES

Aquatic resources are not present on the project site which consists entirely of upland vegetation communities. Sampling points collected in uplands are shown on the Aquatic Resources Delineation Map in Appendix B.

### 5.1 POTENTIAL WATERS OF THE U.S.

Potential waters of the U.S. are not present on the site.

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<sup>2</sup> National Wetlands Inventory online database at <<http://www.fws.gov/wetlands/Wetlands-Mapper.html>> accessed January 10, 2020.

## **5.2 POTENTIAL WATERS OF THE STATE**

Potential waters of the state are not present on the site.

## **5.3 POTENTIAL CDFW JURISDICTION**

Potential CDFW jurisdictional features are not present on the site.

## **6.0 SUMMARY**

HELIX conducted an aquatic resources delineation of the 10.4-acre project site comprised of APN 134-0181-041-0000 at 10000 Waterman Road in the City of Elk Grove in Sacramento County. Aquatic resources were not detected on the project site. The site consists entirely of uplands and no aquatic resources were delineated on the property that would be potential waters of the U.S. or waters of the State or fall under CDFW jurisdiction under Section 1600 et seq. of the California Fish and Game Code. This aquatic resource delineation is preliminary and subject to verification by the resource agencies.

## 7.0 REFERENCES

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<https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>. Accessed January 10, 2020.
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1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
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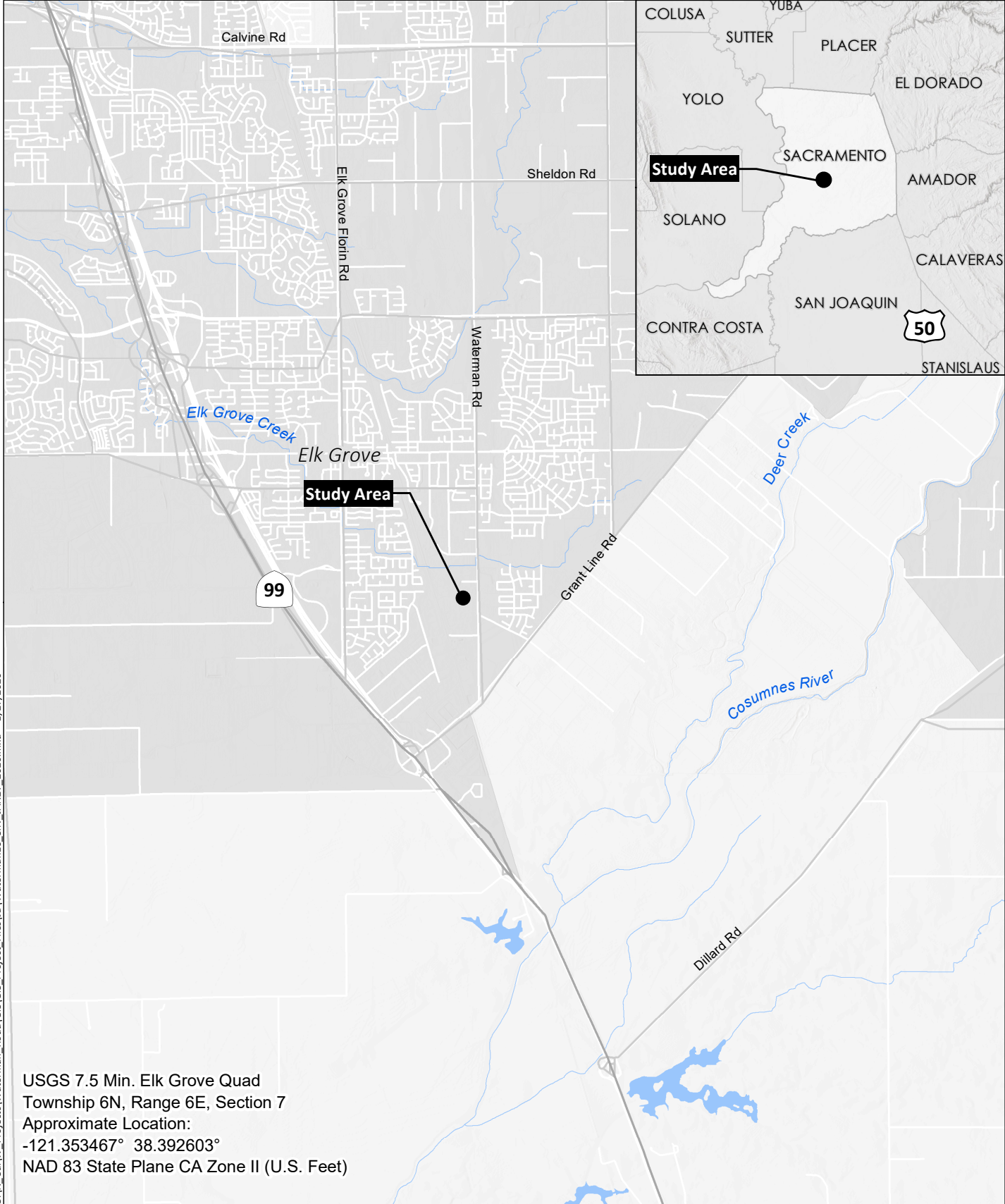
# Appendix A

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Figures

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Waterman Road (10-Acre)



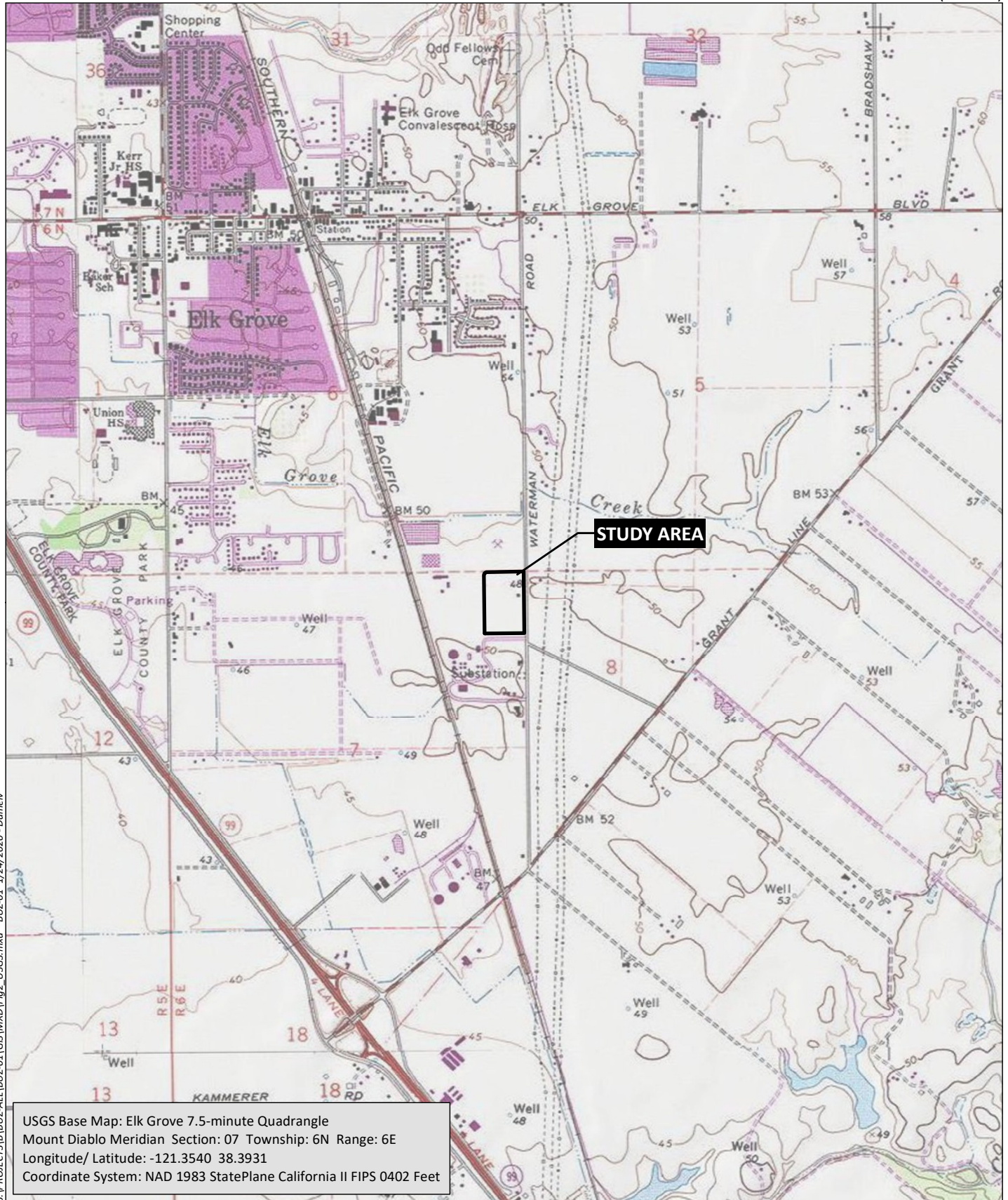
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USGS 7.5 Min. Elk Grove Quad  
 Township 6N, Range 6E, Section 7  
 Approximate Location:  
 -121.353467° 38.392603°  
 NAD 83 State Plane CA Zone II (U.S. Feet)



Source: Base Map Layers (Esri, USGS, NGA, NASA)





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USGS Base Map: Elk Grove 7.5-minute Quadrangle  
 Mount Diablo Meridian Section: 07 Township: 6N Range: 6E  
 Longitude/ Latitude: -121.3540 38.3931  
 Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Source: Base Map Layers (USGS, NGS)



○ Project Site - 10.4 Acres



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Source: Aerial (Sacramento County, 2018)



○ Project Site (±10.4 Acres)

**Soil Type**

● 151 - Galt clay, leveled, 0 to 1 percent slopes

● 213 - San Joaquin silt loam, leveled, 0 to 1 percent slopes

Waterman Road

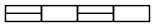
213

151

Mosher Road

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0 150 Feet

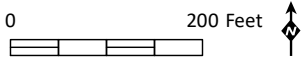


Source: USGS Soil Survey, 2018





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Source: USFWS 2018



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## Appendix B



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### Aquatic Resources Delineation Map

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**Legend**

-  Project Site (±10.4 Acres)
-  Upland Data Point

-121.354892;  
38.394248

6b

5b

4b

Waterman Road

1b

2b

3b

-121.353040;  
38.391916

**NOTES**

- Aquatic resources are subject to U.S. Army Corps of Engineers verification.
- Aquatic resources were mapped by Helix Environmental using a Trimble Global Positioning System on 01/17/2020
- Delineated By: C. Marks and P. Martin
- This delineation utilizes the Corps' 1987 three-parameter methodology and Arid West Supplement to delineate jurisdictional waters of the U.S.
- The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers.
- Coordinate System: California State Plane Zone II.
- Projection: Lambert Conformal Conic.
- Datum: North American Datum 1983.

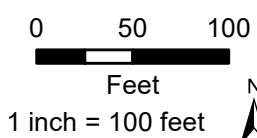
Aerial Imagery Date: 3/26/2018  
Aerial Imagery Source: Sac Regional GIS Coop



USACE REGULATORY FILE #:  
VERIFIED BY: TBD  
DATE OF VERIFICATION: TBD

**REVISIONS**

DATE	DESCRIPTION	BY



**AQUATIC RESOURCES DELINEATION MAP**

Waterman Road- 10 Acre Parcel  
Sacramento County, California  
January 27, 2020

**APPENDIX B**

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# Appendix C

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## Plant Species Observed in the Project Site

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## Appendix C Plant Species Observed in the Project Site

Family	Species Name	Common Name	Rating*
<b>Native</b>			
Asteraceae	<i>Baccharis pilularis</i>	Coyote brush	--
	<i>Centromadia fitchii</i>	Spikeweed	FACU
	<i>Erigeron canadensis</i>	Canada horseweed	FACU
Cyperaceae	<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
Fagaceae	<i>Quercus lobata</i>	Valley oak	FACU
Juglandaceae	<i>Juglans hindsii</i>	Northern California black walnut	FAC
Juncaceae	<i>Juncus bufonius</i>	Toad rush	FACW
Onagraceae	<i>Epilobium brachycarpum</i>	Annual fireweed	--
Salicaceae	<i>Populus fremontii</i>	Fremont's cottonwood	FAC
	<i>Salix</i> spp.	Arroyo willow	FACW
Vitaceae	<i>Vitis californica</i>	California wild grape	FACU
<b>Non-native</b>			
Anacardiaceae	<i>Pistacia atlantica</i>	Pistachio	--
Asteraceae	<i>Dittrichia graveolens</i>	Stinkwort	--
	<i>Lactuca serriola</i>	Prickly wild lettuce	FACU
	<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	FAC
	<i>Silybum marianum</i>	Milk thistle	
Brassicaceae	<i>Hirschfeldia incana</i>	Wild mustard	--
Chenopodiaceae	<i>Salsola tragus</i>	Tumbleweed	FACU
Convolvulaceae	<i>Convolvulus arvensis</i>	bindweed	--
Euphorbiaceae	<i>Euphorbia</i> spp.	Spurge	UPL
	<i>Triadeca sebifera</i>	Chinese tallow	--
Lythraceae	<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	OBL
Myrtaceae	<i>Eucalyptus</i> spp.	Gum tree	--
Poaceae	<i>Avena fatua</i>	wild oats	--
	<i>Briza minor</i>	little quaking grass	FAC
	<i>Bromus hordeaceus</i>	soft brome	FACU
	<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	--
	<i>Cynodon dactylon</i>	Bermuda grass	FACU
	<i>Festuca perennis</i>	Italian ryegrass	FAC
	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley	FAC
	<i>Polypogon monspeliensis</i>	Annual beard grass	FACW
Oleaceae	<i>Olea europaea</i>	Olive	--
Polygonaceae	<i>Polygonum aviculare</i>	Prostrate knotweed	FAC
	<i>Rumex crispus</i>	curly dock	FAC
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	FAC
Ulmaceae	<i>Ulmus</i> spp.	Elm	UPL

Scientific and common names from:

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley or

U.S. Army Corps of Engineers Cold Regions Research and Engineering Laboratory, *Arid West 2016 Regional Wetland Plant List* (USACE 2016)

\* Acronyms: FAC – facultative, FACU – facultative upland, FACW – facultative wetland, UPL – upland, OBL – obligate, -- Not Listed, considered upland



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# Appendix D

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## Ground Photographs

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**Photo 1.** View of Sampling Point 1 (shovel) located in a puddle in uplands looking southeast.  
Photo date 1/17/2020.



**Photo 2.** View of Sampling Point 2b (shovel) in puddle in uplands looking west.  
Photo date 1/17/2020.





**Photo 3.** View of Sampling Point 3b in puddle in uplands facing southeast.  
Photo date 1/17/2020.



**Photo 4.** View of Sampling Point 4b located in a puddle in uplands facing south.  
Photo date 1/17/2020.



**Photo 5.** View of Sampling Point 6b located in a puddle in uplands facing east.  
Photo date 1/17/2020.

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# Appendix E

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Data Sheets



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**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (10-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 1B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S7, T6N, R6E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.391961 Long: -121.354051 Datum: NAD83  
 Soil Map Unit Name: Galt clay, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Puddle in uplands fed by offsite roadside ditch. Puddle was dry on 1/20/20.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>16</u> x 3 = <u>48</u> FACU species _____ x 4 = <u>0</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>26</u> (A) <u>98</u> (B) Prevalence Index = B/A = <u>3.769230769</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. <u>Festuca perennis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Hirschfeldia incana</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Polygonum aviculare</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
26 = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>74</u> % Cover of Biotic Crust <u>0</u>				

Remarks:  
 Data point lacks a dominance and prevalence of hydrophytes.

**SOIL**

Sampling Point: 1B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10 YR 3/3	100						loamey clay
6-12	10 YR 3/2	98	10 YR 3/6	2	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

**Hydric Soil Present?** Yes  No

**Remarks:**

Prominent redoximorphic concentrations are present in the matrix, but are not abundant enough to qualify it as a hydric soil.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

Surface water is present one day after a precipitation event. However, on 1/20/2020 this location was dry and the surface water is a short duration puddle.

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (10-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 2B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S7, T6N, R6E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.391980 Long: -121.353356 Datum: NAD83  
 Soil Map Unit Name: Galt clay, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Puddle in uplands fed by offsite roadside ditch. Puddle was dry on 1/20/20.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
4. _____	_____	_____	_____	
0 = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>13</u> x 3 = <u>39</u>
5. _____	_____	_____	_____	FACU species _____ x 4 = <u>0</u>
0 = Total Cover				UPL species <u>19</u> x 5 = <u>95</u>
				Column Totals: <u>32</u> (A) <u>134</u> (B)
				Prevalence Index = B/A = <u>4.1875</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Festuca perennis</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Hirschfeldia incana</u>	<u>8</u>	<u>Yes</u>	<u>UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Polygonum aviculare</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. <u>Dittrichia graveolens</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. <u>Hordeum marinum</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
6. <u>Geranium molle</u>	<u>1</u>	<u>No</u>	<u>UPL</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
32 = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>68</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 Data point lacks a dominance and prevalence of hydrophytes.

**SOIL**

Sampling Point: 2B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 3/3	100						loamey clay
8-12	10 YR 3/2	100						loamey clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )
<input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface water is present one day after a precipitation event. However, on 1/20/2020 this location was dry and the surface water is a short duration puddle.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (10-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 3B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S7, T6N, R6E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.391990 Long: -121.353065 Datum: NAD83  
 Soil Map Unit Name: Galt clay, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Puddle in uplands fed by offsite roadside ditch. Puddle was dry on 1/20/20.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0 = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>16</u> x 5 = <u>80</u> Column Totals: <u>31</u> (A) <u>130</u> (B) Prevalence Index = B/A = <u>4.1935483876</u>
0 = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Festuca perennis</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Salsola tragus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. <u>Hirschfeldia incana</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>	
4. <u>Lythrum hyssopifolium</u>	<u>1</u>	<u>No</u>	<u>OBL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
31 = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 = Total Cover				
% Bare Ground in Herb Stratum <u>69</u> % Cover of Biotic Crust <u>0</u>				

**Hydrophytic Vegetation Indicators:**  
 Dominance Test is >50%  
 Prevalence Index is ≤3.0<sup>1</sup>  
 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No

Remarks:  
 Data point lacks a dominance and prevalence of hydrophytes.

**SOIL**

Sampling Point: 3B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10 YR 3/3	100						loamey clay
8-14	10 YR 4/2	100						loamey clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

Remarks:  
 No hydric soil indicators detected.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  
 Remarks:  
 Surface water is present one day after a precipitation event. However, on 1/20/2020 this location was dry and the surface water is a short duration puddle.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (10-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 4B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S7, T6N, R6E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.393197 Long: -121.353039 Datum: NAD83  
 Soil Map Unit Name: San Joaquin silt loam, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Puddle in uplands fed by offsite roadside ditch. Puddle was dry on 1/20/20.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = <u>0</u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u>8</u> x 3 = <u>24</u> FACU species _____ x 4 = <u>0</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>23</u> (A) <u>84</u> (B) Prevalence Index = B/A = <u>3.6521739136</u>
<b>Sapling/Shrub Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
<b>Herb Stratum (Plot size: _____)</b>				
1. <u>Cyperus eragrostis</u>	<u>3</u>	<u>No</u>	<u>FACW</u>	
2. <u>Dittrichia graveolens</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Festuca perennis</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>	
4. <u>Polypogon monspeliensis</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>23</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>77</u> % Cover of Biotic Crust <u>0</u>				
<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				

Remarks:  
 Data point lacks a dominance and prevalence of hydrophytes.





## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Waterman Road (10-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 5B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S7, T6N, R6E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.393382 Long: -121.353832 Datum: NAD83  
 Soil Map Unit Name: San Joaquin silt loam, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Low lying area is in uplands and appears to be a previously excavated area.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Quercus lobata</u>	15	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
4. _____				
	15	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species <u>5</u> x 1 = <u>5</u>
3. _____				FACW species <u>2</u> x 2 = <u>4</u>
4. _____				FAC species _____ x 3 = <u>0</u>
5. _____				FACU species <u>8</u> x 4 = <u>32</u>
	0	= Total Cover		UPL species <u>10</u> x 5 = <u>50</u>
Herb Stratum (Plot size: _____)				Column Totals: <u>25</u> (A) <u>91</u> (B)
1. <u>Lythrum hyssopifolium</u>	5	Yes	OBL	Prevalence Index = B/A = <u>3.64</u>
2. <u>Centromadia fitchii</u>	8	Yes	FACU	
3. <u>Cyperus eragrostis</u>	1	No	FACW	
4. <u>Polypogon monspeliensis</u>	1	No	FACW	
5. <u>Silybum marianum</u>	4	No	UPL	
6. <u>Hirschfeldia incana</u>	5	Yes	UPL	
7. _____				
8. _____				
	24	= Total Cover		
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____				<input type="checkbox"/> Dominance Test is >50%
2. _____				<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
	0	= Total Cover		<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
% Bare Ground in Herb Stratum <u>76</u> % Cover of Biotic Crust <u>0</u>				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Remarks: Data point lacks a dominance and prevalence of hydrophytes.				<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

**SOIL**

Sampling Point: 5B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/3	100						loamey clay with gravel

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> ) <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if present):</b> Type: <u>None</u> Depth (inches): <u>N/A</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
No hydric soil indicators detected.

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> ) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> ) <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No wetland hydrology indicators.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Waterman Road (10-Acre) City/County: Elk Grove, Sacramento Co. Sampling Date: 1/17/20  
 Applicant/Owner: Buzz Oates State: CA Sampling Point: 6B  
 Investigator(s): Charlotte Marks and Patrick Martin Section, Township, Range: S7, T6N, R6E  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0  
 Subregion (LRR): C Lat: 38.393517 Long: -121.354716 Datum: NAD83  
 Soil Map Unit Name: San Joaquin silt loam, leveled, 0 to 1 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Low lying area is in uplands and appears to be a previously excavated area.	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____				
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = <u>0</u>
3. _____				FACW species _____ x 2 = <u>0</u>
4. _____				FAC species _____ x 3 = <u>0</u>
5. _____				FACU species <u>6</u> x 4 = <u>24</u>
				UPL species <u>13</u> x 5 = <u>65</u>
	<u>0</u>	= Total Cover		Column Totals: <u>19</u> (A) <u>89</u> (B)
				Prevalence Index = B/A = <u>4.684210526</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Hirschfeldia incana</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Erigeron canadensis</u>	<u>6</u>	<u>Yes</u>	<u>FACU</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>
3. <u>Dittrichia graveolens</u>	<u>3</u>	<u>No</u>	<u>UPL</u>	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
	<u>19</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>76</u> % Cover of Biotic Crust <u>0</u>				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Remarks:  
 Data point lacks a dominance and prevalence of hydrophytes.

**SOIL**

Sampling Point: 6B

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10 YR 3/3	100						loamey clay with gravel

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: None  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

No hydric soil indicators detected.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface water is present and this site is a puddle. The site was dry on 1/20/2020.

# **APPENDIX G**

## **ARBORIST REPORT AND TREE INVENTORY (LOT A)**



# California Tree and Landscape Consulting, Inc.

March 30, 2020

Logan James, Development Project Manager  
Buzz Oates  
555 Capitol Mall, Suite 900  
Sacramento, California 95814

Phone: (916) 379-3865

Via Email: [LoganJames@buzzoates.com](mailto:LoganJames@buzzoates.com)

## PROPERTY TRANSITION ARBORIST REPORT

**RE:** Arborist Report and Tree Inventory for 9195 Brinkman Court  
City of Elk Grove, California

### Executive Summary:

Buzz Oates contacted California Tree and Landscape Consulting, Inc. to document the trees on the property for a better understanding of the existing resource and any potential improvement obstacles that may arise. Buzz Oates requested an arborist report and tree inventory suitable for submittal to the City of Elk Grove. This is a Preliminary Arborist Report and Tree Inventory for the initial filing of plans to develop the property.

Ed Stirtz, ISA Certified Arborist WE0510A, visited the property on March 24, 2020, to provide species identification, measurements of DBH and canopy, field condition notes, recommended actions, ratings, and approximate locations for the trees. A total of 55 trees were evaluated on this property, of which 25 are protected trees according to the City of Elk Grove.

The City of Elk Grove Tree Preservation and Protection Ordinance (Elk Grove Municipal Code Chapter 19.12) regulates both the removal of “trees of local importance” and “secured trees,” and the encroachment of construction activities within their critical root zone area. The City of Elk Grove Tree Preservation and Protection Ordinance currently defines a “tree of local importance” as the following species of trees with a diameter at breast height of 6 inches or greater, or multi-trunked trees with a combined diameter at breast height of 6 inches or greater: Coast Live Oak (*Quercus agrifolia*); Valley Oak (*Quercus lobata*); Blue Oak (*Quercus douglasii*); Interior Live Oak (*Quercus wislizenii*); Oracle Oak (*Quercus morehus*); California Sycamore (*Platanus racemosa*); and California Black Walnut (*Juglans hindsii*).

The vegetation on site includes those trees identified in the inventory and native grasses. Many of the trees are within the overhead utility line corridor and have consequently been pruned for utility line clearance. Many of these trees have poor structure and are not good candidates for retention.

**TABLE 1**

<b>Tree Species</b>	<b>Trees on this Site</b>	<b>Protected Trees on the Site</b>	<b>Proposed for Removal for Development</b>	<b>Total Proposed for Retention</b>
Black Walnut	1	1	1	0
Brazilian Pepper	14	0	11	3
Cottonwood	3	0	3	0
Flowering Pear	1	0	1	0
Interior Live Oak	3	3	1	2
Valley Oak	21	21	15	6
Willow	1	0	0	1
<b>TOTALS</b>	<b>44</b>	<b>25</b>	<b>32</b>	<b>12</b>

**ASSIGNMENT**

Perform an examination of the site to document the presence and condition of trees protected by the City of Elk Grove. The study area for this effort includes those trees found within or overhanging the project boundaries as depicted on the project exhibit titled Waterman Road at Brinkman Court Logistics Center prepared by RMW Architects & Interiors. (All trees protected by the County are included in the inventory.) Prepare a report of findings.

**METHODS**

**Appendix 2 and Tables 1, 2 and 3** in this report are the detailed inventory and recommendations for the trees. The following terms and Table A – Ratings Descriptions will further explain our findings.

**Species** of trees is listed by our local common name and botanical name by genus and species.

**DBH** (diameter breast high) is normally measured at 4’6” (54” above the average ground, height but if that varies then the location where it is measured is noted here. A steel diameter tape was used to measure the trees.

**Canopy radius** is measured in feet. It is the farthest extent of the crown composed of leaves and small twigs measured by a Stanley digital distance meter. This measurement often defines the Critical Root Zone (CRZ) or Protection Zone (PZ), which is a circular area around a tree with a radius equal to this measurement.

**Actions** listed are recommendations to improve health or structure of the tree. Trees in public spaces require maintenance. If a tree is to remain and be preserved, then the tree may need some form of work to reduce the likelihood of failure and increase the longevity of the tree. Preservation requirements and actions based on a proposed development plan are not included here.

**Arborist Rating** is subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and



the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead). The rating was done in the field at the time of the measuring and inspection.

**Table A – Ratings Descriptions**

No problem(s)	5	excellent
No apparent problem(s)	4	good
<u>Minor problem(s)</u>	<u>3</u>	<u>fair</u>
Major problem(s)	2	poor
Extreme problem(s)	1	hazardous, non-correctable
Dead	0	dead

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

**Notes** indicate the health, structure and environment of the tree and explain why the tree should be removed or preserved. Additional notes may indicate if problems are minor, extreme or correctible.

**Remove** is the recommendation that the tree be removed. The recommendation will normally be based either on poor structure or poor health and is indicated as follows:

- Yes H – Tree is unhealthy
- Yes S – Tree is structurally unsound

**OBSERVATIONS AND CONCLUSIONS**

The site is an existing, undeveloped commercial parcel in the southeast area of Elk Grove and is bounded on **the east by an existing city water treatment facility and a self-storage complex, a vacant lot to the south, the** Union Pacific Rail corridor to the west, and a drainage easement to the north.

**RECOMMENDED REMOVALS**

At this time, 32 trees have been recommended for removal from the proposed project area due to the nature and extent of defects, compromised health, and/or structural instability noted at the time of field inventory efforts. If these trees were retained within the proposed project area, it is our opinion that they may be hazardous depending upon their proximity to planned development activities. For reference, the trees which have been recommended for removal due

to the severity of noted defects, compromised health, and/or structural instability are highlighted in green within the accompanying Tree Inventory Summary and are briefly summarized as follows:

**TABLE 3**

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Off-site	Common Name	Species	DBH (in.)	Ht. Dia. Meas. At (in.)	Canopy Radius (ft.)	Condition Rating
7		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	19	6	15	1 Extreme Structure or Health Problems
8		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	16	54	15	1 Extreme Structure or Health Problems
9		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	13	54	19	1 Extreme Structure or Health Problems
10		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	13	3	14	1 Extreme Structure or Health Problems
11		No	No	Flowering Pear	<i>Pyrus calleryana</i>	6	3	10	1 Extreme Structure or Health Problems
12		No	No	Cottonwood	<i>Populus deltoides</i>	16	3	16	1 Extreme Structure or Health Problems
13		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	6	36	11	1 Extreme Structure or Health Problems
14		No	No	Cottonwood	<i>Populus deltoides</i>	23	6	19	1 Extreme Structure or Health Problems
17		Yes	Yes	Valley Oak	<i>Quercus lobata</i>	12	24	14	2 Major Structure or Health Problems
18		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	11	6	10	1 Extreme Structure or Health Problems
19		No	Yes	Brazilian Pepper	<i>Schinus terebinthifolia</i>	13	12	16	1 Extreme Structure or Health Problems
20		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	11	3	10	1 Extreme Structure or Health Problems
21		No	No	Cottonwood	<i>Populus deltoides</i>	18	36	20	2 Major Structure or Health Problems
22		No	Yes	Brazilian Pepper	<i>Schinus terebinthifolia</i>	17	18	14	2 Major Structure or Health Problems
23		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	54	6	11	1 Extreme Structure or Health Problems

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Off-site	Common Name	Species	DBH (in.)	Ht. Dia. Meas. At (in.)	Canopy Radius (ft.)	Condition Rating
24		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	36	3	22	2 Major Structure or Health Problems
25		Yes	Yes	Black Walnut	<i>Juglans nigra</i>	42	3	38	1 Extreme Structure or Health Problems
4531		Yes	No	Valley Oak	<i>Quercus lobata</i>	14	6	16	1 Extreme Structure or Health Problems
5429		Yes	No	Valley Oak	<i>Quercus lobata</i>	16	6	18	2 Major Structure or Health Problems
5430		Yes	No	Valley Oak	<i>Quercus lobata</i>	12	12	16	2 Major Structure or Health Problems
5432		Yes	No	Valley Oak	<i>Quercus lobata</i>	15	3	17	2 Major Structure or Health Problems
5433		Yes	No	Valley Oak	<i>Quercus lobata</i>	6	54	6	2 Major Structure or Health Problems
5434		Yes	No	Valley Oak	<i>Quercus lobata</i>	6	48	11	2 Major Structure or Health Problems
5435		Yes	No	Interior Live Oak	<i>Quercus wislizenii</i>	11	3	14	1 Extreme Structure or Health Problems
5436		Yes	No	Valley Oak	<i>Quercus lobata</i>	15	42	15	2 Major Structure or Health Problems
5437		Yes	No	Valley Oak	<i>Quercus lobata</i>	11	36	17	1 Extreme Structure or Health Problems
5439		Yes	No	Valley Oak	<i>Quercus lobata</i>	26	36	27	2 Major Structure or Health Problems
5440		Yes	No	Valley Oak	<i>Quercus lobata</i>	16	6	16	2 Major Structure or Health Problems
5441		Yes	No	Valley Oak	<i>Quercus lobata</i>	14	6	16	2 Major Structure or Health Problems
5442		Yes	No	Valley Oak	<i>Quercus lobata</i>	17	12	16	2 Major Structure or Health Problems
5443		Yes	No	Valley Oak	<i>Quercus lobata</i>	9	36	16	2 Major Structure or Health Problems

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Off-site	Common Name	Species	DBH (in.)	Ht. Dia. Meas. At (in.)	Canopy Radius (ft.)	Condition Rating
5444		Yes	No	Valley Oak	<i>Quercus lobata</i>	12	3	14	2 Major Structure or Health Problems

**DISCUSSION**

Trees need to be protected from normal construction practices if they are to remain healthy and viable on the site. Our recommendations are based on experience, and County ordinance requirements, so as to enhance tree longevity. This requires their root zones remain intact and viable, despite heavy equipment being on site, and the need to install foundations, driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil has serious consequences for tree health.

Following is a summary of Impacts to trees during construction and Tree Protection measures that should be incorporated into the site plans in order to protect the trees. Once the plans are approved, they become the document that all contractors will follow. ***The plans become the contract between the owner and the contractor, so that only items spelled out in the plans can be expected to be followed. Hence, all protection measures, such as fence locations, mulch requirements and root pruning specifications must be shown on the plans.***

**RECOMMENDATIONS: SUMMARY OF TREE PROTECTION MEASURES**

Hire a Project Arborist to help ensure protection measures are incorporated into the site plans and followed. The Project Arborist should, in cooperation with the Engineers and/or Architects:

- Identify the Root Protection Zones on the final construction drawings, prior to bidding the project.
- Show the placement of tree protection fences, as well as areas to be irrigated, fertilized and mulched on the final construction drawings.
- Clearly show trees for removal on the plans and mark them clearly on site. A Contractor who is a Certified Arborist should perform tree and stump removal. All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. **No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment.**
- Prior to any grading, or other work on the site that will come within 50’ of any tree to be preserved:
  1. Irrigate (if needed) and place a 3” layer of chip mulch over the protected root zone of all trees that will be impacted.
  2. Erect Tree Protection Fences. Place boards against trees located within 3’ of construction zones, even if fenced off.
  3. Remove lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation, and oversee the pruning, performed by a contractor who is an ISA Certified Arborist.
- For cuts, expose roots by hand digging, potholing or using an air spade and then cut roots cleanly prior to further grading outside the tree protection zones.

- For fills, if a cut is required first, follow as for cuts.
- Where possible, specify geotextile fabric in lieu of compacting and root cutting, prior to placing fills on the soil surface. Any proposed retaining wall or fill soil shall be discussed with the engineer and arborist in order to reduce impacts to trees to be preserved.
- Clearly designate an area on the site outside the drip line of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the root zones of protected trees.
- Design utility and irrigation trenches to minimize disturbance to tree roots. Where possible, dig trenches with a hydraulic or air spade, placing pipes underneath the roots, or bore the deeper trenches underneath the roots.
- Include on the plans an Arborist inspection schedule to monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.

General Tree protection measures are included as Appendix 3. These measures need to be included on the Site, Grading, Utility and Landscape Plans. A final report of recommendations specific to the plan can be completed as part of, and in conjunction with, the actual plans. This will require the arborist working directly with the engineer and architect for the project. If the above recommendations are followed, the amount of time required by the arborist for the final report should be minimal this will require the arborist working directly with the engineer and architect for the project. If the above recommendations are followed, the amount of time required by the arborist for the final report should be minimal.

Report Prepared by:

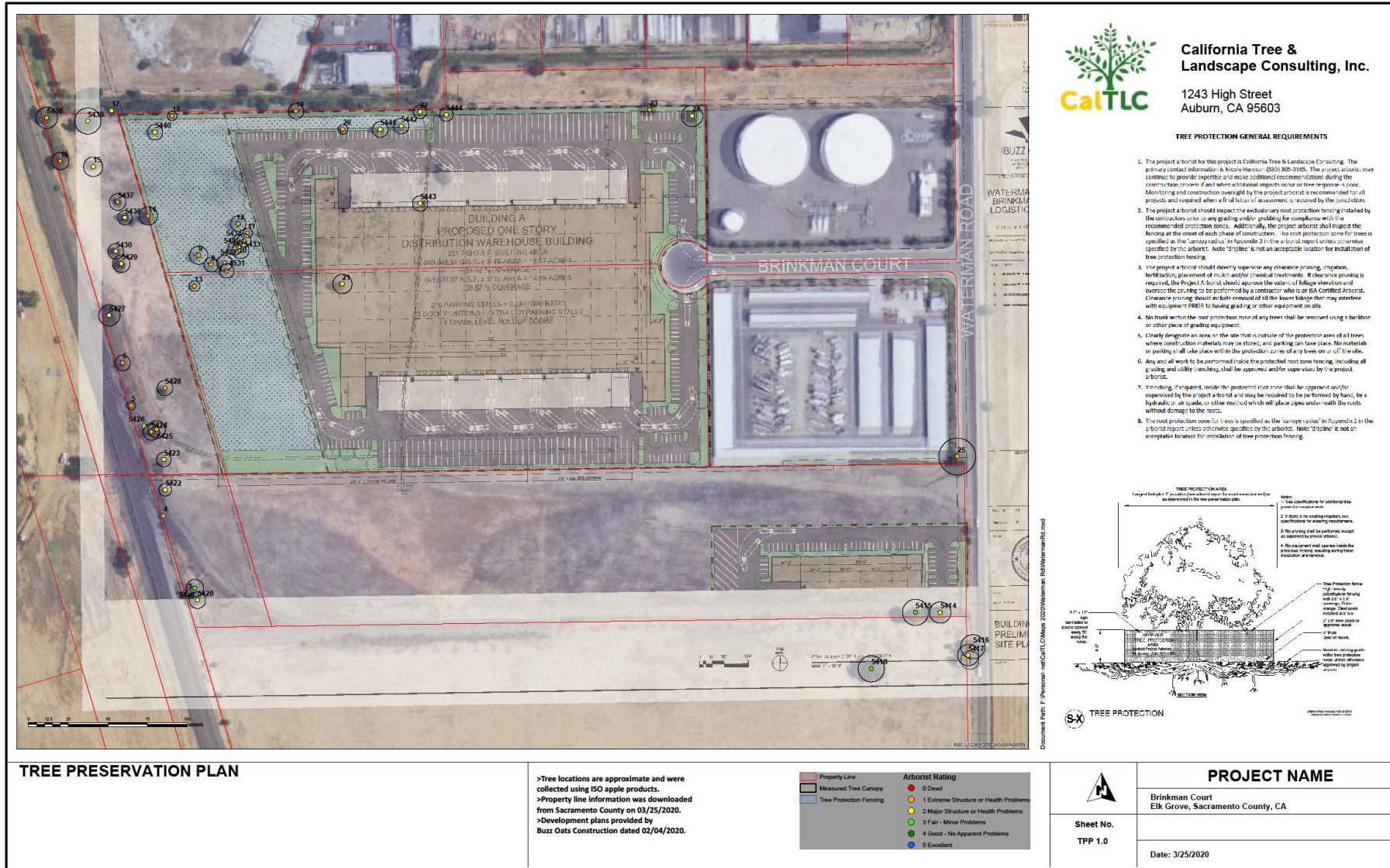


Edwin E. Stirtz, Consulting Arborist  
International Society of Arboriculture  
Certified Arborist WE-0510A  
ISA Tree Risk Assessment Qualified  
Member, American Society of Consulting Arborists

Enc.: Appendix 1 – Map of The Property Showing Tree Locations  
Appendix 2 – Tree Information Collected  
Appendix 3 – General Practices for Tree Protection

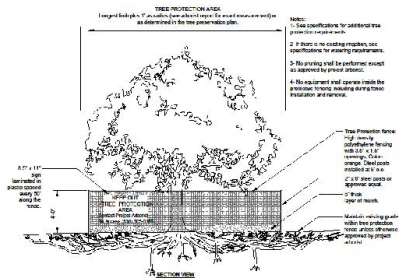


APPENDIX 1 – MAP OF THE PROPERTY SHOWING TREE LOCATIONS



**California Tree & Landscape Consulting, Inc.**  
 CalTLC  
 1243 High Street  
 Auburn, CA 95603

- TREE PROTECTION GENERAL REQUIREMENTS**
- The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Brian Harris, (916) 885-2065. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
  - The project arborist should inspect the exclusionary root protection fencing installed by the contractor prior to any grading and/or grading for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the canopy radius in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note: "drillline" is not an acceptable location for installation of tree protection fencing.
  - The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch, and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage retention and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should exclude removal of all the lower limbs that may interfere with equipment (PPE) to having grading or other equipment on site.
  - No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
  - Clearly designate an area on the site that is outside of the protection area of all trees, where construction materials may be stored, and parking on these areas. No materials or parking shall take place within the protection zone of any trees on or off the site.
  - Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
  - Trenching, if required, inside the protected root zone shall be performed and/or supervised by the project arborist and may be installed to be performed by hand, by a hydraulic or air blade, or other method which will place signs around the roots without damage to the roots.
  - The root protection zone (or trees is specified as the canopy radius) in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note: "drillline" is not an acceptable location for installation of tree protection fencing.



**APPENDIX 2 – TREE INFORMATION COLLECTED**

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Offsite	Common Name	Species	DBH (in.)	Ht. Dia. Meas At (in.)	Canopy Radius (ft.)	Condition Rating	Comments	Project Status
5		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	6	6	9	1 Extreme Structure or Health Problems	Located at fence line. 7 multi stems at base. Under utility wires.	Preserve
6		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	14	3	16	1 Extreme Structure or Health Problems	6 leaders at base. Included bark. Utility wires.	Preserve
7		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	19	6	15	1 Extreme Structure or Health Problems	Multi-stem at base.	Remove
8		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	16	54	15	1 Extreme Structure or Health Problems	6 leaders at base.	Remove
9		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	13	54	19	1 Extreme Structure or Health Problems	6 leaders at base.	Remove
10		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	13	3	14	1 Extreme Structure or Health Problems	4 leaders at base.	Remove
11		No	No	Flowering Pear	<i>Pyrus calleryana</i>	6	3	10	1 Extreme Structure or Health Problems	6 leaders at 6 inches.	Remove
12		No	No	Cottonwood	<i>Populus deltoides</i>	16	3	16	1 Extreme Structure or Health Problems	3 stems at base. Codominant with included bark.	Remove
13		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	6	36	11	1 Extreme Structure or Health Problems	Short trunk. Sprouts at 5 feet.	Remove
14		No	No	Cottonwood	<i>Populus deltoides</i>	23	6	19	1 Extreme Structure or Health Problems	8 stems at base.	Remove

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Offsite	Common Name	Species	DBH (in.)	Ht. Dia. Meas At (in.)	Canopy Radius (ft.)	Condition Rating	Comments	Project Status
15		No	No	Willow	<i>Salix laevigata</i>	19	6	20	2 Major Structure or Health Problems	3 stems at base. Leans northeast.	Preserve
16		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	29	6	18	1 Extreme Structure or Health Problems	4 stems at base. Located along fence. Under utility wires.	Preserve
17		Yes	Yes	Valley Oak	<i>Quercus lobata</i>	12	24	14	2 Major Structure or Health Problems	Located off property and extending into property by 13 feet.	Remove
18		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	11	6	10	1 Extreme Structure or Health Problems	Growing under utility wires. Topped at 4 feet.	Remove
19		No	Yes	Brazilian Pepper	<i>Schinus terebinthifolia</i>	13	12	16	1 Extreme Structure or Health Problems	Growing outside of fence under utility wires. Extends into property by 12 feet.	Remove
20		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	11	3	10	1 Extreme Structure or Health Problems	3 stems at base.	Remove
21		No	No	Cottonwood	<i>Populus deltoides</i>	18	36	20	2 Major Structure or Health Problems	Swollen base. Leans east, self-correcting. 3 leaders at 5 feet.	Remove
22		No	Yes	Brazilian Pepper	<i>Schinus terebinthifolia</i>	17	18	14	2 Major Structure or Health Problems	Growing outside fence and extends into property by 12 feet. Codominant at 2 feet and 3 feet.	Remove
23		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	54	6	11	1 Extreme Structure or Health Problems	11 stems at base. Under utility wires. Low branches.	Remove
24		No	No	Brazilian Pepper	<i>Schinus terebinthifolia</i>	36	3	22	2 Major Structure or Health Problems	8 stems at base. Low branches.	Remove
25		Yes	Yes	Black Walnut	<i>Juglans nigra</i>	42	3	38	1 Extreme Structure or Health Problems	7 leaders in bottom 2 feet. Next to fire hydrant. Extends into property by 14 feet.	Remove



Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Offsite	Common Name	Species	DBH (in.)	Ht. Dia. Meas At (in.)	Canopy Radius (ft.)	Condition Rating	Comments	Project Status
4531		Yes	No	Valley Oak	<i>Quercus lobata</i>	14	6	16	1 Extreme Structure or Health Problems	Buried flare. Codominant at 12 inches with included bark. Codominant at 3 and 4 feet.	Remove
5422	732	Yes	No	Valley Oak	<i>Quercus lobata</i>	10	6	13	2 Major Structure or Health Problems	Growing at fence line. Codominant at 18 inches. Low branching.	Preserve
5423		Yes	No	Valley Oak	<i>Quercus lobata</i>	11	42	15	2 Major Structure or Health Problems	Slightly buried base. Low north lateral. Codominant at 4 feet. Growing 19 feet east of utility lines and pole.	Preserve
5424		Yes	No	Valley Oak	<i>Quercus lobata</i>	14	6	17	1 Extreme Structure or Health Problems	Buried flare. Codominants at 12 inches with included bark. Crossing grafted leaders at 30 inches.	Preserve
5425		Yes	No	Valley Oak	<i>Quercus lobata</i>	11	3	18	1 Extreme Structure or Health Problems	Buried flare. Codominants at 12 inches with included bark. One-sided crown east.	Preserve
5426		Yes	No	Interior Live Oak	<i>Quercus wislizenii</i>	9	24	11	2 Major Structure or Health Problems	Normal flare. 3 codominants at 30 inches. Low branches.	Preserve
5427		Yes	No	Valley Oak	<i>Quercus lobata</i>	20	54	22	2 Major Structure or Health Problems	Normal flare. Laterals at 5, 6 and 7 feet. Under utility wires. End weights.	Preserve
5428		Yes	No	Interior Live Oak	<i>Quercus wislizenii</i>	12	6	16	1 Extreme Structure or Health Problems	Buried flare. 6 leaders at 12 inches. Dense growth.	Preserve
5429		Yes	No	Valley Oak	<i>Quercus lobata</i>	16	6	18	2 Major Structure or Health Problems	Buried flare. 3 leaders at 12 inches. Leaders lean outward. Low branches to ground.	Remove
5430		Yes	No	Valley Oak	<i>Quercus lobata</i>	12	12	16	2 Major Structure or Health Problems	Normal flare. Codominant at 2 feet with included bark. Low foliage.	Remove
5432		Yes	No	Valley Oak	<i>Quercus lobata</i>	15	3	17	2 Major Structure or Health Problems	Buried flare. Low north lateral 6 inches. Codominant at 2 feet with included bark. Low laterals.	Remove

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Offsite	Common Name	Species	DBH (in.)	Ht. Dia. Meas At (in.)	Canopy Radius (ft.)	Condition Rating	Comments	Project Status
5433		Yes	No	Valley Oak	<i>Quercus lobata</i>	6	54	6	2 Major Structure or Health Problems	Flat flare west. Trunk wound 36 inches, south side. Leaning/one-sided crown east. Codominant at 7 feet.	Remove
5434		Yes	No	Valley Oak	<i>Quercus lobata</i>	6	48	11	2 Major Structure or Health Problems	Low lateral at base north. Included branch 5 feet north. Suppressed top, northeast side.	Remove
5435		Yes	No	Interior Live Oak	<i>Quercus wislizenii</i>	11	3	14	1 Extreme Structure or Health Problems	3 stems at base. Leans north and east. One-sided crown east.	Remove
5436		Yes	No	Valley Oak	<i>Quercus lobata</i>	15	42	15	2 Major Structure or Health Problems	Normal flare. 3 codominant stems at 6 feet. Vertical branching.	Remove
5437		Yes	No	Valley Oak	<i>Quercus lobata</i>	11	36	17	1 Extreme Structure or Health Problems	Buried flare. Crooked main leader codominant at 6 feet. Low branches to ground.	Remove
5438		Yes	No	Valley Oak	<i>Quercus lobata</i>	14	54	22	1 Extreme Structure or Health Problems	Trunk wound east side from 0 to 6 feet. Under utility wires. One-sided crown southwest.	Preserve
5439		Yes	No	Valley Oak	<i>Quercus lobata</i>	26	36	27	2 Major Structure or Health Problems	Buried flare. Codominant at 6 feet. Growing under utility wires. Line clearance pruned north side.	Remove
5440		Yes	No	Valley Oak	<i>Quercus lobata</i>	16	6	16	2 Major Structure or Health Problems	Normal flare. Codominant at 18 inches with included bark. Low branches.	Remove
5441		Yes	No	Valley Oak	<i>Quercus lobata</i>	14	6	16	2 Major Structure or Health Problems	Buried flare. Codominant at 12 inches with included bark. Low branches.	Remove
5442		Yes	No	Valley Oak	<i>Quercus lobata</i>	17	12	16	2 Major Structure or Health Problems	Buried flare. Codominant at 30 inches with included bark. Low laterals. Branches to ground.	Remove
5443		Yes	No	Valley Oak	<i>Quercus lobata</i>	9	36	16	2 Major Structure or Health Problems	Surface root north. Swollen trunk at 30 inches. 3 codominants at 4 feet.	Remove

Tree #	Old Tag #	Tree of Local Importance 6"+ DBH	Offsite	Common Name	Species	DBH (in.)	Ht. Dia. Meas At (in.)	Canopy Radius (ft.)	Condition Rating	Comments	Project Status
5444		Yes	No	Valley Oak	<i>Quercus lobata</i>	12	3	14	2 Major Structure or Health Problems	Buried flare. Trunk wound north 12 to 24 inches. Codominant at 24 inches. Growing under utility wires.	Remove

<b>TOTAL INVENTORIED TREES = 44 trees (695 aggregate diameter inches)</b>
<b>TOTAL RECOMMENDED REMOVALS = 32 trees (526 aggregate diameter inches)</b>
<b>Rating (0-5, where 0 is remove) = 0=0 trees; 1=23 trees; 2=21 trees; 3=0 trees; 4=0 trees; 5=0 trees</b>
<b>Trees of Local Importance = 25 trees (355 aggregate diameter inches)</b>

## APPENDIX 3 – GENERAL PRACTICES FOR TREE PROTECTION

### **Definitions:**

**Root zone:** The roots of trees grow fairly close to the surface of the soil, and spread out in a radial direction from the trunk of tree. A general rule of thumb is that they spread 2 to 3 times the radius of the canopy, or 1 to 1 ½ times the height of the tree. It is generally accepted that disturbance to root zones should be kept as far as possible from the trunk of a tree.

**Inner Bark:** The bark on large valley oaks and coast live oaks is quite thick, usually 1" to 2". If the bark is knocked off a tree, the inner bark, or cambial region, is exposed or removed. The cambial zone is the area of tissue responsible for adding new layers to the tree each year, so by removing it, the tree can only grow new tissue from the edges of the wound. In addition, the wood of the tree is exposed to decay fungi, so the trunk present at the time of the injury becomes susceptible to decay. Tree protection measures require that no activities occur which can knock the bark off the trees.

### **Methods Used in Tree Protection:**

No matter how detailed Tree Protection Measures are in the initial Arborist Report, they will not accomplish their stated purpose unless they are applied to individual trees and a Project Arborist is hired to oversee the construction. The Project Arborist should have the ability to enforce the Protection Measures. The Project Arborist should be hired as soon as possible to assist in design and to become familiar with the project. He must be able to read and understand the project drawings and interpret the specifications. He should also have the ability to cooperate with the contractor, incorporating the contractor's ideas on how to accomplish the protection measures, wherever possible. It is advisable for the Project Arborist to be present at the Pre-Bid tour of the site, to answer questions the contractors may have about Tree Protection Measures. This also lets the contractors know how important tree preservation is to the developer.

**Root Protection Zone (RPZ):** Since in most construction projects it is not possible to protect the entire root zone of a tree, a Root Protection Zone is established for each tree to be preserved. The minimum Root Protection Zone is the area underneath the tree's canopy (out to the dripline, or edge of the canopy), plus 10'. The Project Arborist must approve work within the RPZ.

**Irrigate, Fertilize, Mulch:** Prior to grading on the site near any tree, the area within the Tree Protection fence should be fertilized with 4 pounds of nitrogen per 1000 square feet, and the fertilizer irrigated in. The irrigation should percolate at least 24 inches into the soil. This should be done no less than 2 weeks prior to grading or other root disturbing activities. After irrigating, cover the RPZ with at least 12" of leaf and twig mulch. Such mulch can be obtained from chipping or grinding the limbs of any trees removed on the site. Acceptable mulches can be obtained from nurseries or other commercial sources. Fibrous or shredded redwood or cedar bark mulch shall not be used anywhere on site.

**Fence:** Fence around the Root Protection Zone and restrict activity therein to prevent soil compaction by vehicles, foot traffic or material storage. The fenced area shall be off limits to all construction equipment, unless there is express written notification provided by the Project Arborist, and impacts are discussed and mitigated prior to work commencing.

No storage or cleaning of equipment or materials, or parking of any equipment can take place within the fenced off area, known as the RPZ.

The fence should be highly visible, and stout enough to keep vehicles and other equipment out. I recommend the fence be made of orange plastic protective fencing, kept in place by t-posts set no farther apart than 6’.

In areas of intense impact, a 6’ chain link fence is preferred.

In areas with many trees, the RPZ can be fenced as one unit, rather than separately for each tree.

Where tree trunks are within 3’ of the construction area, place 2” by 4” boards vertically against the tree trunks, even if fenced off. Hold the boards in place with wire. Do not nail them directly to the tree. The purpose of the boards is to protect the trunk, should any equipment stray into the RPZ.

**Elevate Foliage:** Where indicated, remove lower foliage from a tree to prevent limb breakage by equipment. Low foliage can usually be removed without harming the tree, unless more than 25% of the foliage is removed. Branches need to be removed at the anatomically correct location in order to prevent decay organisms from entering the trunk. For this reason, a contractor who is an ISA Certified Arborist should perform all pruning on protected trees.<sup>1</sup>

**Expose and Cut Roots:** Breaking roots with a backhoe, or crushing them with a grader, causes significant injury, which may subject the roots to decay. Ripping roots may cause them to splinter toward the base of the tree, creating much more injury than a clean cut would make. At any location where the root zone of a tree will be impacted by a trench or a cut (including a cut required for a fill and compaction), the roots shall be exposed with either a backhoe digging radially to the trunk, by hand digging, or by a hydraulic air spade, and then cut cleanly with a sharp instrument, such as chainsaw with a carbide chain. Once the roots are severed, the area behind the cut should be moistened and mulched. A root protection fence should also be erected to protect the remaining roots, if it is not already in place. Further grading or backhoe work required outside the established RPZ can then continue without further protection measures.

**Protect Roots in Deeper Trenches:** The location of utilities on the site can be very detrimental to trees. Design the project to use as few trenches as possible, and to keep them away from the major trees to be protected. Wherever possible, in areas where trenches will be very deep, consider boring under the roots of the trees, rather than digging the trench through the roots. This technique can be quite useful for utility trenches and pipelines.

**Protect Roots in Small Trenches:** After all construction is complete on a site, it is not unusual for the landscape contractor to come in and sever a large number of “preserved” roots during the installation of irrigation systems. The Project Arborist must therefore approve the landscape and irrigation plans. The irrigation system needs to be designed so the main lines are located outside the root zone of major trees, and the secondary lines are either laid on the surface (drip systems), or carefully dug with a hydraulic or air spade, and the flexible pipe fed underneath the major roots.

Design the irrigation system so it can slowly apply water (no more than ¼” to ½” of water per hour) over a longer period of time. This allows deep soaking of root zones. The system also needs to accommodate infrequent irrigation settings of once or twice a month, rather than several times a week.

**Monitoring Tree Health During and After Construction:** The Project Arborist should visit the site at least twice a month during construction to be certain the tree protection measures are being followed, to monitor the health of impacted trees, and make recommendations as to irrigation or other needs. After construction is

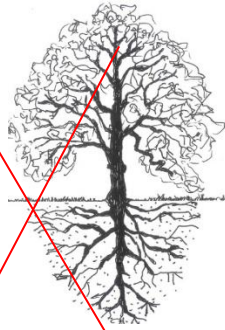
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<sup>1</sup> International Society of Arboriculture (ISA), maintains a program of Certifying individuals. Each Certified Arborist has a number and must maintain continuing education credits to remain Certified.

complete, the arborist should monitor the site monthly for one year and make recommendations for care where needed. If longer term monitoring is required, the arborist should report this to the developer and the planning agency overseeing the project.

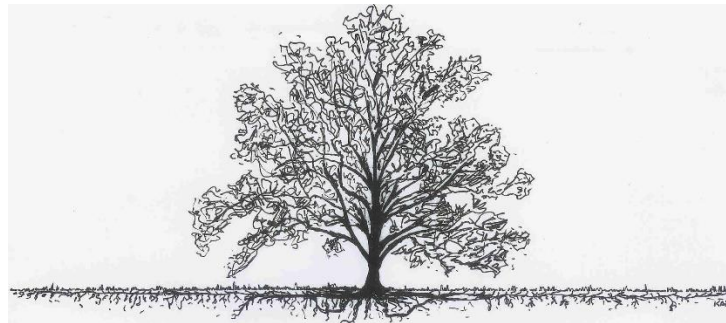
### Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy (see Drawing A below). The correct root structure of a tree is in Drawing B. All plants' roots need both water and air for survival. Surface roots are a common phenomenon with trees grown in compacted soil. Poor canopy development or canopy decline in mature trees is often the result of inadequate root space and/or soil compaction.



Drawing A

Common misconception of where tree roots are assumed to be located



Drawing B

The reality of where roots are generally located



### Structural Issues

Limited space for canopy development produces poor structure in trees. The largest tree in a given area, which is 'shading' the other trees is considered Dominant. The 'shaded' trees are considered Suppressed. The following picture illustrates this point. Suppressed trees are more likely to become a potential hazard due to their poor structure.

Dominant Tree

Growth is upright

Canopy is balanced by limbs and foliage equally

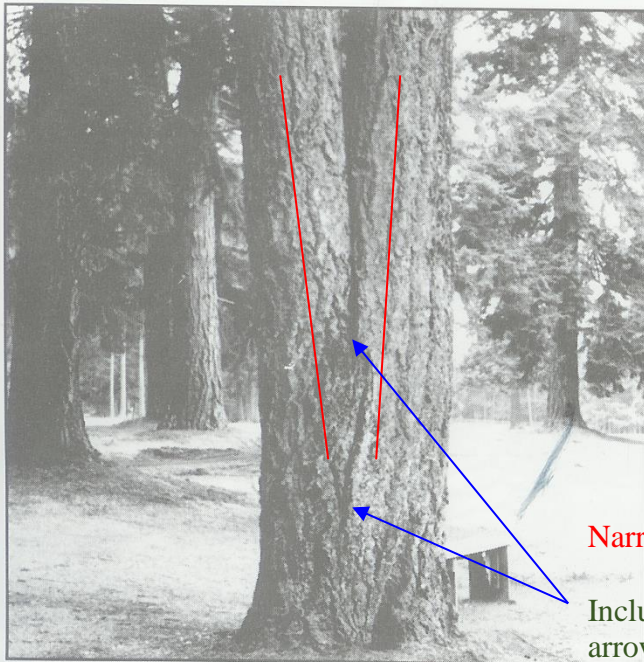


Suppressed Tree

Canopy weight all to one side

Limbs and foliage grow away from dominant tree

Co-dominant leaders are another common structural problem in trees.



The tree in this picture has a co-dominant leader at about 3' and included bark up to 7 or 8'. Included bark occurs when two or more limbs have a narrow angle of attachment resulting in bark between the stems – instead of cell to cell structure. This is considered a critical defect in trees and is the cause of many failures.

Narrow Angle

Included Bark between the arrows

Figure 6. Codominant stems are inherently weak because the stems are of similar diameter.

Photo from Evaluation of Hazard Trees in Urban Areas by Nelda P. Matheny and James R. Clark, 1994 International Society of Arboriculture

### Pruning Mature Trees for Risk Reduction

There are few good reasons to prune mature trees. Removal of deadwood, directional pruning, removal of decayed or damaged wood, and end-weight reduction as a method of mitigation for structural faults are the only reasons a mature tree should be pruned. Live wood over 3” should not be pruned unless absolutely necessary. Pruning cuts should be clean and correctly placed. Pruning should be done in accordance with the American National Standards Institute (ANSI) A300 standards. It is far better to use more small cuts than a few large cuts as small pruning wounds reduce risk while large wounds increase risk.

Pruning causes an open wound in the tree. Trees do not “heal” they compartmentalize. Any wound made today will always remain, but a healthy tree, in the absence of decay in the wound, will ‘cover it’ with callus tissue. Large, old pruning wounds with advanced decay are a likely failure point. Mature trees with large wounds are a high failure risk.

Overweight limbs are a common structural fault in suppressed trees. There are two remedial actions for overweight limbs (1) prune the limb to reduce the extension of the canopy, or (2) cable the limb to reduce movement. Cables do not hold weight they only stabilize the limb and require annual inspection.



Normal limb structure

Over weight, reaching limb with main stem diameter small compared with amount of foliage present



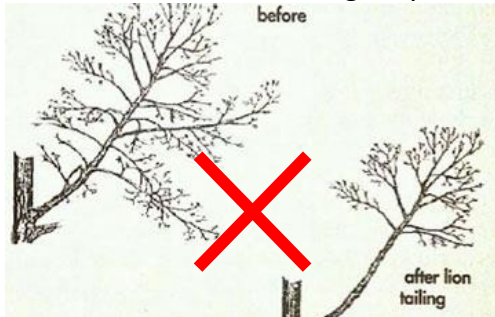
Photo of another tree – not at this site

Photo of another tree – not at this site.



Lion’s – Tailing is the pruning practice of removal of “an excessive number of inner and/or lower lateral branches from parent branches. Lion’s tailing is not an acceptable pruning practice” ANSI A300 (part 1) 4.23. It increases the risk of failure.

Pruning – Cutting back trees changes their natural structure, while leaving trees in their natural form enhances longevity.



### Arborist Classifications

There are different types of Arborists:

Tree Removal and/or Pruning Companies. These companies may be licensed by the State of California to do business, but they do not necessarily know anything about trees;

Arborists. Arborist is a broad term. It is intended to mean someone with specialized knowledge of trees but is often used to imply knowledge that is not there.

ISA Certified Arborist: An International Society of Arboriculture Certified Arborist is someone who has been trained and tested to have specialized knowledge of trees. You can look up certified arborists at the International Society of Arboriculture website: [isa-arbor.org](http://isa-arbor.org).

Consulting Arborist: An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and tested to have specialized knowledge of trees and trained and tested to provide high quality reports and documentation. You can look up registered consulting arborists at the American Society of Consulting Arborists website: <https://www.asca-consultants.org/>

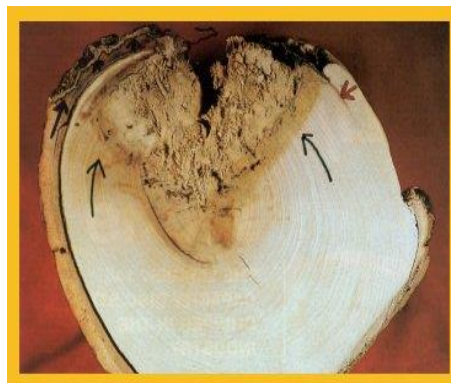
## Decay in Trees

**Decay (in General):** Fungi cause all decay of living trees. Decay is considered a disease because cell walls are altered, wood strength is affected, and living sapwood cells may be killed. Fungi decay wood by secreting enzymes. Different types of fungi cause different types of decay through the secretion of different chemical enzymes. Some decays, such as white rot, cause less wood strength loss than others because they first attack the lignin (causes cell walls to thicken and reduces susceptibility to decay and pest damage) secondarily the cellulose (another structural component in a cell walls). Others, such as soft rot, attack the cellulose chain and cause substantial losses in wood strength even in the initial stages of decay. Brown rot causes wood to become brittle and fractures easily with tension. Identification of internal decay in a tree is difficult because visible evidence may not be present.



According to Evaluation of Hazard Trees in Urban Areas (Matheny, 1994) decay is a critical factor in the stability of the tree. As decay progresses in the trunk, the stem becomes a hollow tube or cylinder rather than a solid rod. This change is not readily apparent to the casual observer. Trees require only a small amount of bark and wood to transport water, minerals and sugars. Interior heartwood can be eliminated (or degraded) to a great degree without compromising the transport process. Therefore, trees can contain significant amounts of decay without showing decline symptoms in the crown.

additional cells. The weakest of the vertical wall. Accordingly, decay progression inward at large are more than one pruning cut trunk of the tree, the likelihood of decay progression and the associated structural loss of integrity of the internal wood is high.



Compartmentalization of decay in trees is a biological process in which the cellular tissue around wounds is changed to inhibit fungal growth and provide a barrier against the spread of decay agents into the barrier zones is the formation of while a tree may be able to limit pruning cuts, in the event that there located vertically along the main

## Oak Tree Impacts

Our native oak trees are easily damaged or killed by having the soil within the Critical Root Zone (CRZ) disturbed or compacted. All of the work initially performed around protected trees that will be saved should be done by people rather than by wheeled or track type tractors. Oaks are fragile giants that can take little change in soil grade, compaction, or warm season watering. Don't be fooled into believing that warm season watering has no adverse effects on native oaks. Decline and eventual death can take as long as 5-20 years with poor care and inappropriate watering. Oaks can live hundreds of years if treated properly during construction, as well as later with proper pruning, and the appropriate landscape/irrigation design.

# **APPENDIX H**

## **ARBORIST REPORT AND TREE INVENTORY SUMMARY (LOT B)**

**ARBORIST REPORT  
AND  
TREE INVENTORY SUMMARY**

**10000 WATERMAN ROAD PROJECT SITE  
City of Elk Grove, California**

**Prepared for:**

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**Prepared by:**

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**September 16, 2019**

**TABLE OF CONTENTS**

COPYRIGHT STATEMENT ..... i

QUALIFICATION STATEMENT ..... ii

INTRODUCTION ..... 1

LOCATION AND SITE ..... 1

SCOPE OF INVENTORY EFFORT ..... 1

METHODOLOGY ..... 2

SUMMARY OF INVENTORY EFFORT ..... 2

*Recommended Removals*..... 3

CONSTRUCTION IMPACT ASSESSMENT ..... 4

GENERAL COMMENTS AND ARBORISTS’ DISCLAIMER..... 5

ASSUMPTIONS AND LIMITING CONDITIONS ..... 7

DEFINITIONS..... 9

TREE CONDITION RATING CRITERIA..... 10

GENERAL PROTECTION GUIDELINES FOR TREES PLANNED FOR  
PRESERVATION..... 11

APPENDICES:

- A. Tree Inventory Summary (sorted by tree number)
- B. Tree Inventory Field Exhibit

## **COPYRIGHT STATEMENT**

This consultant's report, dated September 16, 2019, is for the exclusive and confidential use of Buzz Oates concerning potential development of the 10000 Waterman Road Project Site, located in the City of Elk Grove, California. Any use of this report, the accompanying appendices, or portions thereof, other than for project review and approval by appropriate governmental authorities, shall be subject to and require the written permission of Sierra Nevada Arborists. Unauthorized modification, distribution and/or use of this report, including the data or portions thereof contained within the accompanying appendices, is strictly prohibited.

## **QUALIFICATION STATEMENT**

Sierra Nevada Arborists is a fully insured, Roseville, California-based arboriculture consulting firm founded in January of 1998 by its Principal, Edwin E. Stirtz. Mr. Stirtz is an ISA Certified Arborist and is ISA Tree Risk Assessment Qualified. He is a member of the American Society of Consulting Arborists and International Society of Arboriculture. Mr. Stirtz possesses in excess of 40 years of experience in arboriculture, forestry, and horticulture, both maintenance and construction, and has spent the last 29 years as a consultant focusing on preservation and compliance with environmental regulations in the Sacramento and surrounding regions.

## **INTRODUCTION**

Sierra Nevada Arborists is pleased to present this Arborist Report and Tree Inventory Summary for the trees located within and/or overhanging the 10000 Waterman Road property located in the City of Elk Grove, California. This Arborist Report and Tree Inventory Summary memorializes tree data obtained by Edwin E. Stirtz, ISA Certified Arborist WE-0510A, at the time of field reconnaissance and inventory efforts on September 11, 2019.

## **LOCATION AND SITE**

The site is a flat agricultural field. It is bounded by commercial uses to the south. A railroad line abuts the west boundary. Waterman Road abuts the east boundary. Commercial and agricultural land abuts the north boundary.

## **SCOPE OF INVENTORY EFFORT**

The City of Elk Grove Tree Preservation and Protection Ordinance (Elk Grove Municipal Code Chapter 19.12) regulates both the removal of “trees of local importance” and “secured trees,” and the encroachment of construction activities within their critical root zone area. The City of Elk Grove Tree Preservation and Protection Ordinance currently defines a “tree of local importance” as:

The following species of trees with a diameter at breast height of six inches or greater, or multi trunked trees with a combined diameter at breast height of six inches or greater: Coast Live Oak (*Quercus agrifolia*); Valley Oak (*Quercus lobata*); Blue Oak (*Quercus douglasii*); Interior Live Oak (*Quercus wislizenii*); Oracle Oak (*Quercus morehus*); California Sycamore (*Platanus racemosa*); and California Black Walnut (*Juglans hindsii*).

At the request of Buzz Oates, on September 11, 2019, Edwin E. Stirtz of Sierra Nevada Arborists visited the 10000 Waterman Road Project Site, located in the City of Elk Grove. The purpose of this field reconnaissance effort was to identify, inventory, and comment upon the current structure and vigor of the “Trees of Local Importance” within and/or overhanging the project area which met the defined standards of the Tree Preservation Ordinance. Specifically, we were to update the previous Arborist Report prepared in September 2005.



## **METHODOLOGY**

During field reconnaissance and inventory efforts, Edwin E. Stirtz of Sierra Nevada Arborists conducted a visual review from ground level of the trees within and/or overhanging the project site. The trees which met the defined criteria were identified in the field by affixing round tags with blue flagging to the tree trunks. The tree numbers utilized in this report and accompanying Tree Inventory Summary correspond to the tree tags which were affixed to the trees in the field, and those tree numbers or grouping of numbers were rough-plotted on the attached Tree Inventory Field Exhibit so that the precise vertical and horizontal location of the trees may be surveyed in the field by a licensed land surveyor and data for the trees (i.e. tree number, diameter, dripline and protected root zone radii) may be properly depicted on future development plans and Tree Location Exhibit.

At the time of field identification and inventory efforts specific data was gathered for each tagged tree including the tree's species, diameter measured at breast height ("DBH") and dripline radius ("DLR"). Utilizing this data, the tree's overall structural condition and vigor were separately assessed ranging from "excellent"<sup>1</sup> to "poor" based upon the observed characteristics noted within the tree and the Arborist's best professional judgment. Ratings are subjective and are dependent upon both the structure and vigor of the tree. The vigor rating considers factors such as the size, color and density of the foliage; the amount of deadwood within the canopy; bud viability; evidence of wound closure; and the presence or evidence of stress, disease, nutrient deficiency and insect infestation. The structural rating reflects the root crown/collar, trunk and branch configurations; canopy balance; the presence of included bark, weak crotches and other structural defects and decay and the potential for structural failure. Finally, notable characteristics were documented and recommendations on a tree-by-tree basis were made which logically followed the observed characteristics noted within the trees at the time of the field inventory effort. The recommendations are based on the assumption that the tree would be introduced into a developed environment and may require maintenance and/or may not be suitable for retention within a post-development setting.

## **SUMMARY OF INVENTORY EFFORT**

Field reconnaissance and inventory efforts found 12 trees measuring 4 inches in diameter and larger measured at breast height within and/or overhanging the proposed project area. Composition of the 12 inventoried trees includes the following species and accompanying aggregate diameter inches:

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<sup>1</sup> It is rare that a tree qualifies in an "excellent" category, and it should be noted that there were no trees observed within the project area which fell within the criteria of an "excellent" or "good" rating. A complete description of the terms and ratings utilized in this report and accompany inventory summary are found on pages 9-10.

<b>SPECIES DIVERSIFICATION</b>			
California Black Walnut	=	2 trees	(56 aggregate diameter inches)
Chinese Pistache	=	2 trees	(29 aggregate diameter inches)
Elm	=	1 tree	(22 aggregate diameter inches)
Valley Oak	=	7 trees	(143 aggregate diameter inches)
<b>TOTAL</b>	=	<b>12 trees</b>	<b>(250 aggregate diameter inches)</b>

<b>CONDITIONAL RATINGS (1-6, where 6 is remove)</b>
1 = None
2 = None
3 = 4 trees
4 = 1 tree
5 = None
6 = 7 trees
<b>TOTAL = 12 trees</b>

<b>SUITABILITY FOR PRESERVATION (P/M/G)</b>
Poor (low) = 2 trees
Moderate (may be okay to keep) = 9 trees
Moderate to Good = 1 tree
Good (okay to keep) = None
<b>TOTAL = 12 trees</b>

<b>TREES OF LOCAL IMPORTANCE</b>			
California Black Walnut	=	2 trees	(0 aggregate diameter inches)
Valley Oak	=	7 trees	(84 aggregate diameter inches)
<b>TOTAL</b>	=	<b>9 trees</b>	<b>(84 aggregate diameter inches)</b>

**Recommended Removals**

At this time, 7 trees have been recommended for removal from the proposed project area due to the nature and extent of defects, compromised health, and/or structural instability noted at the time of field inventory efforts. If these trees were retained within the proposed project area, it is our opinion that they may be hazardous depending upon their proximity to planned development activities. For reference, the trees which have been recommended for removal due to the severity of noted defects, compromised health, and/or structural instability are highlighted in green within the accompanying Tree Inventory Summary and are briefly summarized as follows:

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT	
						STRUCTURE	VIGOR
132	California Black Walnut	<i>(Juglans hindsii)</i>	4,4,6,6,8,8,10	46	24	Poor	Poor to fair
133	California Black Walnut	<i>(Juglans hindsii)</i>	3,3,4	10	8	Poor	Poor
135	Elm	<i>(Ulmus)</i>		22	19	Poor	Poor
136	Valley Oak	<i>(Quercus lobata)</i>		20	21	Poor to fair	Poor to fair
137	Valley Oak	<i>(Quercus lobata)</i>		22	23	Poor to fair	Poor to fair
139	Valley Oak	<i>(Quercus lobata)</i>		17	19	Poor to fair	Poor to fair
140	Chinese Pistache	<i>(Pistacia chinensis)</i>		11	8	Poor	Poor

It should also be noted that some of the trees within the proposed project area are trees which may be undesirable on residential lots, or are trees which will require periodic/seasonal monitoring to assess the trees' ongoing structural integrity. At this early stage of the project Sierra Nevada Arborists has not recommended the removal of these trees since development plans, including proposed home sites and building footprints, have not yet been finalized and the precise location of these trees in proximity to planned improvement activities is not known. At this time, it is recommended that these trees be monitored and thoroughly inspected by a qualified ISA Certified Arborist on at least an annual basis to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

### **CONSTRUCTION IMPACT ASSESSMENT**

This Arborist Report and Tree Inventory Summary is intended to provide to Buzz Oates, the City of Elk Grove, and other members of the development team a detailed *pre-development review* of the species, size, and current structure and vigor of the trees within and/or overhanging the proposed project area. It is not an exhaustive review of the impacts which will be sustained from project implementation. At this early stage of the project specific root system and canopy impacts on a tree-by-tree basis cannot be definitively assessed until the site development, grading, and other improvement plans have been refined and finalized and data from the accompanying inventory summary (i.e., tree numbers, dripline radius, and root protection zones) is properly depicted on the plans.

Since trees are living organisms whose condition may change at any time a complete assessment of construction impacts and specific recommendations to help mitigate for the adverse impacts which may be sustained by the trees from contemplated construction activities cannot be made until the development plans have been refined and finalized. Once final plans have been developed for the site a qualified ISA Certified Arborist with special expertise and demonstrated experience with construction projects in and among native and

non-native trees should review those plans and provide a more detailed assessment of impacts, including identification of trees which may require removal to facilitate home construction and other contemplated site development activities. This review will be particularly important if structures and/or residential activities will fall within or near the fall zone of a tree which has been noted as exhibiting structural defects, questionable long-term longevity and/or a conditional rating which is less than “fair”, and for trees which measure 16 inches and greater in diameter which will be retained within close proximity to development as trees of this size may pose a more significant hazard if a sudden limb shed and/or catastrophic failure should occur. In addition, the review should include an assessment of root system and canopy impacts which will be sustained by the trees which will be retained within the proposed development area, along with specific recommendations on a tree-by-tree basis to help reduce adverse impacts of construction on the retained trees. In the meantime, this report provides some pre-development recommendations which logically follow the observed characteristics noted in the trees at the time of the field inventory efforts, as well as General Protection Measures which should be utilized as a guideline for the protection of trees which may be retained within the development area. These recommendations will require modification and/or augmentation as development plans are refined and finalized.

### **GENERAL COMMENTS AND ARBORISTS' DISCLAIMER**

The City of Elk Grove regulates both the removal of “protected trees” and the encroachment of construction activities within their driplines. Therefore, a tree permit and/or additional development authorization should be obtained from the City of Elk Grove prior to the removal of any trees within the proposed project area. All terms and conditions of the tree permit and/or other Conditions of Approval are the sole and exclusive responsibility of the project applicant. It should be noted that prior to final inspection written verification from an ISA Certified Arborist may be required certifying the approved removal activities and/or implementation of other Conditions of Approval outlined for the retained trees on the site. ***Sierra Nevada Arborists will not provide written Certification of Compliance unless we have been provided with a copy of the approved site development plans, applicable permits and/or Conditions of Approval, and are on site to monitor and observe regulated activities during the course of construction.*** Therefore, it will be necessary for the project applicant to notify Sierra Nevada Arborists well in advance (at least 72 hours prior notice) of any regulated activities which are scheduled to occur on site so that those activities can be properly monitored and documented for compliance certification.

Please bear in mind that implementation of the recommendations provided within this report will help to reduce adverse impacts of construction on the retained trees; however, implementation of any recommendations should not be viewed as a guarantee or warranty against the trees' ultimate demise and/or failure in the future. Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of the trees and ***attempt to reduce the risk of living near trees***. Arborists cannot detect every condition that could possibly lead to the

structural failure of a tree. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Entities who choose to construct homes on wooded property are accepting a certain level of risk from unpredictable tree related hazards such as toppling in storms, limbs falling and fires that may damage property at some time in the future. Since trees are living organisms their structure and vigor constantly change over time, and they are not immune to changes in site conditions or seasonal variations in the weather. Further, conditions are often hidden within the tree and/or below ground. Arborists and other tree care professionals cannot guarantee that a tree will be healthy and/or safe under all circumstances or for a specific period of time. Likewise, remedial treatments cannot be guaranteed. Trees can be managed but they cannot be controlled. To develop land and live near trees is to accept some degree of risk and the only way to eliminate all risk associated with trees would be to eliminate all of the trees. ***An entity who develops land and builds a home with a tree in the vicinity should be aware of and inform their future residents of this Arborists' Disclaimer, and be further advised that the developer and the future residents assume the risk that a tree could at any time suffer a branch and/or limb failure, blow over in a storm and/or fail for no apparent reason which may cause bodily injury or property damage.*** Sierra Nevada Arborists cannot predict acts of nature including, without limitation, storms of sufficient strength which can even take down a tree with a structurally sound and vigorous appearance.

Finally, the trees preserved within and/or overhanging the proposed project area will experience a physical environment different from the pre-development environment. As a result, tree health and structural stability should be regularly monitored. Occasional pruning, fertilization, mulch, pest management, replanting and/or irrigation may be required. In addition, ***provisions for monitoring both tree health and structural stability following construction must be made a priority.*** As trees age, the likelihood of failure of branches or entire trees increases. Therefore, ***the future management plan must include an annual inspection*** by a qualified ISA Certified Arborist to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

Thank you for allowing Sierra Nevada Arborists to assist you with this review. Please feel free to give me a call if you have any questions or require additional information and/or clarification.

Sincerely,



Edwin E. Stirtz  
International Society of Arboriculture  
Certified Arborist WE-0510A  
ISA Tree Risk Assessment Qualified  
Member, American Society of Consulting Arborists

## **ASSUMPTIONS AND LIMITING CONDITIONS**

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
4. The consultant shall not be required to give a deposition and/or attend court by reason of this report unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to our standard fee schedule, adjusted yearly, and terms of the subsequent contract of engagement.
5. Loss or alteration of any part of this report invalidates the entire report. Ownership of any documents produced passes to the Client only when all fees have been paid.
6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.
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10. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.
11. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
12. This report is based on the observations and opinions of Edwin E. Stirtz, and does not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described herein. Neither this author nor Sierra Nevada Arborists has assumed any responsibility for liability associated with the trees on or adjacent to this Project Site, their future demise and/or any damage which may result therefrom.
13. The information contained within this report is true to the best of the author's knowledge and experience as of the date it was prepared; however, certain conditions may exist which only a comprehensive, scientific, investigation might reveal which should be performed by other consulting professionals.
14. The legal description, dimensions, and areas herein are assumed to be correct. No responsibility is assumed for matters that are legal in nature.
15. Any changes to an established tree's environment can cause its decline, death and/or structural failure.

## **DEFINITIONS**

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter (“DBH”):	This is the trunk diameter measured at breast height (industry standard 4.5 feet above ground level).
Dripline radius (“DLR”):	A radius equal to the horizontal distance from the trunk of the tree to the end of the farthest most branch tip prior to any cutting. When depicted on a map, the dripline will appear as an irregularly shaped circle that follows the contour of the tree’s branches as seen from overhead.
Protected Zone:	A circle equal to the largest radius of a protected tree’s dripline plus 1 foot.
Root Crown:	Assessment of the root crown/collar area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree’s main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree’s leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Recommendation:	Pre-development recommendations based upon observed characteristics noted at the time of the field inventory effort.
Obscured:	Occasionally some portion of the tree may be obscured from visual inspection due to the presence of dense vegetation which, during the course of inspection for the arborist report, prevented a complete evaluation of the tree. In these cases, if the tree is to be retained on site the vegetation should be removed to allow for a complete assessment of the tree prior to making final decisions regarding the suitability for retention.



### **TREE CONDITION RATING CRITERIA**

<b>RATING TERM</b>	<b>ROOT CROWN</b>	<b>TRUNK</b>	<b>LIMBS</b>	<b>FOLIAGE</b>	<b>STRUCTURE</b>	<b>VIGOR</b>
Good	No apparent injuries, decay, cavities or evidence of hollowing; no anchoring roots exposed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; no codominant attachments or multiple trunk attachments are observed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; below average amount of dead limbs or twigs; no major limb failures or included bark; callus growth is vigorous	Leaf size, color and density are typical for the species; buds are normal in size, viable, abundant and uniform throughout the canopy; annual seasonal growth increments are average or above average; no insect or disease infestations/ infections evident	No apparent structural defects; no weak crotches; no excessively weighted branches and no significant cavities or decay	Tree appears healthy and has little or no significant deadwood; foliage is normal and healthy
Fair	Small to moderate injuries, decay, cavities or hollowing may be evident but are not currently affecting the overall structure; some evidence of infestation or disease may be present but is not currently affecting the tree's structure	Small to moderate injuries, decay, cavities or hollowing may be evident; codominant branching or multiple trunk attachments or minor bark inclusion may be observed; some infestation or disease may be present but not currently affecting the tree's structure	Small to moderate injuries, decay or cavities may be present; average or above average dead limbs or twigs may be present; some limb failures or bark inclusion observed; callus growth is average	Leaf size, color and density are typical or slightly below typical for the species; buds are normal or slightly sparse with potentially varied viability, abundance and distribution throughout the canopy; annual seasonal growth increments are average or slightly below average; minor insect or disease infestation/infection may be present	Minor structural problems such as weak crotches, minor wounds and/or cavities or moderate amount of excessive weight; non-critical structural defects which can be mitigated through pruning, cabling or bracing	Tree appears stressed or partially damaged; minimal vegetative growth since previous season; moderate amount of deadwood, abnormal foliage and minor lesions or cambium dieback
Poor	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the overall structure; presence of infestation or disease may be significant and affecting the tree's structure	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the tree's structure; presence of infestation or disease may be significant and affecting the tree's structure	Severe injuries, decay or cavities may be present; major deadwood, twig dieback, limb failures or bark inclusion observed; callus growth is below average	Leaf size, color and density are obviously abnormal; buds are obviously abnormal or absent; annual seasonal growth is well below average for the species; insect or disease problems may be severe	Obvious major structural problems which cannot be corrected with mitigation; potential for major limb, trunk or root system failure is high; significant decay or dieback may be present	Tree health is declining; no new vegetative growth; large amounts of deadwood; foliage is severely abnormal

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both

## **GENERAL PROTECTION GUIDELINES FOR TREES PLANNED FOR PRESERVATION**

Great care must be exercised when work is conducted upon or around protected trees. The purpose of these General Protection Measures is to provide guidelines to protect the health of the affected protected trees. These guidelines apply to all encroachments into the protected zone of a protected tree, and may be incorporated into tree permits and/or other Conditions of Approval as deemed appropriate by the applicable governing body.

- A circle with a radius measurement from the trunk of the tree to the tip of its longest limb, plus one foot, shall constitute the critical root zone protection area of each protected tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each protected tree. Removing limbs that make up the dripline does not change the protected area.
- Any protected trees on site which require pruning shall be pruned by an ISA Certified Arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards, ANSI Standard 2133.1-2000 regarding safety practices, and the International Society of Arboriculture (ISA) “Tree Pruning Guidelines” and Best Management Practices.
- Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the root protection zone of the protected trees in order to avoid damage to the tree canopies and root systems. Fencing shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall contact the Project Arborist and the Planning Department for an inspection of the fencing prior to commencing construction activities on site.
- Signs shall be installed on the protective fence in four (4) equidistant locations around each individual protected tree. The size of each sign must be a minimum of two (2) feet by two (2) feet and must contain the following language:

**WARNING: THIS FENCE SHALL NOT BE REMOVED OR RELOCATED  
WITHOUT WRITTEN AUTHORIZATION FROM THE CITY OF  
ELK GROVE.**

Once approval has been obtained by the City of Elk Grove protective fencing shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down or otherwise modified in whole or in part without prior written authorization from the Agency, or as deemed necessary by the Project Arborist to facilitate approved activities within the root protection zone.

- Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected tree shall be done under the direct supervision of the Project Arborist. To the maximum extent feasible, demolition work within the dripline protection area of the protected tree shall be performed by hand. If the Project Arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used.
- No signs, ropes, cables (except those which may be installed by an ISA Certified Arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of identification in preparing tree reports and inventories shall be allowed.
- No vehicles, construction equipment, mobile homes/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.
- Drainage patterns on the site shall not be modified so that water collects, stands or is diverted across the dripline of any protected tree.
- No trenching shall be allowed within the driplines of protected trees, except as specifically approved by the Planning Department as set forth in the project's Conditions of Approval and/or approved tree permit. If it is absolutely necessary to install underground utilities within the dripline of a protected tree the utility line within the protected zone shall be "bored and jacked" or performed utilizing hand tools to avoid root injury under the direct supervision of the Project Arborist.
- Grading within the protected zone of a protected tree shall be minimized. Cuts within the protected zone shall be maintained at less than 20% of the critical root zone area. Grade cuts shall be monitored by the Project Arborist. Any damaged roots encountered shall be root pruned and properly treated as deemed necessary by the Project Arborist.
- Minor roots less than one (1) inch in diameter encountered during approved excavation and/or grading activities may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area as deemed necessary by the Project Arborist.
- Major roots greater than one (1) inch in diameter encountered during approved excavation and/or grading activities may not be cut without approval of the Project Arborist. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the roots and the tree.

- Cut faces, which will be exposed for more than 2-3 days, shall be covered with dense burlap fabric and watered to maintain soil moisture at least on a daily basis (or possibly more frequently during summer months). If any native ground surface fabric within the protected zone must be removed for any reason, it shall be replaced within forty-eight (48) hours.
- If fills exceed 1 foot in depth up to 20% of the critical root zone area, aeration systems may serve to mitigate the presence of the fill materials as determined by the Project Arborist.
- When fill materials are deemed necessary on two or three sides of a tree it is critical to provide for drainage away from the critical root zone area of the tree (particularly when considering heavy winter rainfalls). Overland releases and subterranean drains dug outside the critical root zone area and tied directly to the main storm drain system are two options.
- In cases where a permit has been approved for construction of a retaining wall(s) within the protected zone of a protected tree the applicant will be required to provide for immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall within the protected zone of the protected tree shall be constructed within seventy-two (72) hours after completion of grading within the root protection zone.
- The construction of impervious surfaces within the dripline of a protected tree shall be minimized. When necessary, a piped aeration system shall be installed under the direct supervision of the Project Arborist.
- Preservation devices such as aeration systems, tree wells, drains, special paving and cabling systems must be installed in conformance with approved plans and certified by the Project Arborist.
- No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the dripline of a protected tree. An above ground drip irrigation system is recommended. An independent low-flow drip irrigation system may be used for establishing drought-tolerant plants within the protected zone of a protected tree. Irrigation shall be gradually reduced and discontinued after a two (2) year period.
- All portions of permanent fencing that will encroach into the protected zone of a protected tree shall be constructed using posts set no closer than ten (10) feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the tree(s).

- Landscaping beneath native oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. Planting live material under protected native oak trees is generally discouraged, and is not recommended within six (6) feet of the trunk of a native oak tree with a diameter at breast height (DBH) of eighteen (18) inches or less, or within ten (10) feet of the trunk of a native oak tree with a DBH of more than eighteen (18) inches. The only plant species which shall be planted within the dripline of native oak trees are those which are tolerant of the natural, semi-arid environs of the tree(s).

**BUZZ OATES**  
**10000 Waterman Road Project Site**  
**City of Elk Grove, California**  
**TREE INVENTORY SUMMARY**

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						Rating (1-6)	Preservation (P/M/G)	Trees of Local Importance	NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
132	California Black Walnut	<i>(Juglans hindsii)</i>	4,4,6,6,8,8,10	46	24	Poor to fair	Poor to fair	Poor to fair	Poor to fair	Poor	Poor to fair	6	P	0	Branches at 2' above grade. Very sparse canopy on the north and east sides of the tree. Above average amount of deadwood.	<i>Recommend removal due to nature and extent of noted defects.</i>
133	California Black Walnut	<i>(Juglans hindsii)</i>	3,3,4	10	8	Poor	Poor	Poor	Poor	Poor	Poor	6	P	0	Branches at grade. Above average amount of deadwood. Upper canopy is dead.	<i>Recommend removal due to nature and extent of noted defects.</i>
134	Valley Oak	<i>(Quercus lobata)</i>		22	21	Fair	Fair	Fair	Fair	Poor to fair	Poor to fair	3	M	22	Out of balance/leaning east and growing over the roadway. Pruned for utility line clearance. Above average amount of deadwood.	None at this time.
135	Elm	<i>(Ulmus)</i>		22	19	Fair	Poor	Poor	Poor	Poor	Poor	6	M-G		<b>AKA Tree 520</b> Branches at 8' above grade. Weakly attached codominant stems. Limb failure, south side. Tree is 75% dead.	<i>Recommend removal due to nature and extent of noted defects.</i>
136	Valley Oak	<i>(Quercus lobata)</i>		20	21	Poor	Poor	Poor	Poor to fair	Poor to fair	Poor to fair	6	M	0	Galvanized pipe embedded in root collar, east side. Basal trunk wounds, north side, 1' above grade with moderate decay. Abundant wasp galls and infestation. Dieback in the upper canopy. Above average amount of deadwood.	<i>Recommend removal due to nature and extent of noted defects.</i>
137	Valley Oak	<i>(Quercus lobata)</i>		22	23	Poor to fair	Fair	Poor to fair	Poor	Poor to fair	Poor to fair	6	M	0	Galvanized pipe embedded in the root collar, north side. Extensive foliage dieback in the lower canopy. Extensive oak galls and infestation. Out of balance southeast.	<i>Recommend removal due to nature and extent of noted defects.</i>
138	Valley Oak	<i>(Quercus lobata)</i>		31	29	Fair	Fair	Fair	Poor to fair	Poor to fair	Poor to fair	4	M	31	Leans east. Out of balance southeast. Branches at 11' above grade. Weakly attached codominant stems with inclusions. Extensive dieback in the lower canopy. Above average amount of deadwood.	<i>Prune deadwood, perform canopy lift, perform aerial inspection of the crotches, looking for decay, and provide further recommendations.</i>

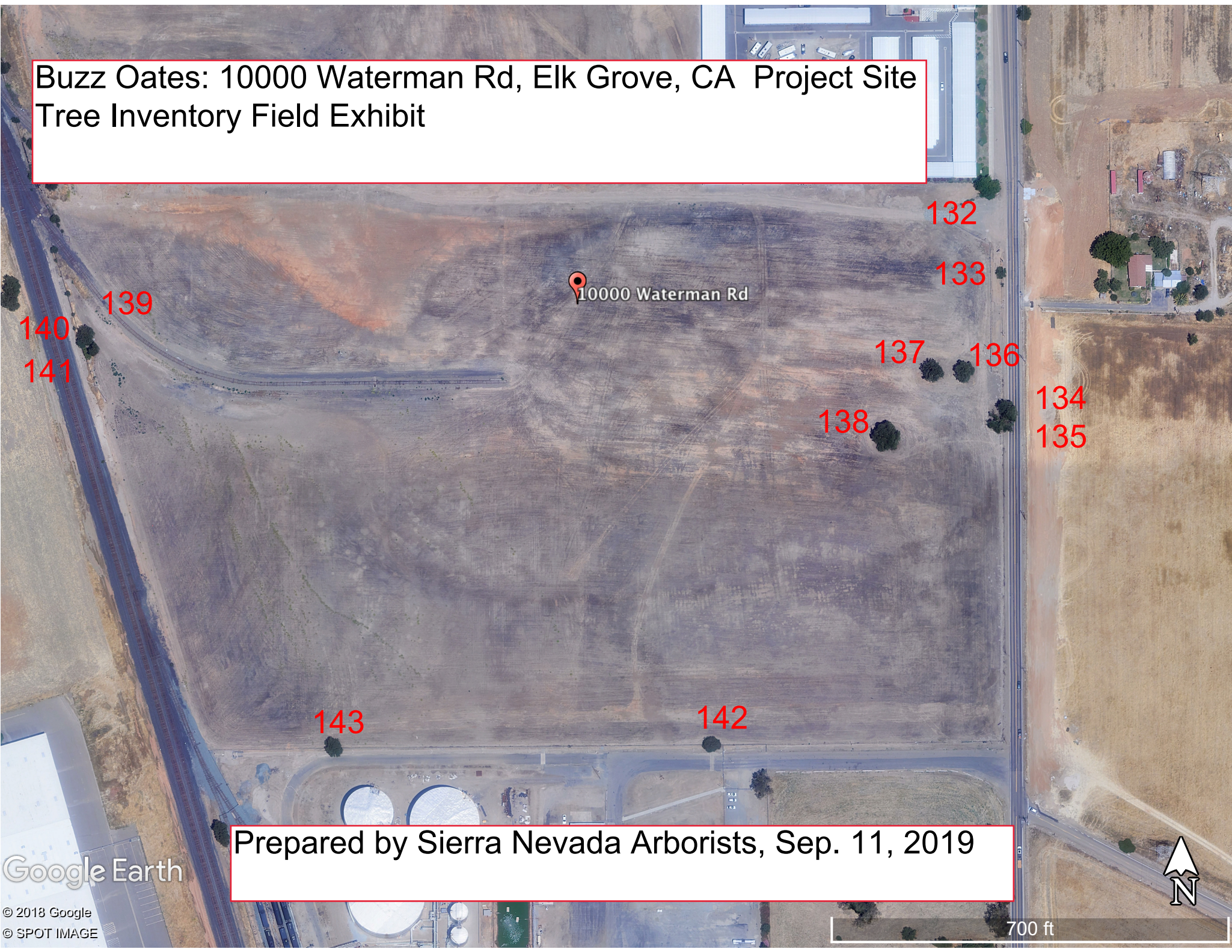
**BUZZ OATES**  
**10000 Waterman Road Project Site**  
**City of Elk Grove, California**  
**TREE INVENTORY SUMMARY**

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT						Rating (1-6)	Preservation (P/M/G)	Trees of Local Importance	NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR					
139	Valley Oak	<i>(Quercus lobata)</i>		17	19	Fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	6	M	0	Out of balance east. Sparse foliage. Above average amount of deadwood. Extensive dieback in the lower canopy.	<i>Recommend removal due to nature and extent of noted defects.</i>
140	Chinese Pistache	<i>(Pistacia chinensis)</i>		11	8	Poor	Poor	Poor	Poor	Poor	Poor	6	M		Measured at 1' above grade. Branches at 1' above grade. Weakly attached codominant stems. North side is mostly dead.	<i>Recommend removal due to nature and extent of noted defects.</i>
141	Valley Oak	<i>(Quercus lobata)</i>		17	16	Fair	Poor to fair	Poor to fair	Poor	Poor to fair	Poor to fair	3	M	17	Measured at 4' above grade. Branches at between 4'-5' above grade. Weakly attached stems with inclusion. Excessive amount of deadwood. Dieback throughout the tree.	Prune deadwood.
142	Chinese Pistache	<i>(Pistacia chinensis)</i>	3,3,4,4,4	18	15	Fair	Fair	Fair	Fair	Poor to fair	Fair	3	M		Located on the south boundary and overhanging the parcel 10'. DBH estimated. Tree embedded in cyclone fence. Tag on south side.	None at this time.
143	Valley Oak	<i>(Quercus lobata)</i>	est.	14	19	Fair	Fair	Poor to fair	Poor to fair	Poor to fair	Poor to fair	3	M	14	Located on the south boundary and overhanging the parcel. Tag on fence southeast of the tree. Branches at 7' above grade into multiple stems which are weakly attached with inclusions. Above average amount of deadwood.	Prune deadwood and lift canopy.

<b>TOTAL INVENTORIED TREES = 12 trees (250 aggregate diameter inches)</b>
<b>TOTAL RECOMMENDED REMOVALS = 7 trees (148 aggregate diameter inches)</b>
<b>PRECAUTIONARY TREES HIGHLIGHTED FOR REFERENCE</b>
<b>Rating (1-6, where 6 is remove) = 1=0 trees; 2=0 trees; 3=4 trees; 4=1 tree; 5=0 trees; 6=7 trees</b>
<b>Suitability for Preservation (P/M/G): P=2 trees; M=9; trees; M-G=1 tree; G=0 trees</b>
<b>Trees of Local Importance = 9 trees (84 aggregate diameter inches)</b>



Buzz Oates: 10000 Waterman Rd, Elk Grove, CA Project Site  
Tree Inventory Field Exhibit



Prepared by Sierra Nevada Arborists, Sep. 11, 2019

Google Earth

© 2018 Google  
© SPOT IMAGE

700 ft





# **APPENDIX I**

**PHASE I ESA – 9195 BRINKMAN COURT (LOT A)**

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**


APNs 134-011-084/-085  
9195 Brinkman Court  
Elk Grove, Sacramento County, CA 95624  
Bole and Associates File # 0212-2020-1907



*Prepared for*

Buzz Oates Construction, Inc.  
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*Prepared by*

 **BOLE**  
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March 3, 2020

**Table of Contents**

1. Summary ..... 1

2. Introduction ..... 1

    2.1. Purpose..... 1

    2.2. Detailed Scope-of-Services..... 2

    2.3. Significant Assumptions ..... 2

    2.4. Limitations, Exceptions, and Data Gaps ..... 2

    2.5. Special Terms and Conditions ..... 3

    2.6. Reliance ..... 3

    2.7. Environmental Personnel ..... 4

3. Site Description ..... 4

    3.1. Location and Legal Description..... 4

    3.2. Site and Vicinity Characteristics..... 4

    3.3. Current Use of the Property ..... 4

    3.4. Descriptions of Structures, Roads, Other Improvements on the Site ..... 4

    3.5. Current Uses of the Adjoining Properties ..... 4

4. User Provided Information ..... 5

    4.1. Title Records..... 5

    4.2. Environmental Liens or Activity and Use Limitations..... 5

    4.3. Specialized Knowledge..... 5

    4.4. Commonly Known or Reasonably Ascertainable Information ..... 5

    4.5. Valuation Reduction for Environmental Issues..... 5

    4.6. Owner, Property Manager, and Occupant Information ..... 5

    4.7. Reason for Performing Phase I ..... 5

    4.8. Previous Site Investigations ..... 5

5. Records Review ..... 6

    5.1. Standard Environmental Record Sources..... 7

    5.2. Additional Environmental Record Sources..... 7

    5.3. Standard and Additional Environmental Record Review Results..... 7

        5.3.1. *Federal Environmental Records* ..... 7

        5.3.2. *State and Tribal Environmental Records*..... 7

        5.3.4. *Environmental Lien Search* ..... 10

    5.4. Physical Setting Sources and Results..... 10

6. Historical Use Information on the Property and Adjoining Properties Sources and Results..... 11

7. Site Observations..... 12

    7.1. Methodology and Limiting Conditions ..... 12

    7.2. General Site Setting ..... 12

    7.3. Site Observation Findings..... 13

8. Findings, Opinions, and Conclusions ..... 14

9. Qualifications and Signature ..... 15

- APPENDIX A: MAPS
- APPENDIX B: SITE OBSERVATIONS PHOTOGRAPHS
- APPENDIX C: REGULATORY RECORDS REVIEW
- APPENDIX D: HISTORICAL RESEARCH DOCUMENTATION
- APPENDIX E: QUALIFICATIONS

## 1. Summary

Bole & Associates has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitation of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments E 1527-13, and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the subject property described as Sacramento County Assessor's Parcel Numbers 134-011-084/-085, located at 9195 Brinkman Court in Elk Grove, Sacramento County, CA 95624. Any exceptions to, or deletions from this practice are described in Section 2.4 of this report. The Phase I Environmental Site Assessment is designed to provide Buzz Oates Construction, Inc. and their assigns with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property. The subject property consists of two (2) parcels of undeveloped land with a combined total area of approximately an approximately 19.51-acres. No permanent structures were noted on the property. A remnant rail spur was noted in the southwestern corner of parcel 134-011-085. No hazardous materials in any appreciable quantity were noted on the property. With the exception of several remnant homeless encampments, no significant amounts of solid waste disposal or hazardous waste disposal were noted on the property. The site is located in a predominantly commercial corridor of Elk Grove and is adjoined to the north by multiple light industrial/commercial warehouse/offices; to the east by a municipal water treatment plant and a self-storage facility; to the south by undeveloped land; and to the west by rail track and farther to the west by undeveloped land. While no initial environmental site assessment can fully eliminate the uncertainty regarding the potential for recognized environmental conditions, the ASTM standard does cite the balance between appropriate levels of inquiry and the cost of such exhaustive investigations. It is Bole & Associate's opinion that a full assessment of the site has been completed. Our investigations did not reveal any Recognized Environmental Conditions associated with the subject property and it is the professional opinion of Bole and Associates that no further investigations are warranted at this time. Our investigations revealed the following Historical Recognized Environmental Conditions (HRECs) and findings:

- According to records obtained from the California Regional Water Quality Control Board (CRWQCB), the subject property historically contained the Kingsford Charcoal Company briquet factory which operated between the mid-1960s and 1989. A fire destroyed the main warehouse/plant in 1988. The subject property occupied the northern half of the facility and included two (2) evaporation ponds, a main warehouse structure, storage yard areas, a drum storage pad, and raw materials storage areas. The majority of the hazardous materials storage areas associated with the plant were located on what today is the adjoining parcel to the south of the subject property. The main areas of concern in the northern portion of the Kingsford property (currently the subject property APNs 134-011-085/085) included the evaporation/settling ponds, oil drum storage area, and storage yard. Harding Lawson Associates spearheaded the onsite cleanup activities and summarized their findings in a Closure Report dated May 2, 1991 (See Appendix F). A review of the closure report indicates that no hazardous materials spills or releases to the subject property have negatively impacted the onsite soils and groundwater at the former Kingsford Charcoal plant. Groundwater at the site has been demonstrated to be at depths of greater than 100 feet; no impacts to groundwater at the site were noted during a review of the Harding Lawson Associates report. CRWQCB issued a letter of closure for leaking underground storage tanks historically located on the Kingsford site to the south of the subject property in January of 1996. A thorough review of the information provided by CRWQCB did not indicate the presence of hazardous materials contamination on the subject property and it is the professional opinion of Bole and Associates that no further investigations are recommended at this time.

## 2. Introduction

### 2.1. Purpose

As per Section 1.1 of the American Society of Testing and Materials (ASTM) Standard Practice Designation E 1527-13, the purpose of this assessment is to identify recognized environmental conditions, as defined in Section 3.2.78 of the same Standard Practice; that is "the presence or likely presence of any hazardous substances or petroleum products in, on or at a property due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 U.S.C. § 9601(35) (A) & (B). Bole & Associates has conducted this Phase I ESA under the direction a qualified Environmental Professional, whose seal and/or signature appears hereon. This document serves to identify recognized environmental conditions (RECs) in association with the subject property.

## **2.2. Detailed Scope-of-Services**

The Phase I ESA conducted at the subject property was in general accordance with ASTM Standard E 1527-13 and included some or all of the following:

- Review of previous environmental site assessments
- Records review
- Interviews with regulatory officials
- A site visit
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

## **2.3. Significant Assumptions**

Bole & Associates believes the results, specifications, conclusions and professional opinions to be accurate and relevant but cannot accept responsibility for the accuracy or completeness of public documentation or accuracy, completeness, or possible withholding of information by interviewees or other private parties. We make no other warranty, either expressed or implied.

It is assumed that this investigation is being conducted to identify recognized environmental conditions (RECs) concerning the subject property, and to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability. This investigation may mention but does not fully address non-scope considerations such as:

- Asbestos
- Radon
- Lead-based paint
- Lead in drinking water
- Wetlands
- Regulatory compliance (USACOE, USDA, NRCS)
- Cultural and historic resources
- Health and safety
- Ecological resources
- Endangered species
- Air quality
- Water quality

This property assessment did not include air, soil or water sampling, or laboratory analysis. Therefore, the results of this investigation do not preclude the possibility of substances that are currently or in the future may be defined as hazardous being present on the property. This report does not purport to address all safety problems, if any, associated with the subject property.

## **2.4. Limitations, Exceptions, and Data Gaps**

The scope of services performed to complete this Phase I ESA is limited in nature. Site conditions can change in time, and our assessment is not intended to predict future site conditions. Because of the limited nature of this assessment, site history will be developed based only on information provided by a review of available regulatory files on this site and near-by sites. This report is not a complete risk assessment and the scope of

services does not include a complete determination of the extent of, nor the environmental or public health impact of, known or suspected hazardous materials or wastes.

Along with all of the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report may be limited by the following:

Access Limitations – No access limitations were encountered during site reconnaissance.

Physical Obstructions to Observations – No physical obstructions were noted on site to prevent observations.

Outstanding Information Requests – The current property owner PW Fund B Limited Partnership did not complete an environmental questionnaire for the site. The lack of an owner-completed questionnaire represents a data gap. However, based on the historical databases and additional research performed by Bole and Associates, this data gap is deemed to be less than significant.

Historical Data Source Failure – None.

The information and conclusions contained in this report are based upon work undertaken by trained professionals and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment of Bole & Associates based on the data obtained from the work. Due to the nature of investigation and the limited data available, Bole & Associates cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

The government database search included sites that are within the search range of the subject property. However, sites exist that are in the general vicinity of the subject property without enough information listed to map these “orphan” sites or determine if they are within the search range. The Orphan summary indicated that there are two (2) unmapped orphan sites in the database report. These sites are associated with the historical Kingsford Charcoal plant, of which the subject property comprised the northern half of its facilities. The Kingsford plant has undergone remediation and site characterization by Harding Lawson Associates and is not considered to be a recognized environmental condition in association with the subject property.

Based on information obtained during the evaluation process and general knowledge of the history of this vicinity of Sacramento County, it is the opinion of the Bole & Associates representative that the historical subject property uses have been adequately defined.

Aside from the limitation(s) listed above, it is the opinion of David Bole, Environmental Professional that this property assessment provides an appropriate degree of inquiry to determine if RECs exist on the subject property.

### ***2.5. Special Terms and Conditions***

Authorization to perform this assessment was given by the client on February 12, 2020. Instructions as to the location of the property, and details of access were supplied by Mr. Logan James of Buzz Oates Construction, Inc.

### ***2.6. Reliance***

This report has been prepared for the sole benefit of Buzz Oates Construction, Inc. and their assigns. The report may not be relied upon by any other person or entity without the express written consent of Bole & Associates and the client. Any lender or CDC assisting with the financing or purchase of this property will be provided a letter of reliance upon request.

### **2.7. Environmental Personnel**

This assessment was conducted under the supervision of David H. Bole, Environmental Professional. The following personnel contributed to the assessment:

- David H. Bole, B.S, Environmental Professional, Registered Environmental Property Assessor (REPA) Number 762718, performed site observations, conducted local file reviews, provided supervision, review, and opinions/conclusions.
- Skye A. Bole, B.A, Environmental Professional, Quality Control Project Manager, coordinated and reviewed database searches, conducted first-level and final reviews of all reports and documents in accordance with the principles of ISO 9001.

### **3. Site Description**

The Bole & Associates representative performed a site observation on February 19, 2020.

#### **3.1. Location and Legal Description**

The subject property consists of Sacramento County Assessor's Parcel Numbers 134-011-084/-085, located at 9195 Brinkman Court in Elk Grove, Sacramento County, CA 95624. The subject property location is outlined in Appendix A of this report.

#### **3.2. Site and Vicinity Characteristics**

The site is located in a predominantly commercial corridor of Elk Grove and is adjoined to the north by multiple light industrial/commercial warehouse/offices; to the east by a municipal water treatment plant and a self-storage facility; to the south by undeveloped land; and to the west by rail track and farther to the west by undeveloped land. The current use of the immediately adjacent properties is presented in Section 3.5 of this report. For information regarding the physical setting and soil composition in the general area of the subject property refer to section 5.4.

#### **3.3. Current Use of the Property**

At the time of the February 19, 2020 site observation the subject property included two (2) parcels of vacant land.

#### **3.4. Descriptions of Structures, Roads, Other Improvements on the Site**

At the time of the February 19, 2020 site observation structures, roads, and other improvements for the subject properties include the following:

- Two (2) parcels of vacant land: APN 113-0100-084 (9.68-acres) and APN 113-0100-085 (9.83-acres). No permanent structures were noted on the subject property.
- A remnant rail spur was noted in the southwestern corner of APN 113-0100-085. This spur was historically associated with a Kingsford Charcoal plant, with which the parcels comprising the subject property were associated.
- The northwestern portion of APN 113-0100-084 historically contained settling/evaporation ponds associated with the Kingsford Charcoal plant. This area is noticeably lower than surrounding portions of the site. Several homeless encampments were noted in this portion of the site.
- Although to no obvious power, water, sewer, or other utilities were readily apparent, it is assumed that any future development of the site will involve connections to municipal water/sewer utilities and to the Sacramento Municipal Utility District (SMUD) power and nature gas lines. approximately 2.43-acre parcel of vacant land.
- Access to the site is gained from the east via Brinkman Court.

#### **3.5 Current Uses of the Adjoining Properties**

During the vicinity reconnaissance, Bole & Associates observed the following land use on properties in the immediate vicinity of the subject property:

<b>Direction</b>	<b>Property(description); APN/Address; Site Use (NAICS code)</b>
North	Light industrial/commercial warehouse/offices
East	East Elk Grove Water Treatment Plant, 9960 Waterman Road (221310); IN Self-Storage, 9200 Brinkman Court (531130)
South	Undeveloped land, 10000 Waterman Road (formerly the site of the Kingsford Charcoal plant)
West	Rail tracks, undeveloped land

#### **4. User Provided Information**

##### **4.1. Title Records**

A Preliminary Title Report (PTR) was not available for review.

##### **4.2. Environmental Liens or Activity and Use Limitations**

There was no report or record of any environmental liens, activity, and/or use limitations due to hazardous material issues on the subject or surrounding properties. On February 14, 2020 EDR® searched the LIENS, LIENS 2, DEED, US ENG CONTROLS, and US INST CONTROLS databases. The subject property was not listed in any of these databases. A search of environmental liens was conducted by EDR® on February 18, 2020; no environmental liens were found associated with the subject property.

##### **4.3. Specialized Knowledge**

The subject property address of 9195 Brinkman Court was listed in NPDES and CIWQS databases in association with historical storm water construction permits for prior development attempts of the subject property. These permits have since expired. No other specialized information was provided to Bole and Associates.

##### **4.4. Commonly Known or Reasonably Ascertainable Information**

All commonly known, or reasonably ascertainable information is described in this report.

##### **4.5. Valuation Reduction for Environmental Issues**

Based upon physical observations and from a review of historical sources, no environmental issues were identified that could result in property value reduction.

##### **4.6. Owner, Property Manager, and Occupant Information**

The current property owner PW Fund B Limited Partnership did not complete an environmental questionnaire for the site. The lack of an owner-completed questionnaire represents a data gap. However, based on the historical databases and additional research performed by Bole and Associates, this data gap is deemed to be less than significant. The property information is presented in the table below:

Property Owner	PW Fund B Limited Partnership
Property Occupant	N/A-vacant land
Property Onsite Contact(s)	Mr. Logan James

##### **4.7. Reason for Performing Phase I**

The Phase I ESA is being conducted as part of environmental due diligence by Buzz Oates Construction, Inc. and their assigns.

##### **4.8. Previous Site Investigations**

Bole and Associates obtained and reviewed previous site assessment and remediation reports prepared by Harding Lawson Associates in 1991 which chronicled the dismantling and remediation of the site from a Kingsford Charcoal plant to vacant land. The subject property occupied the northern half of the Kingsford



property and was used for settling/evaporation ponds, equipment storage areas, an oil drum storage area, and raw materials storage areas. A review of the final closure report did not indicate any significant release of hazardous materials to the subject property associated with the Kingsford plant. A copy of the final closure report is included in Appendix F. No other previous environmental investigations performed on the subject property address of 9195 Brinkman Court were available for review.

## 5. Records Review

***The comprehensive EDR® Radius Map™ Report with GeoCheck® Report is provided as a searchable document attached to the general deliverable. The report includes descriptions of standard and additional environmental records searched, original source of information, approximate search distance, date information was last updated by EDR®, and date information was last updated by original source.***

Bole & Associates contracted Environmental Data Resources, Inc. (EDR®) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property.

Standard Environmental Record Sources	Additional Environmental Record Sources
Federal NPL Site List	State and Local HIST CAL-SITES
Federal Proposed NPL Site List	State and Local CA BOND EXP PLAN List
Federal Delisted NPL Site List	State and Local SCH List
Federal NPL Liens Site List	State and Local WDS List
Federal LIENS2 List	State and Local NPDES List
Federal CORRACTS List	State and Local Cortese List
Federal US ENG CONTROLS List	State and Local HIST CORTESE List
Federal US INST CONTROL List	State and Local SWRCY List
Federal DOT OPS List	State and Local LEAKING UNDERGROUND STORAGE TANK Sites
Federal US CDL List	State and Local CA FID UNDERGROUND STORAGE TANK Sites
Federal US BROWNFIELDS List	State and Local SLIC List
Federal Department of Defense Site	State and Local UST Sites
Federal Formerly Used Defense Sites	State and Local HIST UST Sites
Federal LUCIS List	State and Local SWEEPS UST List
Federal CONSENT List	State and Local CHMIRS List
Federal ROD List	State and Local ABOVEGROUND STORAGE TANK Sites
Federal UMTRA Sites	State and Local NOTIFY 65 List
Federal DEBRIS REGION 9 List	State and Local VCP List
Federal ODI List	State and Local DRYCLEANERS Sites
Federal MINES List	State and Local RESPONSE List
Federal TSCA List	State and Local HAZNET List
Federal FTTS List	State and Local EMI List
Federal HIST FTTS List	State and Local ENVIROSTOR List
Federal SSTS List	State and Local HWP List
Federal ICIS List	State and Local PROC List
Federal PADS List	State and Local EDR PROPRIETARY RECORDS List
Federal MLTS List	State and Local Toxic Pits List
Federal RADINFO List	State and Local SWF/LF List
Federal RAATS List	State and Local WMUDS/SWAT List
Federal SCR DRYCLEANERS Sites	State and Local LIENS List
Federal UST HIST CDL List	State and Local LDS List
Federal PCB TRANSFORMER List	State and Local MCS List
Federal Facility Site Information List	State and Local DEED List
Federal COAL ASH DOE List	State and Local WIP List
Federal FEMA UST List	State and Local CDL List
Federal COAL ASH EPA List	State and Local ENF List

Federal CERCLIS List	State and Local HAULERS List
Federal CERCLIS NFRAP List (SEMS)	State and Local MWMP List
Federal RCRA TSDf List	State and Local HWT List
Federal RCRA Large Quantity Generators List	Tribal INDIAN RESERV List
Federal RCRA Small Quantity Generators List	Tribal INDIAN ODL List
Federal RCRA CESQG List	State and Tribal INDIAN LUST List
Federal RCRA NONGEN List	Tribal INDIAN UST List
Federal ERNS List	Tribal INDIAN VCP List
Federal HMIRS List	
Federal TRIS List	
Federal FINDS List	

### 5.1. Standard Environmental Record Sources

Information on standard environmental records was provided by EDR® on January 13, 2020. Sections 5.3.1 and 5.3.2 discuss the results of this review.

### 5.2. Additional Environmental Record Sources

The following is a list of additional local environmental and historic record sources contacted/reviewed by the Bole & Associates representative:

- State Water Resources Control Board GeoTracker® Database
- Sacramento County Environmental Management Department

### 5.3. Standard and Additional Environmental Record Review Results

A summary of results for EDR® revealed multiple sites within the radius search required by the ASTM Standard practice. The subject property address of 9195 Brinkman Court was listed in NPDES and CIWQS databases in association with historical storm water construction permits for prior development attempts of the subject property. These permits have since expired. A search of records kept at the Sacramento County Environmental Management Department did not reveal any current hazardous substances violations or indications of release of hazardous materials to the environment.

#### 5.3.1. Federal Environmental Records

Sites identified within the search radius of the subject property in the Federal State Regulatory records databases are as follows:

RCRA-SQG: RCRAInfo is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQG) generate between 100 kg and 1,000 kg of hazardous waste per month. A review of the RCRA-SQG list, as provided by EDR®, and dated 12/16/2019 has revealed that there is one (1) RCRA-SQG sites within the searched area. Based upon the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

#### 5.3.2. State and Tribal Environmental Records

Sites identified within the search radius of the subject property in the California State Regulatory records databases are as follows:

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) ENVIROSTOR database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. ENVIROSTOR provides similar information to the information that was available in Cal-Sites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties

where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. A review of the ENVIROSTOR list, as provided by EDR®, and dated 10/28/2019 has revealed that there are three (3) ENVIROSTOR sites within the searched area. All of the sites are located greater than ½-mile from the subject property. Based upon the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents in the state of California. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System. A review of the LUST list, as provided by EDR®, has revealed that there are 12 LUST sites within the searched area. All of these LUST sites have been granted closure and are not considered recognized environmental conditions in association with the subject property. Two (2) nearby sites, located at 10000 Waterman Road (former Kingsford Charcoal plant) and 10090 Waterman Road (Conoco Bulk Plant) have been granted regulatory closure and are not considered recognized environmental conditions in association with the subject property.

**CPS-SLIC:** Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Board's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. A review of the CPS-SLIC list, as provided by EDR, has revealed that there is one (1) CPS-SLIC site within the searched area (Conoco Bulk Plant, 10090 Waterman Road, approximately 0.33-miles to the south-southeast). Based on the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

**SAC COUNTY CS:** This database includes a listing of sites where unauthorized releases of potentially hazardous materials have occurred and is maintained by the Sacramento County Environmental Management Department. A review of the SAC COUNTY CS list, as provided by EDR®, and dated 8/6/2019, has revealed that there are four (4) SAC COUNTY CS sites within the searched area. Based on the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

**AST:** The California Aboveground Storage Tank database contains registered ASTs. The data comes from the State Water Resources Control Board's Hazardous Substance Storage Container Database. A review of the AST list, as provided by EDR®, and dated 7/6/2016 has revealed that there is one (1) AST site within the searched area. Based upon the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

**SWRCY:** The SWRCY is a listing of recycling facilities in the state of California. A review of the SWRCY list, as provided by EDR®, and dated 9/9/2019 has revealed that there is one (1) SWRCY site within the searched area. Based upon the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

**CERS HAZ WASTE:** This database includes a list of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW generator programs. A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/21/2019, has revealed that there are 12 CERS HAZ WASTE sites located within the searched area. Based on the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

**CERS TANKS:** This database includes a list of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. A review of the CERS TANKS list, as provided by EDR, and dated 10/21/2019, has revealed that there is one (1) CERS TANKS site within the searched area. Based on the

status and location of this site it is not considered a recognized environmental condition in association with the subject property.

CORTESE: The sites for this list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). A review of the Cortese list, as provided by EDR®, and dated 9/23/2019, has revealed that there is one (1) Cortese site within approximately 0.5-miles of the target property (Conoco Bulk Plant, 10090 Waterman Road). Based on the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

HIST CORTESE: The sites listed for the HIST CORTESE list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Control Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency. A review of the HIST CORTESE list, as provided by EDR®, and dated 04/01/2001 has revealed that there are three (3) HIST CORTESE sites within the searched area. Based upon the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

SACRAMENTO COUNTY ML: The Sacramento County Environmental Management Department's Master List of Sites includes any business that has hazardous materials onsite-hazardous materials storage sites, underground storage tanks, and waste generators. A review of the SAC CO ML list, as provided by EDR®, and dated 8/7/2019 has revealed that there are 55 SAC CO ML sites within the searched area. Based upon the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

NOTIFY 65: This database includes listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency. A review of the NOTIFY 65 list, as provided by EDR, and dated 9/16/2019, has revealed that there is one (1) NOTIFY 65 site within the searched area. Based on the status and location of this site it is not considered a recognized environmental condition in association with the subject property.

### ***EDR PROPRIETARY RECORDS***

EDR US Historical Auto Stations: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/ service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records" or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches. A review of the EDR US Historical Auto Stations list, as provided by EDR, has revealed that there are two (2) EDR US Historical Auto Stations sites within the searched area. Based upon the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. This list is compiled from Records formerly available from the State Water Resources Control Board in California. A review of the RGA LUST list, as provided by EDR® has revealed that there are 19 RGA LUST sites within the searched area. Based upon the status and location of these sites they are not considered recognized environmental conditions in association with the subject property.

### ***Orphan Summary:***

The government database search included sites that are within the search range of the subject property. However, sites exist that are in the general vicinity of the subject property without enough information listed to map these "orphan" sites or determine if they are within the search range. The Orphan summary

indicated that there are two (2) unmapped orphan sites in the database report. These sites are associated with the historical Kingsford Charcoal plant, of which the subject property comprised the northern half of its facilities. The Kingsford plant has undergone remediation and site characterization by Harding Lawson Associates and is not considered to be a recognized environmental condition in association with the subject property.

*5.3.3. Local Environmental Records*

**State Water Resources Control Board GeoTracker® Database**

Bole and Associates reviewed the on-line State Water Resources Control Board GeoTracker® Database. The subject property was not listed in GeoTracker. 10000 Waterman Road was listed in Geotracker in association with remediation performed to clean up soil contamination associated with former underground fuel storage tanks at the historical Kingsford Charcoal plant, of which the subject property parcels comprised the northern half. The Kingsford property historically operated several underground storage tanks which are listed in the closure documentation summary report included in Appendix F of this report. No impacts to groundwater were noted during the removal of the tanks and subsequent excavation/remediation of the onsite soils. CRWQCB issued a letter of regulatory closure for all USTs at the former Kingsford facility in January of 1996 (see Appendix F). No other adjoining properties were listed in GeoTracker.

**Sacramento County Environmental Management Department**

A search of records kept at the Sacramento County Environmental Management Department did not reveal any current hazardous substances violations or indications of past release of hazardous materials to the environment.

*5.3.4. Environmental Lien Search*

There was no report or record of any environmental liens, activity, and/or use limitations due to hazardous material issues on the subject or surrounding properties. On February 14, 2020 EDR® searched the LIENS, LIENS 2, DEED, US ENG CONTROLS, and US INST CONTROLS databases. The subject property was not listed in any of these databases. A search of environmental liens was conducted by EDR® on February 18, 2020; no environmental liens were found associated with the subject property.

**5.4. Physical Setting Sources and Results**

The elevation of the subject property is approximately 50 feet above mean sea level, as depicted on the U.S.G.S. 7.5 Minute Series Topographic Map of the CARMICHAEL (1992) USGS Quadrangle. The topography within the confines of the subject property is generally flat, with a noticeable depressed area located in the northwestern portion of the site. This feature historically was used as a settling/evaporation pond for the Kingsford Charcoal facility. The general gradient of the immediate vicinity slopes towards the west.

**Subject Property Soil Associations:**

A soil map was prepared using the NRCS Web Soil Survey application. A brief description of the dominant soil type present on the subject property is presented in the table below:

<b>Soil Association</b>	<b>Areas of Occurrence</b>	<b>Landform Groups</b>	<b>Potential Soil Hazards Characterization/Hydric status</b>
San Joaquin loam	Eastern side of Sacramento and San Joaquin Valleys	Hummocky, nearly level to undulating terraces; formed in alluvium from mixed but dominantly granitic rock sources.	Moderate. These soils are moderately well drained with very slow infiltration rates. These soils are classified as being partially hydric.

The northwest portion of the site contains soils characterized by NRCS as “water,” meaning that at one point in time these areas were inundated with water. The northwestern portion of the property was used by

the Kingsford Charcoal plant as settling/evaporation ponds which allowed surface runoff to evaporate, leaving behind primarily nontoxic char. The Kingsford plant was closed in 1989 following a catastrophic fire to the main plant; the site has remained undeveloped through to the present day. Maps and other information regarding the onsite soils are presented in Appendix F.

**National Wetlands Inventory**

Bole and Associates referenced the subject property location against known wetlands mapped in the U. S. Fish and Wildlife Service’s National Wetlands Inventory. According to NWI, there are two (2) identified wetland features on site, both associated with historically settling/evaporation ponds associated with the former Kingsford Charcoal facility which operated on site between the mid-1960s and 1989. These features were entirely man-made, with hydrology having been artificially introduced.

**Geologic Information Sources:**

U.S. Geological Survey. “Elk Grove,” California (1979) 1:24,000. 7.5 Minute Series. U.S. Department of Interior, USGS.

Natural Resources Conservation Service Web Soil Survey. <http://www.websoilsurvey.sc.egov.usda.gov>

National Wetlands Inventory Wetlands Mapper <http://fws.gov/wetlands/Data/Mapper.html>

**6. Historical Use Information on the Property and Adjoining Properties Sources and Results**

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix D of this report and included: aerial photographs, historical USGS topographic maps, and historic city directories supplied by EDR®. The subject property historically was part of a Kingsford Charcoal plant which operated between the mid 1960s and 1989. The subject property parcels comprised the northern half of the Kingsford facility and included settling/evaporation ponds, the main charcoal plant, storage yards, a dirt berm, raw materials storage areas, and an oil drum storage pad. These features have all been demolished from the site; however, the northwestern portion of the site still exhibits a depressed elevation relative to the remainder of the site. The site has remained undeveloped/vacant land from 1989 when the Kingsford facility closed through to the present day. The immediate vicinity of the subject property has been developed for primarily commercial/light industrial purposes.

***Aerial Photographs***

Historical aerial photographs were reviewed to determine past land use patterns of the subject and surrounding properties. Photographs covering the years 1937-2016 were available for review. The results of the review are as follows:

<b>Year(s)</b>	<b>Scale</b>	<b>Description</b>
1937-1966	1” = 500’	The subject property and immediately adjoining properties on all sides are shown as undeveloped/agricultural land.
1972	1” = 500’	The majority of the subject property is shown as undeveloped/vacant land. A warehouse structure is shown in the southern portion of the site. Undeveloped/agricultural properties are shown adjacent to the west, south, and east. Warehouses and other structures associated with the Kingsford Charcoal plant are shown adjacent to the south.
1984	1” = 500’	The northwestern portion of the property is shown containing a settling/evaporation pond, with storage areas for raw materials shown in the eastern portion of the site. A warehouse is shown in the southern portion of the site with a rail spur leading westward onto rail tracks. Undeveloped land is shown immediately adjacent to the west, with residence shown farther to the west. Undeveloped land is shown to the north and east. The remainder of the Kingsford Charcoal plant is shown immediately to the south.
1984	1” = 500’	The subject property is shown as vacant land; the western portion is shown as

		undeveloped land, the eastern portion is shown as an asphalted parking lot. Point East Drive is shown developed to the west and north of the property. Undeveloped land is shown adjacent to the west and north. To the east is shown a hotel/casino. To the south across Folsom Boulevard is shown a warehouse/office building.
1993	1" = 500'	The subject property is shown as vacant land. All structures associated with the former Kingsford Charcoal plant have been demolished, with just the remnant building pad of the main warehouse shown in the southern portion of the site. The adjoining properties to the west and east appear as shown on the 1984 photograph. To the north are shown multiple warehouse/offices. To the south is shown vacant land; remnant building pads for the former structures comprising the Kingsford Charcoal plant are still visible.
2006-2016	1" = 500'	The subject property and immediately adjoining properties to the west and south appear as shown on the 1993 photograph. Additional warehouse/offices are shown to the north. To the east are shown a water treatment plant and a self-storage facility.

### ***Historical Topographic Maps***

Historical topographic maps were reviewed to determine past land use patterns of the subject and surrounding properties. Maps spanning the years 1894-2012 were reviewed. The results are as follows:

<b>Year</b>	<b>Target Quad</b>	<b>Description</b>
1894	Lodi	No markings were shown in the vicinity of the subject property.
1909-1968	Elk Grove	The subject property is shown as undeveloped land. Rail tracks are shown to the west. Irrigation ditches are shown to the north.
1975	Elk Grove	One (1) warehouse structure was noted in the southwestern portion of the site. Warehouses associated with the former Kingsford Charcoal plant are shown to the south.
1979-1980	Elk Grove	The northwestern portion of the site is shown containing a settling/evaporation pond, with a warehouse shown in the southwestern portion of the site. The adjoining properties appear as shown on the 1975 map.
2012	Elk Grove	No markings were noted in the vicinity of the subject property.

### ***Sanborn® Fire Insurance Maps***

Sanborn® Fire Insurance Maps with coverage of the subject property were sought through EDR®. Sanborn® Fire Insurance Maps are detailed drawings of site development and were typically used by fire insurance companies to determine site fire insurability. According to EDR®, there is no Sanborn® coverage for the immediate vicinity of the subject property.

### ***City Directory Search***

Historic City Directories were searched for the subject property address of 9195 Brinkman Court for the years spanning 1920-2014. No directory listings were available for 9195 Brinkman Court. The complete City Directory listings for the adjacent properties are included in Appendix D.

## **7. Site Observations**

### ***7.1. Methodology and Limiting Conditions***

Site observations were conducted on foot on February 19, 2020. Weather conditions at the time of the site observations were sunny and clear. Photographs of pertinent site features identified during the site observations are included in Appendix B.

### ***7.2. General Site Setting***

The site is located in a predominantly commercial corridor of Elk Grove and is adjoined to the north by multiple light industrial/commercial warehouse/offices; to the east by a municipal water treatment plant and

a self-storage facility; to the south by undeveloped land; and to the west by rail track and farther to the west by undeveloped land (see Appendix A).

### **7.3. Site Observation Findings**

#### **7.3.1. Hazardous Substances**

The subject property is currently vacant land. No hazardous materials in any appreciable quantity were noted on the subject property.

#### **7.3.2. Petroleum Products**

No petroleum products were noted on the subject property.

#### **7.3.3. USTs**

According to records searched by EDR, Inc., records reviewed at the Sacramento County Environmental Health Department, the subject property has no history of underground petroleum storage tank use. No superficial indicators of USTs (vent pipes, fill pipes, dispensers, etc.) were noted during the site inspections.

#### **7.3.4. ASTs**

No aboveground storage tanks were noted on the subject property.

#### **7.3.5. Other Suspect Containers**

Other suspect containers were not identified on the subject property during the records search or during on-site observations.

#### **7.3.6. Equipment Likely to Contain PCBs**

Equipment likely to contain PCB material was not identified on the subject property during the records search or on-site observations.

#### **7.3.7. Interior Staining/Corrosion**

There are no buildings on the subject property.

#### **7.3.8. Discharge Features**

No obvious discharge featured were noted on the subject property. It is assumed that any future development of the site will include the construction of curbs and gutters to convey surface runoff into the storm sewer system.

#### **7.3.9. Pits, Ponds, and Lagoons**

No pits, ponds, or lagoons were noted on the subject property. Historically the northwestern portion of the site was used by the former Kingsford Charcoal plant as a settling/evaporation pond. The topography in this area is approximately five (5) feet lower than the surrounding areas. Although this site is identified in the National Wetlands Inventory as a recognized wetland, no wetland vegetation or hydrology were noted on the property during the site inspection.

#### **7.3.10. Solid Waste Dumping/Landfills**

No significant indications of solid waste dumping were noted on the subject property. Several small homeless encampments were noted in the northwestern portion of the site. These areas were found to contain common household garbage and discarded clothing; no indications of hazardous materials dumping were noted in these areas.

#### **7.3.11. Stained Soil/Stressed Vegetation**

No stained soil or stressed vegetation was observed on the subject property during the on-site observations.

#### **7.3.12. Wells**

No wells were noted on the subject property. It is assumed that any future development of the site will include connections with the municipal water supply.



### 7.3.13. Interviews

The current property owner PW Fund B Limited Partnership did not complete an environmental questionnaire for the site. The lack of an owner-completed questionnaire represents a data gap. However, based on the historical databases and additional research performed by Bole and Associates, this data gap is deemed to be less than significant.

### 7.3.14. Vapor Intrusion

Vapor intrusion is the migration of Volatile Organic Compounds (VOCs) from the subsurface into buildings. VOCs are compounds or chemicals including products such as gasoline, diesel, solvents, certain pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and other organic compounds with sufficient volatility and toxicity to pose a vapor intrusion risk. If there are, or are likely to be, buildings within 100 feet of a VOC source area of contaminated soil or within 100 feet of a VOC groundwater plume, soil gas data will be needed to assess vapor intrusion risk. The California Department of Toxic Substances Control (DTSC) requires that the human health risk be evaluated at sites if volatile chemical contamination is present. Some of the physical features that are indicative of chemical releases are: storage tanks and storage areas, areas with odors or stressed vegetation, waste piles, pools of liquid, electrical or hydraulic equipment, unidentified containers, drains and sumps, stained soil and pavement, degraded floors and walls, pits, ponds, and lagoons, dry wells and injection wells, wash racks and oil/water separators, waste processing areas, solvent dipping tanks and spray booths, and waste transfer areas. The subject property was evaluated during onsite inspections to determine if any of the above physical features were present in such a manner to present an elevated risk of vapor intrusion into onsite buildings. A comprehensive evaluation of the current and historical features, structures, and activities at the subject property did not reveal potential locations of releases of hazardous chemicals to the environment. The potential for vapor migration and/or vapor intrusion on this property is considered low. Extensive soil testing was performed in 1991 by Harding Lawson Associates as part of the final closure of the former Kingsford Charcoal plant. No indications of groundwater contamination or lingering soil contamination that could potentially affect the indoor air quality of any future development of the site were noted.

## 8. Findings, Opinions, and Conclusions

Bole & Associates has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitation of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments E 1527-13, and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the subject property described as Sacramento County Assessor's Parcel Numbers 134-011-084/-085, located at 9195 Brinkman Court in Elk Grove, Sacramento County, CA 95624. Any exceptions to, or deletions from this practice are described in Section 2.4 of this report. The Phase I Environmental Site Assessment is designed to provide Buzz Oates Construction, Inc. and their assigns with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property. The subject property consists of two (2) parcels of undeveloped land with a combined total area of approximately an approximately 19.51-acres. No permanent structures were noted on the property. A remnant rail spur was noted in the southwestern corner of parcel 134-011-085. No hazardous materials in any appreciable quantity were noted on the property. With the exception of several remnant homeless encampments, no significant amounts of solid waste disposal or hazardous waste disposal were noted on the property. The site is located in a predominantly commercial corridor of Elk Grove and is adjoined to the north by multiple light industrial/commercial warehouse/offices; to the east by a municipal water treatment plant and a self-storage facility; to the south by undeveloped land; and to the west by rail track and farther to the west by undeveloped land. While no initial environmental site assessment can fully eliminate the uncertainty regarding the potential for recognized environmental conditions, the ASTM standard does cite the balance between appropriate levels of inquiry and the cost of such exhaustive investigations. It is Bole & Associate's opinion that a full assessment of the site has been completed. Our investigations did not reveal any Recognized Environmental Conditions associated with the subject property and it is the professional opinion of Bole and Associates that no further investigations are warranted at this time. Our investigations revealed the following Historical Recognized Environmental Conditions (HRECs) and findings:

- According to records obtained from the California Regional Water Quality Control Board (CRWQCB), the subject property historically contained the Kingsford Charcoal Company briquet factory which operated between the mid-1960s and 1989. A fire destroyed the main warehouse/plant

in 1988. The subject property occupied the northern half of the facility and included two (2) evaporation ponds, a main warehouse structure, storage yard areas, a drum storage pad, and raw materials storage areas. The majority of the hazardous materials storage areas associated with the plant were located on what today is the adjoining parcel to the south of the subject property. The main areas of concern in the northern portion of the Kingsford property (currently the subject property APNs 134-011-085/085) included the evaporation/settling ponds, oil drum storage area, and storage yard. Harding Lawson Associates spearheaded the onsite cleanup activities and summarized their findings in a Closure Report dated May 2, 1991 (See Appendix F). A review of the closure report indicates that no hazardous materials spills or releases to the subject property have negatively impacted the onsite soils and groundwater at the former Kingsford Charcoal plant. Groundwater at the site has been demonstrated to be at depths of greater than 100 feet; no impacts to groundwater at the site were noted during a review of the Harding Lawson Associates report. CRWQCB issued a letter of closure for leaking underground storage tanks historically located on the Kingsford site to the south of the subject property in January of 1996. A thorough review of the information provided by CRWQCB did not indicate the presence of hazardous materials contamination on the subject property and it is the professional opinion of Bole and Associates that no further investigations are recommended at this time.

## 9. Qualifications and Signature

Bole & Associates has performed this assessment under my supervision in accordance with generally accepted environmental practices and procedures, as of the date of this report. I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental professionals practicing in this area. The conclusions contained within this assessment are based upon site conditions readily observed or were reasonably ascertainable and present at the time of the site observations.

### Prepared and Certified By:



David Bole, B.S.  
Principal Environmental Scientist  
Registered Environmental Assessor  
National Registry REPA 762718

### Final Review and Certification:



Skye A Bole, B.A.  
Environmental Professional

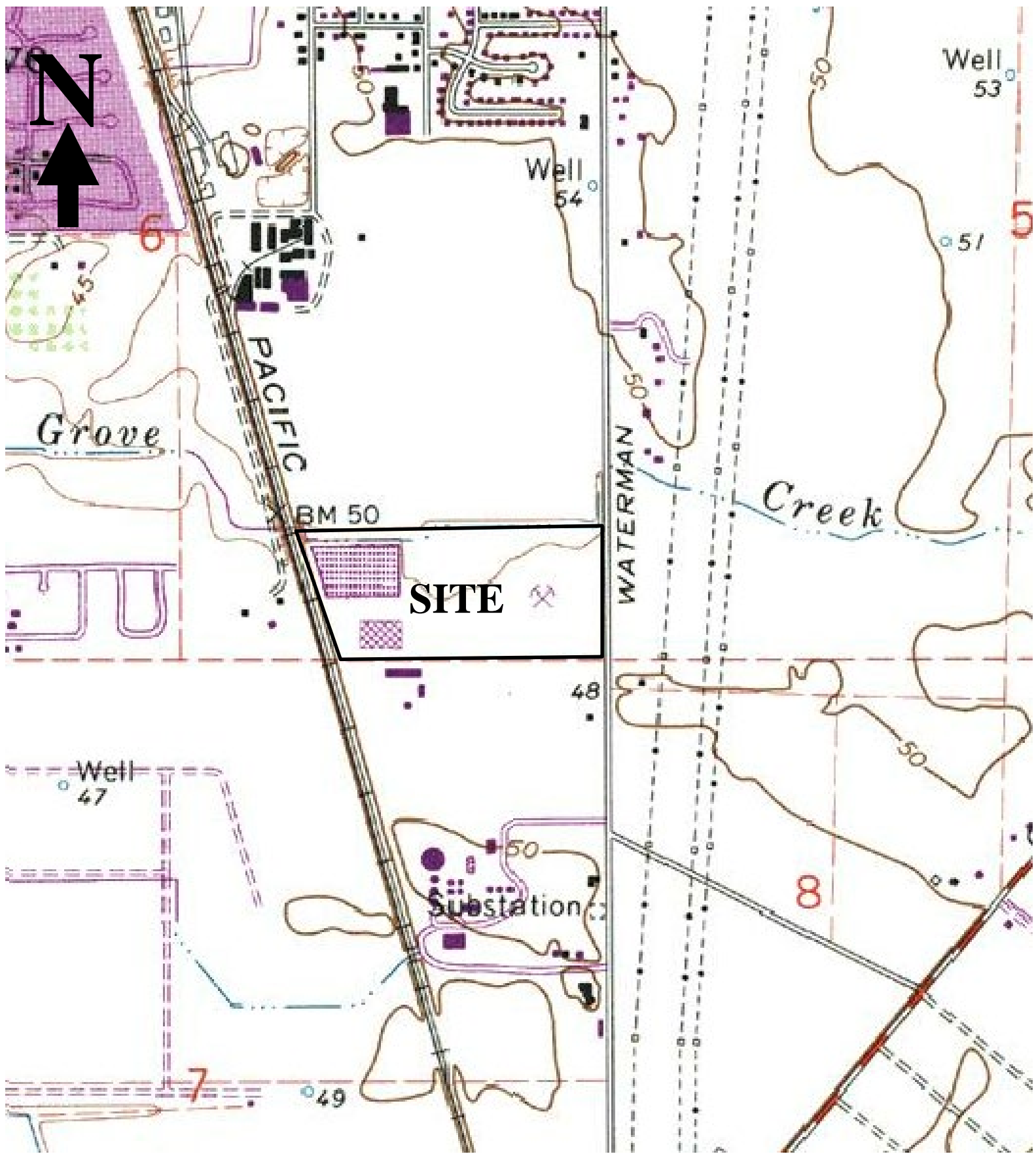


## **APPENDIX A: MAPS**

*FIGURE 1: SITE LOCATION MAP*

*FIGURE 2: VICINITY MAP*

*FIGURE 3: SITE MAP-AERIAL OVERLAY*



**Site Location Map:** APNs 134-0100-084/-085, 9195 Brinkman Court, Elk Grove, Sacramento County, CA 95624. Section 6, Township 6 North, Range 6 East, Elk Grove (1979) USGS Quadrangle.

**Figure 1**





Light industrial/commercial warehouse/offices

E. Elk Grove Water Treatment Plant  
9960 Waterman Road  
NAICS 221310

Brinkman Ct.

IN Self Storage  
9200 Brinkman Ct.  
NAICS 531130

SITE

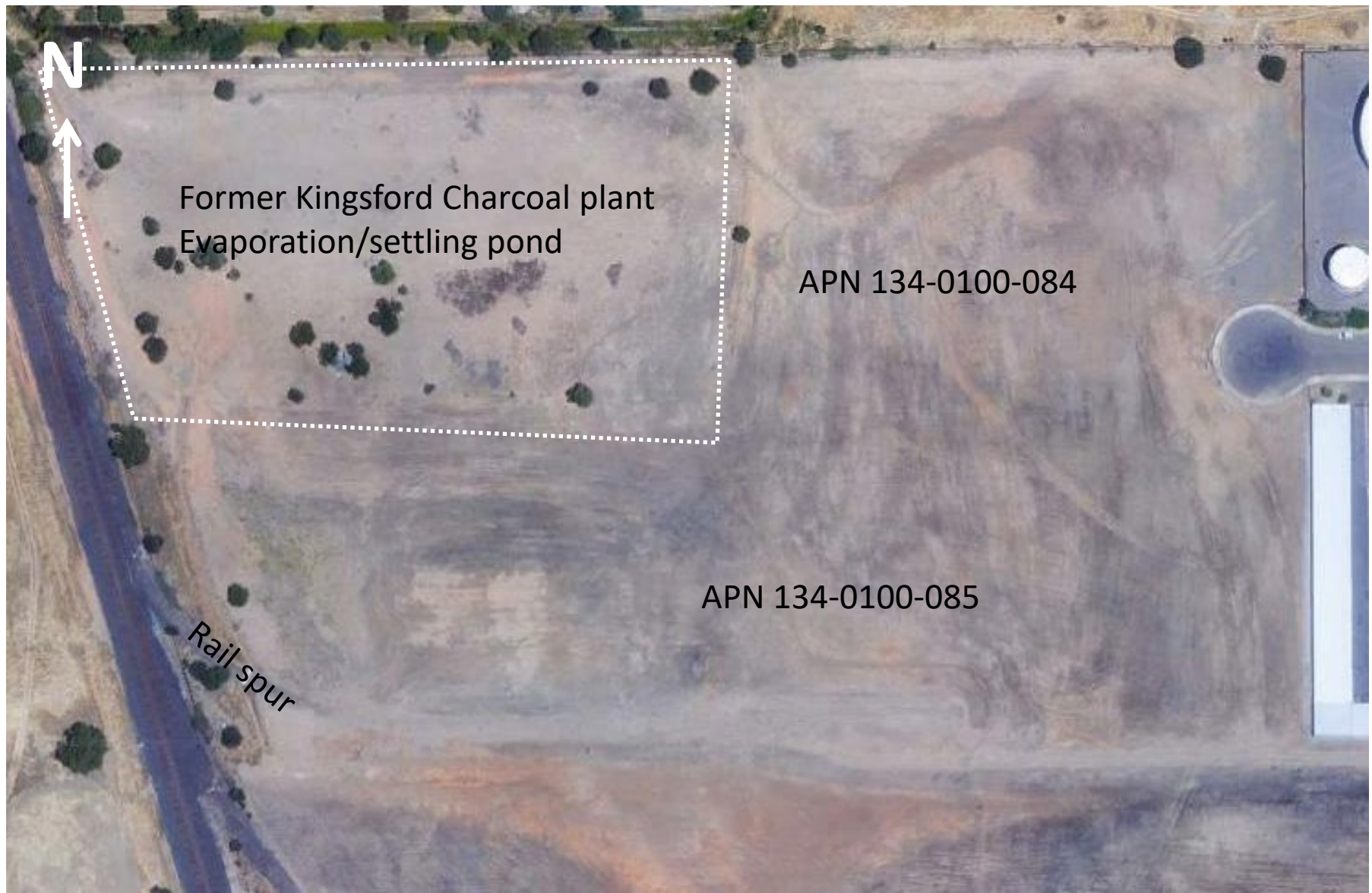
Railroad tracks

undeveloped

Undeveloped land  
10000 Waterman Road

**Vicinity Map: 9195 Brinkman Court, Elk Grove, Sacramento County, CA 95624. Site is shown surrounded by a water treatment plant, a self-storage facility, undeveloped land, railroad tracks, and light industrial/commercial warehouse/office buildings.**

**Figure 2**



**BOLE & ASSOCIATES**

6898 Penny Way, Browns Valley, CA 95918  
(530) 415-6623, email: davidhbole@yahoo.com

**SITE: 9195 BRINKMAN COURT, ELK GROVE, CA 95624**

**ITEM: SITE MAP**

**FIGURE 3**

## **APPENDIX B: SITE RECONNAISSANCE PHOTOGRAPHS**

*PHOTO PLATE 1: SITE PHOTOGRAPHS*

*PHOTO PLATE 2: ADJOINING PROPERTIES*





**BOLE & ASSOCIATES**  
6898 Penny Way, Browns Valley, CA 95918  
(530) 415-6623, email: davidhbole@yahoo.com

**SITE: 9195 BRINKMAN COURT**  
**ITEM: SITE PHOTOS (EXTERIOR)**  
**DATE: 2-19-2020** **PLATE: 1**

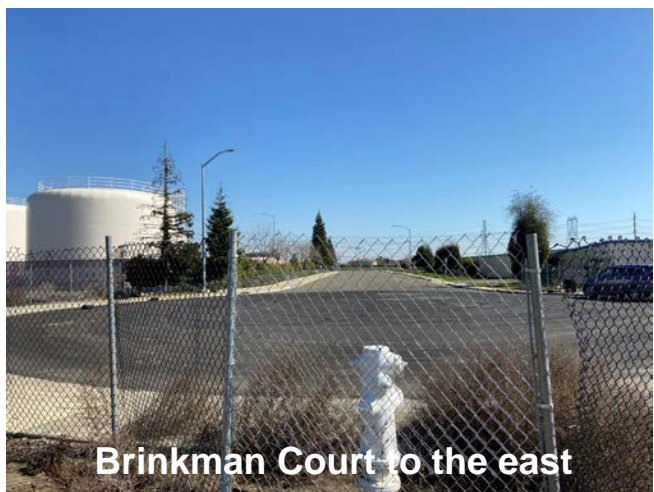




View to the north



Water treatment plant to the NE



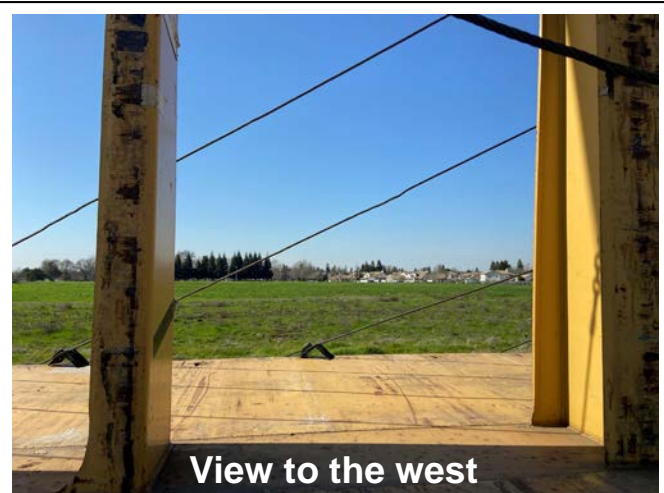
Brinkman Court to the east



Self storage to the east



Undeveloped land to the south



View to the west

**BOLE & ASSOCIATES**

6898 Penny Way, Browns Valley, CA 95918  
(530) 415-6623, email: davidhbole@yahoo.com

**SITE: 9195 BRINKMAN COURT**

**ITEM: ADJOINING PROPERTIESB**

**DATE: 2-19-2020**

**PLATE: 2**

# APPENDIX C: REGULATORY RECORDS REVIEW

*EDR® RADIUS MAP™ REPORT*

**Apns 134-0100-084/-085**

9195 Brinkman Court  
Elk Grove, CA 95624

Inquiry Number: 5973221.2s  
February 14, 2020

## The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary .....	ES1
Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	8
Orphan Summary .....	350
Government Records Searched/Data Currency Tracking .....	GR-1
 <b><u>GEOCHECK ADDENDUM</u></b>	
Physical Setting Source Addendum .....	A-1
Physical Setting Source Summary .....	A-2
Physical Setting SSURGO Soil Map .....	A-5
Physical Setting Source Map .....	A-11
Physical Setting Source Map Findings .....	A-13
Physical Setting Source Records Searched .....	PSGR-1

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

9195 BRINKMAN COURT  
ELK GROVE, CA 95624

#### COORDINATES

Latitude (North): 38.3962110 - 38° 23' 46.35"  
Longitude (West): 121.3568670 - 121° 21' 24.72"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 643491.2  
UTM Y (Meters): 4250848.5  
Elevation: 51 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5629052 ELK GROVE, CA  
Version Date: 2012  
  
Northwest Map: 5619710 FLORIN, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140621  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
9195 BRINKMAN COURT  
ELK GROVE, CA 95624

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	9195 BRINKMAN COURT	9195 BRINKMAN COURT	NPDES, CIWQS		TP
<a href="#">A2</a>	GRANTLINE BUSINESS P	9195 BRINKMAN CT & 1	CIWQS		TP
<a href="#">3</a>	NUTRISHARE INC	9850 KENT ST	Sacramento Co. ML	Higher	247, 0.047, NNW
<a href="#">B4</a>	KEVIN YOUNG CONCRETE	9880 KENT ST	Sacramento Co. ML	Higher	375, 0.071, North
<a href="#">B5</a>	BENCO BRIDGES	9888 KENT ST	HAZNET, Sacramento Co. ML	Higher	378, 0.072, NNE
<a href="#">C6</a>	CALIFORNIA WASTE REM	9900 KENT ST	Sacramento Co. ML	Higher	381, 0.072, NE
<a href="#">C7</a>	LAWSON DRAYAGE, INC	9900 KENT ST	Sacramento Co. ML	Higher	381, 0.072, NE
<a href="#">C8</a>	LINK TRUCK REPAIR, L	9900 KENT ST STE B	CERS HAZ WASTE, HAZNET, CERS	Higher	381, 0.072, NE
<a href="#">B9</a>	MECHANICAL SOLUTIONS	9914 KENT ST STE 2	Sacramento Co. ML	Higher	395, 0.075, NNE
<a href="#">B10</a>	EXPERT AUTOMOTIVE	9914 KENT ST 8	Sacramento Co. ML	Higher	395, 0.075, NNE
<a href="#">B11</a>	SOLID GOLD	9914 KENT ST STE 1	Sacramento Co. ML	Higher	395, 0.075, NNE
<a href="#">B12</a>	CYPRESS AUTO	9914 KENT ST STE 5	Sacramento Co. ML	Higher	395, 0.075, NNE
<a href="#">B13</a>	STEELE'S PAINTING CO	9914 KENT ST STE 4	Sacramento Co. ML	Higher	395, 0.075, NNE
<a href="#">C14</a>	ELK GROVE BUILDERS,	9918 KENT ST STE 1	Sacramento Co. ML	Higher	426, 0.081, NE
<a href="#">C15</a>	LINDCRAFT	9918 KENT ST #2	Sacramento Co. ML	Higher	426, 0.081, NE
<a href="#">C16</a>	CRACKAWAY ENGINE MAC	9911 KENT ST STE 6	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	495, 0.094, NNE
<a href="#">C17</a>	WESTERN SUPPLY, INC	9911 KENT ST STE 2	Sacramento Co. ML	Higher	495, 0.094, NNE
<a href="#">C18</a>	LEE'S AUTO SERVICE	9911 KENT ST STE 3	Sacramento Co. ML	Higher	495, 0.094, NNE
<a href="#">C19</a>	OFFSET SERVICES INK	9911 KENT ST NO 4	RCRA-SQG, FINDS, ECHO, Sacramento Co. ML	Higher	495, 0.094, NNE
<a href="#">C20</a>	AA-FABRICATION	9911 KENT ST STE 5	Sacramento Co. ML	Higher	495, 0.094, NNE
<a href="#">C21</a>	PARKER KENNETH AND B	9911 KENT ST	EDR Hist Auto	Higher	495, 0.094, NNE
<a href="#">B22</a>	JIM DUPZYK CONCRETE	9883 KENT ST	Sacramento Co. ML	Higher	506, 0.096, NNE
<a href="#">B23</a>	JIM DUPZYK CONCRETE	9883 KENT ST	Sacramento Co. ML	Higher	506, 0.096, NNE
<a href="#">C24</a>	IMPORT GARAGE	9901 KENT ST STE 3	Sacramento Co. ML	Higher	512, 0.097, NE
<a href="#">C25</a>	IMPORT GARAGE	9901 KENT ST STE 1	Sacramento Co. ML	Higher	512, 0.097, NE
<a href="#">C26</a>	IMPORT GARAGE	9901 KENT ST STE 1	CERS HAZ WASTE, CERS	Higher	512, 0.097, NE
<a href="#">C27</a>	J D GOLDMAN CO INC	9901 KENT ST 6	Sacramento Co. ML	Higher	512, 0.097, NE
<a href="#">C28</a>	CAL-SPORT AUTOMOTIVE	9901 KENT ST	Sacramento Co. ML	Higher	512, 0.097, NE
<a href="#">29</a>	MSA: EAST ELK GROVE	9960 WATERMAN RD	Sacramento Co. ML	Higher	529, 0.100, East
<a href="#">D30</a>	CORDEIRO VAULT CO IN	9830 KENT ST	Sacramento Co. ML, NPDES, CIWQS, CERS	Higher	529, 0.100, NNW
<a href="#">C31</a>	FRONTIER CITIZENS TE	9931 KENT ST	Sacramento Co. ML	Higher	535, 0.101, NE
<a href="#">C32</a>	SCHWAN'S HOME SERVIC	9919 KENT ST	Sacramento Co. ML	Higher	549, 0.104, NE
<a href="#">E33</a>	FEIST CABINETS & WOO	9930 KENT ST	Sacramento Co. ML	Higher	555, 0.105, ENE
<a href="#">D34</a>	VALDEZ RECYCLING	9833 KENT ST	SWRCY, Sacramento Co. ML, NPDES, CIWQS, CERS	Higher	687, 0.130, NNW
<a href="#">F35</a>	KINGSFORD PROD CO (C	10000 WATERMAN RD	RGA LUST	Higher	777, 0.147, SE
<a href="#">F36</a>	THE KINGSFORD COMPAN	10000 WATERMAN RD	LUST, EMI, HIST CORTESE, Sacramento Co. ML, CERS	Higher	777, 0.147, SE
<a href="#">F37</a>	KINGSFORD PRODUCTS C	10000 WATERMAN ROAD	RGA LUST	Higher	777, 0.147, SE
<a href="#">F38</a>	KINGSFORD PROD CO	10000 WATERMAN RD	RGA LUST	Higher	777, 0.147, SE
<a href="#">39</a>	HANFORD READY MIX	9800 KENT ST	CERS HAZ WASTE, Sacramento Co. ML, NPDES, WDS,...	Higher	786, 0.149, NW



MAPPED SITES SUMMARY

Target Property Address:  
9195 BRINKMAN COURT  
ELK GROVE, CA 95624

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
G40	KIRKLAND & SON	9874 DINO DR STE 1	Sacramento Co. ML	Higher	794, 0.150, North
G41	CUDA CLEANING SYSTEM	9874 DINO DR STE 5	Sacramento Co. ML	Higher	794, 0.150, North
G42	MARTY GARDENS LANDSC	9875 DINO DR	Sacramento Co. ML	Higher	801, 0.152, North
G43	US TRUCK & TRAILER R	9875 DINO DR	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	801, 0.152, North
E44	PERFECTION AUTO PART	9882 WATERMAN RD STE	Sacramento Co. ML	Higher	802, 0.152, NE
E45	AUTO START	9882 WATERMAN RD STE	Sacramento Co. ML	Higher	802, 0.152, NE
G46	EXPERT AUTOMOTIVE	9864 DINO DR STE 1	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	922, 0.175, North
G47	ASAP YARD TOOLS	9864 DINO DR STE 2	Sacramento Co. ML	Higher	922, 0.175, North
G48	ON-SITE WELDING & EQ	9864 DINO DR 3	Sacramento Co. ML	Higher	922, 0.175, North
G49	FLEETWASH, INC	9861 DINO DR	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	1028, 0.195, North
H50	CUSTOM GEARS	9857 DINO DR STE B	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	1029, 0.195, NNE
H51	OFFSET SERVICE INK	9851 DINO DR	RCRA-SQG, HAZNET, Sacramento Co. ML	Higher	1029, 0.195, NNE
G52	JOHNSEN'S MOBILE EQU	9854 DINO DR 6	Sacramento Co. ML	Higher	1050, 0.199, North
G53	SPRAY TECH FINISHING	9854 DINO DR STE 3	Sacramento Co. ML	Higher	1050, 0.199, North
G54	CUSTOM GEARS	9854 DINO DR STE 1	Sacramento Co. ML	Higher	1050, 0.199, North
G55	SUPERIOR AUTOMOTIVE	9854 DINO DR STE 7	Sacramento Co. ML	Higher	1050, 0.199, North
I56	S & N MOTORSPORT	9277 BENDEL PL STE 2	Sacramento Co. ML	Higher	1117, 0.212, NNE
I57	YOUR WAY FUMIGATION,	9277 BENDEL PL STE 2	Sacramento Co. ML	Higher	1117, 0.212, NNE
I58	FINISH LINE SMOG	9277 BENDEL PL STE 2	Sacramento Co. ML	Higher	1117, 0.212, NNE
J59	PACIFIC EXCAVATION,	9796 KENT ST	AST	Higher	1127, 0.213, NNW
J60	PACIFIC EXCAVATION,	9796 KENT ST	CERS HAZ WASTE, CERS TANKS, Sacramento Co. ML,...	Higher	1127, 0.213, NNW
I61	VORTEX AUTOMOTIVE	9291 BENDEL PL STE 1	EDR Hist Auto	Higher	1175, 0.223, NE
I62	MINUTEMAN PRESS	9291 BENDEL PL STE 1	Sacramento Co. ML	Higher	1175, 0.223, NE
I63	ADVANCE IMPORT AUTO	9291 BENDEL PL STE 1	CERS HAZ WASTE, CERS	Higher	1175, 0.223, NE
I64	AUTO START OF ELK GR	9291 BENDEL PL STE 1	CERS HAZ WASTE, CERS	Higher	1175, 0.223, NE
I65	AUTO START OF ELK GR	9291 BENDEL PL STE 1	Sacramento Co. ML	Higher	1175, 0.223, NE
I66	ADVANCE IMPORT AUTO	9291 BENDEL PL STE 1	Sacramento Co. ML	Higher	1175, 0.223, NE
67	CENTERLINE STRIPING	9847 DINO DR	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	1264, 0.239, North
68	CONOCO ASPHALT TERMI	10090 WATERMAN RD	RGA LUST	Higher	1701, 0.322, SSE
K69	CONOCO ASPHALT TERMI	10090 WATERMAN RD	RGA LUST	Higher	1745, 0.330, SSE
K70	CONOCO BULK PLANT	10090 WATERMAN RD	LUST, CPS-SLIC, Sacramento Co. CS, CHMIRS,...	Higher	1745, 0.330, SSE
K71	CONOCO ASPHALT TERMI	10090 WATERMAN ROAD	RGA LUST	Higher	1745, 0.330, SSE
L72	FERRELL GAS	9765 DINO DRIVE	RGA LUST	Higher	2035, 0.385, North
L73	FERRELL GAS	9765 DINO DRIVE	LUST, Sacramento Co. CS, CERS HAZ WASTE, HIST UST,...	Higher	2035, 0.385, North
L74	FERRELL GAS	9765 DINO DRIVE	LUST, CERS	Higher	2035, 0.385, North
M75	RESIDENCE	9800 WATERMAN	RGA LUST	Higher	2161, 0.409, NNE
M76	RESIDENCE	9800 WATERMAN	LUST, Sacramento Co. CS, Notify 65, CERS	Higher	2161, 0.409, NNE
N77	WORLD ASPHALT COMPAN	10144 WATERMAN RD	LUST, Sacramento Co. CS, CERS HAZ WASTE, SWEEPS...	Higher	2227, 0.422, South
N78	WORLD ASPHALT	10144 WATERMAN RD	RGA LUST	Higher	2227, 0.422, South

MAPPED SITES SUMMARY

Target Property Address:  
9195 BRINKMAN COURT  
ELK GROVE, CA 95624

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">N79</a>	WORLD AHPHALT	10144 WATERMAN RD	RGA LUST	Higher	2227, 0.422, South
<a href="#">80</a>	HIGH SCHOOL/MIDDLE S	CALVINE ROAD/AUBERRY	ENVIROSTOR, SCH	Lower	2804, 0.531, WNW
<a href="#">O81</a>	CRUMP RESIDENCE	9674 KENT	LUST, Sacramento Co. CS, HIST CORTESE, Sacramento...	Higher	3545, 0.671, NNW
<a href="#">O82</a>	CRUMP RESIDENCE	9674 KENT ST	RGA LUST	Higher	3545, 0.671, NNW
<a href="#">P83</a>	EDNA BATEY ELEMENTAR	BRADSHAW ROAD/ELK GR	ENVIROSTOR, SCH	Lower	4217, 0.799, WNW
<a href="#">P84</a>	ELEMENTARY SCHOOL NO	BOTHWELL DRIVE/VINTA	ENVIROSTOR, SCH	Lower	4217, 0.799, WNW
<a href="#">Q85</a>	ARCO #5696	9215 ELK GROVE BLVD	LUST, HIST CORTESE, CERS	Higher	4472, 0.847, North
<a href="#">Q86</a>	ARCO #5696	9215 ELK GROVE BLVD	RGA LUST	Higher	4472, 0.847, North
<a href="#">R87</a>	HARCROW PROPERTY	9251 ELK GROVE BLVD	RGA LUST	Higher	4496, 0.852, North
<a href="#">R88</a>	HARCROW PROPERTY	9251 ELK GROVE	LUST, Sacramento Co. CS, HIST CORTESE, Sacramento...	Higher	4496, 0.852, North
<a href="#">S89</a>	ELK GROVE PAINT AND	9097 ELK GROVE	LUST, Sacramento Co. CS, HIST CORTESE, CERS	Higher	4739, 0.898, NNW
<a href="#">S90</a>	ELK GROVE PAINT AND	9097 ELK GROVE BLVD	RGA LUST	Higher	4739, 0.898, NNW
<a href="#">T91</a>	HORNING PROPERTY	9020 ELK GROVE BLVD	RGA LUST	Lower	4864, 0.921, NNW
<a href="#">T92</a>	HORNING PROPERTY	9020 ELK GROVE	LUST, Sacramento Co. CS, HIST CORTESE, CERS	Lower	4864, 0.921, NNW
<a href="#">T93</a>	ARCO	9000 ELK GROVE BLVD	RGA LUST	Lower	4977, 0.943, NNW
<a href="#">U94</a>	UNOCAL SS #4829(CLOS	8999 ELK GROVE BLVD	RGA LUST	Lower	5160, 0.977, NNW
<a href="#">U95</a>	UNOCAL #4829	8999 ELK GROVE BLVD	RGA LUST	Lower	5160, 0.977, NNW
<a href="#">U96</a>	UNOCAL SS #4829	8999 ELK GROVE BLVD	RGA LUST	Lower	5160, 0.977, NNW
<a href="#">U97</a>	UNOCAL #4829	8999 ELK GROVE	LUST, HIST CORTESE, CERS	Lower	5160, 0.977, NNW



# EXECUTIVE SUMMARY

## **TARGET PROPERTY SEARCH RESULTS**

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
9195 BRINKMAN COURT 9195 BRINKMAN COURT ELK GROVE, CA 95624	NPDES Facility Status: Terminated CIWQS	N/A
GRANTLINE BUSINESS P 9195 BRINKMAN CT & 1 ELK GROVE, CA 95624	CIWQS	N/A

## **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## **STANDARD ENVIRONMENTAL RECORDS**

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

## EXECUTIVE SUMMARY

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
UST..... Active UST Facilities  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing  
VCP..... Voluntary Cleanup Program Properties

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT..... Waste Management Unit Database  
HAULERS..... Registered Waste Tire Haulers Listing

## EXECUTIVE SUMMARY

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory  
IHS OPEN DUMPS..... Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... Delisted National Clandestine Laboratory Register  
HIST Cal-Sites..... Historical Calsites Database  
SCH..... School Property Evaluation Program  
CDL..... Clandestine Drug Labs  
Toxic Pits..... Toxic Pits Cleanup Act Sites  
US CDL..... National Clandestine Laboratory Register  
PFAS..... PFAS Contamination Site Location Listing

### **Local Lists of Registered Storage Tanks**

SWEEPS UST..... SWEEPS UST Listing  
HIST UST..... Hazardous Substance Storage Container Database  
CA FID UST..... Facility Inventory Database

### **Local Land Records**

LIENS..... Environmental Liens Listing  
LIENS 2..... CERCLA Lien Information  
DEED..... Deed Restriction Listing

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
CHMIRS..... California Hazardous Material Incident Report System  
LDS..... Land Disposal Sites Listing  
MCS..... Military Cleanup Sites Listing

### **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated  
FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List  
TSCA..... Toxic Substances Control Act  
TRIS..... Toxic Chemical Release Inventory System  
SSTS..... Section 7 Tracking Systems  
ROD..... Records Of Decision  
RMP..... Risk Management Plans  
RAATS..... RCRA Administrative Action Tracking System  
PRP..... Potentially Responsible Parties  
PADS..... PCB Activity Database System  
ICIS..... Integrated Compliance Information System  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
MLTS..... Material Licensing Tracking System

## EXECUTIVE SUMMARY

COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
MINES MRDS.....	Mineral Resources Data System

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP..... EDR Proprietary Manufactured Gas Plants

# EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

RGA LF..... Recovered Government Archive Solid Waste Facilities List

## SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/16/2019 has revealed that there is 1 RCRA-SQG site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>OFFSET SERVICES INK</i></b> EPA ID:: CAR000044172	<b><i>9911 KENT ST NO 4</i></b>	<b><i>NNE 0 - 1/8 (0.094 mi.)</i></b>	<b><i>C19</i></b>	<b><i>43</i></b>

### ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

## EXECUTIVE SUMMARY

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/28/2019 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>HIGH SCHOOL/MIDDLE S</b> Facility Id: 34010015 Status: No Action Required	<b>CALVINE ROAD/AUBERRY</b>	<b>WNW 1/2 - 1 (0.531 mi.)</b>	<b>80</b>	<b>311</b>
<b>EDNA BATEY ELEMENTAR</b> Facility Id: 34020001 Status: No Action Required	<b>BRADSHAW ROAD/ELK GR</b>	<b>WNW 1/2 - 1 (0.799 mi.)</b>	<b>P83</b>	<b>318</b>
<b>ELEMENTARY SCHOOL NO</b> Facility Id: 34010005 Status: No Action Required	<b>BOTHWELL DRIVE/VINTA</b>	<b>WNW 1/2 - 1 (0.799 mi.)</b>	<b>P84</b>	<b>320</b>

### **State and tribal leaking storage tank lists**

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 12 LUST sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>THE KINGSFORD COMPAN</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Status: Case Closed Global Id: T0606700284	<b>10000 WATERMAN RD</b>	<b>SE 1/8 - 1/4 (0.147 mi.)</b>	<b>F36</b>	<b>87</b>
<b>CONOCO BULK PLANT</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 09/09/2019 Status: Open - Assessment & Interim Remedial Action Status: Case Closed Global Id: T0606700036	<b>10090 WATERMAN RD</b>	<b>SSE 1/4 - 1/2 (0.330 mi.)</b>	<b>K70</b>	<b>249</b>
<b>FERRELL GAS</b> Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed Global Id: T0606720608	<b>9765 DINO DRIVE</b>	<b>N 1/4 - 1/2 (0.385 mi.)</b>	<b>L73</b>	<b>258</b>
<b>FERRELL GAS</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Status: Leak being confirmed	<b>9765 DINO DRIVE</b>	<b>N 1/4 - 1/2 (0.385 mi.)</b>	<b>L74</b>	<b>296</b>
<b>RESIDENCE</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 09/09/2019 Status: Completed - Case Closed	<b>9800 WATERMAN</b>	<b>NNE 1/4 - 1/2 (0.409 mi.)</b>	<b>M76</b>	<b>298</b>

## EXECUTIVE SUMMARY

Status: Case Closed  
Global Id: T0606791922

**WORLD ASPHALT COMPAN**                      **10144 WATERMAN RD**                      **S 1/4 - 1/2 (0.422 mi.)**                      **N77**                      **300**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: No Action  
Global Id: T0606701093

**CRUMP RESIDENCE**                      **9674 KENT**                      **NNW 1/2 - 1 (0.671 mi.)**                      **O81**                      **314**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: Case Closed  
Global Id: T0606700860

**ARCO #5696**                      **9215 ELK GROVE BLVD**                      **N 1/2 - 1 (0.847 mi.)**                      **Q85**                      **323**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: Case Closed  
Global Id: T0606700579

**HARCROW PROPERTY**                      **9251 ELK GROVE**                      **N 1/2 - 1 (0.852 mi.)**                      **R88**                      **328**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: Case Closed  
Global Id: T0606700774

**ELK GROVE PAINT AND**                      **9097 ELK GROVE**                      **NNW 1/2 - 1 (0.898 mi.)**                      **S89**                      **331**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: Remedial action (cleanup) Underway  
Global Id: T0606701004

**Lower Elevation**                      **Address**                      **Direction / Distance**                      **Map ID**                      **Page**

**HORNING PROPERTY**                      **9020 ELK GROVE**                      **NNW 1/2 - 1 (0.921 mi.)**                      **T92**                      **341**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: Case Closed  
Global Id: T0606700546

**UNOCAL #4829**                      **8999 ELK GROVE**                      **NNW 1/2 - 1 (0.977 mi.)**                      **U97**                      **347**

Database: LUST REG 5, Date of Government Version: 07/01/2008  
Database: LUST, Date of Government Version: 09/09/2019  
Status: Completed - Case Closed  
Status: Case Closed  
Global Id: T0606700425

## EXECUTIVE SUMMARY

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO BULK PLANT</b> Database: SLIC REG 5, Date of Government Version: 04/01/2005	<b>10090 WATERMAN RD</b>	<b>SSE 1/4 - 1/2 (0.330 mi.)</b>	<b>K70</b>	<b>249</b>

Sacramento Co. CS: List of sites where unauthorized releases of potentially hazardous materials have occurred.

A review of the Sacramento Co. CS list, as provided by EDR, and dated 08/06/2019 has revealed that there are 4 Sacramento Co. CS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO BULK PLANT</b> Facility Id: RO0001142	<b>10090 WATERMAN RD</b>	<b>SSE 1/4 - 1/2 (0.330 mi.)</b>	<b>K70</b>	<b>249</b>
<b>FERRELL GAS</b> Facility Id: RO0001567 Date Closed: 3/20/2004	<b>9765 DINO DRIVE</b>	<b>N 1/4 - 1/2 (0.385 mi.)</b>	<b>L73</b>	<b>258</b>
<b>RESIDENCE</b> Facility Id: RO0001466 Date Closed: 4/4/2004	<b>9800 WATERMAN</b>	<b>NNE 1/4 - 1/2 (0.409 mi.)</b>	<b>M76</b>	<b>298</b>
<b>WORLD ASPHALT COMPAN</b> Facility Id: RO0001330	<b>10144 WATERMAN RD</b>	<b>S 1/4 - 1/2 (0.422 mi.)</b>	<b>N77</b>	<b>300</b>

### ***State and tribal registered storage tank lists***

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PACIFIC EXCAVATION, Database: AST, Date of Government Version: 07/06/2016	9796 KENT ST	NNW 1/8 - 1/4 (0.213 mi.)	J59	210

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 09/09/2019 has revealed that there is 1



## EXECUTIVE SUMMARY

SWRCY site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VALDEZ RECYCLING</b> Cert Id: RC271948.001	<b>9833 KENT ST</b>	<b>NNW 1/8 - 1/4 (0.130 mi.)</b>	<b>D34</b>	<b>78</b>

### **Local Lists of Hazardous waste / Contaminated Sites**

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/21/2019 has revealed that there are 12 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>LINK TRUCK REPAIR, L</b>	<b>9900 KENT ST STE B</b>	<b>NE 0 - 1/8 (0.072 mi.)</b>	<b>C8</b>	<b>19</b>
<b>CRACKAWAY ENGINE MAC</b>	<b>9911 KENT ST STE 6</b>	<b>NNE 0 - 1/8 (0.094 mi.)</b>	<b>C16</b>	<b>36</b>
<b>IMPORT GARAGE</b>	<b>9901 KENT ST STE 1</b>	<b>NE 0 - 1/8 (0.097 mi.)</b>	<b>C26</b>	<b>49</b>
<b>HANFORD READY MIX</b>	<b>9800 KENT ST</b>	<b>NW 1/8 - 1/4 (0.149 mi.)</b>	<b>39</b>	<b>94</b>
<b>US TRUCK &amp; TRAILER R</b>	<b>9875 DINO DR</b>	<b>N 1/8 - 1/4 (0.152 mi.)</b>	<b>G43</b>	<b>123</b>
<b>EXPERT AUTOMOTIVE</b>	<b>9864 DINO DR STE 1</b>	<b>N 1/8 - 1/4 (0.175 mi.)</b>	<b>G46</b>	<b>133</b>
<b>FLEETWASH, INC</b>	<b>9861 DINO DR</b>	<b>N 1/8 - 1/4 (0.195 mi.)</b>	<b>G49</b>	<b>139</b>
<b>CUSTOM GEARS</b>	<b>9857 DINO DR STE B</b>	<b>NNE 1/8 - 1/4 (0.195 mi.)</b>	<b>H50</b>	<b>148</b>
<b>PACIFIC EXCAVATION,</b>	<b>9796 KENT ST</b>	<b>NNW 1/8 - 1/4 (0.213 mi.)</b>	<b>J60</b>	<b>211</b>
<b>ADVANCE IMPORT AUTO</b>	<b>9291 BENDEL PL STE 1</b>	<b>NE 1/8 - 1/4 (0.223 mi.)</b>	<b>I63</b>	<b>221</b>
<b>AUTO START OF ELK GR</b>	<b>9291 BENDEL PL STE 1</b>	<b>NE 1/8 - 1/4 (0.223 mi.)</b>	<b>I64</b>	<b>228</b>
<b>CENTERLINE STRIPING</b>	<b>9847 DINO DR</b>	<b>N 1/8 - 1/4 (0.239 mi.)</b>	<b>67</b>	<b>241</b>

### **Local Lists of Registered Storage Tanks**

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/21/2019 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PACIFIC EXCAVATION,</b>	<b>9796 KENT ST</b>	<b>NNW 1/8 - 1/4 (0.213 mi.)</b>	<b>J60</b>	<b>211</b>

### **Other Ascertainable Records**

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 09/23/2019 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO BULK PLANT</b> Cleanup Status: OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	<b>10090 WATERMAN RD</b>	<b>SSE 1/4 - 1/2 (0.330 mi.)</b>	<b>K70</b>	<b>249</b>

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>THE KINGSFORD COMPAN</b> Reg Id: 340352	<b>10000 WATERMAN RD</b>	<b>SE 1/8 - 1/4 (0.147 mi.)</b>	<b>F36</b>	<b>87</b>
<b>CONOCO BULK PLANT</b> Reg Id: 340054	<b>10090 WATERMAN RD</b>	<b>SSE 1/4 - 1/2 (0.330 mi.)</b>	<b>K70</b>	<b>249</b>
<b>WORLD ASPHALT COMPAN</b> Reg Id: 341269	<b>10144 WATERMAN RD</b>	<b>S 1/4 - 1/2 (0.422 mi.)</b>	<b>N77</b>	<b>300</b>

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 08/07/2019 has revealed that there are 55 Sacramento Co. ML sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NUTRISHARE INC	9850 KENT ST	NNW 0 - 1/8 (0.047 mi.)	3	15
KEVIN YOUNG CONCRETE	9880 KENT ST	N 0 - 1/8 (0.071 mi.)	B4	16
<b>BENCO BRIDGES</b>	<b>9888 KENT ST</b>	<b>NNE 0 - 1/8 (0.072 mi.)</b>	<b>B5</b>	<b>16</b>
CALIFORNIA WASTE REM Facility Status: Inactive. Included on a listing no longer updated.	9900 KENT ST	NE 0 - 1/8 (0.072 mi.)	C6	18
LAWSON DRAYAGE, INC Facility Status: Inactive. Included on a listing no longer updated.	9900 KENT ST	NE 0 - 1/8 (0.072 mi.)	C7	19
MECHANICAL SOLUTIONS	9914 KENT ST STE 2	NNE 0 - 1/8 (0.075 mi.)	B9	32
EXPERT AUTOMOTIVE	9914 KENT ST 8	NNE 0 - 1/8 (0.075 mi.)	B10	33
SOLID GOLD	9914 KENT ST STE 1	NNE 0 - 1/8 (0.075 mi.)	B11	33
CYPRESS AUTO	9914 KENT ST STE 5	NNE 0 - 1/8 (0.075 mi.)	B12	34
STEELE'S PAINTING CO	9914 KENT ST STE 4	NNE 0 - 1/8 (0.075 mi.)	B13	34
ELK GROVE BUILDERS,	9918 KENT ST STE 1	NE 0 - 1/8 (0.081 mi.)	C14	35
LINDCRAFT Facility Status: Inactive. Included on a listing no longer updated.	9918 KENT ST #2	NE 0 - 1/8 (0.081 mi.)	C15	36
<b>CRACKAWAY ENGINE MAC</b>	<b>9911 KENT ST STE 6</b>	<b>NNE 0 - 1/8 (0.094 mi.)</b>	<b>C16</b>	<b>36</b>
WESTERN SUPPLY, INC	9911 KENT ST STE 2	NNE 0 - 1/8 (0.094 mi.)	C17	42
LEE'S AUTO SERVICE	9911 KENT ST STE 3	NNE 0 - 1/8 (0.094 mi.)	C18	43
<b>OFFSET SERVICES INK</b>	<b>9911 KENT ST NO 4</b>	<b>NNE 0 - 1/8 (0.094 mi.)</b>	<b>C19</b>	<b>43</b>
AA-FABRICATION	9911 KENT ST STE 5	NNE 0 - 1/8 (0.094 mi.)	C20	46
JIM DUPZYK CONCRETE	9883 KENT ST	NNE 0 - 1/8 (0.096 mi.)	B22	47
JIM DUPZYK CONCRETE	9883 KENT ST	NNE 0 - 1/8 (0.096 mi.)	B23	47

## EXECUTIVE SUMMARY

Facility Status: Inactive. Included on a listing no longer updated.

IMPORT GARAGE	9901 KENT ST STE 3	NE 0 - 1/8 (0.097 mi.)	C24	48
IMPORT GARAGE	9901 KENT ST STE 1	NE 0 - 1/8 (0.097 mi.)	C25	48
J D GOLDMAN CO INC	9901 KENT ST 6	NE 0 - 1/8 (0.097 mi.)	C27	62
CAL-SPORT AUTOMOTIVE	9901 KENT ST	NE 0 - 1/8 (0.097 mi.)	C28	63

Facility Status: Inactive. Included on a listing no longer updated.

MSA: EAST ELK GROVE	9960 WATERMAN RD	E 0 - 1/8 (0.100 mi.)	29	63
<b>CORDEIRO VAULT CO IN</b>	<b>9830 KENT ST</b>	<b>NNW 0 - 1/8 (0.100 mi.)</b>	<b>D30</b>	<b>64</b>
FRONTIER CITIZENS TE	9931 KENT ST	NE 0 - 1/8 (0.101 mi.)	C31	76
SCHWAN'S HOME SERVIC	9919 KENT ST	NE 0 - 1/8 (0.104 mi.)	C32	76
FEIST CABINETS & WOO	9930 KENT ST	ENE 0 - 1/8 (0.105 mi.)	E33	77
<b>VALDEZ RECYCLING</b>	<b>9833 KENT ST</b>	<b>NNW 1/8 - 1/4 (0.130 mi.)</b>	<b>D34</b>	<b>78</b>
<b>THE KINGSFORD COMPAN</b>	<b>10000 WATERMAN RD</b>	<b>SE 1/8 - 1/4 (0.147 mi.)</b>	<b>F36</b>	<b>87</b>

Facility Status: Inactive. Included on a listing no longer updated.

Facility Id: G0105786

<b>HANFORD READY MIX</b>	<b>9800 KENT ST</b>	<b>NW 1/8 - 1/4 (0.149 mi.)</b>	<b>39</b>	<b>94</b>
KIRKLAND & SON	9874 DINO DR STE 1	N 1/8 - 1/4 (0.150 mi.)	G40	121
CUDA CLEANING SYSTEM	9874 DINO DR STE 5	N 1/8 - 1/4 (0.150 mi.)	G41	122
MARTY GARDENS LANDSC	9875 DINO DR	N 1/8 - 1/4 (0.152 mi.)	G42	123

Facility Status: Inactive. Included on a listing no longer updated.

<b>US TRUCK &amp; TRAILER R</b>	<b>9875 DINO DR</b>	<b>N 1/8 - 1/4 (0.152 mi.)</b>	<b>G43</b>	<b>123</b>
PERFECTION AUTO PART	9882 WATERMAN RD STE	NE 1/8 - 1/4 (0.152 mi.)	E44	132
AUTO START	9882 WATERMAN RD STE	NE 1/8 - 1/4 (0.152 mi.)	E45	133
<b>EXPERT AUTOMOTIVE</b>	<b>9864 DINO DR STE 1</b>	<b>N 1/8 - 1/4 (0.175 mi.)</b>	<b>G46</b>	<b>133</b>
ASAP YARD TOOLS	9864 DINO DR STE 2	N 1/8 - 1/4 (0.175 mi.)	G47	138
ON-SITE WELDING & EQ	9864 DINO DR 3	N 1/8 - 1/4 (0.175 mi.)	G48	138
<b>FLEETWASH, INC</b>	<b>9861 DINO DR</b>	<b>N 1/8 - 1/4 (0.195 mi.)</b>	<b>G49</b>	<b>139</b>
<b>CUSTOM GEARS</b>	<b>9857 DINO DR STE B</b>	<b>NNE 1/8 - 1/4 (0.195 mi.)</b>	<b>H50</b>	<b>148</b>
<b>OFFSET SERVICE INK</b>	<b>9851 DINO DR</b>	<b>NNE 1/8 - 1/4 (0.195 mi.)</b>	<b>H51</b>	<b>151</b>
JOHNSEN'S MOBILE EQU	9854 DINO DR 6	N 1/8 - 1/4 (0.199 mi.)	G52	206
SPRAY TECH FINISHING	9854 DINO DR STE 3	N 1/8 - 1/4 (0.199 mi.)	G53	207
CUSTOM GEARS	9854 DINO DR STE 1	N 1/8 - 1/4 (0.199 mi.)	G54	207
SUPERIOR AUTOMOTIVE	9854 DINO DR STE 7	N 1/8 - 1/4 (0.199 mi.)	G55	208
S & N MOTORSPORT	9277 BENDEL PL STE 2	NNE 1/8 - 1/4 (0.212 mi.)	I56	208
YOUR WAY FUMIGATION,	9277 BENDEL PL STE 2	NNE 1/8 - 1/4 (0.212 mi.)	I57	209
FINISH LINE SMOG	9277 BENDEL PL STE 2	NNE 1/8 - 1/4 (0.212 mi.)	I58	209
<b>PACIFIC EXCAVATION,</b>	<b>9796 KENT ST</b>	<b>NNW 1/8 - 1/4 (0.213 mi.)</b>	<b>J60</b>	<b>211</b>
MINUTEMAN PRESS	9291 BENDEL PL STE 1	NE 1/8 - 1/4 (0.223 mi.)	I62	220
AUTO START OF ELK GR	9291 BENDEL PL STE 1	NE 1/8 - 1/4 (0.223 mi.)	I65	240
ADVANCE IMPORT AUTO	9291 BENDEL PL STE 1	NE 1/8 - 1/4 (0.223 mi.)	I66	240
<b>CENTERLINE STRIPING</b>	<b>9847 DINO DR</b>	<b>N 1/8 - 1/4 (0.239 mi.)</b>	<b>67</b>	<b>241</b>

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/16/2019 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RESIDENCE</b>	<b>9800 WATERMAN</b>	<b>NNE 1/4 - 1/2 (0.409 mi.)</b>	<b>M76</b>	<b>298</b>

## EXECUTIVE SUMMARY

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PARKER KENNETH AND B	9911 KENT ST	NNE 0 - 1/8 (0.094 mi.)	C21	46
VORTEX AUTOMOTIVE	9291 BENDEL PL STE 1	NE 1/8 - 1/4 (0.223 mi.)	I61	220

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

A review of the RGA LUST list, as provided by EDR, has revealed that there are 19 RGA LUST sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KINGSFORD PROD CO (C	10000 WATERMAN RD	SE 1/8 - 1/4 (0.147 mi.)	F35	87
KINGSFORD PRODUCTS C	10000 WATERMAN ROAD	SE 1/8 - 1/4 (0.147 mi.)	F37	92
KINGSFORD PROD CO	10000 WATERMAN RD	SE 1/8 - 1/4 (0.147 mi.)	F38	92
CONOCO ASPHALT TERMI	10090 WATERMAN RD	SSE 1/4 - 1/2 (0.322 mi.)	68	247
CONOCO ASPHALT TERMI	10090 WATERMAN RD	SSE 1/4 - 1/2 (0.330 mi.)	K69	248
CONOCO ASPHALT TERMI	10090 WATERMAN ROAD	SSE 1/4 - 1/2 (0.330 mi.)	K71	257
FERRELL GAS	9765 DINO DRIVE	N 1/4 - 1/2 (0.385 mi.)	L72	258
RESIDENCE	9800 WATERMAN	NNE 1/4 - 1/2 (0.409 mi.)	M75	297
WORLD ASPHALT	10144 WATERMAN RD	S 1/4 - 1/2 (0.422 mi.)	N78	310
WORLD AHPHALT	10144 WATERMAN RD	S 1/4 - 1/2 (0.422 mi.)	N79	310
CRUMP RESIDENCE	9674 KENT ST	NNW 1/2 - 1 (0.671 mi.)	O82	316
ARCO #5696	9215 ELK GROVE BLVD	N 1/2 - 1 (0.847 mi.)	Q86	325
HARCROW PROPERTY	9251 ELK GROVE BLVD	N 1/2 - 1 (0.852 mi.)	R87	327
ELK GROVE PAINT AND	9097 ELK GROVE BLVD	NNW 1/2 - 1 (0.898 mi.)	S90	338
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HORNING PROPERTY	9020 ELK GROVE BLVD	NNW 1/2 - 1 (0.921 mi.)	T91	339

## EXECUTIVE SUMMARY

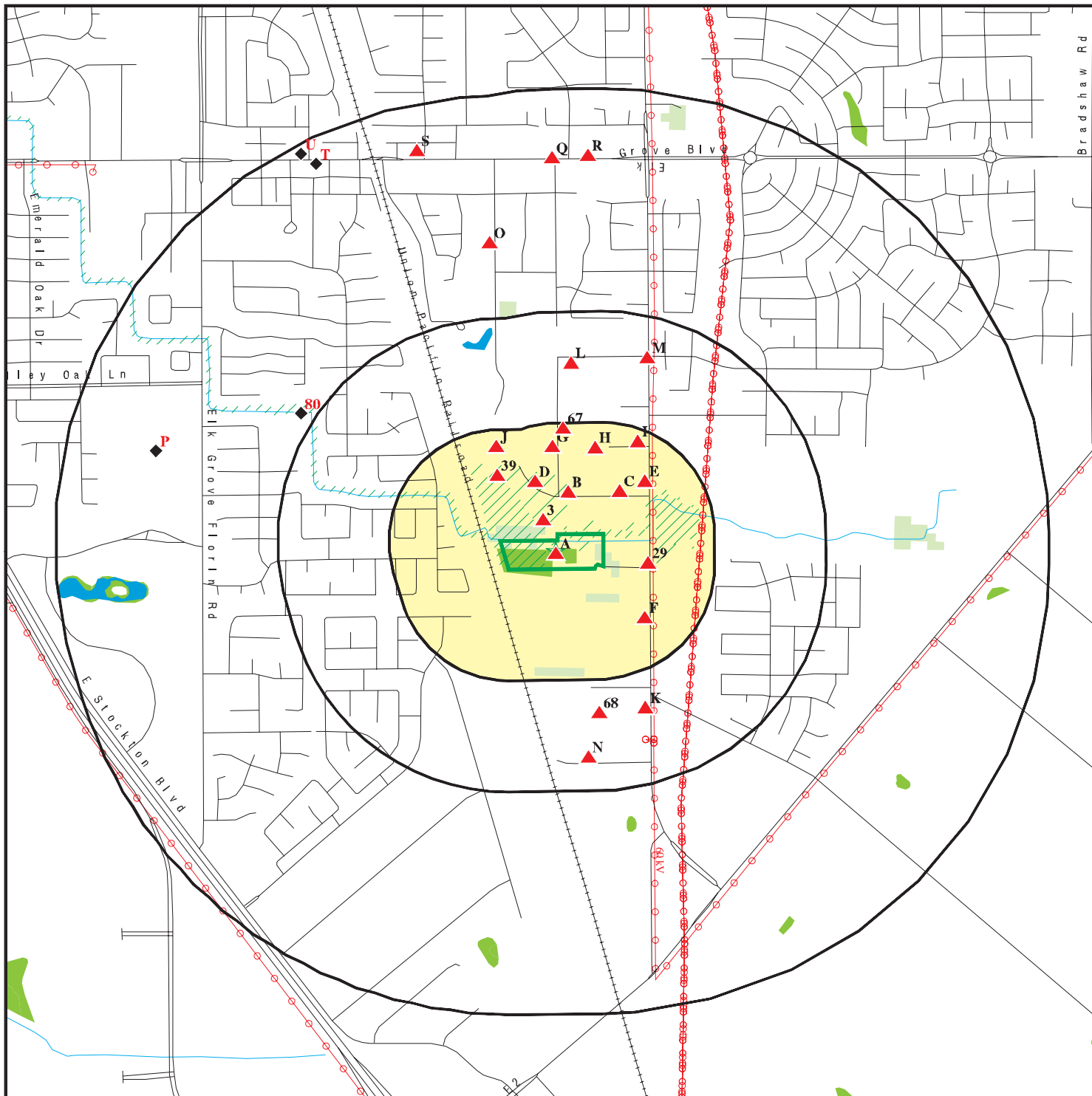
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ARCO	9000 ELK GROVE BLVD	NNW 1/2 - 1 (0.943 mi.)	T93	344
UNOCAL SS #4829(CLOS	8999 ELK GROVE BLVD	NNW 1/2 - 1 (0.977 mi.)	U94	345
UNOCAL #4829	8999 ELK GROVE BLVD	NNW 1/2 - 1 (0.977 mi.)	U95	345
UNOCAL SS #4829	8999 ELK GROVE BLVD	NNW 1/2 - 1 (0.977 mi.)	U96	346

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

<u>Site Name</u>	<u>Database(s)</u>
KINGSFORD CHARCOAL PLANT	Sacramento Co. CS
KINGSFORD CHARCOAL COMPANY	Sacramento Co. CS

# OVERVIEW MAP - 5973221.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

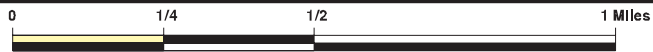
Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

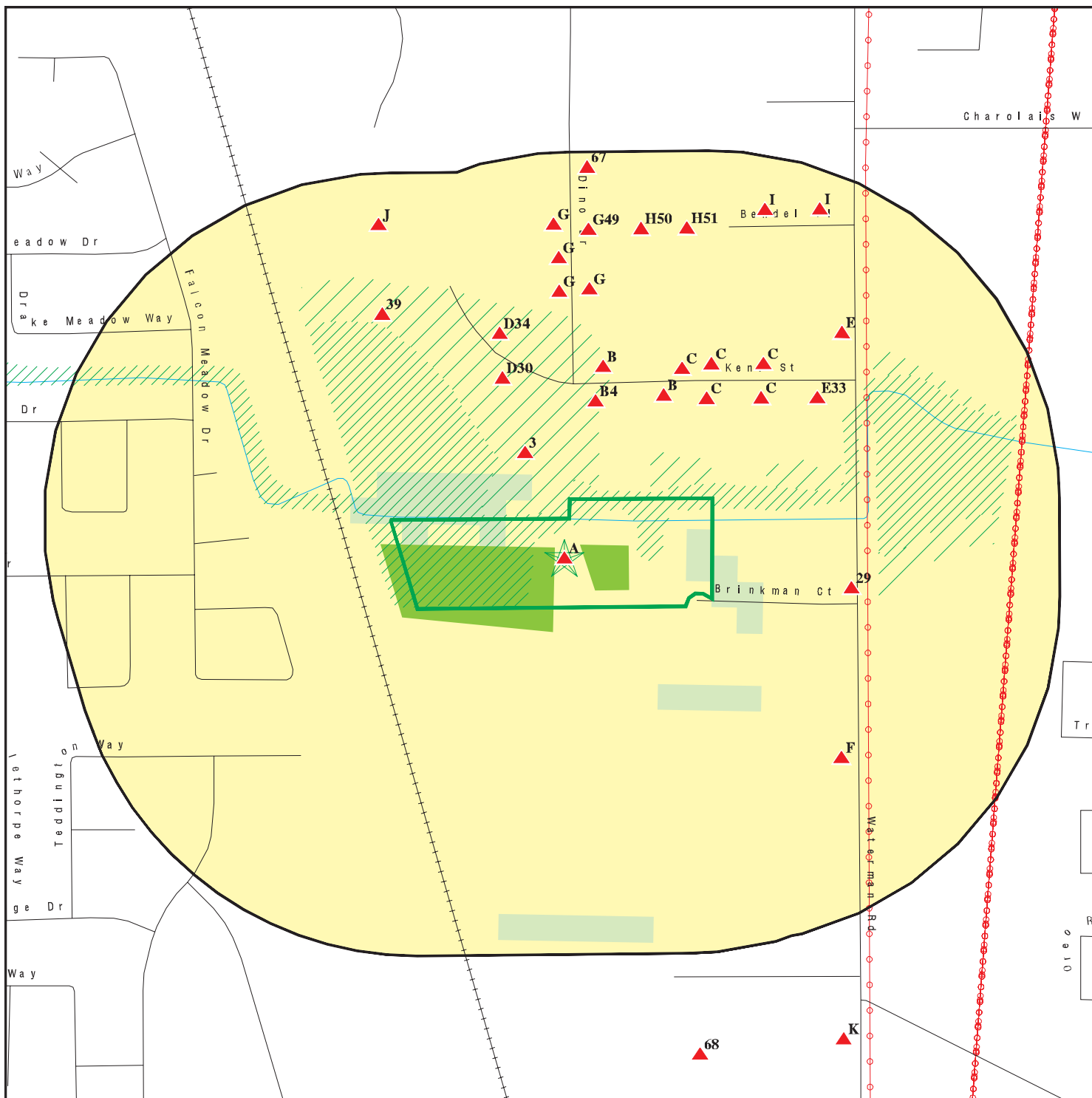


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Apts 134-0100-084/-085  
 ADDRESS: 9195 Brinkman Court  
 Elk Grove CA 95624  
 LAT/LONG: 38.396211 / 121.356867

CLIENT: Bole and Associates  
 CONTACT: David Bole  
 INQUIRY #: 5973221.2s  
 DATE: February 14, 2020 2:05 pm

# DETAIL MAP - 5973221.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Areas of Concern

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Apsn 134-0100-084/-085  
 ADDRESS: 9195 Brinkman Court  
 Elk Grove CA 95624  
 LAT/LONG: 38.396211 / 121.356867

CLIENT: Bole and Associates  
 CONTACT: David Bole  
 INQUIRY #: 5973221.2s  
 DATE: February 14, 2020 2:06 pm



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	1.000		0	0	0	0	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.125		0	NR	NR	NR	NR	0
RCRA-SQG	0.125		1	NR	NR	NR	NR	1
RCRA-VSQG	0.125		0	NR	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
ENVIROSTOR	1.000		0	0	0	3	NR	3
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	1.000		0	1	5	6	NR	12

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	1	NR	NR	1
Sacramento Co. CS	0.500		0	0	4	NR	NR	4
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.125		0	NR	NR	NR	NR	0
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	1	0	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		3	9	NR	NR	NR	12
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
SWEEPS UST	0.125		0	NR	NR	NR	NR	0
HIST UST	0.125		0	NR	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	1	NR	NR	NR	1
<b>Local Land Records</b>								
LIENS	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	TP		NR	NR	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	1	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	2	NR	NR	3
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
Sacramento Co. ML	0.250		28	27	NR	NR	NR	55
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP	1	NR	NR	NR	NR	NR	1
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	1	0	NR	1
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP	2	NR	NR	NR	NR	NR	2
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0

### **EDR HIGH RISK HISTORICAL RECORDS**

#### ***EDR Exclusive Records***

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.250		1	1	NR	NR	NR	2
EDR Hist Cleaner	0.250		0	0	NR	NR	NR	0

### **EDR RECOVERED GOVERNMENT ARCHIVES**

#### ***Exclusive Recovered Govt. Archives***

RGA LF	0.500		0	0	0	NR	NR	0
RGA LUST	1.000		0	3	7	9	NR	19

- Totals --		3	33	45	21	18	0	120
-------------	--	---	----	----	----	----	---	-----

#### **NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**A1**            **9195 BRINKMAN COURT AND 10000 WATERMAN ROAD**  
**Target**        **9195 BRINKMAN COURT**  
**Property**      **ELK GROVE, CA 95624**

**NPDES**    **S119083783**  
**CIWQS**    **N/A**

**Site 1 of 2 in cluster A**

**Actual:**  
**51 ft.**

NPDES:  
Name: 9195 BRINKMAN COURT AND 10000 WATERMAN ROAD  
Address: 9195 BRINKMAN COURT  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Terminated  
NPDES Number: CAS000002  
Region: 5S  
Agency Number: 0  
Regulatory Measure ID: 461788  
Place ID: Not reported  
Order Number: 2009-0009-DWQ  
WDID: 5S34C376504  
Regulatory Measure Type: Enrollee  
Program Type: Construction  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 06/10/2016  
Termination Date Of Regulatory Measure: 02/02/2017  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: 555 Capitol Mall Ninth Floor  
Discharge Name: Buzz Oates Construction Inc  
Discharge City: Sacramento  
Discharge State: California  
Discharge Zip: 95814  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported

NPDES as of 03/2018:  
NPDES Number: Not reported  
Status: Not reported  
Agency Number: Not reported  
Region: 5S  
Regulatory Measure ID: 461788  
Order Number: Not reported  
Regulatory Measure Type: Construction  
Place ID: Not reported  
WDID: 5S34C376504  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: 02/02/2017  
Discharge Name: Not reported  
Discharge Address: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Received Date: 05/24/2016  
Processed Date: 06/10/2016  
Status: Terminated

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**9195 BRINKMAN COURT AND 10000 WATERMAN ROAD (Continued)**

**S119083783**

Status Date: 02/02/2017  
Place Size: 52.3  
Place Size Unit: Acres  
Contact: Troy Estacio  
Contact Title: Not reported  
Contact Phone: 916-381-3600  
Contact Phone Ext: Not reported  
Contact Email: troyestacio@buzzoates.com  
Operator Name: Buzz Oates Construction Inc  
Operator Address: 555 Capitol Mall Ninth Floor  
Operator City: Sacramento  
Operator State: California  
Operator Zip: 95814  
Operator Contact: Troy Estacio  
Operator Contact Title: Not reported  
Operator Contact Phone: 916-381-3600  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: troyestacio@buzzoates.com  
Operator Type: Private Business  
Developer: Buzz Oates Construction Inc  
Developer Address: 8615 Elder Creek Rd  
Developer City: Sacramento  
Developer State: California  
Developer Zip: 95828  
Developer Contact: Troy Estacio  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: N  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: N  
Constype Below Ground Ind: N  
Constype Cable Line Ind: N  
Constype Comm Line Ind: N  
Constype Commercial Ind: Y  
Constype Electrical Line Ind: N  
Constype Gas Line Ind: N  
Constype Industrial Ind: N  
Constype Other Description: Not reported  
Constype Other Ind: N  
Constype Recons Ind: N  
Constype Residential Ind: N  
Constype Transport Ind: N  
Constype Utility Description: Not reported  
Constype Utility Ind: N  
Constype Water Sewer Ind: N  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Not reported  
Certifier: Troy Estacio  
Certifier Title: Manager  
Certification Date: 24-MAY-16  
Primary Sic: Not reported  
Secondary Sic: Not reported  
Tertiary Sic: Not reported  
  
NPDES Number: CAS000002  
Status: Terminated  
Agency Number: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**9195 BRINKMAN COURT AND 10000 WATERMAN ROAD (Continued)**

**S119083783**

Region: 5S  
Regulatory Measure ID: 461788  
Order Number: 2009-0009-DWQ  
Regulatory Measure Type: Enrollee  
Place ID: Not reported  
WDID: 5S34C376504  
Program Type: Construction  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 06/10/2016  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: 02/02/2017  
Discharge Name: Buzz Oates Construction Inc  
Discharge Address: 555 Capitol Mall Ninth Floor  
Discharge City: Sacramento  
Discharge State: California  
Discharge Zip: 95814  
Received Date: Not reported  
Processed Date: Not reported  
Status: Not reported  
Status Date: Not reported  
Place Size: Not reported  
Place Size Unit: Not reported  
Contact: Not reported  
Contact Title: Not reported  
Contact Phone: Not reported  
Contact Phone Ext: Not reported  
Contact Email: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported  
Operator Contact: Not reported  
Operator Contact Title: Not reported  
Operator Contact Phone: Not reported  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: Not reported  
Operator Type: Not reported  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: Not reported  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**9195 BRINKMAN COURT AND 10000 WATERMAN ROAD (Continued)**

**S119083783**

Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: Not reported  
Receiving Water Name: Not reported  
Certifier: Not reported  
Certifier Title: Not reported  
Certification Date: Not reported  
Primary Sic: Not reported  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

Name: 9195 BRINKMAN COURT AND 10000 WATERMAN ROAD  
Address: 9195 BRINKMAN COURT  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34C376504  
Regulatory Measure Type: Construction  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Terminated  
Status Date: 02/02/2017  
Operator Name: Buzz Oates Construction Inc  
Operator Address: 555 Capitol Mall Ninth Floor  
Operator City: Sacramento  
Operator State: California  
Operator Zip: 95814

**NPDES as of 03/2018:**

NPDES Number: Not reported  
Status: Not reported  
Agency Number: Not reported  
Region: 5S  
Regulatory Measure ID: 461788  
Order Number: Not reported  
Regulatory Measure Type: Construction  
Place ID: Not reported  
WDID: 5S34C376504  
Program Type: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**9195 BRINKMAN COURT AND 10000 WATERMAN ROAD (Continued)**

**S119083783**

Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: 02/02/2017  
Discharge Name: Not reported  
Discharge Address: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Received Date: 05/24/2016  
Processed Date: 06/10/2016  
Status: Terminated  
Status Date: 02/02/2017  
Place Size: 52.3  
Place Size Unit: Acres  
Contact: Troy Estacio  
Contact Title: Not reported  
Contact Phone: 916-381-3600  
Contact Phone Ext: Not reported  
Contact Email: troyestacio@buzzoates.com  
Operator Name: Buzz Oates Construction Inc  
Operator Address: 555 Capitol Mall Ninth Floor  
Operator City: Sacramento  
Operator State: California  
Operator Zip: 95814  
Operator Contact: Troy Estacio  
Operator Contact Title: Not reported  
Operator Contact Phone: 916-381-3600  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: troyestacio@buzzoates.com  
Operator Type: Private Business  
Developer: Buzz Oates Construction Inc  
Developer Address: 8615 Elder Creek Rd  
Developer City: Sacramento  
Developer State: California  
Developer Zip: 95828  
Developer Contact: Troy Estacio  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: N  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: N  
Constype Below Ground Ind: N  
Constype Cable Line Ind: N  
Constype Comm Line Ind: N  
Constype Commercial Ind: Y  
Constype Electrical Line Ind: N  
Constype Gas Line Ind: N  
Constype Industrial Ind: N  
Constype Other Description: Not reported  
Constype Other Ind: N  
Constype Recons Ind: N  
Constype Residential Ind: N  
Constype Transport Ind: N  
Constype Utility Description: Not reported  
Constype Utility Ind: N  
Constype Water Sewer Ind: N

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**9195 BRINKMAN COURT AND 10000 WATERMAN ROAD (Continued)**

**S119083783**

Dir Discharge Uswater Ind:	N
Receiving Water Name:	Not reported
Certifier:	Troy Estacio
Certifier Title:	Manager
Certification Date:	24-MAY-16
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	CAS000002
Status:	Terminated
Agency Number:	0
Region:	5S
Regulatory Measure ID:	461788
Order Number:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S34C376504
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	06/10/2016
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	02/02/2017
Discharge Name:	Buzz Oates Construction Inc
Discharge Address:	555 Capitol Mall Ninth Floor
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95814
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**9195 BRINKMAN COURT AND 10000 WATERMAN ROAD (Continued)**

**S119083783**

Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

**CIWQS:**

Name:	9195 BRINKMAN COURT AND 10000 WATERMAN ROAD
Address:	9195 BRINKMAN COURT
City,State,Zip:	ELK GROVE, CA 95624
Agency:	Buzz Oates Construction Inc
Agency Address:	555 Capitol Mall Ninth Floor, Sacramento, CA 95814
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported
Region:	5S
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	5S34C376504
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	06/10/2016
Termination Date:	02/02/2017
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.3937
Longitude:	-121.35692

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A2**      **GRANTLINE BUSINESS PARK**  
**Target**    **9195 BRINKMAN CT & 10000 WATERMAN RD**  
**Property**   **ELK GROVE, CA 95624**

**CIWQS**    **S121641725**  
**N/A**

**Site 2 of 2 in cluster A**

**Actual:**  
**51 ft.**

**CIWQS:**  
 Name: GRANTLINE BUSINESS PARK  
 Address: 9195 BRINKMAN CT & 10000 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 95624  
 Agency: Grantline Business Park  
 Agency Address: PO Box 19928, Sacramento, CA 95819  
 Place/Project Type: Construction - Commercial, Utility, Transportation  
 SIC/NAICS: Not reported  
 Region: 5S  
 Program: CONSTW  
 Regulatory Measure Status: Terminated  
 Regulatory Measure Type: Storm water construction  
 Order Number: 99-08DW  
 WDID: 5S34C349606  
 NPDES Number: CAS000002  
 Adoption Date: Not reported  
 Effective Date: 11/05/2007  
 Termination Date: 11/26/2008  
 Expiration/Review Date: Not reported  
 Design Flow: Not reported  
 Major/Minor: Not reported  
 Complexity: Not reported  
 TTWQ: Not reported  
 Enforcement Actions within 5 years: 0  
 Violations within 5 years: 0  
 Latitude: Not reported  
 Longitude: Not reported

**3**      **NUTRISHARE INC**  
**NNW**    **9850 KENT ST**  
**< 1/8**    **ELK GROVE, CA 95624**  
**0.047 mi.**  
**247 ft.**

**Sacramento Co. ML**    **S109419541**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**Sacramento Co. ML:**  
 Name: NUTRISHARE INC  
 Address: 9850 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NUTRISHARE INC (Continued)**

**S109419541**

UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B4**  
**North**  
**< 1/8**  
**0.071 mi.**  
**375 ft.**

**KEVIN YOUNG CONCRETE**  
**9880 KENT ST**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML**

**S108054264**  
**N/A**

**Site 1 of 9 in cluster B**

**Relative:**  
**Higher**

Sacramento Co. ML:

**Actual:**  
**51 ft.**

Name: KEVIN YOUNG CONCRETE  
Address: 9880 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: |  
Billing Codes UST: Not reported  
WG Bill Code: |  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B5**  
**NNE**  
**< 1/8**  
**0.072 mi.**  
**378 ft.**

**BENCO BRIDGES**  
**9888 KENT ST**  
**ELK GROVE, CA 95624**

**HAZNET**  
**Sacramento Co. ML**

**S102316541**  
**N/A**

**Site 2 of 9 in cluster B**

**Relative:**  
**Higher**

HAZNET:

**Actual:**  
**51 ft.**

Name: BENCO BRIDGES  
Address: 9888 KENT ST  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 956240000  
Year: 2004  
Gepaid: CAL000257479  
Contact: JIM GASKINS SAFETY SUPERVISOR  
Telephone: 9166865030  
Mailing Name: Not reported  
Mailing Address: 9888 KENT ST  
Gen County: 34

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BENCO BRIDGES (Continued)**

**S102316541**

Waste Category: Latex waste  
TSD EPA ID: CAD009452657  
TSD County: 41  
Disposal Method: Recycler  
Tons: 4.1283

Additional Info:  
Year: 2004  
Shipment Date: 20041217  
Creation Date: 3/13/2007 18:30:28  
Receipt Date: 20041220  
Manifest ID: 24222419  
Gen EPA ID: CAL000257479  
Trans EPA ID: CAD983582701  
Trans Name: RAH ENVIRONMENTAL INC  
Trans 2 EPA ID: CAD009452657  
Trans 2 Name: ROMIC ENVIRONMENTAL TECHNOLOGIES  
TSD EPA ID: CAD009452657  
Trans Name: ROMIC ENVIRONMENTAL TECHNOLOGIES  
TSD EPA Alt ID: Not reported  
TSD EPA Alt Name: Not reported  
Waste Code: 291  
RCRA Code: NR  
Meth Code: R01  
Quantity Tons: 4.1283  
Waste Quantity: 990  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Sacramento Co. ML:  
Name: BENCO BRIDGES  
Address: 9888 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BENCO BRIDGES (Continued)**

**S102316541**

AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C6  
 NE  
 < 1/8  
 0.072 mi.  
 381 ft.**

**CALIFORNIA WASTE REMOVAL  
 9900 KENT ST  
 ELK GROVE, CA 95624  
 Site 1 of 18 in cluster C**

**Sacramento Co. ML S123289810  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:  
 Name: CALIFORNIA WASTE REMOVAL  
 Address: 9900 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Inactive. Included on a listing no longer updated.  
 FD: G  
 Billing Codes BP: Out of Business  
 Billing Codes UST: No Tanks  
 WG Bill Code: Oil Changed by Outside Company-No Fee  
 Target Property Bill Cod: 51  
 Food Bill Code: 51  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: 0  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

Name: LINK TRUCK REPAIR LLC  
 Address: 9900 KENT ST STE B  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CALIFORNIA WASTE REMOVAL (Continued)**

**S123289810**

CALARP Bill Code: Not reported

**C7  
 NE  
 < 1/8  
 0.072 mi.  
 381 ft.**

**LAWSON DRAYAGE, INC  
 9900 KENT ST  
 ELK GROVE, CA 95624**

**Sacramento Co. ML**

**S123292368  
 N/A**

**Site 2 of 18 in cluster C**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:  
 Name: LAWSON DRAYAGE, INC  
 Address: 9900 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Inactive. Included on a listing no longer updated.  
 FD: Not reported  
 Billing Codes BP: Out of Business  
 Billing Codes UST: No Tanks  
 WG Bill Code: Oil Changed by Outside Company-No Fee  
 Target Property Bill Cod: 51  
 Food Bill Code: 51  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: 0  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C8  
 NE  
 < 1/8  
 0.072 mi.  
 381 ft.**

**LINK TRUCK REPAIR, LLC  
 9900 KENT ST STE B  
 ELK GROVE, CA 95624**

**CERS HAZ WASTE  
 HAZNET  
 CERS**

**S103707648  
 N/A**

**Site 3 of 18 in cluster C**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

CERS HAZ WASTE:  
 Name: LINK TRUCK REPAIR, LLC  
 Address: 9900 KENT ST STE B  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 130015  
 CERS ID: 10219735  
 CERS Description: Hazardous Waste Generator

HAZNET:  
 Name: LINK TRUCK & TRAILER REPAIR, INC  
 Address: 9900 KENT ST  
 Address 2: Not reported  
 City,State,Zip: ELK GROVE, CA 95624  
 Year: 2017  
 Gepaid: CAL000399230  
 Contact: ADINA MAGALLON



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Telephone:	9168798750
Mailing Name:	Not reported
Mailing Address:	9900 KENT STREET ST B
Gen County:	34
Waste Category:	Other organic solids
TSD EPA ID:	CAD097030993
TSD County:	19
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.475
Additional Info:	
Year:	2017
Shipment Date:	20170412
Creation Date:	5/9/2018 18:31:26
Receipt Date:	20170426
Manifest ID:	016773375JJK
Gen EPA ID:	CAL000399230
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSD EPA ID:	CAD097030993
Trans Name:	US ECOLOGY VERNON INC
TSD EPA ID:	Not reported
TSD Alt Name:	Not reported
Waste Code:	352
RCRA Code:	Not reported
Meth Code:	H141
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2017
Shipment Date:	20170714
Creation Date:	5/21/2018 18:32:48
Receipt Date:	20170724
Manifest ID:	017454126JJK
Gen EPA ID:	CAL000399230
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSD EPA ID:	CAD097030993
Trans Name:	US ECOLOGY VERNON INC
TSD EPA ID:	Not reported
TSD Alt Name:	Not reported
Waste Code:	352
RCRA Code:	Not reported
Meth Code:	H141
Quantity Tons:	0.2
Waste Quantity:	400
Quantity Unit:	P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2017
Shipment Date:	20170202
Creation Date:	5/17/2017 18:31:30
Receipt Date:	20170214
Manifest ID:	016863519JJK
Gen EPA ID:	CAL000399230
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD097030993
Trans Name:	US ECOLOGY VERNON, INC.
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	352
RCRA Code:	Not reported
Meth Code:	H141
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2017
Shipment Date:	20171121
Creation Date:	8/3/2018 18:30:58
Receipt Date:	20171204
Manifest ID:	017693455JJK
Gen EPA ID:	CAL000399230
Trans EPA ID:	CAD028277036
Trans Name:	ASBURY ENVIRONMENTAL SERVICES
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD097030993
Trans Name:	US ECOLOGY VERNON INC
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	352
RCRA Code:	Not reported
Meth Code:	H141
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Year: 2017  
Shipment Date: 20170921  
Creation Date: 5/30/2018 18:33:51  
Receipt Date: 20171004  
Manifest ID: 017695971JJK  
Gen EPA ID: CAL000399230  
Trans EPA ID: CAD028277036  
Trans Name: ASBURY ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CAD097030993  
Trans Name: US ECOLOGY VERNON INC  
TSD Alt EPA ID: Not reported  
TSD Alt Name: Not reported  
Waste Code: 352  
RCRA Code: Not reported  
Meth Code: H141  
Quantity Tons: 0.075  
Waste Quantity: 150  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: LINK TRUCK & TRAILER REPAIR  
Address: 9900 KENT ST  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2016  
Gepaid: CAL000399230  
Contact: ADINA MAGALLON  
Telephone: 9168798750  
Mailing Name: Not reported  
Mailing Address: 9900 KENT ST  
Gen County: 34  
Waste Category: Other organic solids  
TSD EPA ID: CAD097030993  
TSD County: 19  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.15

**Additional Info:**

Year: 2016  
Shipment Date: 20151111  
Creation Date: 1/25/2016 22:15:12  
Receipt Date: 20151117  
Manifest ID: 015140524JJK  
Gen EPA ID: CAL000399230  
Trans EPA ID: CAD028277036  
Trans Name: ASBURY ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CAD097030993  
Trans Name: EVOQUA WATER TECHNOLOGIES LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code: 352  
RCRA Code: Not reported  
Meth Code: H141  
Quantity Tons: 0.1  
Waste Quantity: 200  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: LINK TRUCK & TRAILER REPAIR  
Address: 9900 KENT ST  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2015  
Gepaid: CAL000399230  
Contact: MARCOS ORTEGA  
Telephone: 9168215316  
Mailing Name: Not reported  
Mailing Address: 9900 KENT ST  
Gen County: 34  
Waste Category: Other organic solids  
TSD EPA ID: CAD097030993  
TSD County: 19  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.1

Additional Info:

Year: 2015  
Shipment Date: 20151111  
Creation Date: 1/25/2016 22:15:12  
Receipt Date: 20151117  
Manifest ID: 015140524JJK  
Gen EPA ID: CAL000399230  
Trans EPA ID: CAD028277036  
Trans Name: ASBURY ENVIRONMENTAL SERVICES  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD097030993  
Trans Name: EVOQUA WATER TECHNOLOGIES LLC  
TSDF Alt EPA ID: Not reported  
TSDF Alt Name: Not reported  
Waste Code: 352  
RCRA Code: Not reported  
Meth Code: H141  
Quantity Tons: 0.1  
Waste Quantity: 200  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Additional Code 5: Not reported

**CERS:**

Name: LINK TRUCK REPAIR, LLC  
Address: 9900 KENT ST STE B  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 130015  
CERS ID: 10219735  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violation Notes: Returned to compliance on 01/08/2016. OBSERVATION: Initial training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 11/10/2015. OBSERVATION: A 55 gallon drum of waste coolant located in the hazardous waste storage area was observed without the generator information (name, address, etc.) on the label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 04-15-2019  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Violation Notes: Returned to compliance on 07/02/2019. OBSERVATION: Annual employee training in safety procedures in the event of a release or threatened release of a hazardous material including familiarity with the emergency response plan has not been documented for a minimum of three years. CORRECTIVE ACTION: Submit documentation to this department demonstrating appropriate personnel have received training and maintain ongoing annual training records for a minimum of three years.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 04-15-2019  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 04/15/2019. OBSERVATION: Two 55 gallon drums of waste coolant located in the hazardous waste accumulation area were observed without the accumulation start date on the label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled. CLOSED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 04-15-2019  
Citation: HSC 6.95 25505(c) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(c)

Violation Description: Failure to have a business plan readily available to personnel of the business or the unified program facility with responsibilities for emergency response or training.

Violation Notes: Returned to compliance on 06/04/2019. OBSERVATION: The business has not made the Hazardous Materials Business Plan readily available to personnel of the business or the unified program facility with responsibilities for emergency response or training. CORRECTIVE ACTION: Provide a readily available Hazardous Materials Business Plan to personnel of the business or the unified program facility with responsibilities for emergency response or training. Submit documentation that appropriate personnel have the business plan readily available.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 03/15/2016. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for new coolant or used coolant to this department and the chemical Assault is not being used on site and must be removed from the chemical inventory. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 01-11-2017  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 01/27/2017. OBSERVATION: One 55 gallon drum of used oil and fuel filters located in the shop was observed without a label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the used oil and fuel filters drum is properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)

Violation Description: Failure to ensure employees are familiar with the handling and compliance of hazardous waste regulations and emergency response.

Violation Notes: Returned to compliance on 01/08/2016. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.

Violation Notes: Returned to compliance on 12/29/2015. OBSERVATION: The Owner/Operator Identification page submitted to this department has incorrect

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

environmental contact and emergency contacts. CORRECTIVE ACTION: Update the Owner/Operator page and submit electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 04-15-2019  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 06/04/2019. OBSERVATION: The Hazardous Materials Inventory Chemical Description page for waste coolant has not been submitted to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System. OBSERVATION: The Hazardous Materials Inventory Chemical Description pages for new coolant and used motor oil do not have the correct size for the largest container. CORRECTIVE ACTION: Update the container size for the two hazardous materials listed above and submit the Hazardous Materials Inventory Chemical Description page electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 11/05/2015. OBSERVATION: The Emergency Response Plan has not been adequately implemented as demonstrated by the fire extinguishers are not tested and maintained as necessary (e.g. fire extinguishers assessed annually). CORRECTIVE ACTION: Submit documentation to this department demonstrating that the fire extinguishers have been serviced.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 10-21-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Violation Notes: Returned to compliance on 03/15/2016. OBSERVATION: The annotated site map submitted to this department does not show the accurate location of hazardous materials and hazardous waste on site. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 01-11-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 01/27/2017. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for new antifreeze to this department. The largest container listed for the new motor oil is incorrect (should be 250 gallons); the maximum daily amount should be 500 gallons (2 tanks). CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 01-11-2017  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violation Notes: Returned to compliance on 01/27/2017. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 01-11-2017  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Violation Notes: the environment.  
Returned to compliance on 01/27/2017. OBSERVATION: Liquid was observed inside the containment under the waste coolant drums in the shop.  
CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Violation Date: 04-15-2019  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Returned to compliance on 06/04/2019. OBSERVATION: The Hazardous Materials Business Plan (HMBP) was not reviewed and electronically certified by the annual due date of 12/7/2018 that it is complete, accurate, and in compliance with EPCRA. CORRECTIVE ACTION: Review, revise, and submit and certify the HMBP electronically in the California Environmental Reporting System. On an ongoing basis, electronically submit and certify the HMBP annually on or before the annual due date.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 01-11-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 01-11-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-15-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-21-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-08-2016  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-15-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-21-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Site Address: 9900 KENT ST STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-21-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 130015  
Site Name: LINK TRUCK REPAIR, LLC  
Site Address: 9900 KENT ST STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-21-2015  
Enf Action Type: Notice of Violation (Unified Program)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9900 KENT ST STE B  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: LINK TRUCK & TRAILER REPAIR  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: CLAUDIA ORTEGA  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: CLAUDIA ORTEGA  
Entity Title: Not reported  
Affiliation Address: 9900 KENT ST STE B  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95829  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LINK TRUCK REPAIR, LLC (Continued)**

**S103707648**

Affiliation Type Desc: Legal Owner  
Entity Name: LINK TRUCK REPAIR, LLC  
Entity Title: Not reported  
Affiliation Address: 9900 KENT ST STE B  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 685-0359

Affiliation Type Desc: Identification Signer  
Entity Name: CLAUDIA ORTEGA  
Entity Title: OWNER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: MARCOS ORTEGA  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 685-0359

**B9**  
**NNE**  
**< 1/8**  
**0.075 mi.**  
**395 ft.**

**MECHANICAL SOLUTIONS & REPAIR**  
**9914 KENT ST STE 2**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S123292699**  
**N/A**

**Site 3 of 9 in cluster B**

**Relative:**  
**Higher**

Sacramento Co. ML:

**Actual:**  
**51 ft.**

Name: MECHANICAL SOLUTIONS & REPAIR  
Address: 9914 KENT ST STE 2  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MECHANICAL SOLUTIONS & REPAIR (Continued)**

**S123292699**

SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**B10**  
**NNE**  
 < 1/8  
 0.075 mi.  
 395 ft.

**EXPERT AUTOMOTIVE**  
**9914 KENT ST 8**  
**ELK GROVE, CA 95624**  
**Site 4 of 9 in cluster B**

**Sacramento Co. ML S123681128**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: EXPERT AUTOMOTIVE  
 Address: 9914 KENT ST 8  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: Not reported  
 Billing Codes UST: Not reported  
 WG Bill Code: I  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**B11**  
**NNE**  
 < 1/8  
 0.075 mi.  
 395 ft.

**SOLID GOLD**  
**9914 KENT ST STE 1**  
**ELK GROVE, CA 95624**  
**Site 5 of 9 in cluster B**

**Sacramento Co. ML S108222647**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: SOLID GOLD  
 Address: 9914 KENT ST STE 1  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLID GOLD (Continued)**

**S108222647**

HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B12**  
**NNE**  
**< 1/8**  
**0.075 mi.**  
**395 ft.**

**CYPRESS AUTO**  
**9914 KENT ST STE 5**  
**ELK GROVE, CA 95624**  
**Site 6 of 9 in cluster B**

**Sacramento Co. ML S123681079**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: CYPRESS AUTO  
Address: 9914 KENT ST STE 5  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: Not reported  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B13**  
**NNE**  
**< 1/8**  
**0.075 mi.**  
**395 ft.**

**STEELE'S PAINTING COMPANY**  
**9914 KENT ST STE 4**  
**ELK GROVE, CA 95624**  
**Site 7 of 9 in cluster B**

**Sacramento Co. ML S108484698**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: STEELE'S PAINTING COMPANY  
Address: 9914 KENT ST STE 4  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**STEELE'S PAINTING COMPANY (Continued)**

**S108484698**

Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	A
Billing Codes UST:	Not reported
WG Bill Code:	I
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

**C14  
 NE  
 < 1/8  
 0.081 mi.  
 426 ft.**

**ELK GROVE BUILDERS, INC  
 9918 KENT ST STE 1  
 ELK GROVE, CA 95624  
 Site 4 of 18 in cluster C**

**Sacramento Co. ML S108195608  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:	
Name:	ELK GROVE BUILDERS, INC
Address:	9918 KENT ST STE 1
City,State,Zip:	ELK GROVE, CA 95624
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**C15**      **LINDCRAFT**  
**NE**        **9918 KENT ST #2**  
**< 1/8**     **ELK GROVE, CA 95759**  
**0.081 mi.**  
**426 ft.**    **Site 5 of 18 in cluster C**

**Sacramento Co. ML**    **S105270059**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: LINDCRAFT  
 Address: 9918 KENT ST #2  
 City,State,Zip: ELK GROVE, CA 95759  
 Facility Id: Not reported  
 Facility Status: Inactive. Included on a listing no longer updated.  
 FD: G  
 Billing Codes BP: Disclaimer  
 Billing Codes UST: No Tanks  
 WG Bill Code: Oil Changed by Outside Company-No Fee  
 Target Property Bill Cod: 50  
 Food Bill Code: 50  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: 0  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C16**      **CRACKAWAY ENGINE MACHINE**  
**NNE**      **9911 KENT ST STE 6**  
**< 1/8**     **ELK GROVE, CA 95624**  
**0.094 mi.**  
**495 ft.**    **Site 6 of 18 in cluster C**

**CERS HAZ WASTE**    **S103707653**  
**Sacramento Co. ML**    **N/A**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

CERS HAZ WASTE:  
 Name: CRACKAWAY ENGINE MACHINE  
 Address: 9911 KENT ST STE 6  
 City,State,Zip: ELK GROVE, CA 95624-4007  
 Site ID: 22288  
 CERS ID: 10222705  
 CERS Description: Hazardous Waste Generator

Sacramento Co. ML:  
 Name: CRACKAWAY ENGINE MACHINE  
 Address: 9911 KENT ST STE 6  
 City,State,Zip: ELK GROVE, CA 95624-4007  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRACKAWAY ENGINE MACHINE (Continued)**

**S103707653**

HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: CRACKAWAY ENGINE MACHINE  
Address: 9911 KENT ST STE 6  
City,State,Zip: ELK GROVE, CA 95624-4007  
Site ID: 22288  
CERS ID: 10222705  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.  
Violation Notes: Returned to compliance on 05/16/2018. OBSERVATION: The emergency response plan and procedures submitted to this department did not include the following: mark that you have Hazardous Materials in Section A5, and complete the sections Section B, Section E, Section F, Section G, Section H, and Section I. CORRECTIVE ACTION: Revise the emergency response plan and procedures to include all required content and submit electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 06/19/2018. OBSERVATION: One container of used oil and fuel filters located in the shop was observed without a label. Bills of lading for used oil and fuel filters were not available for the past three years. CORRECTIVE ACTION: Obtain copies of all bills of lading for used oil and fuel filters for the past three years and submit copies to this department or submit a bill of lading to this department demonstrating proper disposal.  
Violation Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRACKAWAY ENGINE MACHINE (Continued)**

**S103707653**

Violation Program: HW  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 06/19/2018. OBSERVATION: The following containers of hazardous waste were observed without a hazardous waste label: One 55 gallon drum of bead blast The following containers of hazardous waste were observed with missing information on the hazardous waste label: Two 55 gallon drums of bead blast were missing the accumulation start date One 55 gallon drum of waste coolant was missing the accumulation start date Two 55 gallon drums of used oil were missing the accumulation start date Manifests/disposal receipts demonstrating disposal of waste coolant and bead blast within the past 180 days was not available. CORRECTIVE ACTION: Dispose of waste coolant and bead blast and submit a copy of the manifest/disposal receipt to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 05/18/2018. OBSERVATION: The following containers of hazardous waste were observed without a hazardous waste label: One 55 gallon drum of bead blast The following containers of hazardous waste were observed with missing information on the hazardous waste label: Two 55 gallon drums of bead blast were missing the accumulation start date One 55 gallon drum of waste coolant was missing the accumulation start date and the contents of the container Two 55 gallon drums of used oil were missing the accumulation start date and the contents of the containers CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRACKAWAY ENGINE MACHINE (Continued)**

**S103707653**

Violation Notes: Returned to compliance on 05/30/2018. OBSERVATION: The annotated site map has not been completed and submitted to this department. CORRECTIVE ACTION: Complete an annotated site map and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: 40 CFR 1 265.35 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.35

Violation Description: Failure to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

Violation Notes: Returned to compliance on 05/24/2018. OBSERVATION: The hazardous waste storage areas located in the shop did not have adequate aisle space allowing for unobstructed movement. CORRECTIVE ACTION: Submit photos to this department demonstrating that adequate aisle space has been provided.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Returned to compliance on 05/18/2018. OBSERVATION: The facility has not reviewed and electronically certified by the annual due date of November 10, 2017 that the HMBP is complete and accurate. CORRECTIVE ACTION: Review, revise, and certify the HMBP electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 05/16/2018. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for propane, waste bead blast, waste coolant or used oil to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRACKAWAY ENGINE MACHINE (Continued)**

**S103707653**

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 22288  
Site Name: CRACKAWAY ENGINE MACHINE  
Violation Date: 05-03-2018  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violation Notes: Returned to compliance on 05/18/2018. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-23-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-03-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-30-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-23-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRACKAWAY ENGINE MACHINE (Continued)**

**S103707653**

Eval Source: CERS  
  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-03-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

**Affiliation:**

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9911 KENT STREET STE 6  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624-4007  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Richard Gray  
Entity Title: Owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: RICK GRAY  
Entity Title: Not reported  
Affiliation Address: 9911 KENT STREET STE 6  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624-4007  
Affiliation Phone: (916) 686-1961

Affiliation Type Desc: Parent Corporation  
Entity Name: CRACKAWAY ENGINE MACHINE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRACKAWAY ENGINE MACHINE (Continued)**

**S103707653**

Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: Joseph Silva  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Richard Gray  
Entity Title: Not reported  
Affiliation Address: 9911 Kent St Ste 6  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: CRACKAWAY ENGINE MACHINE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 686-1961

**C17**  
**NNE**  
**< 1/8**  
**0.094 mi.**  
**495 ft.**

**WESTERN SUPPLY, INC**  
**9911 KENT ST STE 2**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S123295402**  
**N/A**

**Site 7 of 18 in cluster C**

**Relative:**  
**Higher**

Sacramento Co. ML:

**Actual:**  
**51 ft.**

Name: WESTERN SUPPLY, INC  
Address: 9911 KENT ST STE 2  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**WESTERN SUPPLY, INC (Continued)**

**S123295402**

UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C18**  
**NNE**  
 < 1/8  
 0.094 mi.  
 495 ft.

**LEE'S AUTO SERVICE**  
**9911 KENT ST STE 3**  
**ELK GROVE, CA 95624**  
**Site 8 of 18 in cluster C**

**Sacramento Co. ML S123292377**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: LEE'S AUTO SERVICE  
 Address: 9911 KENT ST STE 3  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: I  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C19**  
**NNE**  
 < 1/8  
 0.094 mi.  
 495 ft.

**OFFSET SERVICES INK**  
**9911 KENT ST NO 4**  
**ELK GROVE, CA 95624**  
**Site 9 of 18 in cluster C**

**RCRA-SQG 1001231377**  
**FINDS CAR000044172**  
**ECHO**  
**Sacramento Co. ML**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

RCRA-SQG:  
 Date form received by agency: 1998-09-11 00:00:00.0  
 Facility name: OFFSET SERVICES INK  
 Facility address: 9911 KENT ST NO 4  
 ELK GROVE, CA 95624  
 EPA ID: CAR000044172  
 Mailing address: 663 FRAZIER DR  
 OAKLEY, CA 94561



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICES INK (Continued)**

**1001231377**

Contact: RUSSELL SYRAACUSE  
Contact address: 663 FRAZIER DR  
OAKLEY, CA 94561  
Contact country: US  
Contact telephone: 916-686-0643  
Contact email: Not reported  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

**Owner/Operator Summary:**

Owner/operator name: RUSELL SYRACUSE  
Owner/operator address: 663 FRAZIER DR  
OAKLEY, CA 94561  
Owner/operator country: Not reported  
Owner/operator telephone: 925-625-1715  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

**Hazardous Waste Summary:**

. Waste code: D001  
. Waste name: IGNITABLE WASTE  
  
. Waste code: D006  
. Waste name: CADMIUM  
  
. Waste code: D008  
. Waste name: LEAD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICES INK (Continued)**

1001231377

- . Waste code: D018
- . Waste name: BENZENE
  
- . Waste code: D027
- . Waste name: 1,4-DICHLOROBENZENE
  
- . Waste code: D039
- . Waste name: TETRACHLOROETHYLENE
  
- . Waste code: D040
- . Waste name: TRICHLOROETHYLENE

Violation Status: No violations found

**FINDS:**

Registry ID: 110064296729

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**ECHO:**

Envid: 1001231377  
Registry ID: 110064296729  
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110064296729>

**Sacramento Co. ML:**

Name: OFFSET SERVICES INK  
Address: 9911 KENT ST 4  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**OFFSET SERVICES INK (Continued)**

**1001231377**

AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C20**  
**NNE**  
 < 1/8  
 0.094 mi.  
 495 ft.

**AA-FABRICATION**  
**9911 KENT ST STE 5**  
**ELK GROVE, CA 95624**  
**Site 10 of 18 in cluster C**

**Sacramento Co. ML S108649299**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: AA-FABRICATION  
 Address: 9911 KENT ST STE 5  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C21**  
**NNE**  
 < 1/8  
 0.094 mi.  
 495 ft.

**PARKER KENNETH AND BONNIE**  
**9911 KENT ST**  
**ELK GROVE, CA 95624**  
**Site 11 of 18 in cluster C**

**EDR Hist Auto 1020785733**  
**N/A**

**Relative:**  
**Higher**

EDR Hist Auto

**Actual:**  
**51 ft.**

Year:	Name:	Type:
1998	CRACKAWAY ENGINE MACHINE	General Automotive Repair Shops
2001	GORDONS AUTOMOTIVE REPAIR	General Automotive Repair Shops
2004	TRANSMISSION DEPOT	Automotive Transmission Repair Shops
2005	TRANSMISSION DEPOT	Automotive Transmission Repair Shops
2005	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2006	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2007	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2008	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2009	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2010	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2011	GRAY RICHARD	Automotive Repair Shops, NEC, NEC
2012	GRAY RICHARD	Automotive Repair Shops, NEC, NEC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PARKER KENNETH AND BONNIE (Continued)**

**1020785733**

2013 GRAY RICHARD Automotive Repair Shops, NEC, NEC  
2014 GRAY RICHARD Automotive Repair Shops, NEC, NEC

**B22**  
**NNE**  
**< 1/8**  
**0.096 mi.**  
**506 ft.**

**JIM DUPZYK CONCRETE PUMPING INC**  
**9883 KENT ST**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S123292061**  
**N/A**

**Site 8 of 9 in cluster B**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: JIM DUPZYK CONCRETE PUMPING INC  
Address: 9883 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B23**  
**NNE**  
**< 1/8**  
**0.096 mi.**  
**506 ft.**

**JIM DUPZYK CONCRETE PUMPNG**  
**9883 KENT ST**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S123292062**  
**N/A**

**Site 9 of 9 in cluster B**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: JIM DUPZYK CONCRETE PUMPNG  
Address: 9883 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: Not reported  
Billing Codes BP: Disclaimer  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 50  
Food Bill Code: 50  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**JIM DUPZYK CONCRETE PUMPNG (Continued)**

**S123292062**

Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: 0  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C24  
 NE  
 < 1/8  
 0.097 mi.  
 512 ft.**

**IMPORT GARAGE  
 9901 KENT ST STE 3  
 ELK GROVE, CA 95624  
 Site 12 of 18 in cluster C**

**Sacramento Co. ML S123291814  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:  
 Name: IMPORT GARAGE  
 Address: 9901 KENT ST STE 3  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: I  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C25  
 NE  
 < 1/8  
 0.097 mi.  
 512 ft.**

**IMPORT GARAGE  
 9901 KENT ST STE 1  
 ELK GROVE, CA 95624  
 Site 13 of 18 in cluster C**

**Sacramento Co. ML S123291813  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:  
 Name: IMPORT GARAGE  
 Address: 9901 KENT ST STE 1  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**IMPORT GARAGE (Continued)**

**S123291813**

Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**C26  
 NE  
 < 1/8  
 0.097 mi.  
 512 ft.**

**IMPORT GARAGE  
 9901 KENT ST STE 1  
 ELK GROVE, CA 95624  
 Site 14 of 18 in cluster C**

**CERS HAZ WASTE S108724886  
 CERS N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

**CERS HAZ WASTE:**  
 Name: IMPORT GARAGE  
 Address: 9901 KENT ST STE 1  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 124079  
 CERS ID: 10219738  
 CERS Description: Hazardous Waste Generator

**CERS:**  
 Name: IMPORT GARAGE  
 Address: 9901 KENT ST STE 1  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 124079  
 CERS ID: 10219738  
 CERS Description: Chemical Storage Facilities

**Violations:**  
 Site ID: 124079  
 Site Name: IMPORT GARAGE  
 Violation Date: 09-04-2018  
 Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
 Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
 Violation Notes: Returned to compliance on 09/04/2018. OBSERVATION: The Hazardous Materials Inventory Chemical Description pages for used oil and waste coolant were incomplete. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System. COMPLIED DURING INSPECTION  
 Violation Division: Sacramento County Env Management Department  
 Violation Program: HMRRP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.  
Violation Notes: Returned to compliance on 04/16/2019. OBSERVATION: An Emergency Response Plan and procedures has not been completed and submitted to this department. CORRECTIVE ACTION: Complete the emergency response plan and procedures to include all required content and submit electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507  
Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The Emergency Response Plan has not been adequately implemented as demonstrated by emergency equipment (fire extinguishers) are not tested and maintained as necessary (e.g. fire extinguishers assessed annually). CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating that the Emergency Response Plan is being adequately implemented.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 04-15-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: Returned to compliance on 04/30/2015. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Violation Date: 09-04-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: Returned to compliance on 09/04/2018. OBSERVATION: The annotated site map submitted to this department was not legible. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System. COMPLIED DURING INSPECTION  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: A 55 gallon drum of used oil and fuel filters located in the hazardous waste accumulation area was observed without a label. Bills of lading for used oil and fuel filters were not available for the past years. CORRECTIVE ACTION: Submit photos to this department demonstrating that the used oil and fuel filters are being properly managed or submit a bill of lading to this department demonstrating proper disposal.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Violation Notes: safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Returned to compliance on 04/16/2019. OBSERVATION: Initial employee training in safety procedures in the event of a release or threatened release of a hazardous material including familiarity with the emergency response plan has not been provided and / or documented and training records maintained for a minimum of three years. CORRECTIVE ACTION: Establish and electronically submit an employee training program containing provisions to ensure initial and annual training for all applicable employees in safety procedures in the event of a release or threatened release of a hazardous material and release reporting procedures. Submit documentation to the unified program agency demonstrating appropriate personnel have received training and maintain ongoing annual training records for a minimum of three years.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 09/04/2018. OBSERVATION: The business has not established and implemented a Hazardous Materials Business Plan when handling hazardous materials at or above the reportable threshold quantities. CORRECTIVE ACTION: Establish and implement a Hazardous Materials Business Plan for the facility. Submit documentation of correction to this department. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 09/04/2018. OBSERVATION: A Hazardous Materials Business Plan (HMBP) has not been received by this department. The facility was previously sent a notice/request from this department for the submittal of an HMBP by the due date of 3/9/2018]. CORRECTIVE ACTION: Submit the HMBP electronically in the California Environmental Reporting System and implement immediately. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 04/18/2019. OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 04-15-2015  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain and/or maintain an Active EPA ID.  
Violation Notes: Returned to compliance on 04/30/2015. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: A HMBP has not been received by this department. The facility was previously sent a notice/request from this department for the submittal of a HMBP by the due date of March 9, 2017. CORRECTIVE ACTION: Submit the HMBP electronically in the California Environmental Reporting System and implement immediately.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: 40 CFR 1 265.33 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.33  
Violation Description: Failure to test and maintain as necessary all facility communications or alarm systems, fire protection equipment, spill control equipment,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Violation Notes: and decontamination equipment to assure its proper operation in time of emergency.  
Returned to compliance on 11/26/2018. OBSERVATION: Fire extinguishers have not been tested and maintained to assure its proper operation in time of emergency. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the fire extinguishers have been properly tested or maintained.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for used oil or waste coolant to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The annotated site map has not been completed and submitted to this department. CORRECTIVE ACTION: Complete an annotated site map and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 04-15-2015  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2

Violation Description: Failure to meet any of the following consolidated manifest requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt for at least three years.

Violation Notes: Returned to compliance on 04/30/2015. OBSERVATION: Consolidated Manifests for used oil and waste coolant were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Consolidated Manifest receipts for used oil and waste coolant and submit a copy to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Violation Notes: Returned to compliance on 09/04/2018. OBSERVATION: An Emergency Response Plan and procedures for a release or threatened release of a hazardous material have not been established and submitted to this department. CORRECTIVE ACTION: Establish an Emergency Response Plan and procedures for a release or threatened release of a hazardous material and submit electronically in the California Environmental Reporting System. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple

Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 04/18/2019. OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 04-15-2015  
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130

Violation Description: Failure to properly handle, manage, label, and recycle used oil and

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Violation Notes: fuel filters.  
Returned to compliance on 04/30/2015. OBSERVATION: Used oil filter have not been disposed of since March 2014. Used oil filters must be disposed of annually. CORRECTIVE ACTION: Submit a bill of lading to this department demonstrating proper disposal.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: Un-Specified  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance

Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: Two 55 gallon drums of used oil, one 55 gallon drum of waste coolant, and one 55 gallon drum of used paper filters located in the hazardous waste accumulation area were observed without the following information on the label: accumulation start date, generator information, hazardous component, physical characteristics . CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.

Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The Business Activities page has not been submitted to this department. CORRECTIVE ACTION: Complete the Business Activities page and submit

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 09-04-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: One 55 gallon drum of used oil located in the shop was missing the hazardous components and the physical state on the hazardous waste label. CORRECTIVE ACTION: Submit a photo to this department demonstrating that the container listed above has been properly labeled. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 03-02-2018  
Citation: Un-Specified  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance  
Violation Notes: Returned to compliance on 11/26/2018. OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.  
Violation Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Violation Program: HW  
Violation Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Violation Date: 04-15-2015  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.  
Violation Notes: Returned to compliance on 08/11/2015. OBSERVATION: The facility has not reviewed and electronically certified by the annual due date of March 13, 2015 that the HMBP is complete and accurate. CORRECTIVE ACTION: Review, revise, and certify the HMBP electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-01-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 03-05-2018  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-15-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-07-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-02-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 09-04-2018  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-02-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 03-05-2018  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-02-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-15-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 09-04-2018  
Violations Found: Yes



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:

Site ID: 124079  
Site Name: IMPORT GARAGE  
Site Address: 9901 KENT ST STE 1  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-15-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Site Address: 9901 KENT ST STE 1  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-15-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Site Address: 9901 KENT ST STE 1  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 06-21-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 124079  
Site Name: IMPORT GARAGE  
Site Address: 9901 KENT ST STE 1  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 06-21-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Enf Action Source: CERS

Affiliation:

Affiliation Type Desc: Parent Corporation  
Entity Name: IMPORT GARAGE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Dustin Moen  
Entity Title: Not reported  
Affiliation Address: 9901 KENT ST STE 1  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 686-2610

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Identification Signer  
Entity Name: Dustin Moen  
Entity Title: OWNER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9901 KENT ST STE 1  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Dustin Moen  
Entity Title: Not reported  
Affiliation Address: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**IMPORT GARAGE (Continued)**

**S108724886**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 752-2273
Affiliation Type Desc:	Environmental Contact
Entity Name:	Dustin Moen
Entity Title:	Not reported
Affiliation Address:	9901 KENT ST STE 1
Affiliation City:	ELK GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95624
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Dustin Moen
Entity Title:	Not reported
Affiliation Address:	9901 KENT ST STE 1
Affiliation City:	ELK GROVE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95624
Affiliation Phone:	(916) 686-2610

**C27  
 NE  
 < 1/8  
 0.097 mi.  
 512 ft.**

**J D GOLDMAN CO INC  
 9901 KENT ST 6  
 ELK GROVE, CA 95624  
 Site 15 of 18 in cluster C**

**Sacramento Co. ML S106387908  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:	
Name:	J D GOLDMAN CO INC
Address:	9901 KENT ST 6
City,State,Zip:	ELK GROVE, CA 95624
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**C28**  
**NE**  
**< 1/8**  
**0.097 mi.**  
**512 ft.**

**CAL-SPORT AUTOMOTIVE**  
**9901 KENT ST**  
**ELK GROVE, CA 95624**  
**Site 16 of 18 in cluster C**

**Sacramento Co. ML** **S102593051**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: CAL-SPORT AUTOMOTIVE  
Address: 9901 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: Not reported  
Billing Codes BP: Disclaimer  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 50  
Food Bill Code: 50  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**29**  
**East**  
**< 1/8**  
**0.100 mi.**  
**529 ft.**

**MSA: EAST ELK GROVE WTP (WT05)**  
**9960 WATERMAN RD**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML** **S106388212**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: MSA: EAST ELK GROVE WTP (WT05)  
Address: 9960 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MSA: EAST ELK GROVE WTP (WT05) (Continued)**

**S106388212**

Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**D30  
 NNW  
 < 1/8  
 0.100 mi.  
 529 ft.**

**CORDEIRO VAULT CO INC  
 9830 KENT ST  
 ELK GROVE, CA 95624  
 Site 1 of 2 in cluster D**

**Sacramento Co. ML  
 NPDES  
 CIWQS  
 CERS**

**S102316539  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

Sacramento Co. ML:  
 Name: CORDEIRO VAULT COMPANY  
 Address: 9830 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**NPDES:**

Name: CORDEIRO VAULT CO INC  
 Address: 9830 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Status: Active  
 NPDES Number: CAS000001  
 Region: 5S  
 Agency Number: 0  
 Regulatory Measure ID: 422877  
 Place ID: Not reported  
 Order Number: 97-03-DWQ  
 WDID: 5S34I023462  
 Regulatory Measure Type: Enrollee  
 Program Type: Industrial  
 Adoption Date Of Regulatory Measure: Not reported  
 Effective Date Of Regulatory Measure: 01/05/2012  
 Termination Date Of Regulatory Measure: Not reported  
 Expiration Date Of Regulatory Measure: Not reported  
 Discharge Address: PO Box 1724  
 Discharge Name: Cordeiro Vault Co Inc  
 Discharge City: Vallejo

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Discharge State: California  
Discharge Zip: 94590  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported

NPDES as of 03/2018:  
NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 5S  
Regulatory Measure ID: 422877  
Order Number: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place ID: Not reported  
WDID: 5S34I023462  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 01/05/2012  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Cordeiro Vault Co Inc  
Discharge Address: PO Box 1724  
Discharge City: Vallejo  
Discharge State: California  
Discharge Zip: 94590  
Received Date: Not reported  
Processed Date: Not reported  
Status: Not reported  
Status Date: Not reported  
Place Size: Not reported  
Place Size Unit: Not reported  
Contact: Not reported  
Contact Title: Not reported  
Contact Phone: Not reported  
Contact Phone Ext: Not reported  
Contact Email: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported  
Operator Contact: Not reported  
Operator Contact Title: Not reported  
Operator Contact Phone: Not reported  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: Not reported  
Operator Type: Not reported  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: Not reported  
Developer Zip: Not reported  
Developer Contact: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	422877
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34I023462
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	01/05/2012
Processed Date:	01/05/2012
Status:	Active
Status Date:	01/05/2012
Place Size:	7
Place Size Unit:	Acres
Contact:	Mark Cordeiro
Contact Title:	Manager
Contact Phone:	916-686-6080

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Contact Phone Ext: Not reported  
Contact Email: mcordeiro@frontiernet.net  
Operator Name: Cordeiro Vault Co Inc  
Operator Address: PO Box 1724  
Operator City: Vallejo  
Operator State: California  
Operator Zip: 94590  
Operator Contact: Mark Cordeiro  
Operator Contact Title: Manager  
Operator Contact Phone: 916-686-6080  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: mcordeiro@frontiernet.net  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Elk Grove Creek  
Certifier: Mark Cordeiro  
Certifier Title: Manager  
Certification Date: 09-JUN-15  
Primary Sic: 3272-Concrete Products, Except Block and Brick  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

Name: CORDEIRO VAULT COMPANY INC  
Address: 9830 KENT STREET  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34IN601660  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Undetermined  
Status Date: 12/13/2011  
Operator Name: Dan Cordeiro  
Operator Address: 9830 Kent Street  
Operator City: Elk Grove  
Operator State: California  
Operator Zip: 95624

Name: CORDEIRO VAULT CO INC  
Address: 9830 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34I023462  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Active  
Status Date: 01/05/2012  
Operator Name: Cordeiro Vault Co Inc  
Operator Address: PO Box 1724  
Operator City: Vallejo  
Operator State: California  
Operator Zip: 94590

NPDES as of 03/2018:  
NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 5S  
Regulatory Measure ID: 422877

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S341023462
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	01/05/2012
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cordeiro Vault Co Inc
Discharge Address:	PO Box 1724
Discharge City:	Vallejo
Discharge State:	California
Discharge Zip:	94590
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	422877
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34I023462
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	01/05/2012
Processed Date:	01/05/2012
Status:	Active
Status Date:	01/05/2012
Place Size:	7
Place Size Unit:	Acres
Contact:	Mark Cordeiro
Contact Title:	Manager
Contact Phone:	916-686-6080
Contact Phone Ext:	Not reported
Contact Email:	mcordeiro@frontiernet.net
Operator Name:	Cordeiro Vault Co Inc
Operator Address:	PO Box 1724
Operator City:	Vallejo
Operator State:	California
Operator Zip:	94590
Operator Contact:	Mark Cordeiro
Operator Contact Title:	Manager
Operator Contact Phone:	916-686-6080
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	mcordeiro@frontiernet.net
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Elk Grove Creek  
Certifier: Mark Cordeiro  
Certifier Title: Manager  
Certification Date: 09-JUN-15  
Primary Sic: 3272-Concrete Products, Except Block and Brick  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

**CIWQS:**

Name: CORDEIRO VAULT CO INC  
Address: 9830 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Agency: Cordeiro Vault Co Inc  
Agency Address: PO Box 1724, Vallejo, CA 94590  
Place/Project Type: Industrial - Concrete Products, Except Block and Brick  
SIC/NAICS: 3272  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Active  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34I023462  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 01/05/2012  
Termination Date: Not reported  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: 38.39767  
Longitude: -121.35809

**CERS:**

Name: CORDEIRO VAULT CO INC  
Address: 9830 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 529804  
CERS ID: 814264  
CERS Description: Industrial Facility Storm Water

**Violations:**

Site ID: 529804  
Site Name: Cordeiro Vault Co Inc  
Violation Date: 07-02-2012  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report  
Violation Notes: Failure to submit an annual report by July 1, 2012  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-02-2018  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: Storm drain inlet protection needed, clean up procedures schedule needed, SWPPP amendments needed.  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

**Enforcement Action:**

Site ID: 529804  
Site Name: Cordeiro Vault Co Inc  
Site Address: 9830 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-31-2012  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: NNC for late annual report  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

**Affiliation:**

Affiliation Type Desc: Owner/Operator  
Entity Name: Cordeiro Vault Co Inc  
Entity Title: Operator  
Affiliation Address: PO Box 1724  
Affiliation City: Vallejo  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Affiliation Country: Not reported  
Affiliation Zip: 94590  
Affiliation Phone: Not reported

Name: CORDEIRO VAULT COMPANY  
Address: 9830 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 21704  
CERS ID: 10219732  
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 21704  
Site Name: CORDEIRO VAULT COMPANY  
Violation Date: 09-22-2017  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 09/22/2017. OBSERVATION: A 500 gallon tank of stripping oil located in the yard was observed without a label. CORRECTIVE ACTION: Submit a photo to this department demonstrating that the container listed above has been properly labeled.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 21704  
Site Name: CORDEIRO VAULT COMPANY  
Violation Date: 09-22-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for marking paint and cement to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 21704  
Site Name: CORDEIRO VAULT COMPANY  
Violation Date: 09-22-2017  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 09/22/2017. OBSERVATION: An empty 700 gallon tank was observed in the hazmat storage area without a label. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating that the empty tank listed above have been marked with the word Empty.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-20-2014  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-22-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-15-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:

Site ID: 21704  
Site Name: CORDEIRO VAULT COMPANY  
Site Address: 9830 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Coordinates:

Site ID: 21704  
Facility Name: CORDEIRO VAULT COMPANY  
Env Int Type Code: HMBP  
Program ID: 10219732  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.397350  
Longitude: -121.358600

Affiliation:

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Entity Title: Not reported  
Affiliation Address: 281 5th St  
Affiliation City: Vallejo  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94590  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Parent Corporation  
Entity Name: CORDEIRO VAULT COMPANY  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Cordeiro Vault Co Inc  
Entity Title: Not reported  
Affiliation Address: 281 5th St  
Affiliation City: Vallejo  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 94590  
Affiliation Phone: (707) 552-1045

Affiliation Type Desc: Operator  
Entity Name: Dan Cordeiro  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 686-6080

Affiliation Type Desc: Environmental Contact  
Entity Name: Mark Cordeiro  
Entity Title: Not reported  
Affiliation Address: 281 5th St  
Affiliation City: Vallejo  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 94590  
Affiliation Phone: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORDEIRO VAULT CO INC (Continued)**

**S102316539**

Affiliation Type Desc: Identification Signer  
Entity Name: Mark Cordeiro  
Entity Title: Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**C31  
NE  
< 1/8  
0.101 mi.  
535 ft.**

**FRONTIER CITIZENS TELECOM KENT STREET CEV  
9931 KENT ST  
ELK GROVE, CA 95624  
Site 17 of 18 in cluster C**

**Sacramento Co. ML S109612254  
N/A**

**Relative:  
Higher  
Actual:  
51 ft.**

Sacramento Co. ML:  
Name: FRONTIER CITIZENS TELECOM KENT STREET CEV  
Address: 9931 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**C32  
NE  
< 1/8  
0.104 mi.  
549 ft.**

**SCHWAN'S HOME SERVICE INC- ELK GROVE, CA  
9919 KENT ST  
ELK GROVE, CA 95624  
Site 18 of 18 in cluster C**

**Sacramento Co. ML S125093122  
N/A**

**Relative:  
Higher  
Actual:  
51 ft.**

Sacramento Co. ML:  
Name: SCHWAN'S HOME SERVICE INC- ELK GROVE, CA  
Address: 9919 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SCHWAN'S HOME SERVICE INC- ELK GROVE, CA (Continued)**

**S125093122**

Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**E33**  
**ENE**  
**< 1/8**  
**0.105 mi.**  
**555 ft.**

**FEIST CABINETS & WOODWORKS INC**  
**9930 KENT ST**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S102445865**  
**N/A**

**Site 1 of 3 in cluster E**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: FEIST CABINETS & WOODWORKS INC  
Address: 9930 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**D34**      **VALDEZ RECYCLING**  
**NNW**      **9833 KENT ST**  
**1/8-1/4**    **ELK GROVE, CA 95624**  
**0.130 mi.**  
**687 ft.**      **Site 2 of 2 in cluster D**

**SWRCY**    **S108195662**  
**Sacramento Co. ML**  
**NPDES**  
**CIWQS**  
**CERS**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**SWRCY:**  
 Name: VALDEZ RECYCLING  
 Address: 9833 KENT ST STE 101  
 City,State,Zip: ELK GROVE, CA 95624  
 Reg Id: Not reported  
 Cert Id: RC271948.001  
 Mailing Address: 9833 Kent St Ste 101  
 Mailing City: Elk Grove  
 Mailing State: CA  
 Mailing Zip Code: 95624  
 Website: Not reported  
 Email: Not reported  
 Phone Number: (916) 690-8833  
 Rural: N  
 Operation Begin Date: 09/25/2018  
 Aluminium: Not reported  
 Glass: Not reported  
 Plastic: Not reported  
 Bimetal: Not reported  
 Hours of Operation: Mon - Thr 8:00 am - 4:30 pm; Fri - Sat 8:00 am - 4:00 pm; Sun Closed  
 Organization ID: Not reported  
 Organization Name: Valdez Recycling

**Sacramento Co. ML:**  
 Name: VALDEZ RECYCLING  
 Address: 9833 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**NPDES:**  
 Name: VALDEZ RECYCLING  
 Address: 9833 KENT ST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

City,State,Zip:	ELK GROVE, CA 95624
Facility Status:	Active
NPDES Number:	CAS000001
Region:	5S
Agency Number:	0
Regulatory Measure ID:	451064
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	5S34NEC001878
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/14/2014
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	5657 Laurine Way
Discharge Name:	Cayetano Alberto Valdez
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95824
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
NPDES as of 03/2018:	
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	451064
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/14/2014
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cayetano Alberto Valdez
Discharge Address:	5657 Laurine Way
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95824
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	451064
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Not reported  
Discharge Address: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Received Date: 03/07/2016  
Processed Date: 11/14/2014  
Status: Active  
Status Date: 03/07/2016  
Place Size: 9500  
Place Size Unit: SqFt  
Contact: Elva Valdez  
Contact Title: Contact  
Contact Phone: 916-690-8833  
Contact Phone Ext: Not reported  
Contact Email: riveraangelina@sbcglobal.net  
Operator Name: Cayetano Alberto Valdez  
Operator Address: 5657 Laurine Way  
Operator City: Sacramento  
Operator State: California  
Operator Zip: 95824  
Operator Contact: Elva Valdez  
Operator Contact Title: Contact  
Operator Contact Phone: 916-254-8212  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: RIVERAANGELINA@SBCGLOBAL.NET  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Dir Discharge Uswater Ind: N  
Receiving Water Name: Laguna Creek  
Certifier: ALBERTO VALDEZ  
Certifier Title: OWNER  
Certification Date: 30-SEP-16  
Primary Sic: 5093-Scrap and Waste Materials  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34NEC001878  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Active  
Status Date: 03/07/2016  
Operator Name: Cayetano Alberto Valdez  
Operator Address: 5657 Laurine Way  
Operator City: Sacramento  
Operator State: California  
Operator Zip: 95824

NPDES as of 03/2018:

NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 5S  
Regulatory Measure ID: 451064  
Order Number: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place ID: Not reported  
WDID: 5S34NEC001878  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 11/14/2014  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Cayetano Alberto Valdez  
Discharge Address: 5657 Laurine Way  
Discharge City: Sacramento

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Discharge State:	California
Discharge Zip:	95824
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	451064
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	03/07/2016
Processed Date:	11/14/2014
Status:	Active
Status Date:	03/07/2016
Place Size:	9500
Place Size Unit:	SqFt
Contact:	Elva Valdez
Contact Title:	Contact
Contact Phone:	916-690-8833
Contact Phone Ext:	Not reported
Contact Email:	riveraangelina@sbcglobal.net
Operator Name:	Cayetano Alberto Valdez
Operator Address:	5657 Laurine Way
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95824
Operator Contact:	Elva Valdez
Operator Contact Title:	Contact
Operator Contact Phone:	916-254-8212
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	RIVERAANGELINA@SBCGLOBAL.NET
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Laguna Creek  
Certifier: ALBERTO VALDEZ  
Certifier Title: OWNER  
Certification Date: 30-SEP-16  
Primary Sic: 5093-Scrap and Waste Materials  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

**CIWQS:**

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Agency: Cayetano Alberto Valdez  
Agency Address: 5657 Laurine Way, Sacramento, CA 95824  
Place/Project Type: Industrial - Scrap and Waste Materials  
SIC/NAICS: 5093  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Active  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34NEC001878  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 11/14/2014  
Termination Date: Not reported  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 2  
Violations within 5 years: 2  
Latitude: 38.3987  
Longitude: -121.35717

**CERS:**

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 545767  
CERS ID: 832625

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

CERS Description: Industrial Facility Storm Water

Violations:

Site ID: 545767  
Site Name: Valdez Recycling  
Violation Date: 10-02-2017  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Failure to Obtain Permit  
Violation Notes: DISCHARGER FAILED TO RECERTIFY THE NEC BY OCTOBER 1, 2017  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 545767  
Site Name: Valdez Recycling  
Violation Date: 08-15-2015  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report  
Violation Notes: Failure to submit 2014-2015 Annual Report by due date  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-05-2017  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: On 5 April 2017, Staff inspected the facility and determined that the facility complied with the NEC requirements.  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-10-2017  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: On 10 October 2017, Central Valley Regional Water Quality Control Board staff inspected the Valdez Recycling facility in Elk Grove. Staff determined that the facility had refilled for NEC coverage on 9 October 2017. Staff talked with the facility manager who contacted office staff and determined that they had just filed for coverage. The facility qualifies for an NEC.  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Enforcement Action:

Site ID: 545767  
Site Name: Valdez Recycling  
Site Address: 9833 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-16-2015  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Enf Action Notes: Failure to submit 2014-2015 Annual Report by due date  
 Enf Action Division: Water Boards  
 Enf Action Program: INDSTW  
 Enf Action Source: SMARTS

Site ID: 545767  
 Site Name: Valdez Recycling  
 Site Address: 9833 KENT ST  
 Site City: ELK GROVE  
 Site Zip: 95624  
 Enf Action Date: 10-05-2017  
 Enf Action Type: Industrial Storm Water Enforcement  
 Enf Action Description: Industrial Storm Water Enforcement  
 Enf Action Notes: DISCHARGER FAILED TO RECERTIFY THE NEC BY OCTOBER 1, 2017  
 Enf Action Division: Water Boards  
 Enf Action Program: INDSTW  
 Enf Action Source: SMARTS

Affiliation:  
 Affiliation Type Desc: Owner/Operator  
 Entity Name: Cayetano Alberto Valdez  
 Entity Title: Operator  
 Affiliation Address: 5657 Laurine Way  
 Affiliation City: Sacramento  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95824  
 Affiliation Phone: Not reported

**F35**  
**SE**  
**1/8-1/4**  
**0.147 mi.**  
**777 ft.**

**KINGSFORD PROD CO (CLOSED-CO)**  
**10000 WATERMAN RD**  
**ELK GROVE, CA**  
**Site 1 of 4 in cluster F**

**RGA LUST** **S114640156**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

RGA LUST:  
 Name: KINGSFORD PROD CO (CLOSED-CO)  
 Address: 10000 WATERMAN RD  
 City: ELK GROVE  
 State: ELK GROVE  
 1993 KINGSFORD PROD CO (CLOSED-CO) 10000 WATERMAN RD

**F36**  
**SE**  
**1/8-1/4**  
**0.147 mi.**  
**777 ft.**

**THE KINGSFORD COMPANY**  
**10000 WATERMAN RD**  
**ELK GROVE, CA 95624**  
**Site 2 of 4 in cluster F**

**LUST** **1000591231**  
**EMI** **N/A**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

LUST:  
 Name: KINGSFORD PROD CO  
 Address: 10000 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700284](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700284)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**1000591231**

Global Id: T0606700284  
Latitude: 38.3977578  
Longitude: -121.3532017  
Status: Completed - Case Closed  
Status Date: 01/17/1996  
Case Worker: Not reported  
RB Case Number: 340352  
Local Agency: Not reported  
File Location: Not reported  
Local Case Number: 0508/71508  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Other Solvent or Non-Petroleum Hydrocarbon  
Site History: Not reported

LUST:

Global Id: T0606700284  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/03/1994  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 09/11/1990  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 06/30/1994  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 09/30/1992  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 01/12/1994  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/02/1991  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**1000591231**

Date: 01/22/1991  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 12/31/1993  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 03/22/1994  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 09/30/1993  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 03/31/1994  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/03/1994  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 12/09/1993  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 12/06/1990  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/16/1989  
Action: Unauthorized Release Form

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 08/28/1989  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 01/17/1996  
Action: Closure/No Further Action Letter

Global Id: T0606700284  
Action Type: Other  
Date: 02/07/1992  
Action: Leak Reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**1000591231**

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 08/26/1992  
Action: Notice of Reimbursement

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 09/02/1992  
Action: Notice of Reimbursement

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 08/26/1992  
Action: \* Historical Enforcement

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 08/26/1992  
Action: \* No Action

Global Id: T0606700284  
Action Type: Other  
Date: 02/07/1992  
Action: Leak Discovery

**LUST:**

Global Id: T0606700284  
Status: Open - Case Begin Date  
Status Date: 05/01/1989

Global Id: T0606700284  
Status: Open - Remediation  
Status Date: 05/01/1989

Global Id: T0606700284  
Status: Open - Remediation  
Status Date: 07/17/1990

Global Id: T0606700284  
Status: Open - Site Assessment  
Status Date: 07/17/1990

Global Id: T0606700284  
Status: Open - Site Assessment  
Status Date: 02/07/1992

Global Id: T0606700284  
Status: Completed - Case Closed  
Status Date: 01/17/1996

**LUST REG 5:**

Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
Region: 5

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**1000591231**

Status: Case Closed  
Case Number: 340352  
Case Type: Soil only  
Substance: HYDROCARBONS  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**EMI:**

Name: KINGSFORD COMPANY  
Address: 10000 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Year: 1987  
County Code: 34  
Air Basin: SV  
Facility ID: 7  
Air District Name: SAC  
SIC Code: 2861  
Air District Name: SACRAMENTO METROPOLITAN AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 1  
NOX - Oxides of Nitrogen Tons/Yr: 5  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 7  
Part. Matter 10 Micrometers and Smlr Tons/Yr:7

**HIST CORTESE:**

edr\_fname: KINGSFORD PROD CO  
edr\_fadd1: 10000 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340352

**Sacramento Co. ML:**

Name: THE KINGSFORD COMPANY  
Address: 10000 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: G0105786  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: G  
Billing Codes BP: Out of Business  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 51  
Food Bill Code: 51  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: 06/01/1990  
HAZMAT Inspection Date: 07/19/1990  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**1000591231**

UST Inspection Date: 11/10/1988  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: 2499  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 211987  
CERS ID: T0606700284  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**F37**  
**SE**  
**1/8-1/4**  
**0.147 mi.**  
**777 ft.**

**KINGSFORD PRODUCTS COMPANY**  
**10000 WATERMAN ROAD**  
**ELK GROVE, CA**

**RGA LUST S114640160**  
**N/A**

**Site 3 of 4 in cluster F**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**RGA LUST:**  
Name: KINGSFORD PRODUCTS COMPANY  
Address: 10000 WATERMAN ROAD  
City: ELK GROVE  
State: ELK GROVE  
1992 KINGSFORD PRODUCTS COMPANY 10000 WATERMAN ROAD

**F38**  
**SE**  
**1/8-1/4**  
**0.147 mi.**  
**777 ft.**

**KINGSFORD PROD CO**  
**10000 WATERMAN RD**  
**ELK GROVE, CA**

**RGA LUST S114640157**  
**N/A**

**Site 4 of 4 in cluster F**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**RGA LUST:**  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2012 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

**S114640157**

City: ELK GROVE  
State: ELK GROVE  
2011 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2010 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2009 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2008 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2007 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2006 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2005 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2003 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2002 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2001 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2000 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KINGSFORD PROD CO (Continued)**

**S114640157**

Name:	1998 KINGSFORD PROD CO	10000 WATERMAN RD
Address:	KINGSFORD PROD CO	
City:	10000 WATERMAN RD	
State:	ELK GROVE	
Name:	1997 KINGSFORD PROD CO	10000 WATERMAN RD
Address:	KINGSFORD PROD CO	
City:	10000 WATERMAN RD	
State:	ELK GROVE	
Name:	1996 KINGSFORD PROD CO	10000 WATERMAN RD
Address:	KINGSFORD PROD CO	
City:	10000 WATERMAN RD	
State:	ELK GROVE	
Name:	1995 KINGSFORD PROD CO	10000 WATERMAN RD
Address:	KINGSFORD PROD CO	
City:	10000 WATERMAN RD	
State:	ELK GROVE	
Name:	1994 KINGSFORD PROD CO	10000 WATERMAN RD

**39  
 NW  
 1/8-1/4  
 0.149 mi.  
 786 ft.**

**HANFORD READY MIX  
 9800 KENT ST  
 ELK GROVE, CA 95624**

**CERS HAZ WASTE  
 Sacramento Co. ML  
 NPDES  
 WDS  
 CIWQS  
 CERS**

**S103707646  
 N/A**

**Relative:  
 Higher  
 Actual:  
 51 ft.**

CERS HAZ WASTE:  
 Name: HANFORD READY MIX INC  
 Address: 9800 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 394334  
 CERS ID: 10219729  
 CERS Description: Hazardous Waste Generator

Sacramento Co. ML:  
 Name: HANFORD READY MIX INC  
 Address: 9800 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**NPDES:**

Name: HANFORD READY MIX INC  
Address: 9800 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34I001765  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Active  
Status Date: 03/30/1992  
Operator Name: Hanford Ready Mix Inc Preston  
Operator Address: 9800 Kent St  
Operator City: Elk Grove  
Operator State: California  
Operator Zip: 95624

**NPDES as of 03/2018:**

NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 5S  
Regulatory Measure ID: 200643  
Order Number: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place ID: Not reported  
WDID: 5S34I001765  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 03/30/1992  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Hanford Ready Mix Inc Preston  
Discharge Address: 9800 Kent St  
Discharge City: Elk Grove  
Discharge State: California  
Discharge Zip: 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

NPDES Number: Not reported  
Status: Not reported  
Agency Number: Not reported  
Region: 5S  
Regulatory Measure ID: 200643  
Order Number: Not reported  
Regulatory Measure Type: Industrial  
Place ID: Not reported  
WDID: 5S34I001765  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Not reported  
Discharge Address: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Received Date: 05/09/2008  
Processed Date: 03/30/1992  
Status: Active  
Status Date: 03/30/1992  
Place Size: 3  
Place Size Unit: Acres  
Contact: Preston Hanford  
Contact Title: III  
Contact Phone: 916-405-1918  
Contact Phone Ext: Not reported  
Contact Email: 3333ph@gmail.com  
Operator Name: Hanford Ready Mix Inc Preston  
Operator Address: 9800 Kent St  
Operator City: Elk Grove  
Operator State: California  
Operator Zip: 95624  
Operator Contact: Preston Hanford  
Operator Contact Title: III  
Operator Contact Phone: 916-685-9774  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: 3333ph@gmail.com  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: 916-685-9774  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: municipal  
Certifier: Preston Hanford III  
Certifier Title: Vice President  
Certification Date: 26-MAY-15  
Primary Sic: 3273-Ready-Mixed Concrete  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

Name: HANFORD READY MIX INC  
Address: 9800 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Active  
NPDES Number: CAS000001  
Region: 5S  
Agency Number: 0  
Regulatory Measure ID: 200643  
Place ID: Not reported  
Order Number: 97-03-DWQ  
WDID: 5S34I001765  
Regulatory Measure Type: Enrollee  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 03/30/1992  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: 9800 Kent St  
Discharge Name: Hanford Ready Mix Inc Preston  
Discharge City: Elk Grove  
Discharge State: California  
Discharge Zip: 95624  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: CAS000001  
Status: Active  
Agency Number: 0  
Region: 5S  
Regulatory Measure ID: 200643  
Order Number: 97-03-DWQ  
Regulatory Measure Type: Enrollee

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Place ID:	Not reported
WDID:	5S34I001765
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/30/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Hanford Ready Mix Inc Preston
Discharge Address:	9800 Kent St
Discharge City:	Elk Grove
Discharge State:	California
Discharge Zip:	95624
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	200643
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34I001765
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	03/30/1992
Status:	Active
Status Date:	03/30/1992
Place Size:	3
Place Size Unit:	Acres
Contact:	Preston Hanford
Contact Title:	III
Contact Phone:	916-405-1918
Contact Phone Ext:	Not reported
Contact Email:	3333ph@gmail.com
Operator Name:	Hanford Ready Mix Inc Preston
Operator Address:	9800 Kent St
Operator City:	Elk Grove
Operator State:	California
Operator Zip:	95624
Operator Contact:	Preston Hanford
Operator Contact Title:	III
Operator Contact Phone:	916-685-9774
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	3333ph@gmail.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: 916-685-9774  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: municipal  
Certifier: Preston Hanford III  
Certifier Title: Vice President  
Certification Date: 26-MAY-15  
Primary Sic: 3273-Ready-Mixed Concrete  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

**WDS:**

Name: HANFORD READY MIX  
Address: 9800 Kent St  
City: ELK GROVE  
Facility ID: 5S 34I001765  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 0  
Facility Telephone: 9166859774  
Facility Contact: PRESTON HANFORD JR  
Agency Name: HANFORD READY MIX INC  
Agency Address: 9800 Kent St  
Agency City,St,Zip: Elk Grove 956249483  
Agency Contact: PRESTON HANFORD JR  
Agency Telephone: 9166859774  
Agency Type: Private  
SIC Code: 3273

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

SIC Code 2: Not reported  
Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).  
Primary Waste: STORMS  
Waste Type2: Not reported  
Waste2: Stormwater Runoff  
Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: No reclamation requirements associated with this facility.  
POTW: The facility is not a POTW.  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

**CIWQS:**

Name: HANFORD READY MIX INC  
Address: 9800 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Agency: Hanford Ready Mix Inc Preston  
Agency Address: 9800 Kent St, Elk Grove, CA 95624  
Place/Project Type: Industrial - Ready-Mixed Concrete  
SIC/NAICS: 3273  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Active  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34I001765  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 03/30/1992  
Termination Date: Not reported  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Violations within 5 years: 0  
Latitude: 38.398997  
Longitude: -121.358356

**CERS:**

Name: HANFORD READY MIX INC  
Address: 9800 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 394334  
CERS ID: 10219729  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Drained used oil filters have not been disposed of since 3/2/2016. Oil filters must be disposed of annually. CORRECTIVE ACTION: Dispose of used oil filters and submit a copy of the disposal receipt to this department.

Violation Division: Sacramento County Env Management Department

Violation Program: HW

Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Annual training documentation for all applicable employees was not available (general hazcom, emergency response and specific training for the shop foreman). CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.

Violation Division: Sacramento County Env Management Department

Violation Program: HMRRP

Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for DEF, Eucon DS, AEA 92, Moxie

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

or waste coolant to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)

Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: The 55 gallon drum of oily debris located in the shop was observed without an accumulation start date. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 07-02-2009  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report  
Violation Notes: Failure to submit 2008-2009 Annual Report. Section B requires all annual reports to be submitted by July 1st each year. Discharger did not submit report by July 1st.

Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: OBSERVATION: The annotated site map submitted to this department does not include all areas of hazardous materials storage (Moxie, Propane, and Euclid tanks). CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507  
Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.  
Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: The training program for safe handling of hazardous materials has not been adequately implemented as demonstrated by oxygen and acetylene being stored together (incompatibles). CORRECTIVE ACTION: Submit photos to this department demonstrating that the unsafe condition described above has been corrected and submit documentation demonstrating employees have received training on safe handling of hazardous materials.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 01-27-2014  
Citation: HSC 6.95 25504(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)  
Violation Description: Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.  
Violation Notes: Returned to compliance on 08/24/2017. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for Transmission Fluid, Hydraulic Fluid, Oxygen, Nitrogen, and Argon/CO2 mixture to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in this department's e-Reporting Portal or in the California Electronic Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 02-23-2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: failure to comply with the general Industrial storm water permit.  
Failure to have the SWPPP and Monitoring Program on site.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Used oil was observed in the containment under the used oil tank in the in the shop and on the hydraulic oil tank. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 07-01-2011  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report  
Violation Notes: Failure to submit annual report by July 1, 2011  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 01-27-2014  
Citation: 22 CCR 12 66262.34(d) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)  
Violation Description: Failure to dispose of hazardous waste within 180 days (or 270 if waste is transported over 200 miles) for the generator who generates less than 1000 kilogram per month, but more than 100 kilograms per month.  
Violation Notes: Returned to compliance on 03/04/2014. OBSERVATION: The 55 gallon drum of oily debris waste has an accumulation start date of 7/30/07, and the 55 gallon drum of empty aerosols has an accumulation start date of 3/5/10. A manifest/receipt demonstrating disposal within the past 180 days was not available. CORRECTIVE ACTION: Dispose of these two wastes and submit a copy of the manifest/receipt to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Eval Date: 01-27-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-15-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-09-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-08-2012  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: On 8 November 2012, Central Valley Regional Water Quality Control Board staff inspected the Hanford Ready Mix Inc. Preston facility located at 9800 Kent Street in Elk Grove. During the site inspection, staff determined that the SWPPP was generally complete. The SWPPP was last updated in 2006. During the site inspection, staff met with Preston Hanford Jr. Hanford Ready Mix is a large batch plant. The facility includes an office, maintenance shop, batch plant and truck parking area. The facility is divided into two separate areas. Area one includes the office area, maintenance area and truck parking area. Area one discharges into four onsite drain inlets. Area two is the batch plant portion of the facility. Within Area two both process water and storm water are retained onsite. The entire facility had a concrete surface. Area one --> The four drain inlets within area one were protected with fiber rolls and drain inlet filter bags. One of the drain inlets in the area behind the office was located close to a stockpile of material. Staff suggested that fiber rolls be added around the stockpiles. The concrete surface throughout the area was generally clean (see photographs 1-3). Area two --> The batch plant area is designed to retain water onsite. Both storm water and process water flow into a series of concrete lined ponds. Solids are separated out within the ponds and water is pumped in a series of tanks for storage. The water stored in the tanks is then pumped back into the batch plant for reuse. Concrete waste is windrowed, stockpiled and hauled offsite for recycling (see attached inspection report and photographs).  
Eval Division: Water Boards  
Eval Program: INDSTW



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-23-2004  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: Not reported  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-15-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-09-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-05-2011  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: Inspection conducted to determine compliance with the Industrial General Permit. I reviewed the SWPPP and walked the site with the facility owner. The site was well maintained and had a concrete recovery/recycle system with extra above ground waste water recovery containers. The onsite storm drain at the entrance of the facility drains to the recovery system. Some tracking was observed in the roadway on Kent Street. The owner will provide additional street sweeping as needed. See attached inspection report and photos.

Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 01-27-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 03-16-2017  
Violations Found: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 03-16-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

**Enforcement Action:**

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 01-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 01-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-06-2004  
Enf Action Type: Staff Enforcement Letter  
Enf Action Description: Staff Enforcement Letter  
Enf Action Notes: SEL for failure to comply with the general Industrial storm water permit. Failure to have a SWPPP and Monitoring Program on site.  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 394334

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 07-23-2009  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: 1st NONC 08/09 Late Annual Report  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-24-2011  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: NNC for late annual report  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

**Coordinates:**

Site ID: 394334  
Facility Name: HANFORD READY MIX INC  
Env Int Type Code: HMBP  
Program ID: 10219729  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.398750  
Longitude: -121.359280

**Affiliation:**

Affiliation Type Desc: Document Preparer  
Entity Name: CHRIS HYDE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9800 KENT ST  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: Hanford Ready Mix Inc Preston  
Entity Title: Operator  
Affiliation Address: 9800 Kent St  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Environmental Contact  
Entity Name: Chris Hyde  
Entity Title: Not reported  
Affiliation Address: 9800 Kent St  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Preston Hanford III  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 212-5302

Affiliation Type Desc: Identification Signer  
Entity Name: CHRIS HYDE  
Entity Title: VICE PRESIDENT  
Affiliation Address: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
 Entity Name: HANFORD READY MIX INC  
 Entity Title: Not reported  
 Affiliation Address: 9800 KENT ST  
 Affiliation City: ELK GROVE  
 Affiliation State: CA  
 Affiliation Country: United States  
 Affiliation Zip: 95624  
 Affiliation Phone: (916) 685-9774

Affiliation Type Desc: Parent Corporation  
 Entity Name: HANFORD READY MIX INC  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Name: HANFORD READY MIX INC  
 Address: 9800 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 394334  
 CERS ID: 229589  
 CERS Description: Industrial Facility Storm Water

Violations:  
 Site ID: 394334  
 Site Name: HANFORD READY MIX INC  
 Violation Date: 05-09-2017  
 Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
 Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
 Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Drained used oil filters have not been disposed of since 3/2/2016. Oil filters must be disposed of annually. CORRECTIVE ACTION: Dispose of used oil filters and submit a copy of the disposal receipt to this department.  
 Violation Division: Sacramento County Env Management Department  
 Violation Program: HW  
 Violation Source: CERS

Site ID: 394334  
 Site Name: HANFORD READY MIX INC  
 Violation Date: 05-09-2017  
 Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
 Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Violation Notes: records for a minimum of three years.  
Returned to compliance on 05/19/2017. OBSERVATION: Annual training documentation for all applicable employees was not available (general hazcom, emergency response and specific training for the shop foreman). CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for DEF, Eucon DS, AEA 92, Moxie or waste coolant to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)

Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: The 55 gallon drum of oily debris located in the shop was observed without an accumulation start date. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 07-02-2009  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report

Violation Notes: Failure to submit 2008-2009 Annual Report. Section B requires all annual reports to be submitted by July 1st each year. Discharger did not submit report by July 1st.

Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: OBSERVATION: The annotated site map submitted to this department does not include all areas of hazardous materials storage (Moxie, Propane, and Euclid tanks). CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: The training program for safe handling of hazardous materials has not been adequately implemented as demonstrated by oxygen and acetylene being stored together (incompatibles). CORRECTIVE ACTION: Submit photos to this department demonstrating that the unsafe condition described above has been corrected and submit documentation demonstrating employees have received training on safe handling of hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 01-27-2014  
Citation: HSC 6.95 25504(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)  
Violation Description: Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.  
Violation Notes: Returned to compliance on 08/24/2017. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for Transmission Fluid, Hydraulic Fluid, Oxygen, Nitrogen, and Argon/CO2 mixture to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in this department's e-Reporting Portal or in the California Electronic Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 02-23-2004  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Deficient BMP Implementation  
Violation Notes: failure to comply with the general Industrial storm water permit. Failure to have the SWPPP and Monitoring Program on site.  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 05-09-2017  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: Returned to compliance on 05/19/2017. OBSERVATION: Used oil was observed in the containment under the used oil tank in the in the shop and on the hydraulic oil tank. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 07-01-2011  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report  
Violation Notes: Failure to submit annual report by July 1, 2011  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Violation Date: 01-27-2014  
Citation: 22 CCR 12 66262.34(d) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)  
Violation Description: Failure to dispose of hazardous waste within 180 days (or 270 if waste is transported over 200 miles) for the generator who generates less than 1000 kilogram per month, but more than 100 kilograms per month.  
Violation Notes: Returned to compliance on 03/04/2014. OBSERVATION: The 55 gallon drum of oily debris waste has an accumulation start date of 7/30/07, and the 55 gallon drum of empty aerosols has an accumulation start date of 3/5/10. A manifest/receipt demonstrating disposal within the past 180 days was not available. CORRECTIVE ACTION: Dispose of these two wastes and submit a copy of the manifest/receipt to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 01-27-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-15-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-09-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-08-2012  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: On 8 November 2012, Central Valley Regional Water Quality Control Board staff inspected the Hanford Ready Mix Inc. Preston facility located at 9800 Kent Street in Elk Grove. During the site inspection, staff determined that the SWPPP was generally complete. The SWPPP was last updated in 2006. During the site inspection, staff met with Preston Hanford Jr. Hanford Ready Mix is a large batch plant. The facility includes an office, maintenance shop, batch plant and truck

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

parking area. The facility is divided into two separate areas. Area one includes the office area, maintenance area and truck parking area. Area one discharges into four onsite drain inlets. Area two is the batch plant portion of the facility. Within Area two both process water and storm water are retained onsite. The entire facility had a concrete surface. Area one --> The four drain inlets within area one were protected with fiber rolls and drain inlet filter bags. One of the drain inlets in the area behind the office was located close to a stockpile of material. Staff suggested that fiber rolls be added around the stockpiles. The concrete surface throughout the area was generally clean (see photographs 1-3). Area two --> The batch plant area is designed to retain water onsite. Both storm water and process water flow into a series of concrete lined ponds. Solids are separated out within the ponds and water is pumped in a series of tanks for storage. The water stored in the tanks is then pumped back into the batch plant for reuse. Concrete waste is windrowed, stockpiled and hauled offsite for recycling (see attached inspection report and photographs).

Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-23-2004  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: Not reported  
Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-15-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-09-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-05-2011  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: Inspection conducted to determine compliance with the Industrial General Permit. I reviewed the SWPPP and walked the site with the facility owner. The site was well maintained and had a concrete recovery/recycle system with extra above ground waste water recovery

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

containers. The onsite storm drain at the entrance of the facility drains to the recovery system. Some tracking was observed in the roadway on Kent Street. The owner will provide additional street sweeping as needed. See attached inspection report and photos.

Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 01-27-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 03-16-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 03-16-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:  
Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 01-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 01-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-06-2004  
Enf Action Type: Staff Enforcement Letter  
Enf Action Description: Staff Enforcement Letter  
Enf Action Notes: SEL for failure to comply with the general Industrial storm water permit. Failure to have a SWPPP and Monitoring Program on site.  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 07-23-2009  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: 1st NONC 08/09 Late Annual Report  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-24-2011  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: NNC for late annual report  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 394334  
Site Name: HANFORD READY MIX INC  
Site Address: 9800 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Coordinates:

Site ID: 394334  
Facility Name: HANFORD READY MIX INC  
Env Int Type Code: HMBP  
Program ID: 10219729  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.398750  
Longitude: -121.359280

Affiliation:

Affiliation Type Desc: Document Preparer  
Entity Name: CHRIS HYDE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9800 KENT ST  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Owner/Operator  
Entity Name: Hanford Ready Mix Inc Preston  
Entity Title: Operator  
Affiliation Address: 9800 Kent St  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Environmental Contact  
Entity Name: Chris Hyde  
Entity Title: Not reported  
Affiliation Address: 9800 Kent St  
Affiliation City: Elk Grove

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HANFORD READY MIX (Continued)**

**S103707646**

Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Preston Hanford III  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 212-5302

Affiliation Type Desc: Identification Signer  
Entity Name: CHRIS HYDE  
Entity Title: VICE PRESIDENT  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: HANFORD READY MIX INC  
Entity Title: Not reported  
Affiliation Address: 9800 KENT ST  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 685-9774

Affiliation Type Desc: Parent Corporation  
Entity Name: HANFORD READY MIX INC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**G40** **KIRKLAND & SON**  
**North** **9874 DINO DR STE 1**  
**1/8-1/4** **ELK GROVE, CA 95624**  
**0.150 mi.**  
**794 ft.** **Site 1 of 12 in cluster G**

**Sacramento Co. ML S105454992**  
**N/A**

**Relative:** Sacramento Co. ML:  
**Higher** Name: KIRKLAND & SON  
Address: 9874 DINO DR STE 1  
**Actual:** City,State,Zip: ELK GROVE, CA 95624  
**51 ft.** Facility Id: Not reported  
Facility Status: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KIRKLAND & SON (Continued)**

**S105454992**

FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	I
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

**G41**  
**North**  
**1/8-1/4**  
**0.150 mi.**  
**794 ft.**

**CUDA CLEANING SYSTEMS INC**  
**9874 DINO DR STE 5**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML**    **S109034539**  
**N/A**

**Site 2 of 12 in cluster G**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:	
Name:	CUDA CLEANING SYSTEMS INC
Address:	9874 DINO DR STE 5
City,State,Zip:	ELK GROVE, CA 95624
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	I
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**G42**      **MARTY GARDENS LANDSCAPING**  
**North**    **9875 DINO DR**  
**1/8-1/4**   **ELK GROVE, CA 95624**  
**0.152 mi.**  
**801 ft.**    **Site 3 of 12 in cluster G**

**Sacramento Co. ML**    **S103707001**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: MARTY GARDENS LANDSCAPING  
 Address: 9875 DINO DR  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Inactive. Included on a listing no longer updated.  
 FD: O  
 Billing Codes BP: Out of Business  
 Billing Codes UST: No Tanks  
 WG Bill Code: Oil Changed by Outside Company-No Fee  
 Target Property Bill Cod: 51  
 Food Bill Code: 51  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: 0  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**G43**      **US TRUCK & TRAILER REPAIR LLC**  
**North**    **9875 DINO DR**  
**1/8-1/4**   **ELK GROVE, CA 95624**  
**0.152 mi.**  
**801 ft.**    **Site 4 of 12 in cluster G**

**CERS HAZ WASTE**    **S113759375**  
**Sacramento Co. ML**    **N/A**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

CERS HAZ WASTE:  
 Name: US TRUCK & TRAILER REPAIR LLC  
 Address: 9875 DINO DR  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 178281  
 CERS ID: 10492531  
 CERS Description: Hazardous Waste Generator

Sacramento Co. ML:  
 Name: US TRUCK & TRAILER REPAIR LLC  
 Address: 9875 DINO DR  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: US TRUCK & TRAILER REPAIR LLC  
Address: 9875 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 178281  
CERS ID: 10492531  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: One 55 gallon drum of oily absorbent (paper oil filters), one 500 gallon container of used oil and one 100 gallon container of waste coolant located in the hazardous waste accumulation area were observed without a hazardous waste label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled. COMPLIED DURING INSPECTION  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)  
Violation Description: Failure to ensure employees are familiar with the handling and compliance of hazardous waste regulations and emergency response.  
Violation Notes: Returned to compliance on 09/19/2016. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.  
Violation Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Release/Leaks/Spills - General  
Violation Notes: Returned to compliance on 05/18/2017. OBSERVATION: Oil spills were observed in the shop in the hazardous materials and hazardous waste storage areas. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills have been properly removed and managed. Corrected during inspection.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Release/Leaks/Spills - General  
Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: Waste diesel and used oil were observed spilled on the concrete floor in the hazardous waste accumulation area in the shop. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: 22 CCR 15 66265.31 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: Used oil and waste gasoline were observed spilled on the concrete floor in the shop near the hazardous waste accumulation area. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Violation Description: Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.

Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: The final signed Uniform Hazardous Waste Manifest number 016781422JJK dated 9/17/2018 was not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of the final signed Uniform Hazardous Waste Manifest number listed above and submit copies to this department. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for acetylene or gear oil to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: The Emergency Response Plan has not been adequately implemented as demonstrated by emergency equipment (such as fire extinguishers) have not been tested and maintained as necessary (e.g. fire extinguishers assessed annually). CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating that the fire extinguishers have been serviced or purchased. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Violation Notes: inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Returned to compliance on 11/07/2018. OBSERVATION: Chemical inventory information for gear oil on site at or above reportable quantities has not been completed and electronically submitted to this department. CORRECTIVE ACTION: Complete the chemical inventory information for gear oil and submit electronically in the California Environmental Reporting System. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections

Violation Description: Haz Waste Generator Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 09/19/2016. OBSERVATION: The used oil tank located in the shop was observed without an accumulation start date on the label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: 22 CCR 15 66265.33 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.33

Violation Description: Failure to test and maintain as necessary all facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment to assure its proper operation in time of emergency.

Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: Fire extinguishers have not been tested and maintained to assure its proper operation in time of emergency. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the fire extinguishers have been properly tested or maintained. COMPLIED DURING INSPECTION

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment..

Violation Notes: Returned to compliance on 04/19/2016. OBSERVATION: Oil spills were observed in the shop in the hazardous materials and hazardous waste

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

storage areas. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills have been properly removed and managed. Corrected during inspection.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130

Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.

Violation Notes: Returned to compliance on 04/20/2016. OBSERVATION: Four 55 gallon drums of used oil and fuel filters located in the shop were observed without labels. Bills of lading for used oil and fuel filters were not kept for the past three years. CORRECTIVE ACTION: Submit photos to this department demonstrating that the used oil and fuel filters are properly labeled and submit bills of lading for 2015 and 2016 to this department demonstrating proper disposal.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment..

Violation Notes: Returned to compliance on 04/19/2016. OBSERVATION: Used oil was observed spilled in the hazardous waste storage area in the shop. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed. Corrected during inspection.d

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 11-07-2018  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 11/07/2018. OBSERVATION: One 55 gallon drum of used oil and fuel filters located in the hazardous waste accumulation area was observed without a label. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating that the used oil and fuel filter drum is properly labeled. COMPLIED DURING INSPECTION

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Notes: Returned to compliance on 09/19/2016. OBSERVATION: The training program for safe handling of hazardous materials has not been adequately implemented as demonstrated by the oxygen and acetylene being unsecured. CORRECTIVE ACTION: Submit photos to this department demonstrating that the unsafe condition described above has been corrected and submit documentation demonstrating employees have received training on safe handling of hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Violation Date: 04-19-2016  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain and/or maintain an Active EPA ID.

Violation Notes: Returned to compliance on 04/21/2016. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-19-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-07-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 11-07-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-19-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Site Address: 9875 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-19-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 178281  
Site Name: US TRUCK & TRAILER REPAIR LLC  
Site Address: 9875 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-19-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:

Site ID: 178281  
Facility Name: US TRUCK & TRAILER REPAIR LLC  
Env Int Type Code: HWG  
Program ID: 10492531  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.399020  
Longitude: -121.356360

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Affiliation:

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9875 DINO DR  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Environmental Contact  
Entity Name: DAVINDER SINGH  
Entity Title: Not reported  
Affiliation Address: 9490 DINO DR,  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: DAVINDER SINGH  
Entity Title: OWNER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: US TRUCK & TRAILER REPAIR LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: DAVINDER SINGH  
Entity Title: Not reported  
Affiliation Address: 9875 DINO DR  
Affiliation City: ELK GROVE  
Affiliation State: CA



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US TRUCK & TRAILER REPAIR LLC (Continued)**

**S113759375**

Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 686-2664

Affiliation Type Desc: Operator  
Entity Name: DAVINDER SINGH  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 686-2664

Affiliation Type Desc: Document Preparer  
Entity Name: Parminder Virk  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**E44  
NE  
1/8-1/4  
0.152 mi.  
802 ft.**

**PERFECTION AUTO PARTS AND REPAIR  
9882 WATERMAN RD STE 120  
ELK GROVE, CA 95624**

**Sacramento Co. ML S108484694  
N/A**

**Site 2 of 3 in cluster E**

**Relative:  
Higher  
Actual:  
51 ft.**

Sacramento Co. ML:  
Name: PERFECTION AUTO PARTS AND REPAIR  
Address: 9882 WATERMAN RD STE 120  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**E45**      **AUTO START**  
**NE**        **9882 WATERMAN RD STE 140**  
**1/8-1/4**    **ELK GROVE, CA 95624**  
**0.152 mi.**  
**802 ft.**    **Site 3 of 3 in cluster E**

**Sacramento Co. ML**    **S109035005**  
**N/A**

**Relative:**      Sacramento Co. ML:  
**Higher**        Name:                      AUTO START  
**Actual:**        Address:                    9882 WATERMAN RD STE 140  
**51 ft.**            City,State,Zip:            ELK GROVE, CA 95624  
                      Facility Id:                    Not reported  
                      Facility Status:            Not reported  
                      FD:                            Not reported  
                      Billing Codes BP:            I  
                      Billing Codes UST:           Not reported  
                      WG Bill Code:                I  
                      Target Property Bill Cod:   Not reported  
                      Food Bill Code:             Not reported  
                      CUPA Permit Date:         Not reported  
                      HAZMAT Permit Date:      Not reported  
                      HAZMAT Inspection Date:   Not reported  
                      Hazmat Date BP Received:   Not reported  
                      UST Permit Dt:              Not reported  
                      UST Inspection Date:      Not reported  
                      UST Tank Test Date:        Not reported  
                      Number of Tanks:            Not reported  
                      UST Tank Test Date:        Not reported  
                      SIC Code:                    Not reported  
                      Tier Permitting:            Not reported  
                      AST Bill Code:              Not reported  
                      CALARP Bill Code:          Not reported

**G46**        **EXPERT AUTOMOTIVE**  
**North**      **9864 DINO DR STE 1**  
**1/8-1/4**    **ELK GROVE, CA 95624**  
**0.175 mi.**  
**922 ft.**    **Site 5 of 12 in cluster G**

**CERS HAZ WASTE**    **S109034537**  
**Sacramento Co. ML**    **N/A**  
**CERS**

**Relative:**      CERS HAZ WASTE:  
**Higher**        Name:                      EXPERT AUTOMOTIVE  
**Actual:**        Address:                    9864 DINO DR STE 1  
**51 ft.**            City,State,Zip:            ELK GROVE, CA 95624  
                      Site ID:                      29121  
                      CERS ID:                    10223626  
                      CERS Description:         Hazardous Waste Generator

Sacramento Co. ML:  
 Name:                      EXPERT AUTOMOTIVE  
 Address:                    9864 DINO DR STE 1  
 City,State,Zip:            ELK GROVE, CA 95624  
 Facility Id:                    Not reported  
 Facility Status:            Not reported  
 FD:                            Not reported  
 Billing Codes BP:            A  
 Billing Codes UST:           Not reported  
 WG Bill Code:                A  
 Target Property Bill Cod:   Not reported  
 Food Bill Code:             Not reported  
 CUPA Permit Date:        Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EXPERT AUTOMOTIVE (Continued)**

**S109034537**

HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: EXPERT AUTOMOTIVE  
Address: 9864 DINO DR STE 1  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 29121  
CERS ID: 10223626  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 29121  
Site Name: EXPERT AUTOMOTIVE  
Violation Date: 07-24-2017  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 12/27/2017. OBSERVATION: Two 55 gallon drums of used oil and fuel filters located in the hazardous waste storage area were observed accumulation start dates. CORRECTIVE ACTION: COMPLIED DURING INSPECTION  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 29121  
Site Name: EXPERT AUTOMOTIVE  
Violation Date: 07-24-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: Returned to compliance on 07/31/2017. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 29121

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EXPERT AUTOMOTIVE (Continued)**

**S109034537**

Site Name: EXPERT AUTOMOTIVE  
Violation Date: 07-24-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: Returned to compliance on 07/16/2018. OBSERVATION: The annotated site map submitted to this department does not include the location of the new motor oil and new coolant. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 29121  
Site Name: EXPERT AUTOMOTIVE  
Violation Date: 07-24-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: Returned to compliance on 07/16/2018. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for new motor oil, new coolant or used coolant to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-18-2014  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-18-2014  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EXPERT AUTOMOTIVE (Continued)**

**S109034537**

Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-24-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 29121  
Site Name: EXPERT AUTOMOTIVE  
Site Address: 9864 DINO DR STE 1  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 29121  
Site Name: EXPERT AUTOMOTIVE  
Site Address: 9864 DINO DR STE 1  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Affiliation:  
Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Environmental Contact  
Entity Name: Michael Jones  
Entity Title: Not reported  
Affiliation Address: 9864 Dino Dr. ste #1  
Affiliation City: elk grove

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EXPERT AUTOMOTIVE (Continued)**

**S109034537**

Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Michael Jones  
Entity Title: owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Mike Jones  
Entity Title: Not reported  
Affiliation Address: 9864 DINO DR STE 1  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 685-7997

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9864 DINO DR STE 1  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: EXPERT AUTOMOTIVE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer  
Entity Name: Michael Jones  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Michael Jones

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EXPERT AUTOMOTIVE (Continued)**

**S109034537**

Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 685-7997

**G47**  
**North**  
**1/8-1/4**  
**0.175 mi.**  
**922 ft.**

**ASAP YARD TOOLS**  
**9864 DINO DR STE 2**  
**ELK GROVE, CA 95624**  
**Site 6 of 12 in cluster G**

**Sacramento Co. ML S106541768**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: ASAP YARD TOOLS  
Address: 9864 DINO DR STE 2  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**G48**  
**North**  
**1/8-1/4**  
**0.175 mi.**  
**922 ft.**

**ON-SITE WELDING & EQUIPMENT REPAIR**  
**9864 DINO DR 3**  
**ELK GROVE, CA 95624**  
**Site 7 of 12 in cluster G**

**Sacramento Co. ML S123293102**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: FRISCO AUTO BODY & PAINT  
Address: 9864 DINO DR STE 10  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: Not reported  
Billing Codes UST: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ON-SITE WELDING & EQUIPMENT REPAIR (Continued)**

**S123293102**

WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

Name: ON-SITE WELDING & EQUIPMENT REPAIR  
 Address: 9864 DINO DR 3  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: I  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**G49** **FLEETWASH, INC**  
**North** **9861 DINO DR**  
**1/8-1/4** **ELK GROVE, CA 95624**  
**0.195 mi.**  
**1028 ft.** **Site 8 of 12 in cluster G**

**CERS HAZ WASTE** **S103707000**  
**Sacramento Co. ML** **N/A**  
**CERS**

**Relative:** CERS HAZ WASTE:  
**Higher** Name: FLEETWASH, INC  
 Address: 9861 DINO DR  
 City,State,Zip: ELK GROVE, CA 95624  
**Actual:** Site ID: 30590  
**51 ft.** CERS ID: 10222732  
 CERS Description: Hazardous Waste Generator

Sacramento Co. ML:



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Name: FLEETWASH, INC  
Address: 9861 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: FLEETWASH, INC  
Address: 9861 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 30590  
CERS ID: 10222732  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.  
Violation Notes: Returned to compliance on 07/11/2018. OBSERVATION: Three drums of hazardous waste (used oil and waste coolant) located in the hazardous waste accumulation area were observed open. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly closed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS  
Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Violation Notes: Returned to compliance on 07/11/2018. OBSERVATION: Degreaser was observed spilled inside the secondary containment in the hazardous waste accumulation area. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.

Violation Division: Sacramento County Env Management Department

Violation Program: HW

Violation Source: CERS

Site ID: 30590

Site Name: FLEETWASH, INC

Violation Date: 06-27-2018

Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violation Notes: Returned to compliance on 07/11/2018. OBSERVATION: Annual employee training in safety procedures in the event of a release or threatened release of a hazardous material including familiarity with the emergency response plan has not been provided and / or documented and training records maintained for a minimum of three years. CORRECTIVE ACTION: Establish and electronically submit an employee training program containing provisions to ensure initial and annual training for all applicable employees in safety procedures in the event of a release or threatened release of a hazardous material and release reporting procedures. Submit documentation to the unified program agency demonstrating appropriate personnel have received training and maintain ongoing annual training records for a minimum of three years.

Violation Division: Sacramento County Env Management Department

Violation Program: HMRRP

Violation Source: CERS

Site ID: 30590

Site Name: FLEETWASH, INC

Violation Date: 10-23-2015

Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130

Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.

Violation Notes: Returned to compliance on 01/25/2016. OBSERVATION: One 55 gallon drum of used oil and fuel filters located in the chemical storage area was observed with an accumulation start date of 7/2/2012. Bills of lading for used oil and fuel filters indicate filters were disposed of 10/20/2014. CORRECTIVE ACTION: Submit photos to this department demonstrating that the accumulation start date has been added to the used oil and fuel filter drum label.

Violation Division: Sacramento County Env Management Department

Violation Program: HW

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: Returned to compliance on 10/30/2018. OBSERVATION: The Hazardous Materials Inventory Chemical Description MG-90, used oil or waste coolant have not been submitted to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 10-23-2015  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 01/25/2016. OBSERVATION: Eight drums of mixed acid cleaner located in the chemical storage area were observed without labels. CORRECTIVE ACTION: Submit a photo to this department demonstrating that the containers listed above have been properly labeled.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 10-23-2015  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 07/16/2018. OBSERVATION: A fiber drum of Truck Wash T (soap) located in the chemical storage area was observed deteriorating and spilling out the bottom. CORRECTIVE ACTION: Submit a photo to this department demonstrating the container listed above has been repacked in an appropriate container or submit a manifest/receipt demonstrating it has been properly disposed of.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 10-23-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Violation Notes: inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Returned to compliance on 07/16/2018. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for Compound CM 500 A, Tire and vinyl dressing, or Argon/CO2 to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple

Violation Description: Business Plan Program - Release/Leaks/Spills - General  
Violation Notes: Returned to compliance on 07/11/2018. OBSERVATION: Degreaser was observed spilled inside the secondary containment in the hazardous waste accumulation area. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 07/11/2018. OBSERVATION: One 55 gallon drum of unknown hazardous waste (either coolant or oil) located in the hazardous waste accumulation area was observed without a hazardous waste label. One 55 gallon drum of used oil had a faded hazardous waste label One 55 gallon drum of used oil did not have the accumulation start date. CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)

Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Violation Notes: responsibilities during normal facility operations and emergencies. Returned to compliance on 07/11/2018. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 10-23-2015  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment..

Violation Notes: Returned to compliance on 01/25/2016. OBSERVATION: Used oil was observed spilled inside the secondary containment under the used oil drums in the chemical storage area. A dried spill of an unknown material was observed in the yard on asphalt. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills have been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Violation Date: 06-27-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: Returned to compliance on 10/09/2018. OBSERVATION: The annotated site map submitted to this department does not include the location of hazardous waste accumulation area or the new storage of hazardous materials. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-23-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-27-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Some hazardous materials in reportable quantity are stored in building next door (9857 Dino) and require a separate permit and HMBP. Notify this department for details.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-23-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-27-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-21-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Enforcement Action:  
Site ID: 30590  
Site Name: FLEETWASH, INC  
Site Address: 9861 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-20-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Site Address: 9861 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Enf Action Date: 10-23-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 30590  
Site Name: FLEETWASH, INC  
Site Address: 9861 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-23-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:  
Site ID: 30590  
Facility Name: FLEETWASH, INC  
Env Int Type Code: HWG  
Program ID: 10222732  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.399640  
Longitude: -121.356450

Affiliation:  
Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Parent Corporation  
Entity Name: Fleetwash, Inc.  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9861 DINO DR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Brian Konkel  
Entity Title: Not reported  
Affiliation Address: 4917 brownstone court  
Affiliation City: elk grove  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95758  
Affiliation Phone: (916) 425-5381

Affiliation Type Desc: Identification Signer  
Entity Name: Brian Konkel  
Entity Title: Operation Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Brian Konkel  
Entity Title: Not reported  
Affiliation Address: 4917 BROWNSTONE CT  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95758  
Affiliation Phone: (916) 425-5381

Affiliation Type Desc: Document Preparer  
Entity Name: Brian Konkel  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Brian Konkel  
Entity Title: Not reported  
Affiliation Address: 9861 Dino Drive  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FLEETWASH, INC (Continued)**

**S103707000**

Entity Name: Fleetwash Inc  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 425-5381

**H50**  
**NNE**  
**1/8-1/4**  
**0.195 mi.**  
**1029 ft.**

**CUSTOM GEARS**  
**9857 DINO DR STE B**  
**ELK GROVE, CA 95624**  
**Site 1 of 2 in cluster H**

**CERS HAZ WASTE**  
**Sacramento Co. ML**  
**CERS**

**S123532325**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

CERS HAZ WASTE:  
Name: CUSTOM GEARS  
Address: 9857 DINO DR STE B  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 519847  
CERS ID: 10786405  
CERS Description: Hazardous Waste Generator

Sacramento Co. ML:  
Name: CUSTOM GEARS  
Address: 9857 DINO DR STE B  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

CERS:  
Name: CUSTOM GEARS  
Address: 9857 DINO DR STE B  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 519847  
CERS ID: 10786405  
CERS Description: Chemical Storage Facilities

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CUSTOM GEARS (Continued)**

**S123532325**

Violations:

Site ID: 519847  
Site Name: Custom Gears  
Violation Date: 06-07-2019  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: OBSERVATION: Used oil was observed spilling in the secondary containment under the used oil containers in the hazardous waste accumulation area. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 519847  
Site Name: Custom Gears  
Violation Date: 06-07-2019  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2  
Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.  
Violation Notes: OBSERVATION: The consolidated manifest receipts for the new location were observed to have the EPA ID Number for the old location. CORRECTIVE ACTION: Submit documentation to this department demonstrating that that future consolidated manifest receipts will be properly completed in the future.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 519847  
Site Name: Custom Gears  
Violation Date: 06-07-2019  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: OBSERVATION: Documented annual employee training in safety procedures in the event of a release or threatened release of a hazardous material including familiarity with the emergency response plan was not available during the inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating appropriate personnel have received training and maintain ongoing annual training records for a minimum of three years.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CUSTOM GEARS (Continued)**

**S123532325**

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-07-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-07-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Permit fees due 6/25/2019  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Affiliation:

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9857 Dino Drive Suite B  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Alberto Sanchez  
Entity Title: President  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: CUSTOM GEARS  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 690-9730

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CUSTOM GEARS (Continued)**

**S123532325**

Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Legal Owner  
Entity Name: Northern California Gear Heads Inc.  
Entity Title: Not reported  
Affiliation Address: 9857 Dino Drive Suite B  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 292-9214

Affiliation Type Desc: Parent Corporation  
Entity Name: CUSTOM GEARS  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer  
Entity Name: ALBERTO SANCHEZ  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Alberto Sanchez  
Entity Title: Not reported  
Affiliation Address: 9857 Dino Drive Suite B  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

H51  
NNE  
1/8-1/4  
0.195 mi.  
1029 ft.

**OFFSET SERVICE INK**  
**9851 DINO DR**  
**ELK GROVE, CA 95624**  
**Site 2 of 2 in cluster H**

**RCRA-SQG 1004678179**  
**HAZNET CAR000105932**  
**Sacramento Co. ML**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

RCRA-SQG:  
Date form received by agency: 2001-09-19 00:00:00.0  
Facility name: OFFSET SERVICE INK  
Facility address: 9851 DINO DR  
ELK GROVE, CA 95624  
EPA ID: CAR000105932  
Contact: RUSS SYRACUSE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Contact address: 9851 DINO DR  
ELK GROVE, CA 95624  
Contact country: US  
Contact telephone: 916-686-0643  
Contact email: Not reported  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: RUSS SYRACUSE  
Owner/operator address: 9851 DINO DR  
ELK GROVE, CA 95624  
Owner/operator country: Not reported  
Owner/operator telephone: 916-686-0643  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D001  
. Waste name: IGNITABLE WASTE  
  
. Waste code: D006  
. Waste name: CADMIUM  
  
. Waste code: D018  
. Waste name: BENZENE  
  
. Waste code: D039

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

. Waste name: TETRACHLOROETHYLENE

. Waste code: D040

. Waste name: TRICHLOROETHYLENE

Violation Status: No violations found

**HAZNET:**

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2004  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oil/water separation sludge  
TSD EPA ID: CAD059494310  
TSD County: 43  
Disposal Method: Not reported  
Tons: 0.5838

**Additional Info:**

Year: 2004  
Shipment Date: 20040323  
Creation Date: 8/23/2004 8:48:57  
Receipt Date: 20040403  
Manifest ID: 22950788  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MPE  
TSD EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSD Alt EPA ID: KYD053348108  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040129  
Creation Date: 11/18/2004 8:25:56  
Receipt Date: 20040209  
Manifest ID: 22955208  
Gen EPA ID: CAR000105932

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	Not reported
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040226
Creation Date:	1/5/2007 18:31:00
Receipt Date:	20040312
Manifest ID:	22955209
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041228
Creation Date:	3/16/2005 18:31:03
Receipt Date:	20041229
Manifest ID:	23654633
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDF Alt EPA ID: CA0000084517  
TSDF Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040719  
Creation Date: 11/1/2004 12:36:11  
Receipt Date: 20040720  
Manifest ID: 23511237  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDF Alt EPA ID: CA0000084517  
TSDF Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040505  
Creation Date: 10/8/2004 11:21:14  
Receipt Date: Not reported  
Manifest ID: 23343026  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDF Alt EPA ID: KYD053348108  
TSDF Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Meth Code:	Not reported
Quantity Tons:	0.251
Waste Quantity:	502
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041206
Creation Date:	2/17/2005 18:32:22
Receipt Date:	20041207
Manifest ID:	23724384
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040810
Creation Date:	11/5/2004 18:32:00
Receipt Date:	20040811
Manifest ID:	23515921
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040122
Creation Date:	8/19/2004 11:23:49
Receipt Date:	20040123
Manifest ID:	22950445
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LL
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	Not reported
RCRA Code:	Not reported
Meth Code:	H01
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040122
Creation Date:	8/19/2004 11:23:49
Receipt Date:	20040123
Manifest ID:	22950445
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LL
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	222
RCRA Code:	Not reported
Meth Code:	Not reported
Quantity Tons:	0.5838
Waste Quantity:	140
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2004  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Not reported  
TSD EPA ID: CAD059494310  
TSD County: 43  
Disposal Method: Transfer Station  
Tons: Not reported

Additional Info:

Year: 2004  
Shipment Date: 20040323  
Creation Date: 8/23/2004 8:48:57  
Receipt Date: 20040403  
Manifest ID: 22950788  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MPE  
TSD EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSD EPA Alt EPA ID: KYD053348108  
TSD EPA Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040129  
Creation Date: 11/18/2004 8:25:56  
Receipt Date: 20040209  
Manifest ID: 22955208  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSD EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSD EPA Alt EPA ID: KYD053348108  
TSD EPA Alt Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Waste Code:	212
RCRA Code:	F005
Meth Code:	Not reported
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040226
Creation Date:	1/5/2007 18:31:00
Receipt Date:	20040312
Manifest ID:	22955209
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	KYD053348108
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041228
Creation Date:	3/16/2005 18:31:03
Receipt Date:	20041229
Manifest ID:	23654633
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040719
Creation Date:	11/1/2004 12:36:11
Receipt Date:	20040720
Manifest ID:	23511237
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040505
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported
Manifest ID:	23343026
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	KYD053348108
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	Not reported
Quantity Tons:	0.251
Waste Quantity:	502
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041206
Creation Date:	2/17/2005 18:32:22
Receipt Date:	20041207
Manifest ID:	23724384
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040810
Creation Date:	11/5/2004 18:32:00
Receipt Date:	20040811
Manifest ID:	23515921
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040122
Creation Date:	8/19/2004 11:23:49

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Receipt Date: 20040123  
Manifest ID: 22950445  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LL  
TSDf Alt EPA ID: CAD059494310  
TSDf Alt Name: Not reported  
Waste Code: Not reported  
RCRA Code: Not reported  
Meth Code: H01  
Quantity Tons: Not reported  
Waste Quantity: Not reported  
Quantity Unit: Not reported  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040122  
Creation Date: 8/19/2004 11:23:49  
Receipt Date: 20040123  
Manifest ID: 22950445  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LL  
TSDf Alt EPA ID: CAD059494310  
TSDf Alt Name: Not reported  
Waste Code: 222  
RCRA Code: Not reported  
Meth Code: Not reported  
Quantity Tons: 0.5838  
Waste Quantity: 140  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2004  
Gepaid: CAR000105932  
Contact: Russ Syracuse

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: KYD053348108  
TSD County: 99  
Disposal Method: Not reported  
Tons: 0.269

**Additional Info:**

Year: 2004  
Shipment Date: 20040323  
Creation Date: 8/23/2004 8:48:57  
Receipt Date: 20040403  
Manifest ID: 22950788  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MPE  
TSD EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSD Alt EPA ID: KYD053348108  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040129  
Creation Date: 11/18/2004 8:25:56  
Receipt Date: 20040209  
Manifest ID: 22955208  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSD EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSD Alt EPA ID: KYD053348108  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: Not reported  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040226
Creation Date:	1/5/2007 18:31:00
Receipt Date:	20040312
Manifest ID:	22955209
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041228
Creation Date:	3/16/2005 18:31:03
Receipt Date:	20041229
Manifest ID:	23654633
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Year: 2004  
Shipment Date: 20040719  
Creation Date: 11/1/2004 12:36:11  
Receipt Date: 20040720  
Manifest ID: 23511237  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040505  
Creation Date: 10/8/2004 11:21:14  
Receipt Date: Not reported  
Manifest ID: 23343026  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: Not reported  
Quantity Tons: 0.251  
Waste Quantity: 502  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20041206  
Creation Date: 2/17/2005 18:32:22  
Receipt Date: 20041207  
Manifest ID: 23724384

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040810  
Creation Date: 11/5/2004 18:32:00  
Receipt Date: 20040811  
Manifest ID: 23515921  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040122  
Creation Date: 8/19/2004 11:23:49  
Receipt Date: 20040123  
Manifest ID: 22950445  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

TSDF EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LL  
TSDF Alt EPA ID: CAD059494310  
TSDF Alt Name: Not reported  
Waste Code: Not reported  
RCRA Code: Not reported  
Meth Code: H01  
Quantity Tons: Not reported  
Waste Quantity: Not reported  
Quantity Unit: Not reported  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040122  
Creation Date: 8/19/2004 11:23:49  
Receipt Date: 20040123  
Manifest ID: 22950445  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDF EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LL  
TSDF Alt EPA ID: CAD059494310  
TSDF Alt Name: Not reported  
Waste Code: 222  
RCRA Code: Not reported  
Meth Code: Not reported  
Quantity Tons: 0.5838  
Waste Quantity: 140  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2004  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: KYD053348108  
TSD County: 99

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Disposal Method:	Invalid Code
Tons:	0.151
Additional Info:	
Year:	2004
Shipment Date:	20040323
Creation Date:	8/23/2004 8:48:57
Receipt Date:	20040403
Manifest ID:	22950788
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MPE
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	KYD053348108
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040129
Creation Date:	11/18/2004 8:25:56
Receipt Date:	20040209
Manifest ID:	22955208
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	KYD053348108
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	Not reported
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040226

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Creation Date: 1/5/2007 18:31:00  
Receipt Date: 20040312  
Manifest ID: 22955209  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.133  
Waste Quantity: 266  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20041228  
Creation Date: 3/16/2005 18:31:03  
Receipt Date: 20041229  
Manifest ID: 23654633  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040719  
Creation Date: 11/1/2004 12:36:11  
Receipt Date: 20040720  
Manifest ID: 23511237  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040505
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported
Manifest ID:	23343026
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	Not reported
Quantity Tons:	0.251
Waste Quantity:	502
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041206
Creation Date:	2/17/2005 18:32:22
Receipt Date:	20041207
Manifest ID:	23724384
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040810
Creation Date:	11/5/2004 18:32:00
Receipt Date:	20040811
Manifest ID:	23515921
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040122
Creation Date:	8/19/2004 11:23:49
Receipt Date:	20040123
Manifest ID:	22950445
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LL
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	Not reported
RCRA Code:	Not reported
Meth Code:	H01



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Quantity Tons: Not reported  
Waste Quantity: Not reported  
Quantity Unit: Not reported  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040122  
Creation Date: 8/19/2004 11:23:49  
Receipt Date: 20040123  
Manifest ID: 22950445  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LL  
TSD Alt EPA ID: CAD059494310  
TSD Alt Name: Not reported  
Waste Code: 222  
RCRA Code: Not reported  
Meth Code: Not reported  
Quantity Tons: 0.5838  
Waste Quantity: 140  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2004  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: CA0000084517  
TSD County: 34  
Disposal Method: Transfer Station  
Tons: 0.072

Additional Info:  
Year: 2004  
Shipment Date: 20040323  
Creation Date: 8/23/2004 8:48:57  
Receipt Date: 20040403

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Manifest ID: 22950788  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MPE  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040129  
Creation Date: 11/18/2004 8:25:56  
Receipt Date: 20040209  
Manifest ID: 22955208  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: Not reported  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2004  
Shipment Date: 20040226  
Creation Date: 1/5/2007 18:31:00  
Receipt Date: 20040312  
Manifest ID: 22955209  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Trans 2 Name:	MP ENVIRONMENTAL
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	KYD053348108
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041228
Creation Date:	3/16/2005 18:31:03
Receipt Date:	20041229
Manifest ID:	23654633
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040719
Creation Date:	11/1/2004 12:36:11
Receipt Date:	20040720
Manifest ID:	23511237
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040505
Creation Date:	10/8/2004 11:21:14
Receipt Date:	Not reported
Manifest ID:	23343026
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	Not reported
Quantity Tons:	0.251
Waste Quantity:	502
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20041206
Creation Date:	2/17/2005 18:32:22
Receipt Date:	20041207
Manifest ID:	23724384
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040810
Creation Date:	11/5/2004 18:32:00
Receipt Date:	20040811
Manifest ID:	23515921
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2004
Shipment Date:	20040122
Creation Date:	8/19/2004 11:23:49
Receipt Date:	20040123
Manifest ID:	22950445
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LL
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code:	Not reported
RCRA Code:	Not reported
Meth Code:	H01
Quantity Tons:	Not reported
Waste Quantity:	Not reported
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Additional Code 5: Not reported  
Year: 2004  
Shipment Date: 20040122  
Creation Date: 8/19/2004 11:23:49  
Receipt Date: 20040123  
Manifest ID: 22950445  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LL  
TSD EPA Alt ID: CAD059494310  
TSD EPA Alt Name: Not reported  
Waste Code: 222  
RCRA Code: Not reported  
Meth Code: Not reported  
Quantity Tons: 0.5838  
Waste Quantity: 140  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2002  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: CA0000084517  
TSD County: 34  
Disposal Method: Transfer Station  
Tons: 0.1455

Additional Info:  
Year: 2002  
Shipment Date: 20020715  
Creation Date: 9/18/2002 18:32:45  
Receipt Date: 20020716  
Manifest ID: 21743912  
Gen EPA ID: CAR000105932  
Trans EPA ID: SCR000075150  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2002
Shipment Date:	20020812
Creation Date:	1/27/2003 18:31:12
Receipt Date:	20020813
Manifest ID:	21746768
Gen EPA ID:	CAR000105932
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2002
Shipment Date:	20020906
Creation Date:	1/27/2003 18:32:25
Receipt Date:	20020909
Manifest ID:	21935384
Gen EPA ID:	CAR000105932
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2002
Shipment Date:	20021007
Creation Date:	2/6/2003 18:31:16
Receipt Date:	20021008
Manifest ID:	21910245
Gen EPA ID:	CAR000105932
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.002
Waste Quantity:	4
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2002
Shipment Date:	20021126
Creation Date:	2/25/2003 18:31:38
Receipt Date:	20021126
Manifest ID:	22139894
Gen EPA ID:	CAR000105932
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2002
Shipment Date:	20021220
Creation Date:	3/31/2003 18:31:15
Receipt Date:	20021223
Manifest ID:	22200255
Gen EPA ID:	CAR000105932
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.0175
Waste Quantity:	35
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2002
Shipment Date:	20021101
Creation Date:	2/21/2003 10:42:43
Receipt Date:	20021104
Manifest ID:	22145684
Gen EPA ID:	CAR000105932
Trans EPA ID:	SCR000075150
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	Not reported
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Year: 2002  
Shipment Date: 20020405  
Creation Date: 7/10/2002 18:30:49  
Receipt Date: 20020408  
Manifest ID: 21580118  
Gen EPA ID: CAR000105932  
Trans EPA ID: SCR000075150  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2002  
Shipment Date: 20020111  
Creation Date: 2/26/2002 0:00:00  
Receipt Date: 20020114  
Manifest ID: 21482355  
Gen EPA ID: CAR000105932  
Trans EPA ID: SCR000075150  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: Not reported  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Year: 2003  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: KYD053348108  
TSD County: 99  
Disposal Method: Invalid Code  
Tons: 0.133

Additional Info:

Year: 2003  
Shipment Date: 20030606  
Creation Date: 7/20/2004 10:01:52  
Receipt Date: 20030609  
Manifest ID: 22386739  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD Alt EPA ID: CA0000084517  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030326  
Creation Date: 7/31/2003 18:30:54  
Receipt Date: 20030327  
Manifest ID: 22449132  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD Alt EPA ID: CA0000084517  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031230
Creation Date:	8/20/2004 9:41:48
Receipt Date:	20040119
Manifest ID:	22950787
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031230
Creation Date:	8/20/2004 9:41:48
Receipt Date:	20040119
Manifest ID:	22950787
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	352
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.229
Waste Quantity:	458
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Year: 2003  
Shipment Date: 20031003  
Creation Date: 8/5/2004 10:08:03  
Receipt Date: 20031007  
Manifest ID: 22745227  
Gen EPA ID: CAR000105932  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SERVICES INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: M P ENVIRONMENTAL  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: CAD059494310  
TSDf Alt Name: Not reported  
Waste Code: 122  
RCRA Code: D002  
Meth Code: T01  
Quantity Tons: 0.22935  
Waste Quantity: 55  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20031204  
Creation Date: 7/30/2004 18:31:14  
Receipt Date: 20031204  
Manifest ID: 23306525  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030226

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Creation Date: 6/21/2003 18:30:56  
Receipt Date: 20030227  
Manifest ID: 22438984  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030922  
Creation Date: 8/5/2004 10:08:03  
Receipt Date: 20030923  
Manifest ID: 22745185  
Gen EPA ID: CAR000105932  
Trans EPA ID: CAD004778742  
Trans Name: STURGEON/SON  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: CAD059494310  
TSDf Alt Name: Not reported  
Waste Code: 122  
RCRA Code: D002  
Meth Code: T01  
Quantity Tons: 1.8765  
Waste Quantity: 450  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030123  
Creation Date: 5/6/2003 18:31:20  
Receipt Date: 20030127  
Manifest ID: 22113966  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030423  
Creation Date: 8/29/2003 18:31:02  
Receipt Date: 20030424  
Manifest ID: 22373340  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2003  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

Waste Category: Other organic solids  
TSD EPA ID: KYD053348108  
TSD County: 99  
Disposal Method: Invalid Code  
Tons: 0.229

Additional Info:

Year: 2003  
Shipment Date: 20030606  
Creation Date: 7/20/2004 10:01:52  
Receipt Date: 20030609  
Manifest ID: 22386739  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD EPA ID: CA0000084517  
TSD Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030326  
Creation Date: 7/31/2003 18:30:54  
Receipt Date: 20030327  
Manifest ID: 22449132  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD EPA ID: CA0000084517  
TSD Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Year: 2003  
Shipment Date: 20031230  
Creation Date: 8/20/2004 9:41:48  
Receipt Date: 20040119  
Manifest ID: 22950787  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.133  
Waste Quantity: 266  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20031230  
Creation Date: 8/20/2004 9:41:48  
Receipt Date: 20040119  
Manifest ID: 22950787  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported  
Waste Code: 352  
RCRA Code: F005  
Meth Code: \*\*\*  
Quantity Tons: 0.229  
Waste Quantity: 458  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20031003  
Creation Date: 8/5/2004 10:08:03  
Receipt Date: 20031007  
Manifest ID: 22745227

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Gen EPA ID: CAR000105932  
Trans EPA ID: MAD039322250  
Trans Name: CLEAN HARBORS ENV SERVICES INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: M P ENVIRONMENTAL  
TSDf EPA ID: CAD059494310  
Trans Name: CLEAN HARBORS SAN JOSE LLC  
TSDf Alt EPA ID: CAD059494310  
TSDf Alt Name: Not reported  
Waste Code: 122  
RCRA Code: D002  
Meth Code: T01  
Quantity Tons: 0.22935  
Waste Quantity: 55  
Quantity Unit: G  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20031204  
Creation Date: 7/30/2004 18:31:14  
Receipt Date: 20031204  
Manifest ID: 23306525  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030226  
Creation Date: 6/21/2003 18:30:56  
Receipt Date: 20030227  
Manifest ID: 22438984  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030922
Creation Date:	8/5/2004 10:08:03
Receipt Date:	20030923
Manifest ID:	22745185
Gen EPA ID:	CAR000105932
Trans EPA ID:	CAD004778742
Trans Name:	STURGEON/SON
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	122
RCRA Code:	D002
Meth Code:	T01
Quantity Tons:	1.8765
Waste Quantity:	450
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030123
Creation Date:	5/6/2003 18:31:20
Receipt Date:	20030127
Manifest ID:	22113966
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030423  
Creation Date: 8/29/2003 18:31:02  
Receipt Date: 20030424  
Manifest ID: 22373340  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD Alt EPA ID: CA0000084517  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City, State, Zip: ELK GROVE, CA 95624  
Year: 2003  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Alkaline solution without metals pH >= 12.5  
TSD EPA ID: CAD059494310  
TSD County: 43  
Disposal Method: Treatment, Tank  
Tons: 2.10585

Additional Info:  
Year: 2003  
Shipment Date: 20030606

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Creation Date: 7/20/2004 10:01:52  
Receipt Date: 20030609  
Manifest ID: 22386739  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030326  
Creation Date: 7/31/2003 18:30:54  
Receipt Date: 20030327  
Manifest ID: 22449132  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20031230  
Creation Date: 8/20/2004 9:41:48  
Receipt Date: 20040119  
Manifest ID: 22950787  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031230
Creation Date:	8/20/2004 9:41:48
Receipt Date:	20040119
Manifest ID:	22950787
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDf EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	KYD053348108
TSDf Alt Name:	Not reported
Waste Code:	352
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.229
Waste Quantity:	458
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031003
Creation Date:	8/5/2004 10:08:03
Receipt Date:	20031007
Manifest ID:	22745227
Gen EPA ID:	CAR000105932
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	M P ENVIRONMENTAL
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	122
RCRA Code:	D002
Meth Code:	T01
Quantity Tons:	0.22935
Waste Quantity:	55
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031204
Creation Date:	7/30/2004 18:31:14
Receipt Date:	20031204
Manifest ID:	23306525
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030226
Creation Date:	6/21/2003 18:30:56
Receipt Date:	20030227
Manifest ID:	22438984
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030922
Creation Date:	8/5/2004 10:08:03
Receipt Date:	20030923
Manifest ID:	22745185
Gen EPA ID:	CAR000105932
Trans EPA ID:	CAD004778742
Trans Name:	STURGEON/SON
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	122
RCRA Code:	D002
Meth Code:	T01
Quantity Tons:	1.8765
Waste Quantity:	450
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030123
Creation Date:	5/6/2003 18:31:20
Receipt Date:	20030127
Manifest ID:	22113966
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported  
  
Year: 2003  
Shipment Date: 20030423  
Creation Date: 8/29/2003 18:31:02  
Receipt Date: 20030424  
Manifest ID: 22373340  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD Alt EPA ID: CA0000084517  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2003  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: CA0000084517  
TSD County: 34  
Disposal Method: Transfer Station  
Tons: 0.108

Additional Info:  
Year: 2003  
Shipment Date: 20030606  
Creation Date: 7/20/2004 10:01:52  
Receipt Date: 20030609  
Manifest ID: 22386739  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20030326  
Creation Date: 7/31/2003 18:30:54  
Receipt Date: 20030327  
Manifest ID: 22449132  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: Not reported  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2003  
Shipment Date: 20031230  
Creation Date: 8/20/2004 9:41:48  
Receipt Date: 20040119  
Manifest ID: 22950787  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: CAT000624247  
Trans 2 Name: MP ENVIRONMENTAL  
TSDf EPA ID: KYD053348108  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: KYD053348108  
TSDf Alt Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Waste Code:	212
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.133
Waste Quantity:	266
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031230
Creation Date:	8/20/2004 9:41:48
Receipt Date:	20040119
Manifest ID:	22950787
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	MP ENVIRONMENTAL
TSDF EPA ID:	KYD053348108
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	KYD053348108
TSDF Alt Name:	Not reported
Waste Code:	352
RCRA Code:	F005
Meth Code:	***
Quantity Tons:	0.229
Waste Quantity:	458
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031003
Creation Date:	8/5/2004 10:08:03
Receipt Date:	20031007
Manifest ID:	22745227
Gen EPA ID:	CAR000105932
Trans EPA ID:	MAD039322250
Trans Name:	CLEAN HARBORS ENV SERVICES INC
Trans 2 EPA ID:	CAT000624247
Trans 2 Name:	M P ENVIRONMENTAL
TSDF EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDF Alt EPA ID:	CAD059494310
TSDF Alt Name:	Not reported
Waste Code:	122
RCRA Code:	D002
Meth Code:	T01
Quantity Tons:	0.22935
Waste Quantity:	55

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20031204
Creation Date:	7/30/2004 18:31:14
Receipt Date:	20031204
Manifest ID:	23306525
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030226
Creation Date:	6/21/2003 18:30:56
Receipt Date:	20030227
Manifest ID:	22438984
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CA0000084517
Trans Name:	Not reported
TSDF Alt EPA ID:	CA0000084517
TSDF Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030922
Creation Date:	8/5/2004 10:08:03
Receipt Date:	20030923
Manifest ID:	22745185
Gen EPA ID:	CAR000105932
Trans EPA ID:	CAD004778742
Trans Name:	STURGEON/SON
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CAD059494310
Trans Name:	CLEAN HARBORS SAN JOSE LLC
TSDf Alt EPA ID:	CAD059494310
TSDf Alt Name:	Not reported
Waste Code:	122
RCRA Code:	D002
Meth Code:	T01
Quantity Tons:	1.8765
Waste Quantity:	450
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030123
Creation Date:	5/6/2003 18:31:20
Receipt Date:	20030127
Manifest ID:	22113966
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	Not reported
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2003
Shipment Date:	20030423
Creation Date:	8/29/2003 18:31:02

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

**1004678179**

Receipt Date: 20030424  
Manifest ID: 22373340  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: Not reported  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: Not reported  
TSD Alt EPA ID: CA0000084517  
TSD Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

[Click this hyperlink](#) while viewing on your computer to access  
2 additional CA HAZNET: record(s) in the EDR Site Report.

Name: OFFSET SERVICE INK  
Address: 9851 DINO DR  
Address 2: Not reported  
City,State,Zip: ELK GROVE, CA 95624  
Year: 2005  
Gepaid: CAR000105932  
Contact: Russ Syracuse  
Telephone: 9166860643  
Mailing Name: Not reported  
Mailing Address: 8460 ELORA CREEK RD  
Gen County: 34  
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)  
TSD EPA ID: CA0000084517  
TSD County: 34  
Disposal Method: Transfer Station  
Tons: 0.144

**Additional Info:**

Year: 2005  
Shipment Date: 20050221  
Creation Date: 4/2/2005 18:31:07  
Receipt Date: 20050222  
Manifest ID: 24487772  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSD EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSD Alt EPA ID: CA0000084517

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050420
Creation Date:	7/20/2005 18:30:55
Receipt Date:	20050421
Manifest ID:	24492016
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050420
Creation Date:	7/20/2005 18:30:55
Receipt Date:	20050421
Manifest ID:	24492016
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	Not reported
RCRA Code:	Not reported
Meth Code:	H01
Quantity Tons:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

Waste Quantity:	Not reported
Quantity Unit:	Not reported
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050516
Creation Date:	8/24/2005 7:27:35
Receipt Date:	20050517
Manifest ID:	24496068
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050615
Creation Date:	9/13/2005 18:30:54
Receipt Date:	20050616
Manifest ID:	24500423
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050811
Creation Date:	10/27/2005 10:10:50
Receipt Date:	20050812
Manifest ID:	23678344
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050124
Creation Date:	3/17/2005 18:34:39
Receipt Date:	20050125
Manifest ID:	23658820
Gen EPA ID:	CAR000105932
Trans EPA ID:	TXR000050930
Trans Name:	SAFETY-KLEEN SYSTEMS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDf EPA ID:	CA0000084517
Trans Name:	SAFETY-KLEEN SYSTEMS INC
TSDf Alt EPA ID:	CA0000084517
TSDf Alt Name:	Not reported
Waste Code:	212
RCRA Code:	F005
Meth Code:	H01
Quantity Tons:	0.018
Waste Quantity:	36
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Year:	2005
Shipment Date:	20050322

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OFFSET SERVICE INK (Continued)

1004678179

Creation Date: 5/29/2005 18:31:56  
Receipt Date: 20050323  
Manifest ID: 23667485  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

Year: 2005  
Shipment Date: 20050714  
Creation Date: 10/11/2005 18:31:29  
Receipt Date: 20050714  
Manifest ID: 24362057  
Gen EPA ID: CAR000105932  
Trans EPA ID: TXR000050930  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
Trans 2 EPA ID: Not reported  
Trans 2 Name: Not reported  
TSDf EPA ID: CA0000084517  
Trans Name: SAFETY-KLEEN SYSTEMS INC  
TSDf Alt EPA ID: CA0000084517  
TSDf Alt Name: Not reported  
Waste Code: 212  
RCRA Code: F005  
Meth Code: H01  
Quantity Tons: 0.018  
Waste Quantity: 36  
Quantity Unit: P  
Additional Code 1: Not reported  
Additional Code 2: Not reported  
Additional Code 3: Not reported  
Additional Code 4: Not reported  
Additional Code 5: Not reported

[Click this hyperlink](#) while viewing on your computer to access  
2 additional CA HAZNET: record(s) in the EDR Site Report.

Sacramento Co. ML:

Name: BIANCHI PLUMBING  
Address: 9851 DINO DR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**OFFSET SERVICE INK (Continued)**

1004678179

City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**G52**  
**North**  
**1/8-1/4**  
**0.199 mi.**  
**1050 ft.**

**JOHNSEN'S MOBILE EQUIPMENT REPAIR**  
**9854 DINO DR 6**  
**ELK GROVE, CA 95624**  
**Site 9 of 12 in cluster G**

**Sacramento Co. ML S107769816**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: JOHNSEN'S MOBILE EQUIPMENT REPAIR  
Address: 9854 DINO DR 6  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**G53**      **SPRAY TECH FINISHING**  
**North**    **9854 DINO DR STE 3**  
**1/8-1/4**   **ELK GROVE, CA 95624**  
**0.199 mi.**  
**1050 ft.**   **Site 10 of 12 in cluster G**

**Sacramento Co. ML**    **S108054333**  
**N/A**

**Relative:**      Sacramento Co. ML:  
**Higher**            Name:                      SPRAY TECH FINISHING  
**Actual:**            Address:                    9854 DINO DR STE 3  
**51 ft.**                City,State,Zip:            ELK GROVE, CA 95624  
                          Facility Id:                    Not reported  
                          Facility Status:            Not reported  
                          FD:                            Not reported  
                          Billing Codes BP:            I  
                          Billing Codes UST:            Not reported  
                          WG Bill Code:                A  
                          Target Property Bill Cod:    Not reported  
                          Food Bill Code:              Not reported  
                          CUPA Permit Date:            Not reported  
                          HAZMAT Permit Date:        Not reported  
                          HAZMAT Inspection Date:    Not reported  
                          Hazmat Date BP Received:    Not reported  
                          UST Permit Dt:                Not reported  
                          UST Inspection Date:        Not reported  
                          UST Tank Test Date:         Not reported  
                          Number of Tanks:            Not reported  
                          UST Tank Test Date:         Not reported  
                          SIC Code:                    Not reported  
                          Tier Permitting:              Not reported  
                          AST Bill Code:                Not reported  
                          CALARP Bill Code:            Not reported

**G54**      **CUSTOM GEARS**  
**North**    **9854 DINO DR STE 1**  
**1/8-1/4**   **ELK GROVE, CA 95624**  
**0.199 mi.**  
**1050 ft.**   **Site 11 of 12 in cluster G**

**Sacramento Co. ML**    **S108743376**  
**N/A**

**Relative:**      Sacramento Co. ML:  
**Higher**            Name:                      CUSTOM GEARS  
**Actual:**            Address:                    9854 DINO DR STE 1  
**51 ft.**                City,State,Zip:            ELK GROVE, CA 95624  
                          Facility Id:                    Not reported  
                          Facility Status:            Not reported  
                          FD:                            Not reported  
                          Billing Codes BP:            I  
                          Billing Codes UST:            Not reported  
                          WG Bill Code:                I  
                          Target Property Bill Cod:    Not reported  
                          Food Bill Code:              Not reported  
                          CUPA Permit Date:            Not reported  
                          HAZMAT Permit Date:        Not reported  
                          HAZMAT Inspection Date:    Not reported  
                          Hazmat Date BP Received:    Not reported  
                          UST Permit Dt:                Not reported  
                          UST Inspection Date:        Not reported  
                          UST Tank Test Date:         Not reported  
                          Number of Tanks:            Not reported  
                          UST Tank Test Date:         Not reported  
                          SIC Code:                    Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CUSTOM GEARS (Continued)**

**S108743376**

Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**G55** **SUPERIOR AUTOMOTIVE SERVICE**  
**North** **9854 DINO DR STE 7**  
**1/8-1/4** **ELK GROVE, CA 95624**  
**0.199 mi.**  
**1050 ft.** **Site 12 of 12 in cluster G**

**Sacramento Co. ML S109034536**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: SUPERIOR AUTOMOTIVE SERVICE  
Address: 9854 DINO DR STE 7  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**I56** **S & N MOTORSPORT**  
**NNE** **9277 BENDEL PL STE 215**  
**1/8-1/4** **ELK GROVE, CA 95624**  
**0.212 mi.**  
**1117 ft.** **Site 1 of 9 in cluster I**

**Sacramento Co. ML S123293934**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
Name: S & N MOTORSPORT  
Address: 9277 BENDEL PL STE 215  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: Not reported  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**S & N MOTORSPORT (Continued)**

**S123293934**

HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**I57  
NNE  
1/8-1/4  
0.212 mi.  
1117 ft.**

**YOUR WAY FUMIGATION, INC  
9277 BENDEL PL STE 220  
ELK GROVE, CA 95624**

**Sacramento Co. ML**

**S123295503  
N/A**

**Site 2 of 9 in cluster I**

**Relative:  
Higher**

Sacramento Co. ML:

**Actual:  
51 ft.**

Name: YOUR WAY FUMIGATION, INC  
Address: 9277 BENDEL PL STE 220  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**I58  
NNE  
1/8-1/4  
0.212 mi.  
1117 ft.**

**FINISH LINE SMOG  
9277 BENDEL PL STE 230  
ELK GROVE, CA 95624**

**Sacramento Co. ML**

**S109034464  
N/A**

**Site 3 of 9 in cluster I**

**Relative:  
Higher**

Sacramento Co. ML:

**Actual:  
51 ft.**

Name: FINISH LINE SMOG  
Address: 9277 BENDEL PL STE 230  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FINISH LINE SMOG (Continued)**

**S109034464**

FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	Not reported
WG Bill Code:	Not reported
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

**J59**  
**NNW**  
**1/8-1/4**  
**0.213 mi.**  
**1127 ft.**

**PACIFIC EXCAVATION, INC**  
**9796 KENT ST**  
**ELK GROVE, CA 95624**

**AST A100324592**  
**N/A**

**Site 1 of 2 in cluster J**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**AST:**

Name:	PACIFIC EXCAVATION, INC
Address:	9796 KENT ST
City/Zip:	ELK GROVE,95624
Certified Unified Program Agencies:	Not reported
Owner:	TIM PAXIN'S PACIFIC EXCAVATION
Total Gallons:	Not reported
CERSID:	10224322
Facility ID:	Not reported
Business Name:	PACIFIC EXCAVATION, INC
Phone:	9166862800
Fax:	9166862806
Mailing Address:	9796 KENT STREET
Mailing Address City:	ELK GROVE
Mailing Address State:	CA
Mailing Address Zip Code:	95624
Operator Name:	Tim Paxin
Operator Phone:	9166862800
Owner Phone:	9166862800
Owner Mail Address:	9796 KENT STREET
Owner State:	CA
Owner Zip Code:	95624
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAL000269667

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**A100324592**

Name: PACIFIC EXCAVATION INC  
 Address: 9796 KENT STREET  
 City/Zip: ELK GROVE,  
 Certified Unified Program Agencies: Sacramento  
 Owner: PACIFIC EXCATION INC  
 Total Gallons: 1,500  
 CERSID: Not reported  
 Facility ID: Not reported  
 Business Name: Not reported  
 Phone: Not reported  
 Fax: Not reported  
 Mailing Address: Not reported  
 Mailing Address City: Not reported  
 Mailing Address State: Not reported  
 Mailing Address Zip Code: Not reported  
 Operator Name: Not reported  
 Operator Phone: Not reported  
 Owner Phone: Not reported  
 Owner Mail Address: Not reported  
 Owner State: Not reported  
 Owner Zip Code: Not reported  
 Owner Country: Not reported  
 Property Owner Name: Not reported  
 Property Owner Phone: Not reported  
 Property Owner Mailing Address: Not reported  
 Property Owner City: Not reported  
 Property Owner Stat : Not reported  
 Property Owner Zip Code: Not reported  
 Property Owner Country: Not reported  
 EPAID: Not reported

**J60  
 NNW  
 1/8-1/4  
 0.213 mi.  
 1127 ft.**

**PACIFIC EXCAVATION, INC  
 9796 KENT ST  
 ELK GROVE, CA 95624  
 Site 2 of 2 in cluster J**

**CERS HAZ WASTE  
 CERS TANKS  
 Sacramento Co. ML  
 CERS**

**S105808088  
 N/A**

**Relative:  
 Higher**

**CERS HAZ WASTE:**

**Actual:  
 51 ft.**

Name: PACIFIC EXCAVATION, INC  
 Address: 9796 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 54715  
 CERS ID: 10224322  
 CERS Description: Hazardous Waste Generator

**CERS TANKS:**

Name: PACIFIC EXCAVATION, INC  
 Address: 9796 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 54715  
 CERS ID: 10224322  
 CERS Description: Aboveground Petroleum Storage

**Sacramento Co. ML:**

Name: PACIFIC EXCAVATION, INC  
 Address: 9796 KENT ST  
 City,State,Zip: ELK GROVE, CA 95624



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: PACIFIC EXCAVATION, INC  
Address: 9796 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 54715  
CERS ID: 10224322  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)  
Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.  
Violation Notes: Returned to compliance on 01/11/2018. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-23-2014  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to perform a five-year review of the SPCC plan.  
Violation Notes: Returned to compliance on 12/03/2014.  
Violation Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Violation Program: APSA  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 10/30/2017. OBSERVATION: Two 55 gallon drums of used oil and fuel filters located in the hazardous waste storage area were observed without accumulation start dates. CORRECTIVE ACTION: Submit photos to this department demonstrating that the used oil and fuel filters drums are properly labeled.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: Returned to compliance on 01/11/2018. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: 19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.  
Violation Notes: Returned to compliance on 01/11/2018. OBSERVATION: The Business Activities lists Steven Blackstock as the emergency contact, but Mr. Blackstock no longer works at this facility. CORRECTIVE ACTION: Update the Business Activities page and submit electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Violation Description: Chapter 12, Section(s) 66262.34(f)  
Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 10/30/2017. OBSERVATION: The following hazardous waste containers were observed with incomplete or missing labels: One 55 gallon drum of used oil in the shop did not have a label; two 55 gallon drums of waste coolant in the hazardous waste storage area did not have labels; one 55 gallon drum of waste absorbent did not have an accumulation start date; Two 55 gallon drums of used oil were missing the generator information, drum contents, hazards and accumulation start date. CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-23-2014  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 11/26/2014. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for Diesel to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for Diesel electronically in this department's e-Reporting Portal.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: Returned to compliance on 11/06/2017. OBSERVATION: The annotated site map submitted to this department does not include all areas of hazardous materials/waste storage and handling (e.g. hazmats observed in the warehouse and shop). Additionally, the washout sump in the yard is not shown. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Violation Date: 10-04-2017  
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)  
Violation Description: Failure to prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan.  
Violation Notes: Returned to compliance on 11/06/2017.  
Violation Division: Sacramento County Env Management Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: 22 CCR 12 66262.34(d) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)  
Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.  
Violation Notes: Returned to compliance on 10/30/2017. OBSERVATION: A 55 gallon drum of waste coolant located in the hazardous waste storage area was observed with an accumulation start date of 8/23/2016 and a manifest/receipt demonstrating disposal within the past 180 days was not available. CORRECTIVE ACTION: Dispose of all waste coolant and submit a copy of the manifest/receipt to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-23-2014  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2  
Violation Description: Failure to meet any of the following consolidated manifest requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt for at least three years.  
Violation Notes: Returned to compliance on 11/04/2014. OBSERVATION: Consolidated Manifests for Used Oil, Used Oil Filters, and Waste Antifreeze were not available at time of inspection. CORRECTIVE ACTION: Locate

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

manifests for the above-mentioned materials and send copies from the last 12 months to my office.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Violation Date: 10-04-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 01/11/2018. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for the following hazardous materials observed during the inspection: Flexolith 3 part epoxy Polywater Crafc0 Sealant Bore Gel Bead Blast DEF Gasoline CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-04-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-23-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 10-23-2014  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-04-2017  
Violations Found: Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 10-04-2017  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: OBSERVATION: Failure to make SPCC Plan amendment(s) when the facility has had a change in: design, construction, operation, or maintenance which affects the facility's discharge potential. Several 55 gallon or greater containers of petroleum products were observed on site but are not included in the SPCC Plan (e.g. gasoline, hydraulic oil, motor oil, heat transfer oil.) CORRECTIVE ACTION: Amend SPCC Plan as required and submit a copy to this department.

Eval Division: Sacramento County Env Management Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-23-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:  
Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Site Address: 9796 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-23-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Site Address: 9796 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-23-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Site Address: 9796 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-23-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Site Address: 9796 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 54715  
Site Name: PACIFIC EXCAVATION, INC  
Site Address: 9796 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Coordinates:**

Site ID: 54715  
Facility Name: PACIFIC EXCAVATION, INC  
Env Int Type Code: HWG  
Program ID: 10224322  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.399690  
Longitude: -121.359340

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: Bill Vella  
Entity Title: Not reported  
Affiliation Address: 9796 Kent St.  
Affiliation City: Elk Grove  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9796 KENT STREET  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: PACIFIC EXCAVATION, INC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Legal Owner  
Entity Name: TIM PAXIN'S PACIFIC EXCAVATION  
Entity Title: Not reported  
Affiliation Address: 9796 KENT STREET  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 686-2800

Affiliation Type Desc: Operator  
Entity Name: Tim Paxin  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 686-2800

Affiliation Type Desc: Document Preparer  
Entity Name: Prescilla Gastelum  
Entity Title: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PACIFIC EXCAVATION, INC (Continued)**

**S105808088**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Prescilla Gastelum  
Entity Title: Corporate Secretary  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**I61  
NE  
1/8-1/4  
0.223 mi.  
1175 ft.**

**VORTEX AUTOMOTIVE  
9291 BENDEL PL STE 120  
ELK GROVE, CA 95624**

**EDR Hist Auto 1021459858  
N/A**

**Site 4 of 9 in cluster I**

**Relative:  
Higher**

EDR Hist Auto

**Actual:  
52 ft.**

Year:	Name:	Type:
2006	TRANSMISSION DEPOT	Automotive Transmission Repair Shops
2007	TRANSMISSION DEPOT	Automotive Transmission Repair Shops
2008	VORTEX AUTOMOTIVE	General Automotive Repair Shops
2009	VORTEX AUTOMOTIVE	General Automotive Repair Shops
2010	VORTEX AUTOMOTIVE	General Automotive Repair Shops
2011	VORTEX AUTOMOTIVE	General Automotive Repair Shops
2012	VORTEX AUTOMOTIVE	General Automotive Repair Shops
2013	VORTEX AUTOMOTIVE	General Automotive Repair Shops
2014	VORTEX AUTOMOTIVE	General Automotive Repair Shops

**I62  
NE  
1/8-1/4  
0.223 mi.  
1175 ft.**

**MINUTEMAN PRESS  
9291 BENDEL PL STE 150  
ELK GROVE, CA 95624**

**Sacramento Co. ML S123292815  
N/A**

**Site 5 of 9 in cluster I**

**Relative:  
Higher**

Sacramento Co. ML:

**Actual:  
52 ft.**

Name: MINUTEMAN PRESS  
Address: 9291 BENDEL PL STE 150  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: |  
Billing Codes UST: Not reported  
WG Bill Code: |  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MINUTEMAN PRESS (Continued)**

**S123292815**

HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported  
 UST Inspection Date: Not reported  
 UST Tank Test Date: Not reported  
 Number of Tanks: Not reported  
 UST Tank Test Date: Not reported  
 SIC Code: Not reported  
 Tier Permitting: Not reported  
 AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**I63  
 NE  
 1/8-1/4  
 0.223 mi.  
 1175 ft.**

**ADVANCE IMPORT AUTO  
 9291 BENDEL PL STE 130  
 ELK GROVE, CA 95624**

**CERS HAZ WASTE  
 CERS S108649201  
 N/A**

**Site 6 of 9 in cluster I**

**Relative:  
 Higher  
 Actual:  
 52 ft.**

**CERS HAZ WASTE:**  
 Name: ADVANCE IMPORT AUTO  
 Address: 9291 BENDEL PL STE 130  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 3165  
 CERS ID: 10226857  
 CERS Description: Hazardous Waste Generator

**CERS:**  
 Name: ADVANCE IMPORT AUTO  
 Address: 9291 BENDEL PL STE 130  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 3165  
 CERS ID: 10226857  
 CERS Description: Chemical Storage Facilities

**Violations:**  
 Site ID: 3165  
 Site Name: ADVANCE IMPORT AUTO  
 Violation Date: 04-03-2018  
 Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
 Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
 Violation Notes: Returned to compliance on 01/08/2019. OBSERVATION: [Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.  
 Violation Division: Sacramento County Env Management Department  
 Violation Program: HMRRP  
 Violation Source: CERS  
 Site ID: 3165  
 Site Name: ADVANCE IMPORT AUTO  
 Violation Date: 04-03-2018  
 Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 01/08/2019. OBSERVATION: Two 55 gallon drums of used oil and fuel filters located in the hazardous waste accumulation area were observed without accumulation start dates on the labels. The last disposal was on 6/8/17. CORRECTIVE ACTION: Submit photos to this department demonstrating that the used oil and fuel filters are properly labeled with the accumulation start date.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 05-04-2015  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)  
Violation Description: Failure to ensure employees are familiar with the handling and compliance of hazardous waste regulations and emergency response.  
Violation Notes: Returned to compliance on 05/19/2015. OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 05-04-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: Returned to compliance on 05/19/2015. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 04-03-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: OBSERVATION: The facility has not submitted the Hazardous Materials

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

Inventory Chemical Description page for automatic transmission fluid or waste coolant to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 05-04-2015  
Citation: 22 CCR 12 66262.34(d) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(d)

Violation Description: Failure to dispose of hazardous waste within 180 days (or 270 if waste is transported over 200 miles) for the generator who generates less than 1000 kilogram per month, but more than 100 kilograms per month.

Violation Notes: Returned to compliance on 05/29/2015. OBSERVATION: A 15 gallon drum of brake shavings located in the shop was observed with an accumulation start date of 5/14/2009 and a manifest/receipt demonstrating disposal within the past 180 days was not available. CORRECTIVE ACTION: Dispose of brake shavings and submit a copy of the manifest/receipt to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 04-03-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: Returned to compliance on 01/08/2019. OBSERVATION: The annotated site map submitted to this department does not include storm drains or emergency assembly area. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 04-03-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 01/08/2019. OBSERVATION: One 55 gallon drum of waste coolant located in the hazardous waste accumulation area was observed without a hazardous waste label. CORRECTIVE ACTION: Submit a photo to this department demonstrating that the container listed above

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

has been properly labeled.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 05-04-2015  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: Returned to compliance on 05/19/2015. OBSERVATION: Used oil was observed in the containment beneath the used oil drums in the shop. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills have been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 05-04-2015  
Citation: 40 CFR 1 265.33 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.33  
Violation Description: Failure of the facility to test and maintain all communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment.  
Violation Notes: Returned to compliance on 05/19/2015. OBSERVATION: Fire extinguishers have not been tested and maintained to assure its proper operation in time of emergency. CORRECTIVE ACTION: Submit documentation (e.g. a service or purchase receipt) to this department demonstrating the fire extinguishers have been properly tested or maintained.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Violation Date: 05-04-2015  
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130  
Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.  
Violation Notes: Returned to compliance on 05/19/2015. OBSERVATION: Two 55 gallon drums of used oil and fuel filters located in the shop were observed without proper labels (one did not have a label and one did not have the accumulation start date). CORRECTIVE ACTION: Submit photos to this department demonstrating that the used oil and fuel filters have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-04-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-04-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Once absorbent can no longer be used, place it in a container (e.g. a bucket) with a lid and label as hazardous waste.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-03-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-03-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Site Address: 9291 BENDEL PL STE 130  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 05-04-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Site Address: 9291 BENDEL PL STE 130  
Site City: ELK GROVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

Site Zip: 95624  
Enf Action Date: 05-04-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Site Address: 9291 BENDEL PL STE 130  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 06-21-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 3165  
Site Name: ADVANCE IMPORT AUTO  
Site Address: 9291 BENDEL PL STE 130  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 06-21-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Affiliation:**

Affiliation Type Desc: Document Preparer  
Entity Name: steve cung  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: steve cung  
Entity Title: Not reported  
Affiliation Address: 9291 bendel pl #130  
Affiliation City: elk grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9291 bendel pl #130  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 956724  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: HANNAH PHUNG  
Entity Title: Not reported  
Affiliation Address: 9291 bendel pl #130  
Affiliation City: elk grove  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 568-5888

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Parent Corporation  
Entity Name: ADVANCE IMPORT AUTO  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: steve cung  
Entity Title: manager/operator  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: steve cung  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S108649201**

Affiliation Phone: (916) 568-5888

**164  
NE  
1/8-1/4  
0.223 mi.  
1175 ft.**

**AUTO START OF ELK GROVE, LLC  
9291 BENDEL PL STE 120  
ELK GROVE, CA 95624**

**CERS HAZ WASTE  
CERS**

**S121794786  
N/A**

**Site 7 of 9 in cluster I**

**Relative:  
Higher  
Actual:  
52 ft.**

**CERS HAZ WASTE:**  
Name: AUTO START OF ELK GROVE, LLC  
Address: 9291 BENDEL PL STE 120  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 96122  
CERS ID: 10226197  
CERS Description: Hazardous Waste Generator

**CERS:**  
Name: AUTO START OF ELK GROVE, LLC  
Address: 9291 BENDEL PL STE 120  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 96122  
CERS ID: 10226197  
CERS Description: Chemical Storage Facilities

**Violations:**  
Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 07-01-2016  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.  
Violation Notes: OBSERVATION: An HMBP has not been received by this department.  
CORRECTIVE ACTION: Submit documentation to this department by the date listed above demonstrating that no reportable quantities of hazardous materials or hazardous wastes are stored/handled at the facility. Otherwise, a notice will be sent to you to complete, electronically submit, and implement an HMBP within 60 days.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)  
Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.  
Violation Notes: OBSERVATION: Employees are not thoroughly familiar with proper waste handling and emergency procedures as demonstrated by the number and type of hazardous waste violations observed at the time of inspection.  
CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have been properly trained.  
Violation Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 07-01-2016  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: Returned to compliance on 07/13/2016. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/27/2016. OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: OBSERVATION: Used oil was observed on the floor in the hazardous waste accumulation area. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills have been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.  
Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: A 125 gallon container of used oil located in the shop was observed without the following information on the label: accumulation start date and hazardous properties. A 55 gallon drum of waste coolant located in the shop was observed without the hazardous properties on the label. A 5 gallon bucket of brake lathe shavings was observed without a hazardous waste label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly labeled.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 07-01-2016  
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)  
Violation Description: Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.  
Violation Notes: Returned to compliance on 07/13/2016. OBSERVATION: Uniform Hazardous Waste Manifests for used oil and waste coolant were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Uniform Hazardous Waste Manifests for used oil and waste coolant for July 2015 to June 2016 and submit copies to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173  
Violation Description: Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.  
Violation Notes: Returned to compliance on 07/26/2019. OBSERVATION: A 5 gallon bucket of oily water from the parts washer located in the hazardous waste accumulation area was observed open. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly closed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)  
Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.  
Violation Notes: Returned to compliance on 07/26/2019. OBSERVATION: The 250 gallon used oil container and the 110 gallon waste coolant container located in the hazardous waste accumulation area were observed without accumulation start dates and a manifest/receipt demonstrating disposal within the past 180 days was not available. CORRECTIVE ACTION: Submit copies of the most recent disposal receipt for used oil and waste coolant to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130  
Violation Description: Failure to properly handle, manage, label, and recycle used oil and fuel filters.  
Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: A 55 gallon drum of used oil and fuel filters located in the shop was observed with an accumulation start date of 3/16/2015. Bills of lading for used oil and fuel filters were not available for the past three years. CORRECTIVE ACTION: Submit bills of lading for 2013-2015 to this department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

demonstrating proper disposal.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 07/26/2019. OBSERVATION: Two 55 gallon containers of used oil and fuel filters located in the hazardous waste accumulation area were observed without proper labels. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating that the used oil and fuel filters containers are properly labeled. OBSERVATION: Bills of lading for used oil and fuel filters were not available at the time of inspection. CORRECTIVE ACTION: Obtain copies of all bills of lading for used oil and fuel filters for the past three years and submit copies to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: 22 CCR 12 66262.40(c) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(c)  
Violation Description: Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.  
Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: Finely divided metal generated from the brake lathe are being recycled as scrap metal. Finely divided metal less than 100 microns in size do not meet the definition of scrap metal. CORRECTIVE ACTION: Immediately stop recycling finely divided metal. Submit documentation to this department demonstrating that the finely divided metal has been properly characterized to determine if it is a hazardous waste. If determined to be hazardous submit manifests/receipts documenting proper disposal and a statement demonstrating how you will manage it in the future. Keep the test results, waste analyses, or other determinations at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)  
Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Violation Notes: date.  
Returned to compliance on 07/26/2019. OBSERVATION: One 250 gallon container of used oil and one 110 gallon container of waste coolant located in the hazardous waste accumulation area were observed without accumulation start dates. CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled. OBSERVATION: One 5 gallon bucket of oily water from the parts washer located in the hazardous waste accumulation area was observed without a hazardous waste label. CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 07-01-2016  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 07/20/2016. OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2  
Violation Description: Failure to meet any of the following consolidated manifest requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt for at least three years.

Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: Consolidated Manifests for used oil and waste coolant were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Consolidated Manifest receipts for 2013-2015 for used oil and waste coolant and submit a copy to this department.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 07-01-2016  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 07/20/2016. OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 02/27/2016. OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for new motor oil or waste coolant to this department. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Violation Date: 07-01-2016  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: Returned to compliance on 07/26/2019. OBSERVATION: Bills of lading for used oil and fuel filters were not kept for the past three years. CORRECTIVE ACTION: Obtain copies of all bills of lading for used oil and fuel filters for July 2015 to June 2016 and submit copies to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2  
Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.  
Violation Notes: Returned to compliance on 07/26/2019. OBSERVATION: Consolidated Manifests for used oil, waste coolant and brake shavings were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Consolidated Manifest receipts for 2018 and 2019 and submit a copy to this department.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 02-08-2019  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: OBSERVATION: Annual employee training in safety procedures in the event of a release or threatened release of a hazardous material including familiarity with the emergency response plan training records were not available at the time of the inspection. CORRECTIVE ACTION: Submit documentation to this department demonstrating appropriate personnel have received training and maintain ongoing annual training records for a minimum of three years.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Violation Date: 04-01-2015  
Citation: 40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Violation Description: Failure to properly close hazardous waste containers when not in active use.  
Violation Notes: Returned to compliance on 05/05/2015. OBSERVATION: A 5 gallon bucket and the collection tray of the lathe machine brake shavings located in the shop were observed open. CORRECTIVE ACTION: Submit photos to this department demonstrating that the container listed above has been properly closed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-08-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-18-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-01-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-08-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-01-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-18-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-01-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-01-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

**Enforcement Action:**

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Site Address: 9291 BENDEL PL STE 120  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 03-16-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Site Address: 9291 BENDEL PL STE 120  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 03-16-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Site Address: 9291 BENDEL PL STE 120

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-01-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 96122  
Site Name: AUTO START Of Elk Grove, LLC  
Site Address: 9291 BENDEL PL STE 120  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 04-01-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Affiliation:**

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9291 Bendel Place  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Environmental Contact  
Entity Name: Bennie Cabacungan  
Entity Title: Not reported  
Affiliation Address: 9291 Bendel Place Suite 120  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: AUTO START OF ELK GROVE LLC  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AUTO START OF ELK GROVE, LLC (Continued)**

**S121794786**

Affiliation Address: 9291 Bendel Place Suite 120  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 714-2886

Affiliation Type Desc: Document Preparer  
Entity Name: Bennie Cabacungan  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Bennie Cabacungan  
Entity Title: owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Bennie Cabacungan  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 715-4516

Affiliation Type Desc: Parent Corporation  
Entity Name: AUTO START OF ELK GROVE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**I65**      **AUTO START OF ELK GROVE LLC**  
**NE**        **9291 BENDEL PL STE 120**  
**1/8-1/4**    **ELK GROVE, CA 95624**  
**0.223 mi.**  
**1175 ft.**    **Site 8 of 9 in cluster I**

**Sacramento Co. ML**    **S113153926**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

Sacramento Co. ML:  
Name:                                    AUTO START OF ELK GROVE LLC  
Address:                                9291 BENDEL PL STE 120  
City,State,Zip:                        ELK GROVE, CA 95624  
Facility Id:                              Not reported  
Facility Status:                        Not reported  
FD:                                        Not reported  
Billing Codes BP:                        A  
Billing Codes UST:                       Not reported  
WG Bill Code:                            A  
Target Property Bill Cod:              Not reported  
Food Bill Code:                         Not reported  
CUPA Permit Date:                     Not reported  
HAZMAT Permit Date:                 Not reported  
HAZMAT Inspection Date:             Not reported  
Hazmat Date BP Received:            Not reported  
UST Permit Dt:                         Not reported  
UST Inspection Date:                 Not reported  
UST Tank Test Date:                  Not reported  
Number of Tanks:                       Not reported  
UST Tank Test Date:                  Not reported  
SIC Code:                                Not reported  
Tier Permitting:                        Not reported  
AST Bill Code:                          Not reported  
CALARP Bill Code:                      Not reported

**I66**      **ADVANCE IMPORT AUTO**  
**NE**        **9291 BENDEL PL STE 130**  
**1/8-1/4**    **ELK GROVE, CA 95624**  
**0.223 mi.**  
**1175 ft.**    **Site 9 of 9 in cluster I**

**Sacramento Co. ML**    **S123288798**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

Sacramento Co. ML:  
Name:                                    ADVANCE IMPORT AUTO  
Address:                                9291 BENDEL PL STE 130  
City,State,Zip:                        ELK GROVE, CA 95624  
Facility Id:                              Not reported  
Facility Status:                        Not reported  
FD:                                        Not reported  
Billing Codes BP:                        A  
Billing Codes UST:                       Not reported  
WG Bill Code:                            A  
Target Property Bill Cod:              Not reported  
Food Bill Code:                         Not reported  
CUPA Permit Date:                     Not reported  
HAZMAT Permit Date:                 Not reported  
HAZMAT Inspection Date:             Not reported  
Hazmat Date BP Received:            Not reported  
UST Permit Dt:                         Not reported  
UST Inspection Date:                 Not reported  
UST Tank Test Date:                  Not reported  
Number of Tanks:                       Not reported  
UST Tank Test Date:                  Not reported  
SIC Code:                                Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADVANCE IMPORT AUTO (Continued)**

**S123288798**

Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**67**  
**North**  
**1/8-1/4**  
**0.239 mi.**  
**1264 ft.**

**CENTERLINE STRIPING CO, INC**  
**9847 DINO DR**  
**ELK GROVE, CA 95624**

**CERS HAZ WASTE**  
**Sacramento Co. ML**  
**CERS**

**S102313524**  
**N/A**

**Relative:**  
**Higher**

**CERS HAZ WASTE:**

**Actual:**  
**51 ft.**

Name: CENTERLINE STRIPING CO, INC  
Address: 9847 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 389631  
CERS ID: 10218577  
CERS Description: Hazardous Waste Generator

**Sacramento Co. ML:**

Name: CENTERLINE STRIPING CO, INC  
Address: 9847 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: CENTERLINE STRIPING CO, INC  
Address: 9847 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 389631  
CERS ID: 10218577  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CENTERLINE STRIPING CO, INC (Continued)**

**S102313524**

Section(s) 25160.2  
Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.

Violation Notes: Returned to compliance on 07/02/2019. OBSERVATION: Consolidated Manifests for used oil, waste coolant, and paper filters were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Consolidated Manifest receipts for used oil, waste coolant and paper filters and submit a copy to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.11

Violation Description: Failure to determine if wastes generated are hazardous waste by using generator knowledge or applying testing method.

Violation Notes: Returned to compliance on 07/02/2019. OBSERVATION: The waste bead blast located in the shop has been previously disposed of to the landfill and a proper waste determination has not been made. CORRECTIVE ACTION: Immediately cease disposing of waste bead blast to the landfill. Prior to the next disposal, collect a sample of the waste bead blast and make a hazardous waste determination either by analytical testing or generator knowledge. Submit documentation to this department demonstrating that the waste bead blast has been properly characterized to determine if it is a hazardous waste. If determined to be hazardous, manage and dispose as a hazardous waste. Keep the test results, waste analyses, or other determinations at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal facility.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: Returned to compliance on 07/02/2019. OBSERVATION: Bills of lading for used oil and fuel filters within the past 12 months were not available at the time of inspection. CORRECTIVE ACTION: Obtain copies of all bills of lading for used oil and fuel filters for the past three years and submit copies to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CENTERLINE STRIPING CO, INC (Continued)**

**S102313524**

Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)

Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.

Violation Notes: Returned to compliance on 07/02/2019. OBSERVATION: Two used oil drums located in the hazardous waste accumulation area outside were observed with accumulation start dates over 180 days (10/8/18 and 4/8/18) and a manifest/receipt demonstrating disposal within the past 180 days was not available. CORRECTIVE ACTION: Dispose of used oil and submit a copy of the manifest/receipt to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2

Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: OBSERVATION: The Hazardous Materials Business Plan (HMBP) was not reviewed and electronically certified by the annual due date of January 11, 2019 that it is complete, accurate, and in compliance with EPCRA. CORRECTIVE ACTION: Review, revise, and submit and certify the HMBP electronically in the California Environmental Reporting System. On an ongoing basis, electronically submit and certify the HMBP annually on or before the annual due date.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 07/02/2019. OBSERVATION: The following hazardous waste containers were observed without completed hazardous waste labels: Waste Grindings - Located outside, one 55 gallon drum without a label, four 55 gallon drums without an accumulation start date, hazardous characteristics and physical state. Waste coolant - Located in outside hazardous waste accumulation area, one 55 gallon drum missing generator information, accumulation start date, contents



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CENTERLINE STRIPING CO, INC (Continued)**

**S102313524**

of the container, physical state and hazardous characteristics Paper filters - Located in the outside hazardous waste accumulation area, one 55 gallon drum missing generator information, accumulation start date, contents of the container, physical state and hazardous characteristics Used oil - Located in the shop, one 55 gallon drum missing the hazardous characteristics CORRECTIVE ACTION: Submit photos to this department demonstrating that the containers listed above have been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: OBSERVATION: Chemical inventory information for all reportable hazardous materials on site at or above reportable quantities have not been completed and electronically submitted to this department. The following hazardous materials were observed in reportable quantity: 3M Tape Primer, Thermoplastic primer, Elements (reflective beads), Asphalt Sealer, and Bituminous. CORRECTIVE ACTION: Complete the chemical inventory information for all reportable hazardous materials listed above and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 03-01-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.

Violation Notes: Returned to compliance on 03/06/2017. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 389631  
Site Name: CENTERLINE STRIPING CO, INC  
Violation Date: 06-17-2019  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CENTERLINE STRIPING CO, INC (Continued)**

**S102313524**

Violation Description: Failure to complete and electronically submit a site map with all required content.  
Violation Notes: Returned to compliance on 09/12/2019. OBSERVATION: The annotated site map submitted to this department does not include all hazardous materials/waste handling areas (missing the asphalt sealer tank, and the hazardous waste accumulation area is not labeled), and the adjacent street is not shown. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in the California Environmental Reporting System.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-01-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed today.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-01-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-28-2014  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-17-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-28-2014  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed during inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CENTERLINE STRIPING CO, INC (Continued)**

**S102313524**

Eval Source: CERS  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-17-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Coordinates:  
Site ID: 389631  
Facility Name: CENTERLINE STRIPING CO, INC  
Env Int Type Code: HMBP  
Program ID: 10218577  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.400300  
Longitude: -121.355850

Affiliation:  
Affiliation Type Desc: Document Preparer  
Entity Name: Thomas Breault  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported  
  
Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550  
  
Affiliation Type Desc: Environmental Contact  
Entity Name: Thomas Breault  
Entity Title: Not reported  
Affiliation Address: 9847 Dino Drive  
Affiliation City: Elk Grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported  
  
Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9847 DINO DR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CENTERLINE STRIPING CO, INC (Continued)**

**S102313524**

Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: CENTERLINE STRIPING CO INC  
Entity Title: Not reported  
Affiliation Address: 9847 DINO DR  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 686-8860

Affiliation Type Desc: Identification Signer  
Entity Name: Thomas Breault  
Entity Title: Vice President  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Centerline Striping Co. Inc.  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 686-8860

Affiliation Type Desc: Parent Corporation  
Entity Name: CENTERLINE STRIPING CO, INC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

68  
SSE  
1/4-1/2  
0.322 mi.  
1701 ft.

**CONOCO ASPHALT TERMINAL  
10090 WATERMAN RD  
SACRAMENTO, CA**

**RGA LUST S114605841  
N/A**

**Relative:  
Higher  
Actual:  
52 ft.**

RGA LUST:  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: SACRAMENTO  
State: SACRAMENTO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONOCO ASPHALT TERMINAL (Continued)

S114605841

2004 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD

K69  
SSE  
1/4-1/2  
0.330 mi.  
1745 ft.

CONOCO ASPHALT TERMINAL  
10090 WATERMAN RD  
ELK GROVE, CA

RGA LUST

S114605840  
N/A

Site 1 of 3 in cluster K

Relative:  
Higher  
Actual:  
52 ft.

RGA LUST:

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2012 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2011 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2010 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2009 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2008 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2007 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2006 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2005 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2003 CONOCO ASPHALT TERMINAL 10090 WATERMAN RD  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CONOCO ASPHALT TERMINAL (Continued)**

**S114605840**

Name: Address: City: State:	2002 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	2001 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	2000 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	1998 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	1997 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	1996 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	1995 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	1994 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD
Name: Address: City: State:	1993 CONOCO ASPHALT TERMINAL CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE ELK GROVE	10090 WATERMAN RD

**K70**  
**SSE**  
**1/4-1/2**  
**0.330 mi.**  
**1745 ft.**  
**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**CONOCO BULK PLANT**  
**10090 WATERMAN RD**  
**ELK GROVE, CA 95624**  
**Site 2 of 3 in cluster K**

**LUST** **S102428276**  
**CPS-SLIC** **N/A**  
**Sacramento Co. CS**  
**CHMIRS**  
**Cortese**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**WDS**  
**CERS**

LUST:  
 Name: CONOCO ASPHALT TERMINAL  
 Address: 10090 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700036](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700036)  
Global Id: T0606700036  
Latitude: 38.390996  
Longitude: -121.355214  
Status: Open - Assessment & Interim Remedial Action  
Status Date: 07/16/2018  
Case Worker: DVA  
RB Case Number: 340054  
Local Agency: SACRAMENTO COUNTY LOP  
File Location: Local Agency  
Local Case Number: B548/RO 1142  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

**LUST:**

Global Id: T0606700036  
Contact Type: Local Agency Caseworker  
Contact Name: DAVID VON ASPERN  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 10590 ARMSTRONG AVENUE, SUITE A  
City: MATHER  
Email: vonaspernd@saccounty.net  
Phone Number: Not reported

Global Id: T0606700036  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**

Global Id: T0606700036  
Action Type: RESPONSE  
Date: 09/11/1995  
Action: Site Assessment Report

Global Id: T0606700036  
Action Type: RESPONSE  
Date: 08/20/1993  
Action: Site Assessment Report

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 07/17/2018  
Action: File review

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 09/23/1993  
Action: Notice of Reimbursement

Global Id: T0606700036  
Action Type: Other

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

Date: 11/03/1986  
Action: Leak Reported

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 07/14/1994  
Action: Staff Letter - #7/14/1994

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 08/30/1993  
Action: Letter - Notice - #8/30/1993

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 09/21/1995  
Action: Staff Letter

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 11/12/1986  
Action: Other Report - #11/12/1986

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 06/15/1986  
Action: Other Report - #6/15/1986

**LUST:**

Global Id: T0606700036  
Status: Open - Case Begin Date  
Status Date: 11/03/1986

Global Id: T0606700036  
Status: Completed - Case Closed  
Status Date: 11/12/1986

Global Id: T0606700036  
Status: Open - Assessment & Interim Remedial Action  
Status Date: 07/16/2018

Global Id: T0606700036  
Status: Open - Reopen Case  
Status Date: 07/16/2018

**LUST REG 5:**

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340054  
Case Type: Soil only  
Substance: DIESEL  
Staff Initials: VJF



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

SLIC REG 5:

Name: Conoco Asphalt Terminal  
Address: 10090 Waterman Rd  
City: Elk Grove  
Region: 5  
Facility Status: Closed by County  
Unit: Facility is a Spill or site  
Pollutant: TPH  
Lead Agency: Not reported  
Date Filed: 09/21/95  
Report Date: / /  
Date Added: Not reported  
Date Closed: Not reported

Sacramento Co. CS:

Name: CONOCO INC-ASPHALT PLANT  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
State Site Number: A270  
Lead Staff: Booth, D.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Asphalt  
Date Reported: 8/30/1993  
Facility Id: RO0001142  
Case Type: Soil only  
Case Closed: Not reported  
**Date Closed: Not reported**  
**Case Type: Soil only affected**  
**Substance: Asphalt**

CHMIRS:

Name: Not reported  
Address: 10090 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
OES Incident Number: 10-3974  
OES notification: 06/30/2010  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agency Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Industrial Plant
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1310
Year:	2010
Agency:	Paramount Petroleum Corp
Incident Date:	6/30/2010
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Asphalt
Quantity Released:	75
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller states that a pipeline that leads a pump near storage tank burst due to unknown causes.
Name:	Not reported
Address:	10090 WATERMAN RD
City,State,Zip:	ELK GROVE, CA 95624
OES Incident Number:	1-3161
OES notification:	05/24/2011
OES Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONOCO BULK PLANT (Continued)

S102428276

OES Time:	Not reported
<b>Date Completed:</b>	<b>Not reported</b>
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	900
Year:	2011
Agency:	Paramount Petroleum Corp
Incident Date:	5/24/2011
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Polly Phosphoric Acid
Quantity Released:	10
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
Fataals: Not reported  
Comments: Not reported  
Description: Caller states substance weeped through drums due to drum age. Caller states substance released in a storage area.

**CORTESE:**

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0606700036  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**HIST CORTESE:**

edr\_fname: CONOCO ASPHALT TERMINAL  
edr\_fadd1: 10090 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340054

**Sacramento Co. ML:**

Name: CONOCO BULK PLANT  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: G  
Billing Codes BP: Out of Business  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 51  
Food Bill Code: 51

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

CUPA Permit Date: Not reported  
HAZMAT Permit Date: 06/01/1991  
HAZMAT Inspection Date: 02/04/1991  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: 2951  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**WDS:**

Name: ELK GROVE TERMINAL  
Address: 10090 Waterman Rd  
City: ELK GROVE  
Facility ID: 5S 34I012420  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 0  
Facility Telephone: 8009569253  
Facility Contact: RON EDINGFIELD  
Agency Name: PARAMOUNT PETROLEUM CORP  
Agency Address: 14700 Downey Ave  
Agency City,St,Zip: Paramount 907234526  
Agency Contact: DOUGLAS THOMPSON  
Agency Telephone: 5625312060  
Agency Type: Private  
SIC Code: 2951  
SIC Code 2: 4213  
Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).  
Primary Waste: STORMS  
Waste Type2: Not reported  
Waste2: Stormwater Runoff  
Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S102428276**

Reclamation: No reclamation requirements associated with this facility.  
POTW: The facility is not a POTW.  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

**CERS:**

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 235734  
CERS ID: T0606700036  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: DAVID VON ASPERN - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 10590 ARMSTRONG AVENUE, SUITE A  
Affiliation City: MATHER  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**K71**  
**SSE**  
**1/4-1/2**  
**0.330 mi.**  
**1745 ft.**

**CONOCO ASPHALT TERMINAL**  
**10090 WATERMAN ROAD**  
**ELK GROVE, CA**  
**Site 3 of 3 in cluster K**

**RGA LUST** **S114605842**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

RGA LUST:  
Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN ROAD  
City: ELK GROVE  
State: ELK GROVE  
1992 CONOCO ASPHALT TERMINAL 10090 WATERMAN ROAD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

L72  
North  
1/4-1/2  
0.385 mi.  
2035 ft.

**FERRELL GAS**  
**9765 DINO DRIVE**  
**ELK GROVE, CA**  
**Site 1 of 3 in cluster L**

**RGA LUST** **S114619748**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

- Relative:** RGA LUST:  
**Higher** Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2012 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2011 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2010 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2009 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2008 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2007 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2006 FERRELL GAS 9765 DINO DRIVE  
Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City: ELK GROVE  
State: ELK GROVE  
2005 FERRELL GAS 9765 DINO DRIVE

L73  
North  
1/4-1/2  
0.385 mi.  
2035 ft.

**FERRELL GAS**  
**9765 DINO DRIVE**  
**ELK GROVE, CA 95624**  
**Site 2 of 3 in cluster L**

**LUST** **U001612769**  
**Sacramento Co. CS** **N/A**  
**CERS HAZ WASTE**  
**HIST UST**  
**CERS TANKS**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

- Relative:** LUST:  
**Higher** Name: FERRELL GAS  
Address: 9765 DINO DRIVE  
City,State,Zip: ELK GROVE, CA 95624  
Lead Agency: SACRAMENTO COUNTY LOP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606720608](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606720608)  
Global Id: T0606720608  
Latitude: 38.402278  
Longitude: -121.356232  
Status: Completed - Case Closed  
Status Date: 03/01/2010  
Case Worker: DVA  
RB Case Number: 341402  
Local Agency: SACRAMENTO COUNTY LOP  
File Location: Local Agency  
Local Case Number: G071  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Toluene, Diesel  
Site History: Not reported

LUST:

Global Id: T0606720608  
Contact Type: Local Agency Caseworker  
Contact Name: DAVID VON ASPERN  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 10590 ARMSTRONG AVENUE, SUITE A  
City: MATHER  
Email: vonaspernd@saccounty.net  
Phone Number: Not reported

Global Id: T0606720608  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606720608  
Action Type: Other  
Date: 01/21/2004  
Action: Leak Discovery

Global Id: T0606720608  
Action Type: Other  
Date: 09/08/2004  
Action: Leak Reported

Global Id: T0606720608  
Action Type: ENFORCEMENT  
Date: 09/30/2009  
Action: File Review - Closure

Global Id: T0606720608  
Action Type: ENFORCEMENT  
Date: 04/01/2009  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606720608



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Action Type: RESPONSE  
Date: 10/06/2004  
Action: Site Assessment Report

Global Id: T0606720608  
Action Type: ENFORCEMENT  
Date: 02/26/2010  
Action: Closure/No Further Action Letter

Global Id: T0606720608  
Action Type: RESPONSE  
Date: 09/16/2004  
Action: Correspondence

Global Id: T0606720608  
Action Type: RESPONSE  
Date: 09/16/2004  
Action: Correspondence

Global Id: T0606720608  
Action Type: RESPONSE  
Date: 04/13/2005  
Action: Correspondence

Global Id: T0606720608  
Action Type: RESPONSE  
Date: 05/12/2006  
Action: Correspondence

Global Id: T0606720608  
Action Type: ENFORCEMENT  
Date: 09/17/2004  
Action: Notice of Responsibility

**LUST:**

Global Id: T0606720608  
Status: Open - Case Begin Date  
Status Date: 01/21/2004

Global Id: T0606720608  
Status: Open - Site Assessment  
Status Date: 09/16/2004

Global Id: T0606720608  
Status: Completed - Case Closed  
Status Date: 03/01/2010

**Sacramento Co. CS:**

Name: FERRELL GAS  
Address: 9765 DINO DR  
City,State,Zip: ELK GROVE, CA  
State Site Number: G071  
Lead Staff: Von Aspern, D.  
Lead Agency: HM  
Remedial Action Taken: NO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Substance: Not reported  
Date Reported: Not reported  
Facility Id: RO0001567  
Case Type: Undefined  
Case Closed: Y  
**Date Closed: 3/20/2004**  
**Case Type: Undetermined affected**  
**Substance: Not reported**

**CERS HAZ WASTE:**

Name: INTERSTATE OIL COMPANY  
Address: 9765 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 124624  
CERS ID: 10228219  
CERS Description: Hazardous Waste Generator

**HIST UST:**

Name: ELK GROVE GAS AND OIL  
Address: 9765 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
File Number: Not reported  
URL: Not reported  
Region: STATE  
Facility ID: 00000059220  
Facility Type: Gas Station  
Other Type: Not reported  
Contact Name: DONALD J. VENINGA  
Telephone: 9166854611  
Owner Name: ELK GROVE GAS AND OIL  
Owner Address: 9765 DINO DRIVE  
Owner City,St,Zip: ELK GROVE, CA 95624  
Total Tanks: 0006

Tank Num: 001  
Container Num: 1  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: PREMIUM  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 2  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 3  
Year Installed: 1982  
Tank Capacity: 00012000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

Tank Num: 004  
Container Num: 4  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

Tank Num: 005  
Container Num: 5  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

Tank Num: 006  
Container Num: 6  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: 1/4  
Leak Detection: Stock Inventor

**CERS TANKS:**

Name: INTERSTATE OIL COMPANY  
Address: 9765 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 124624  
CERS ID: 10228219  
CERS Description: Underground Storage Tank

**CERS:**

Name: INTERSTATE OIL COMPANY  
Address: 9765 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 124624  
CERS ID: 10228219  
CERS Description: Chemical Storage Facilities

**Violations:**

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2637(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(f)  
Violation Description: Failure to submit a copy of the secondary containment test results on the G Secondary Containment Testing report FormG to the UPA within 30 days after the test.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violation Notes: OBSERVATION: Owner/Operator did not submit secondary containment test results to the CUPA within 30 days after the test. Secondary containment testing (SB-989) conducted on 03/17/2018 identified failures of the secondary line #3 (clear diesel R), secondary line #7 (clear diesel C) and secondary line #8 (regular fuel C). EMD has not received passing test results for these components. CORRECTIVE ACTION: CORRECTIVE ACTION: Submit secondary containment test results to the CUPA within 30 days after the test. NOTE: This violation applies to both clear diesel tanks and the 87 fuel tank. NOTE: This is a repeat violation that was initially cited on the 05/15/18 inspection.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: 23 CCR 16 2715 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715

Violation Description: Failure to comply with one or more of the designated operator monthly inspection requirements: failed to inspect the monthly alarm history report; attach a copy of the alarm history; failed to inspect for the presence of liquid or debris in the spill container/spill bucket and under dispenser containment; failed to inspect the under dispenser containment to ensure that monitoring equipment is placed in the proper position; failure to inspect for liquid or debris in the containment sump where an alarm occurred or for which there is no record of a service visit; or failure to check that all testing and maintenance has been completed and documented.

Violation Notes: Returned to compliance on 06/21/2016. OBSERVATION: The designated operator failed to document all the alarms from the attached alarm history on the March and February 2016 designated operator monthly inspection reports and failed to check that they were responded to appropriately. The missing alarms include: L29 (Dispenser 16) and L14 (Regular Fill Piping Sump) fuel alarms on 3-12-16 and 3-7-16 respectively. L3 alarm recorded in the February report but should have been L13 (Clear Diesel Fill Piping Sump). During the monthly inspection, the designated operator shall review the alarm history for the previous month, check that each alarm was documented and responded to appropriately, and attach a copy of the alarm history with documentation taken in response to any alarms to the monthly report. CORRECTIVE ACTION: Ensure that designated operators performing monthly inspections at this facility are including all of the required information on the reports. Submit verification. OBSERVATION: Th monthly [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: OBSERVATION: Owner/Operator did not repair/maintain pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when release occurs. The 87, 91 and clear diesel tanks that feed the load rack were not tested during the testing event on 05/15/2018. CORRECTIVE ACTION: Repair/maintain pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. Test the line leak detectors for all three fuel grades and submit test results to this department. NOTE: This is a repeat violation. NOTE: This issue applies to the 87, 91 and diesel tank systems. NOTE: The clear diesel LLD was not tested during the [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: 23 CCR 16 2637(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(f)

Violation Description: Failure to submit a copy of the secondary containment test results on the G Secondary Containment Testing report FormG to the UPA within 30 days after the test.

Violation Notes: OBSERVATION: Owner/Operator did not submit secondary containment test results to the CUPA within 30 days after the test. Secondary containment testing (SB-989) conducted on 03/17/2018 identified failures of the secondary line #3 (clear diesel R), secondary line #7 (clear diesel C) and secondary line #8 (regular fuel C). EMD has not received passing test results for these components. CORRECTIVE ACTION: CORRECTIVE ACTION: Submit secondary containment test results to the CUPA within 30 days after the test. NOTE: This violation applies to both clear diesel tanks and the 87 fuel tank.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-17-2017  
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)

Violation Description: Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.

Violation Notes: -RED DIESEL VIOLATION- 1. OBSERVATION: The facility's load rack dispenser for its red diesel does not have proper under-dispenser containment. CORRECTIVE ACTION: Fix the issue and submit documentation demonstrating compliance to EMD, Attn: Megan Vaughan. NOTE: Obtain a permit, if necessary, prior to starting any work!

Violation Division: Sacramento County Env Management Department  
Violation Program: UST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 p.s.i.g. and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: OBSERVATION: Owner/Operator did not repair/maintain pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. The 87, 91, clear diesel and red diesel tanks that feed the load rack were not tested during todays testing event. CORRECTIVE ACTION: Repair/maintain pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. Test the line leak detectors for all four fuel grades and submit test results to this department. NOTE: This issue applies to the 87, 91, diesel and red diesel tank systems. NOTE: Both the clear diesel LLD and the red diesel LLD were not tested during [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-23-2014  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment..

Violation Notes: Returned to compliance on 01/24/2019. OBSERVATION: Absorbent was placed on a spill under the Diesel Load Rack Dispenser and has not been cleaned up. All spills of hazardous materials must be cleaned up as they occur and are not considered "cleaned up" until the used absorbent/clean up materials has been removed and managed properly. CORRECTIVE ACTION: Clean up this spill under the Diesel Load Rack Dispense and place the absorbent in the used absorbent drum. NOTE: This spill was cleaned up and the absorbent was managed properly during this inspection.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 10/10/2019. OBSERVATION: The monitoring plan submitted to this department through the California Environmental Reporting System does not include all applicable sensors (205 sensors). 205 Sensors were observed in the following locations/tanks: 91 Premium Tank (piping sump and fill sump), 87 Regular Tank (piping sump), Clear Diesel Card Lock (piping sump), and Clear Diesel Load Rack (piping sump). CORRECTIVE ACTION: Submit documentation to this department demonstrating that all applicable sensors/monitoring equipment have been included in the monitoring and response plan.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-17-2017  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have a UST Monitoring Plan available on site.  
Violation Notes: -REGULAR UNLEADED x 2, DIESEL x 3 VIOLATIONS- MONITORING PLAN OBSERVATIONS (FOR EACH TANK): 1. The facility does not use Automatic Tank Gauging. 2. Leak alarms and failure/disconnection trigger pump shutdown. 3. The facility needs to remove reference(s) to electronic line leak detectors; the facility uses mechanical line leak detectors. 4. The facility needs to add the leak sensor manufacturer/sensor model number for the stand-alone dispensers. 5. UDC leak alarms do not trigger automatic pump shutdown. 6. UDC monitoring does stop flow of product at the dispenser. CORRECTIVE ACTION: Make the necessary updates in CERS and resubmit the facility's information to CERS.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-23-2014  
Citation: HSC 6.95 25504(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)  
Violation Description: Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.  
Violation Notes: Returned to compliance on 01/24/2019. OBSERVATION: The amount listed in the "Maximum Daily Amount" box on the Hazardous Materials Business Plan (HMBP) Chemical Description page for Unleaded, Premium, Diesel and Red Dyed Diesel is not correct. All Chemical Description Forms must be adequately filled out. CORRECTIVE ACTION: Login to the [www.emd.saccounty.net/EMDportal.html](http://www.emd.saccounty.net/EMDportal.html) website, make all necessary changes listed above and submit the HMBP electronically in this department's e-Reporting Portal. Call (916) 875-2377 if you need assistance. Send a written statement to Inspector Douglas Osborn when complete.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2716(a) through (e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(a) through (e)  
Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and documented. Verify that all facility employees have been trained in accordance with 23 CCR 2715(c). For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.  
Violation Notes: OBSERVATION: Designated UST Operator (DO) monthly inspection reports for 10/22/18, 11/13/18, 12/7/18, 1/4/19, 2/4/19, 3/1/19, 3/29/19, and 4/19/19 were not signed/addressed by the UST owner/operator within 48 hours of receiving the reports. CORRECTIVE ACTION: Submit documentation that the above DO monthly inspection reports have been signed/addressed by the owner/operator. Moving forward ensure all DO monthly inspection reports are reviewed, addressed, and signed within 48 hours of receipt. NOTE: This violation applies to all tanks in the on-site tank system.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286  
Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.  
Violation Notes: Returned to compliance on 05/15/2019. OBSERVATION: Owner/Operator did not submit and/or maintain an accurate UST Tank information. Tank form 24744 (diesel) should identify the "Riser Pipe Secondary Containment" as Fiberglass. CORRECTIVE ACTION: Submit and maintain an accurate UST Tank information in CERS. NOTE: This is a repeat violation. NOTE: This violation applies to the diesel tank system. NOTE: Please notify Brion McGinness at mcginnessb@saccounty.net following correction of this violation. OBSERVATION: Owner/Operator did not submit and/or maintain an accurate UST Tank information. Tank form 24747 (red diesel) should identify the tank contents as red diesel. CORRECTIVE ACTION: Submit and maintain an accurate UST Tank information in CERS. NOTE: This is a repeat violation. NOTE: This violation applies to the red diesel tank system. NOTE: Please notify Brion McGinness at mcginnessb@saccounty.net following correction of this violation.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: Owner/Operator did not maintain an approved monitoring plans in CERS. The monitoring plan issues are as follows: Tank 24743 (diesel) - Under "Tank Monitoring is Performed Using the Following Methods" the "Automatic Tank Gauging" section should be blank, under "Pipe Monitoring is Performed Using the Following Method(s)" the "Panel Model #" should be TLS-350 and the "Leak Sensor Model #" should be 208, the "MLLD Model" should be LD-2000 and under "Under Dispenser Containment (UDC) Monitoring" the "UDC Monitoring" should be Continuous and "UDC Monitoring Stops Flow of Product at Dispenser" should be No. Tank 24744 (diesel) - Under "Tank Monitoring is Performed Using the Following Methods" the "Automatic Tank Gauging" section should be blank, under "Pipe Monitoring is Performed Using the Following Method(s)" the "Panel Model #" should be TLS-350 and the "Leak Sensor Model #" should be 208, the "MLLD Model" should be LD-2000 and under "Under Dispenser [Truncated]  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-20-2015  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)  
Violation Description: Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.  
Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: The UST tank information for all USTs submitted in the EMD e-reporting portal is not accurate. THE USTs are double walled fiberglass not steel, the piping is double walled not single walled and the piping sumps are single walled not double walled. The vent transition sump type should be marked none not double walled and all boxes should be checked in the "fill components installed" section. The UST tank information page #247454 should be premium not midgrade CORRECTIVE ACTION: Immediately update the required information in the EMD e-reporting portal and submit for review by the CUPA.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a)  
Violation Description: Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit.  
Violation Notes: Returned to compliance on 04/11/2018. OBSERVATION: The UST forms for this facility G Facility Form, Tank form for each tank, Monitoring Plan, Response Plan, Site Map, Financial Responsibility Form,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Owner/Operator agreement form (if necessary), and UST Owner Statement of Designated Operator (DO) G have not been submitted electronically. REQUIRED ACTION: Login to the CERS (California Environmental Reporting System) website at <http://cers.calepa.ca.gov> and fill out the following forms electronically: G UST Facility Form, G UST Tank Form(s), and G UST Monitoring Plan(s) G UST Response Plan G Owner/Operator Agreement form (if necessary) And Upload the following forms: G Certification of Financial Responsibility, and G UST Owner Statement of Designated Operator G Site Plan/Map Please call (916) 876-8890 or email [monasterioj@saccounty.net](mailto:monasterioj@saccounty.net) if you need assistance. NOTIFY JENNEA MONASTERIO WHEN THE ITEMS HAVE BEEN SUBMITTED OR THE VIOLATIONS WILL NOT BE CLEARED. Next UST Workshop is May 24th at 1 [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)

Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate response plan.

Violation Notes: Returned to compliance on 04/11/2018. OBSERVATION: Owner/Operator did not submit and/or maintain an approved response plan in CERS. CORRECTIVE ACTION: Submit and maintain an approved response plan in CERS.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8)

Violation Description: Failure to submit, obtain approval, or maintain a complete/accurate plot plan.

Violation Notes: Returned to compliance on 04/11/2018. OBSERVATION: Owner/Operator did not submit, obtain approval, and maintain a complete/accurate plot plan CORRECTIVE ACTION: Submit, obtain approval, and maintain a complete/accurate plot plan.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34

Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Violation Notes: Returned to compliance on 04/11/2018. OBSERVATION: Financial responsibility documents have not been submitted in CERS. Current financial responsibility documents are required to be submitted

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violation Division: annually. CORRECTIVE ACTION: Complete and submit a copy of the financial responsibility in CERS.  
Violation Program: Sacramento County Env Management Department  
Violation Source: UST  
CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)

Violation Description: Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violation Notes: OBSERVATION: Owner/Operator did not repair/maintain pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. The 87, 91, clear diesel and red diesel tanks that feed the load rack were not tested during the 05/15/19 annual monitoring certification inspection. CORRECTIVE ACTION: Repair/maintain pressurized piping to meet one or more of the following requirements: monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour, and will restrict the flow of product through the piping or trigger an alarm when a release occurs. Test the line leak detectors for all four fuel grades and submit test results to this department. NOTE: This is a repeat violation. NOTE: This issue applies to the 87, 91, diesel and red diesel tank systems. Both [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)

Violation Description: Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.

Violation Notes: Returned to compliance on 05/15/2019. OBSERVATION: Liquid was observed in the card lock diesel tank turbin sump at the time of inspection. If water could enter into the secondary containment by precipitation or infiltration, it must be removed and disposed of properly. CORRECTIVE ACTION: The excess liquid was removed at the time of inspection by facility representative Raymond Gutierrez. No further action needed at this time. NOTE: This violation applies to the card lock diesel tank system on site.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violation Date: 05-20-2015  
Citation: Un-Specified  
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.  
Violation Notes: Returned to compliance on 06/06/2016. OBSERVATION: The 91 line leak detector failed to detect a leak when tested. All line leak detectors shall be capable of detecting a 3-gallon per hour leak at 10 psi. The service technician adjusted the leak detector, retested it, and it passed. CORRECTIVE ACTION: Submit test results to this office within 30 days of testing.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2641(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(a)  
Violation Description: Failure of leak detection equipment to be located such that equipment is capable of detecting a leak at the earliest possible opportunity.  
Violation Notes: Returned to compliance on 01/24/2019. OBSERVATION: Owner/Operator did not locate the sensor in the proper location/position. The red diesel turbine sump sensor was raised approximately 18 inches off the floor of the sump. The sump contained approximately 3 inches of standing red diesel. CORRECTIVE ACTION: Locate sensor to the proper position/location. NOTE: This violation applies to the red diesel tank system. NOTE: The red diesel fuel was removed from the sump and the sensor positioned properly at the time of inspection.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: Un-Specified  
Violation Description: UST Program - Administration/Documentation - For use of Local Ordinance only  
Violation Notes: Returned to compliance on 04/11/2018. OBSERVATION: Facility does not have a valid BOE number submitted in CERS. CORRECTIVE ACTION: Obtain, submit, and maintain a valid Board of Equalization account number in CERS.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)  
Violation Description: Failure to install a line leak detector (LLD).  
Violation Notes: OBSERVATION: The diesel tank turbine sump (north) is not equipped with a line leak detector. Pressurized piping systems must be equipped with an LLD. CORRECTIVE ACTION: Install and test line leak detector on pressurized piping system and/ or provide adequate documentation

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

identifying the piping run(s) originating from the diesel turbine to their termination point(s) and proof that this piping is not pressurized piping. NOTE: This is a repeat violation that applies to the diesel tank system. NOTE: This diesel tank is a single 20,000 gallon tank with two turbine fill sumps. One turbine sump feeds the load rack and includes a LLD while the other turbine sump does not provide fuel to either the load rack or dispensers and does not include a LLD. Both turbine sumps and the single tank annular are continuously monitored. NOTE: The power connector "yolk" for the diesel tank that has no LLD was disconnected at the time of inspection.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)

Violation Description: Failure to install a line leak detector (LLD).  
Violation Notes: OBSERVATION: Owner/Operator did not install line leak detector (LLD) on pressurized piping system. The diesel tank turbine sump (north) is not equipped with a line leak detector. Pressurized piping systems must be equipped with an LLD. CORRECTIVE ACTION: Install and test line leak detector on pressurized piping system and/ or provide adequate documentation identifying the piping run(s) originating from the diesel turbine to their termination point(s) and proof that this piping is not pressurized piping. NOTE: This issue applies to the diesel tank system. NOTE: This diesel tank is a single 20,000 gallon tank with two turbine fill sumps. One turbine sump feeds the load rack and includes a LLD while the other turbine sump does not provide fuel to either the load rack or dispensers and does not include a LLD. Both turbine sumps and the single tank annular are continuously monitored. NOTE: The power connector "yolk" for the diesel tank that has no LLD was disconnected at [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)

Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).  
Violation Notes: OBSERVATION: Owner/Operator did not test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) and/or submit monitoring system certification within 30 days of completion of the test. The diesel line leak detector that feeds the load rack was not tested during the monitoring certification on 05/17/2017 and was not tested during todays monitoring certification. CORRECTIVE ACTION: Test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) and submit monitoring system certification within 30 days of completion of

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

the test. NOTE: This violation applies to the diesel tank system.  
OBSERVATION: Owner/Operator did not test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) and/or submit monitoring system certification within 30 days of completion of the test. The red diesel line leak detector that feeds the load rack was not tested during the monitoring certification on 05/17/2017 and was not tested during today's [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34

Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Violation Notes: Returned to compliance on 01/24/2019. OBSERVATION: Financial responsibility document submitted to CERS is signed by Dominic Decay who is no longer with Interstate Oil Company. Current financial responsibility documents are required to be submitted annually. CORRECTIVE ACTION: Complete and submit a copy of the financial responsibility to CERS. NOTE: This violation applies to all 5 tank systems onsite. NOTE: Please notify Brion McGinness at mcginnessb@saccounty.net following correction of this violation.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2637 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637

Violation Description: Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test within six months of installation and every 36 months thereafter. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician or a licensed tank tester.

Violation Notes: OBSERVATION: Secondary containment testing (SB-989) conducted on 03/17/2018 was past due. Previous SB-989 testing was performed on 03/09/2015. CORRECTIVE ACTION: Conduct secondary containment testing within six months of installation and every 36 months thereafter. Conduct testing in accordance with proper practices, protocols, or test methods. NOTE: This violation applies to all five tank systems onsite. NOTE: This violation was corrected following the SB-989 testing that occurred on 03/17/2018. OBSERVATION: Secondary containment testing (SB-989) conducted on 03/17/2018 identified failures of the secondary line #3 (clear diesel R), secondary line #7 (clear diesel C) and secondary line #8 (regular fuel C). EMD has not received any testing notification or passing test results for these failed components. CORRECTIVE ACTION: Conduct secondary containment testing within six months of installation and every 36 months thereafter. Conduct testing in accordance with proper [Truncated]

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: HSC 6.7 25290.1(c)(3),25290.2(c)(3) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(c)(3),25290.2(c)(3)  
Violation Description: Failure to keep water out of the secondary containment of UST systems installed on or after July 1, 2003.  
Violation Notes: Returned to compliance on 01/24/2019. OBSERVATION: Approximately three inches of liquid was observed in the red diesel turbine sump. CORRECTIVE ACTION: Immediately remove this liquid, make a hazardous waste determination per Title 22 hazardous waste regulations, and manage it accordingly. Ensure that the red diesel turbine sump is maintained free of liquid. NOTE: This violation applies to the red diesel tank system. NOTE: The red diesel was removed from the turbine sump during today's inspection.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)  
Violation Description: Failure to install a line leak detector (LLD).  
Violation Notes: Returned to compliance on 05/15/2018. OBSERVATION: Owner/Operator did not install line leak detector (LLD) on pressurized piping system. The diesel tank turbine sump (north) is not equipped with a line leak detector. Pressurized piping systems must be equipped with an LLD. CORRECTIVE ACTION: Install and test line leak detector on pressurized piping system and/ or provide adequate documentation identifying the piping run(s) originating from the diesel turbine to their termination point(s) and proof that this piping is not pressurized piping. NOTE: This issue applies to the diesel tank system. NOTE: This diesel tank is a single 20,000 gallon tank with two turbine fill sumps. One turbine sump feeds the load rack and includes a LLD while the other turbine sump does not provide fuel to either the load rack or dispensers and does not include a LLD. Both turbine sumps and the single tank annular are continuously monitored. NOTE: The power connector "yolk" for the diesel tank that has no LLD was disconnected at [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)  
Violation Description: Failure to comply with one or more of the following overflow prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months. Returned to compliance on 09/11/2019. OBSERVATION: The overfill prevention system for the 87 and 91 tanks are not in compliance with the regulations enumerated in 23 CCR. CORRECTIVE ACTION: Within 30 days (06/17/19) submit a plan of action detailing how the overfill prevention equipment will be tested and maintained to meet the requirements of 23 CCR 16 2635 & 2637. NOTE: A permit may be required from our department for this repair replacement. NOTE: This violation applies to the 87 and 91 tanks on site. NOTE: The following tanks passed their overfill prevention equipment inspection at the time of inspection: T1 Red Diesel, T2 Diesel (card lock), and T3 Diesel (load rack). Ensure that copies of the passing test results are submitted to this department within 30 days (06/17/19) of completing the test.

Violation Notes: Sacramento County Env Management Department

Violation Division: UST  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-20-2015  
Citation: Un-Specified  
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.

Violation Notes: Returned to compliance on 05/18/2016. OBSERVATION: The sensor in UDC 15/16 failed shut down the turbine and activate an audible/visual alarm. All monitoring equipment shall be maintained to activate an audible and visual alarm or stop the flow of product at the dispenser when it detects a leak. The sensor was replaced, retested, and passed at time of inspection. CORRECTIVE ACTION: Submit test results to this department within 30 days of testing.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: The emergency response plan and procedures submitted to this department did not include completion of the following sections: E4, D1 (#'s 1, 3, 4, 7, 10, 12, 13, 17, and 18), the Spill Control & Clean-up section (#'s 18, 19, , 21, 22, and 23), H6 (#2) and J. CORRECTIVE ACTION: Revise the emergency response plan and procedures to include all required content and submit electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2715(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(e)

Violation Description: Failure to maintain a copy of the designated operator monthly inspections for the last 12 months on-site or off-site at a readily available location, if approved by the UPA.

Violation Notes: Returned to compliance on 01/24/2019. OBSERVATION: The July 2017 designated operator monthly inspection report was not found on site. Designated operator monthly inspection reports for the previous twelve months shall be retained on site. CORRECTIVE ACTION: Locate and ensure that copies of the previous twelve months of designated operator monthly inspection reports are maintained on site. Submit copies to the CUPA. NOTE: This violation applies to all 5 tanks systems onsite.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)

Violation Description: "Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."

Violation Notes: OBSERVATION: Secondary containment testing (SB-989) conducted on 03/17/2018 identified failures of the secondary line #3 (clear diesel R), secondary line #7 (clear diesel C) and secondary line #8 (regular fuel C). EMD has not received any testing notification or passing test results for these failed components. CORRECTIVE ACTION: Repair/replace

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

all failed components. Following the repair/replacement conduct secondary containment testing and submit test results to this department. NOTE: This is a repeat violation that was initially cited during the inspection conducted on 05/15/18. NOTE: This violation applies to both clear diesel tank systems and the 87 tank system. NOTE: Repair/Replacement of the failed components may require a UST construction permit from this department. Contact EMD prior to implementing any repair work.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-23-2014  
Citation: HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2

Violation Description: Failure to test the spill bucket annually.  
Violation Notes: Returned to compliance on 05/01/2015. OBSERVATION: The T3, Red Diesel Spill Bucket failed its annual test. All spill buckets must pass their annual test. CORRECTIVE ACTION: Repair or replace and retest the T3, Red Diesel Spill Bucket. Submit test results when complete.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-17-2017  
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.  
Violation Notes: -REGULAR UNLEADED x 2, DIESEL x 3 VIOLATIONS- TANK INFORMATION OBSERVATIONS (FOR EACH TANK): 1. The tanks are double-wall fiberglass. 2. Piping sumps should be identified as single wall. 3. Vent piping is single wall fiberglass. 4. Diesel piping does not have vapor recovery piping. 5. The facility does not have vent transition sumps. 6. Corrosion protection is isolation. 7. Fill components include containment sumps. CORRECTIVE ACTION: Make the necessary updates in CERS and resubmit the facility's information to CERS.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286

Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.  
Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: Owner/Operator did not submit and/or maintain an accurate UST Tank information to CERS. Tank Form 24744 (diesel) should identify "Riser Pipe Secondary Containment" as Fiberglass. CORRECTIVE ACTION: Submit and maintain an accurate UST Tank information to CERS. NOTE: This violation applies to

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

the diesel tank systems onsite. NOTE: Please notify Brion McGinness at mcginnessb@saccounty.net following correction of this violation. OBSERVATION: Owner/Operator did not submit and/or maintain an accurate UST Tank information to CERS. Tank Form 24747 (red diesel) should identify "Tank Contents" as Red Diesel. CORRECTIVE ACTION: Submit and maintain an accurate UST Tank information to CERS. NOTE: This violation applies to the red diesel tank systems onsite. NOTE: Please notify Brion McGinness at mcginnessb@saccounty.net following correction of this violation.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: 23 CCR 16 2637(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637(e)

Violation Description: Failure to submit a copy of the secondary containment test results to the UPA within 30 days after the test.

Violation Notes: OBSERVATION: Owner/Operator did not submit secondary containment test results to the CUPA within 30 days after the test. Secondary containment testing (SB-989) conducted on 03/17/2018 identified failures of the secondary line #3 (clear diesel R), secondary line #7 (clear diesel C) and secondary line #8 (regular fuel C). EMD has not received passing test results for these components. CORRECTIVE ACTION: Submit secondary containment test results to the CUPA within 30 days after the test. NOTE: This violation applies to both clear diesel tanks and the 87 fuel tank.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2636(f)(4) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(4)

Violation Description: Failure to meet one or more of the following monitoring requirements in lieu of the requirement to be tightness tested every 12 months: The monitoring system maintains all product piping outside the dispenser to be fail-safe and shut down the pump when a leak is detected. The monitoring system shuts down the pump or stops flow when a leak is detected in the under dispenser containment (UDC).

Violation Notes: OBSERVATION: The monitoring and response plan indicates positive shutdown is associated with the five tank systems on site. However, at the time of inspection positive shutdown at the following tanks could not be confirmed: T1 Red Diesel, T3 Diesel Load Rack, 87 Regular Load Rack, and the 91 Premium Load Rack. OBSERVATION: The monitoring and response plan indicates that the UST system (all 5 tanks) is fail safe (ie failure/disconnect triggers pump shutdown). However, at the time of inspection power-out/sensor-out (fail safe) functionality could not be verified for the following tanks: T1 Red Diesel, T3 Diesel Load Rack, 87 Load Rack, and 91 Load Rack. CORRECTIVE ACTION: Submit documentation to this department that 1) Positive shut down has been tested/verified to accurately reflect the monitoring and response plan. 2) That power-out/sensor-out has been tested/verified to

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

accurately reflect what is detailed in the monitoring and response plan. NOTE: This violation [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: Un-Specified  
Violation Description: UST Program - Operations/Maintenance - For use of Local Ordinance only.  
Violation Notes: Returned to compliance on 04/11/2018. OBSERVATION: Owner/Operator did not submit UST compliance statement and/or Designated Operator current certification in CERS. CORRECTIVE ACTION: Submit UST compliance statement and/or Designated Operator current certification in CERS.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.  
Violation Notes: OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for waste fuel/ water to CERS. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System. NOTE: Please notify Brion McGinness at mcginnessb@sacounty.net following correction of this violation.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2019  
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)  
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).  
Violation Notes: OBSERVATION: Owner/Operator did not test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) or submit monitoring system certification within 30 days of completion of the test. The diesel line leak detector that feeds the load rack was not tested during the last two monitoring certifications (05/17/2017 and 05/18/18) or during the 01/13/19 re-inspection and was not tested during the 05/15/19 monitoring certification. CORRECTIVE ACTION: Immediately test leak detection equipment (VPH, sensor, LLD, ATG, etc.) and submit monitoring system certification within 30 days of

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

completion of the test. NOTE: This is a repeat violation that applies to the diesel tank system. OBSERVATION: Owner/Operator did not test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) or submit monitoring system certification within 30 days of completion of the test. The red diesel line leak detector that feeds the load rack was not tested during the [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-17-2017  
Citation: 23 CCR 16 2632, 2634, 2712(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2632, 2634, 2712(b)

Violation Description: Failure to maintain monitoring and maintenance records (e.g., alarm logs) and/or maintain records of appropriate follow-up actions.

Violation Notes: -CL DIESEL LD- 1. OBSERVATION: The facility's January 2017 DO report (dated 1/31/17) stated that the L7 sensor ("CL DIESEL LD ANNULAR") alarmed on 1/24/17 and was still in alarm. The February 2017 DO report (dated 2/16/17) stated that the L7 sensor alarmed on 1/24/17 and was still in alarm. The March 2017 DO report (dated 3/24/17) stated that the L7 sensor alarmed on 2/18/17 and was still in alarm. CORRECTIVE ACTION: Submit documentation to EMD, Attn: Megan Vaughan, demonstrating how the facility had the issue fixed/repaired.

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(f)

Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).

Violation Notes: OBSERVATION: Owner/Operator did not test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) and/or submit monitoring system certification within 30 days of completion of the test. The clear diesel line leak detector that feeds the load rack was not tested during the monitoring certifications on 05/17/2017 and 05/15/2018. CORRECTIVE ACTION: Test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) and submit monitoring system certification within 30 days of completion of the test. NOTE: This violation was cited on the 05/17/2017 and 05/15/2018 inspection reports. NOTE: This is a repeat violation that applies to the clear diesel tank system. OBSERVATION: Owner/Operator did not test leak detection equipment every 12 months (VPH, sensor, LLD, ATG, etc.) and/or submit monitoring system certification within 30 days of completion of the test. The 87 and 91 line leak detectors that feed the load rack were not tested during the testing [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-23-2014  
Citation: HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter 6.7, Section(s) Multiple Sections  
Violation Description: UST Program - Operations/Maintenance - General  
Violation Notes: Returned to compliance on 05/01/2015. OBSERVATION: The 87 Clear Diesel Load Rack Mechanical Line Leak Detector (MLLD) failed to detect a leak when tested. All line leak detectors shall be capable of detecting a 3-gallon per hour leak at 10 psi. CORRECTIVE ACTION: Immediately have a properly licensed, trained, and certified contractor repair or replace the failed leak detector, Like-For-Like. NOTE: The service technician adjusted the leak detector three time and finally replace the VMI LD 2000 Like-For-Like. It was retested with passing results during todays inspection.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-20-2015  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to maintain on site an approved monitoring plan.  
Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: The UST monitoring plans in the EMD e-reporting portal are not accurate and not approved by the CUPA. The monitoring panel is a Veeder-Root TLS 350 not a Veeter Root TLD 350 (on some monitoring plans it is correct and others it is not), some of the tank top sumps are monitored by 208s not 205s, the line leak detectors are VMI LD2000 not LO2000, and UDCs are continuously electronic monitored not electronic stand-alone.  
CORRECTIVE ACTION: Update the required information in the EMD e-reporting portal and submit for review by the CUPA.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-15-2018  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)  
Violation Description: Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.  
Violation Notes: OBSERVATION: The Owner/Operator Identification page submitted to CERS identifies Dominic Dacay as the secondary emergency contact. Mr. Dacay is no longer with Interstate Oil Company. CORRECTIVE ACTION: Accurately complete the Owner/Operator page and submit electronically in the California Environmental Reporting System. NOTE: Please notify Brion McGinness at mcginnessb@sacounty.net following correction of this violation.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 124624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Site Name: INTERSTATE OIL COMPANY  
Violation Date: 05-18-2016  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to maintain on site an approved monitoring plan.  
Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: Owner/Operator did not maintain an approved monitoring plan in CERS. CORRECTIVE ACTION: Maintain an approved monitoring plan. Submit monitoring plan for approval in CERS.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: 23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)  
Violation Description: "Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."  
Violation Notes: OBSERVATION: Secondary containment testing (SB-989) conducted on 03/17/2018 identified failures of the secondary line #3 (clear diesel R), secondary line #7 (clear diesel C), and secondary line #8 (regular fuel C). EMD has not received any testing notification or passing test results for these failed components. CORRECTIVE ACTION: Repair/replace and retest failed UST components. Submit passing test results as proof of compliance. NOTE: This is a repeat violation that was initially cited during the inspection conducted on 05/15/2018. NOTE: This violation applies to the the clear diesel and 87 tanks systems. NOTE: Repair/ replacement of the failed components may require a UST construction permit from this department. Contact EMD prior to implementing any repair work.  
Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Violation Date: 01-17-2019  
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)  
Violation Description: Failure to have current UST Monitoring Plan available on site.  
Violation Notes: Returned to compliance on 01/29/2019. OBSERVATION: Owner/Operator did not maintain an approved monitoring plans in CERS. The monitoring plan issues are as follows: Tank 24743 (diesel) - Under "Tank Monitoring is Performed Using the Following Methods" the "Automatic Tank Gauging" section should be blank, under "Pipe Monitoring is Performed Using the Following Method(s)" the "Panel Model #" should be TLS-350 and the

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

"Leak Sensor Model #" should be 208, the "MLLD Model" should be LD-2000 and under "Under Dispenser Containment (UDC) Monitoring" the "UDC Monitoring" should be Continuous and "UDC Monitoring Stops Flow of Product at Dispenser" should be No. Tank 24744 (diesel) - Under "Tank Monitoring is Performed Using the Following Methods" the "Automatic Tank Gauging" section should be blank, under "Pipe Monitoring is Performed Using the Following Method(s)" the "Panel Model #" should be TLS-350 and the "Leak Sensor Model #" should be 208, the "MLLD Model" should be LD-2000 and under "Under Dispenser [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: UST  
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-18-2016  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: UST Annual Monitoring Certification performed on 5-18-2016. Inspection report completed and signed on 5-23-16. All compliances dates have been assigned from 5-23-16. Revised Inspection report on 5-24-16 due to duplicate signature on original report. Duplicate removed, no other information changed.

Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-15-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed at the time of inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-15-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-20-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-23-2014



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 01-18-2019  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: This is a focused inspection. The purpose of this inspection is to address violations issued on the 05/15/2018 that have not been addressed. This facility will be charged for this inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-15-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-17-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-23-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 05-23-2017  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: MEGAN VAUGHAN CONDUCTED INITIAL INSPECTION. TODAY'S INSPECTION WAS FOR A COMPLETE UST INSPECTION OF THE LOAD RACK WHICH INCLUDES 87, 91, RED DIESEL AND CLEAR DIESEL.  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Eval Date: 05-15-2019  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: NOTE: Several of the violations noted during this inspection are repeat violations that may lead to enforceable action. In addition, the facility has failed to demonstrate adequate return to compliance for the violations noted during the 05/18/18 and the 01/13/19 inspections.  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS  
  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 05-23-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: UST  
Eval Source: CERS

**Enforcement Action:**

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 05-18-2016  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 05-20-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 05-23-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 05-23-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 05-23-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: UST  
Enf Action Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-20-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 124624  
Site Name: INTERSTATE OIL COMPANY  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-20-2018  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: UST  
Enf Action Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Coordinates:

Site ID: 124624  
Facility Name: INTERSTATE OIL COMPANY  
Env Int Type Code: HWG  
Program ID: 10228219  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.402280  
Longitude: -121.356230

Affiliation:

Affiliation Type Desc: Legal Owner  
Entity Name: INTER-STATE OIL COMPANY  
Entity Title: Not reported  
Affiliation Address: 8221 ALPINE AVE  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95826  
Affiliation Phone: (916) 457-6572

Affiliation Type Desc: Parent Corporation  
Entity Name: Inter-State Oil Co.  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Permit Applicant  
Entity Name: Greg Andrews  
Entity Title: Vice-Preseident  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 457-6572

Affiliation Type Desc: Environmental Contact  
Entity Name: Dominic Dacay  
Entity Title: Not reported  
Affiliation Address: 8221 ALPINE AVENUE  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95826  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 8221 ALPINE AVE  
Affiliation City: SACRAMENTO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95826  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Dominic Dacay  
Entity Title: Director of Transportation & Safety  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: UST Property Owner Name  
Entity Name: FERRELL GAS LP  
Entity Title: Not reported  
Affiliation Address: ONE LIBERTY PLZ  
Affiliation City: LIBERTY  
Affiliation State: MO  
Affiliation Country: United States  
Affiliation Zip: 64068  
Affiliation Phone: (816) 792-1600

Affiliation Type Desc: UST Tank Operator  
Entity Name: INTER-STATE OIL COMPANY  
Entity Title: Not reported  
Affiliation Address: 8221 ALPINE AVENUE  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95826  
Affiliation Phone: (916) 457-6572

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: Krystal Blythe  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Inter-State Oil Co.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 457-6572

Affiliation Type Desc: UST Tank Owner  
Entity Name: INTER-STATE OIL CO  
Entity Title: Not reported  
Affiliation Address: 8221 ALPINE AVE  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95826  
Affiliation Phone: (916) 457-6572

Name: FERRELL GAS LP  
Address: 9765 DINO DR  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 392620  
CERS ID: 10218571  
CERS Description: Chemical Storage Facilities

Violations:  
Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 06-21-2017  
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)  
Violation Description: Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.  
Violation Notes: Returned to compliance on 07/03/2017. OBSERVATION: Uniform Hazardous Waste Manifests for oily absorbent were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Uniform Hazardous Waste Manifests for oily absorbent and submit copies to this department. If no manifests can be located, dispose of the oily absorbent and submit a copy of the manifest  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS  
Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 06-21-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: Returned to compliance on 07/03/2017. OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.  
Sacramento County Env Management Department

Violation Division: HW  
Violation Program: CERS  
Violation Source:

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: HSC 6.95 25504(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)

Violation Description: Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.  
Returned to compliance on 11/13/2013.

Violation Notes: Sacramento County Env Management Department  
Violation Division: HMRRP  
Violation Program: CERS  
Violation Source:

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)

Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.  
Returned to compliance on 11/13/2013.

Violation Notes: Sacramento County Env Management Department  
Violation Division: HMRRP  
Violation Program: CERS  
Violation Source:

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 06-21-2017  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 07/17/2017. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for hydraulic oil, gear oil, and CGS-4 to this department.  
CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: 19 CCR 4 2729.2(a)(3) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(3)

Violation Description: Failure to complete and/or submit an annotated site map if required by

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Violation Notes: CUPA.  
Returned to compliance on 11/13/2013.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: 19 CCR 4 2729.2(a)(1) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(1)  
Violation Description: Owner/Operator failed to complete and/or submit the Business Activities Page and/or Business Owner Operator Identification Page.  
Violation Notes: Returned to compliance on 11/13/2013.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: 22 CCR 12 66262.34(b)(1) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(b)(1)  
Violation Description: Failure to dispose of hazardous waste after the first 100-kilogram threshold amount was accumulated within a 90 day period.  
Violation Notes: Returned to compliance on 01/22/2014.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 06-21-2017  
Citation: Un-Specified  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance  
Violation Notes: Returned to compliance on 07/03/2017. OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 11/13/2013.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 08-20-2013  
Citation: HSC 6.95 25504(b) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(b)  
Violation Description: Failure to include adequate emergency response procedures in the business plan for a release or threatened release.  
Violation Notes: Returned to compliance on 11/13/2013.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Violation Date: 06-21-2017  
Citation: HSC 6.67 25270.6(a)(1), 25270.6(a)(2) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(a)(1), 25270.6(a)(2)  
Violation Description: Failure to submit a tank facility statement on or before January 1 annually unless a current Business Plan has been submitted.  
Violation Notes: Returned to compliance on 07/17/2017.  
Violation Division: Sacramento County Env Management Department  
Violation Program: APSA  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-21-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-21-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: AT00 G OBSERVATION: The facility does not have a current permit for aboveground petroleum storage. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed aboveground petroleum storage permit and maintain that permit as active as long as the facility is in operation. AT02 G OBSERVATION: Failure to complete and electronically submit a Hazardous Materials Business Plan (HMBP) or failure to complete an HMBP annual review/certification. CORRECTIVE ACTION: Within 30 days, submit or review/certify the HMBP electronically in this department's e-Reporting Portal or in the California Environmental Reporting System. AT03 G OBSERVATION: Failure to prepare and implement an SPCC Plan. CORRECTIVE ACTION: See AT04 or AT05 below for instructions. AT04 G OBSERVATION: Tier I Facility does not have an SPCC Plan. CORRECTIVE ACTION: Within 30 days, prepare, submit, and implement either an SPCC Plan or Tier I SPCC Template. May be either [Truncated]  
Eval Division: Sacramento County Env Management Department  
Eval Program: APSA  
Eval Source: CERS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Eval General Type: Other/Unknown  
Eval Date: 08-21-2013  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-21-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 08-21-2013  
Violations Found: No  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-15-2017  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-20-2013  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-20-2013  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:  
Site ID: 392620  
Site Name: FERRELL GAS LP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-31-2013  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 392620  
Site Name: FERRELL GAS LP  
Site Address: 9765 DINO DR  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 12-31-2013  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

**Affiliation:**

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: JEFF STICLARU  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 9765 DINO DR  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: JEFF STICLARU

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FERRELL GAS (Continued)**

**U001612769**

Entity Title: JEFF STICLARU  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: FERRELLGAS ELK GROVE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (816) 792-1600

Affiliation Type Desc: Environmental Contact  
Entity Name: JEFF STICLARU  
Entity Title: Not reported  
Affiliation Address: 9765 DINO DR  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: FERRELLGAS PARTNERS LP  
Entity Title: Not reported  
Affiliation Address: ONE LIBERTY PLAZA  
Affiliation City: LIBERTY  
Affiliation State: MO  
Affiliation Country: United States  
Affiliation Zip: 64068  
Affiliation Phone: (816) 792-1600

Affiliation Type Desc: Parent Corporation  
Entity Name: FERRELL GAS LP  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: FERRELLGAS PARTNERS LP  
Entity Title: Not reported  
Affiliation Address: ONE LIBERTY PLAZA  
Affiliation City: LIBERTY  
Affiliation State: MO  
Affiliation Country: United States  
Affiliation Zip: 646068  
Affiliation Phone: (816) 792-1600

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**L74**  
**North**  
**1/4-1/2**  
**0.385 mi.**  
**2035 ft.**

**FERRELL GAS**  
**9765 DINO DRIVE**  
**ELK GROVE, CA 95624**

**Site 3 of 3 in cluster L**

**LUST** **S106567242**  
**CERS** **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**LUST REG 5:**  
 Name: FERRELL GAS  
 Address: 9765 DINO DRIVE  
 City: ELK GROVE  
 Region: 5  
 Status: Leak being confirmed  
 Case Number: 341402  
 Case Type: Undefined  
 Substance: HYDROCARBONS  
 Staff Initials: VJF  
 Lead Agency: Local  
 Program: LUST  
 MTBE Code: N/A

**CERS:**  
 Name: FERRELL GAS  
 Address: 9765 DINO DRIVE  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 199072  
 CERS ID: T0606720608  
 CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**  
 Affiliation Type Desc: Local Agency Caseworker  
 Entity Name: DAVID VON ASPERN - SACRAMENTO COUNTY LOP  
 Entity Title: Not reported  
 Affiliation Address: 10590 ARMSTRONG AVENUE, SUITE A  
 Affiliation City: MATHER  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
 Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
 Entity Title: Not reported  
 Affiliation Address: 11020 SUN CENTER DRIVE #200  
 Affiliation City: RANCHO CORDOVA  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**M75**  
**NNE**  
**1/4-1/2**  
**0.409 mi.**  
**2161 ft.**

**RESIDENCE**  
**9800 WATERMAN**  
**ELK GROVE, CA**  
**Site 1 of 2 in cluster M**

**RGA LUST** **S114676098**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**56 ft.**

- Relative:** RGA LUST:  
**Higher** Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2012 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2011 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2010 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2009 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2008 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2007 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2006 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2005 RESIDENCE 9800 WATERMAN  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
State: ELK GROVE  
2003 RESIDENCE 9800 WATERMAN

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**M76**      **RESIDENCE**  
**NNE**      **9800 WATERMAN**  
**1/4-1/2**    **ELK GROVE, CA 95624**  
**0.409 mi.**  
**2161 ft.**    **Site 2 of 2 in cluster M**

**LUST**    **S105174022**  
**Sacramento Co. CS**    **N/A**  
**Notify 65**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**56 ft.**

**LUST:**  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606791922](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606791922)  
Global Id: T0606791922  
Latitude: 38.407002  
Longitude: -121.35323  
Status: Completed - Case Closed  
Status Date: 04/29/2003  
Case Worker: Not reported  
RB Case Number: 341354  
Local Agency: Not reported  
File Location: Local Agency  
Local Case Number: F589  
Potential Media Affect: Aquifer used for drinking water supply, Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**LUST:**  
Global Id: T0606791922  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**  
Global Id: T0606791922  
Action Type: Other  
Date: 06/22/2001  
Action: Leak Discovery  
  
Global Id: T0606791922  
Action Type: REMEDIATION  
Date: 02/28/2003  
Action: Excavation  
  
Global Id: T0606791922  
Action Type: ENFORCEMENT  
Date: 06/21/2001  
Action: Notification - Proposition 65  
  
Global Id: T0606791922  
Action Type: Other  
Date: 01/02/1965  
Action: Leak Reported  
  
Global Id: T0606791922

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

RESIDENCE (Continued)

S105174022

Action Type: ENFORCEMENT  
Date: 07/30/2001  
Action: Notice of Responsibility

LUST:

Global Id: T0606791922  
Status: Open - Case Begin Date  
Status Date: 06/21/2001

Global Id: T0606791922  
Status: Completed - Case Closed  
Status Date: 04/29/2003

LUST REG 5:

Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 341354  
Case Type: A, S  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

Sacramento Co. CS:

Name: RESIDENCE  
Address: 9800 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
State Site Number: F589  
Lead Staff: Leibold, R.  
Lead Agency: Not reported  
Remedial Action Taken: NO  
Substance: Not reported  
Date Reported: Not reported  
Facility Id: RO0001466  
Case Type: Soil only  
Case Closed: Y  
**Date Closed: 4/4/2004**  
**Case Type: Soil only affected**  
**Substance: Not reported**

NOTIFY 65:

Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported  
Issue Date: Not reported  
Incident Description: Not reported



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RESIDENCE (Continued)**

**S105174022**

**CERS:**

Name: RESIDENCE  
 Address: 9800 WATERMAN  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 216195  
 CERS ID: T0606791922  
 CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
 Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
 Entity Title: Not reported  
 Affiliation Address: 11020 SUN CENTER DRIVE #200  
 Affiliation City: RANCHO CORDOVA  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

**N77**      **WORLD ASPHALT COMPANY**  
**South**    **10144 WATERMAN RD**  
**1/4-1/2**    **ELK GROVE, CA 95624**  
**0.422 mi.**  
**2227 ft.**    **Site 1 of 3 in cluster N**  
  
**Relative:**  
**Higher**  
  
**Actual:**  
**52 ft.**

**LUST**    **1000591153**  
**Sacramento Co. CS**    **N/A**  
**CERS HAZ WASTE**  
**SWEEPS UST**  
**HIST UST**  
**CERS TANKS**  
**CA FID UST**  
**CHMIRS**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**WDS**  
**CIWQS**  
**CERS**

**LUST:**

Name: WORLD ASPHALT  
 Address: 10144 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606701093](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606701093)  
 Global Id: T0606701093  
 Latitude: 38.389574  
 Longitude: -121.355077  
 Status: Completed - Case Closed  
 Status Date: 09/09/1999  
 Case Worker: DWB  
 RB Case Number: 341269  
 Local Agency: SACRAMENTO COUNTY LOP  
 File Location: Not reported  
 Local Case Number: D591/RO 1330  
 Potential Media Affect: Under Investigation  
 Potential Contaminants of Concern: Stoddard solvent / Mineral Spruits / Distillates  
 Site History: Case is closed

**LUST:**

Global Id: T0606701093  
 Contact Type: Local Agency Caseworker

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Contact Name: DANA BOOTH  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 8475 JACKSON ROAD, SUITE 240  
City: SACRAMENTO  
Email: boothd@saccounty.net  
Phone Number: Not reported

Global Id: T0606701093  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**

Global Id: T0606701093  
Action Type: Other  
Date: 09/09/1999  
Action: Leak Discovery

Global Id: T0606701093  
Action Type: RESPONSE  
Date: 02/26/2002  
Action: Site Assessment Report

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 09/09/1999  
Action: Closure/No Further Action Letter

Global Id: T0606701093  
Action Type: Other  
Date: 01/02/1965  
Action: Leak Reported

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 09/21/1999  
Action: Other Report - #9/21/1999

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 11/13/2001  
Action: Staff Letter - #6/9/1999

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 11/07/2001  
Action: Closure/No Further Action Letter - #11/7/2001

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 04/05/2002  
Action: Closure/No Further Action Letter

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

LUST:

Global Id: T0606701093  
Status: Completed - Case Closed  
Status Date: 09/09/1999

Global Id: T0606701093  
Status: Open - Case Begin Date  
Status Date: 09/09/1999

Global Id: T0606701093  
Status: Open - Reopen Case  
Status Date: 09/09/1999

LUST REG 5:

Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Region: 5  
Status: No Action  
Case Number: 341269  
Case Type: Undefined  
Substance: STODDARD SOLVNT  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

Sacramento Co. CS:

Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
State Site Number: D591  
Lead Staff: Booth, D.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Mineral Spirits  
Date Reported: 6/9/1999  
Facility Id: RO0001330  
Case Type: Soil only  
Case Closed: Y  
**Date Closed: Not reported**  
**Case Type: Soil only affected**  
**Substance: Mineral Spirits**

CERS HAZ WASTE:

Name: HENRY'S PROPERTY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 517749  
CERS ID: 10772005  
CERS Description: Hazardous Waste Generator

SWEEPS UST:

Name: WORLD ASPHALT COMPANY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Address: 10144 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 14310  
Number: 9  
Board Of Equalization: 44-019005  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 34-000-014310-000001  
Tank Status: A  
Capacity: 12000  
Active Date: 09-12-88  
Tank Use: UNKNOWN  
STG: P  
Content: Not reported  
Number Of Tanks: 3

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 14310  
Number: 9  
Board Of Equalization: 44-019005  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 34-000-014310-000002  
Tank Status: A  
Capacity: 5000  
Active Date: 09-12-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN  
Number Of Tanks: Not reported

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 14310  
Number: 9  
Board Of Equalization: 44-019005  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 34-000-014310-000003  
Tank Status: A  
Capacity: 7500  
Active Date: 09-12-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Number Of Tanks: Not reported

**HIST UST:**

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
File Number: 00029641  
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00029641.pdf>  
Region: STATE  
Facility ID: 00000014310  
Facility Type: Other  
Other Type: MANUFACTURING PLANT  
Contact Name: NORMAN PUGH  
Telephone: 9166852000  
Owner Name: WORLD ASPHALT COMPANY  
Owner Address: 10144 WATERMAN ROAD  
Owner City,St,Zip: ELK GROVE, CA 95624  
Total Tanks: 0003

Tank Num: 001  
Container Num: 1  
Year Installed: 1976  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Container Construction Thickness: 3/16  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 2  
Year Installed: 1976  
Tank Capacity: 00005000  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Container Construction Thickness: 3/16  
Leak Detection: None

Tank Num: 003  
Container Num: 3  
Year Installed: 1976  
Tank Capacity: 00007500  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Container Construction Thickness: 3/16  
Leak Detection: None

[Click here for Geo Tracker PDF:](#)

**CERS TANKS:**

Name: HENRY'S PROPERTY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 517749  
CERS ID: 10772005  
CERS Description: Aboveground Petroleum Storage

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

CA FID UST:

Facility ID: 34006904  
Regulated By: UTNKA  
Regulated ID: 00014310  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 9166852000  
Mail To: Not reported  
Mailing Address: 10144 WATERMAN RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: ELK GROVE 95624  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

CHMIRS:

Name: Not reported  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
OES Incident Number: 9-0670  
OES notification: 02/12/1999  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agncy Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported  
Others Number Of Decontaminated: Not reported  
Others Number Of Injuries: Not reported  
Others Number Of Fatalities: Not reported  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA DOT PUC/ICC Number: Not reported  
Company Name: Not reported  
Reporting Officer Name/ID: Not reported  
Report Date: Not reported  
Facility Telephone: Not reported  
Waterway Involved: No  
Waterway: Not reported  
Spill Site: Not reported  
Cleanup By: Co. HazMat

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	1999
Agency:	Sacramento FD
Incident Date:	2/11/1999 12:00:00 AM
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Yes
Site Type:	Merchant/Business
E Date:	Not reported
Substance:	Burning Ashland mineral spirits 7.5
Gallons:	300
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Only contamination was air contamination, no ground contamination, foamed with standard foam creating vapor barrier, tank inspected for leakage, none found.

**HIST CORTESE:**

edr_fname:	world asphalt
edr_fadd1:	10144 WATERMAN
City,State,Zip:	ELK GROVE, CA 95624
Region:	CORTESE
Facility County Code:	34
Reg By:	LTNKA
Reg Id:	341269

**Sacramento Co. ML:**

Name:	RIVER CITY WASTE RECYCLERS
Address:	10144 WATERMAN RD
City,State,Zip:	ELK GROVE, CA 95624
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	I
Billing Codes UST:	I
WG Bill Code:	I

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**WDS:**

Name: HENRY COMPANYWORLD ASPHALT DI  
Address: 10144 WATERMAN ROAD  
City: ELK GROVE  
Facility ID: 5S 341006482  
Facility Type: Not reported  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 0  
Facility Telephone: Not reported  
Facility Contact: Not reported  
Agency Name: HENRY COMPANY  
Agency Address: Not reported  
Agency City,St,Zip: 0  
Agency Contact: Not reported  
Agency Telephone: Not reported  
Agency Type: Not reported  
SIC Code: 0  
SIC Code 2: Not reported  
Primary Waste Type: Not reported  
Primary Waste: Not reported  
Waste Type2: Not reported  
Waste2: Not reported  
Primary Waste Type: Not reported  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: Not reported  
POTW: Not reported  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Name: RIVER CITY WASTE RECYCLERS  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Agency: River City Waste Recyclers LLC  
Agency Address: 8940 Elder Creek Rd, Sacramento, CA 95829  
Place/Project Type: Industrial - Metals Service Centers and Offices  
SIC/NAICS: 5051  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Terminated  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34I023684  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 06/20/2012  
Termination Date: 10/08/2013  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: Not reported  
Longitude: Not reported

CERS:

Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 224331  
CERS ID: T0606701093  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: DANA BOOTH - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 8475 JACKSON ROAD, SUITE 240  
Affiliation City: SACRAMENTO  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: HENRY'S PROPERTY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 517749  
CERS ID: 10772005  
CERS Description: Chemical Storage Facilities

**Affiliation:**

Affiliation Type Desc: Parent Corporation  
Entity Name: Asphalt Terminals LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: June Coover  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: June Coover  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**N78**  
South  
1/4-1/2  
0.422 mi.  
2227 ft.

**WORLD ASPHALT**  
**10144 WATERMAN RD**  
**ELK GROVE, CA**

**RGA LUST** **S114723135**  
**N/A**

**Site 2 of 3 in cluster N**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**Relative:** RGA LUST:  
**Higher** Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2012 WORLD ASPHALT 10144 WATERMAN RD  
Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2011 WORLD ASPHALT 10144 WATERMAN RD  
Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2010 WORLD ASPHALT 10144 WATERMAN RD  
Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2009 WORLD ASPHALT 10144 WATERMAN RD  
Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2000 WORLD ASPHALT 10144 WATERMAN RD

**N79**  
South  
1/4-1/2  
0.422 mi.  
2227 ft.

**WORLD AHPHALT**  
**10144 WATERMAN RD**  
**ELK GROVE, CA**

**RGA LUST** **S114723133**  
**N/A**

**Site 3 of 3 in cluster N**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**Relative:** RGA LUST:  
**Higher** Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2008 WORLD AHPHALT 10144 WATERMAN RD  
Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2007 WORLD AHPHALT 10144 WATERMAN RD  
Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2006 WORLD AHPHALT 10144 WATERMAN RD  
Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2005 WORLD AHPHALT 10144 WATERMAN RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD AHPHALT (Continued)**

**S114723133**

Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2003 WORLD AHPHALT 10144 WATERMAN RD  
Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2002 WORLD AHPHALT 10144 WATERMAN RD  
Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2001 WORLD AHPHALT 10144 WATERMAN RD

**80**  
**WNW**  
**1/2-1**  
**0.531 mi.**  
**2804 ft.**

**HIGH SCHOOL/MIDDLE SCHOOL NO. 7**  
**CALVINE ROAD/AUBERRY DRIVE**  
**ELK GROVE, CA 95624**

**ENVIROSTOR** **S118756773**  
**SCH** **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**42 ft.**

ENVIROSTOR:  
Name: HIGH SCHOOL/MIDDLE SCHOOL NO. 7  
Address: CALVINE ROAD/AUBERRY DRIVE  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 34010015  
Status: No Action Required  
Status Date: 08/11/2000  
Site Code: 104150  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 95  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Assembly: 09  
Senate: 06  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 38.40076  
Longitude: -121.3674  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-MID/HIGH SCH #7  
Alias Type: Alternate Name  
Alias Name: HIGH SCHOOL/MIDDLE SCHOOL #7  
Alias Type: Alternate Name

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HIGH SCHOOL/MIDDLE SCHOOL NO. 7 (Continued)**

**S118756773**

Alias Name: 104150  
Alias Type: Project Code (Site Code)  
Alias Name: 34010015  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 08/11/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 01/29/2002  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 08/10/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:

Name: HIGH SCHOOL/MIDDLE SCHOOL NO. 7  
Address: CALVINE ROAD/AUBERRY DRIVE  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 34010015  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 95  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104150  
Assembly: 09  
Senate: 06  
Special Program Status: Not reported  
Status: No Action Required  
Status Date: 08/11/2000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HIGH SCHOOL/MIDDLE SCHOOL NO. 7 (Continued)**

**S118756773**

Restricted Use: NO  
Funding: School District  
Latitude: 38.40076  
Longitude: -121.3674  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED, No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-MID/HIGH SCH #7  
Alias Type: Alternate Name  
Alias Name: HIGH SCHOOL/MIDDLE SCHOOL #7  
Alias Type: Alternate Name  
Alias Name: 104150  
Alias Type: Project Code (Site Code)  
Alias Name: 34010015  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 08/11/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 01/29/2002  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 08/10/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**O81**            **CRUMP RESIDENCE**  
**NNW**           **9674 KENT**  
**1/2-1**           **ELK GROVE, CA 95624**  
**0.671 mi.**  
**3545 ft.**        **Site 1 of 2 in cluster O**

**LUST**    **S101578213**  
**Sacramento Co. CS**    **N/A**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**LUST:**  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700860](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700860)  
Global Id: T0606700860  
Latitude: 38.406326  
Longitude: -121.359861  
Status: Completed - Case Closed  
Status Date: 03/12/1998  
Case Worker: Not reported  
RB Case Number: 341032  
Local Agency: Not reported  
File Location: Not reported  
Local Case Number: C563  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**LUST:**  
Global Id: T0606700860  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**  
Global Id: T0606700860  
Action Type: Other  
Date: 03/28/1995  
Action: Leak Discovery

Global Id: T0606700860  
Action Type: Other  
Date: 01/02/1965  
Action: Leak Reported

**LUST:**  
Global Id: T0606700860  
Status: Open - Case Begin Date  
Status Date: 03/28/1995

Global Id: T0606700860  
Status: Open - Site Assessment  
Status Date: 03/28/1995

Global Id: T0606700860  
Status: Completed - Case Closed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRUMP RESIDENCE (Continued)**

**S101578213**

Status Date: 03/12/1998

LUST REG 5:

Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 341032  
Case Type: Soil only  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

Sacramento Co. CS:

Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City,State,Zip: ELK GROVE, CA  
State Site Number: C563  
Lead Staff: Marcus, B.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Automotive(motor gasoline and additives)  
Date Reported: 3/28/1995  
Facility Id: RO0000683  
Case Type: Soil only  
Case Closed: Y  
**Date Closed: 3/12/1998**  
**Case Type: Soil only affected**  
**Substance: Automotive(motor gasoline and additives)**

HIST CORTESE:

edr\_fname: CRUMP RESIDENCE  
edr\_fadd1: 9674 KENT  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 341032

Sacramento Co. ML:

Name: CRUMP PROPERTY  
Address: 9674 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: 00095011  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: Not reported  
Billing Codes BP: Disclaimer  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 50  
Food Bill Code: 50



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRUMP RESIDENCE (Continued)**

**S101578213**

CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 203216  
CERS ID: T0606700860  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**O82**  
**NNW**  
**1/2-1**  
**0.671 mi.**  
**3545 ft.**

**CRUMP RESIDENCE**  
**9674 KENT ST**  
**ELK GROVE, CA**  
**Site 2 of 2 in cluster O**

**RGA LUST** **S114608108**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**RGA LUST:**  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2012 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2011 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2010 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CRUMP RESIDENCE (Continued)**

**S114608108**

City: ELK GROVE  
State: ELK GROVE  
2009 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2008 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2007 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2006 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2005 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2003 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2002 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2001 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
2000 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
1998 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE  
1997 CRUMP RESIDENCE 9674 KENT ST  
Name: CRUMP RESIDENCE  
Address: 9674 KENT ST  
City: ELK GROVE  
State: ELK GROVE

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CRUMP RESIDENCE (Continued)**

**S114608108**

1996 CRUMP RESIDENCE 9674 KENT ST  
 Name: CRUMP RESIDENCE  
 Address: 9674 KENT ST  
 City: ELK GROVE  
 State: ELK GROVE  
 1995 CRUMP RESIDENCE 9674 KENT ST

**P83**  
**WNW**  
 1/2-1  
 0.799 mi.  
 4217 ft.

**EDNA BATEY ELEMENTARY**  
**BRADSHAW ROAD/ELK GROVE BOULEVARD**  
**ELK GROVE, CA 95624**

**ENVIROSTOR S118756780**  
**SCH N/A**

**Site 1 of 2 in cluster P**

**Relative:**  
**Lower**  
**Actual:**  
**44 ft.**

**ENVIROSTOR:**  
 Name: EDNA BATEY ELEMENTARY  
 Address: BRADSHAW ROAD/ELK GROVE BOULEVARD  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility ID: 34020001  
 Status: No Action Required  
 Status Date: 04/10/2000  
 Site Code: 104071  
 Site Type: School Investigation  
 Site Type Detailed: School  
 Acres: 10  
 NPL: NO  
 Regulatory Agencies: SMBRP  
 Lead Agency: SMBRP  
 Program Manager: Not reported  
 Supervisor: Mark Malinowski  
 Division Branch: Northern California Schools & Santa Susana  
 Assembly: 09  
 Senate: 06  
 Special Program: Not reported  
 Restricted Use: NO  
 Site Mgmt Req: NONE SPECIFIED  
 Funding: School District  
 Latitude: 38.39953  
 Longitude: -121.3734  
 APN: NONE SPECIFIED  
 Past Use: AGRICULTURAL - LIVESTOCK  
 Potential COC: NONE SPECIFIED No Contaminants found  
 Confirmed COC: NONE SPECIFIED  
 Potential Description: NMA  
 Alias Name: EDNA BATEY ELEMENTARY  
 Alias Type: Alternate Name  
 Alias Name: ELK GROVE USD  
 Alias Type: Alternate Name  
 Alias Name: ELK GROVE USD-EDNA BATEY ELEM/CDE  
 Alias Type: Alternate Name  
 Alias Name: 104071  
 Alias Type: Project Code (Site Code)  
 Alias Name: 34020001  
 Alias Type: Envirostor ID Number

**Completed Info:**  
 Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Phase 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EDNA BATEY ELEMENTARY (Continued)**

**S118756780**

Completed Date: 04/10/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 02/29/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 06/27/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:

Name: EDNA BATEY ELEMENTARY  
Address: BRADSHAW ROAD/ELK GROVE BOULEVARD  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 34020001  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 10  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104071  
Assembly: 09  
Senate: 06  
Special Program Status: Not reported  
Status: No Action Required  
Status Date: 04/10/2000  
Restricted Use: NO  
Funding: School District  
Latitude: 38.39953  
Longitude: -121.3734  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - LIVESTOCK  
Potential COC: NONE SPECIFIED, No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EDNA BATEY ELEMENTARY (Continued)**

**S118756780**

Alias Name: EDNA BATEY ELEMENTARY  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-EDNA BATEY ELEM/CDE  
Alias Type: Alternate Name  
Alias Name: 104071  
Alias Type: Project Code (Site Code)  
Alias Name: 34020001  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 04/10/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 02/29/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 06/27/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**P84**  
**WNW**  
**1/2-1**  
**0.799 mi.**  
**4217 ft.**

**ELEMENTARY SCHOOL NO. 31**  
**BOTHWELL DRIVE/VINTAGE PARK DRIVE**  
**ELK GROVE, CA 95758**

**ENVIROSTOR S118756768**  
**SCH N/A**

**Site 2 of 2 in cluster P**

**Relative:**  
**Lower**  
**Actual:**  
**44 ft.**

ENVIROSTOR:  
Name: ELEMENTARY SCHOOL NO. 31  
Address: BOTHWELL DRIVE/VINTAGE PARK DRIVE  
City,State,Zip: ELK GROVE, CA 95758  
Facility ID: 34010005  
Status: No Action Required  
Status Date: 02/29/2000  
Site Code: 104072  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 10  
NPL: NO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELEMENTARY SCHOOL NO. 31 (Continued)**

**S118756768**

Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Assembly: 09  
Senate: 06  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 38.39953  
Longitude: -121.3734  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: ELEMENTARY SCHOOL NO. 31  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-ELEM #31/CDE  
Alias Type: Alternate Name  
Alias Name: 104072  
Alias Type: Project Code (Site Code)  
Alias Name: 34010005  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 02/29/2000  
Comments: PHSE1 - Pursuant to an agreement between the Department of Toxic substances Control (DTSC) and the California Department of Education, DTSC's Site Mitigation Program completed a review of a Phase I Environmental Assessment and has determined that No Action is necessary.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 02/29/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 06/29/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELEMENTARY SCHOOL NO. 31 (Continued)**

**S118756768**

Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:

Name: ELEMENTARY SCHOOL NO. 31  
Address: BOTHWELL DRIVE/VINTAGE PARK DRIVE  
City,State,Zip: ELK GROVE, CA 95758  
Facility ID: 34010005  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 10  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Site Code: 104072  
Assembly: 09  
Senate: 06  
Special Program Status: Not reported  
Status: No Action Required  
Status Date: 02/29/2000  
Restricted Use: NO  
Funding: School District  
Latitude: 38.39953  
Longitude: -121.3734  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED, No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: ELEMENTARY SCHOOL NO. 31  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-ELEM #31/CDE  
Alias Type: Alternate Name  
Alias Name: 104072  
Alias Type: Project Code (Site Code)  
Alias Name: 34010005  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 02/29/2000  
Comments: PHSE1 - Pursuant to an agreement between the Department of Toxic substances Control (DTSC) and the California Department of Education, DTSC's Site Mitigation Program completed a review of a Phase I Environmental Assessment and has determined that No Action is necessary.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ELEMENTARY SCHOOL NO. 31 (Continued)**

**S118756768**

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Site Inspections/Visit (Non LUR)  
 Completed Date: 02/29/2000  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Cost Recovery Closeout Memo  
 Completed Date: 06/29/2000  
 Comments: Not reported

Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported

**Q85**  
**North**  
**1/2-1**  
**0.847 mi.**  
**4472 ft.**

**ARCO #5696**  
**9215 ELK GROVE BLVD**  
**ELK GROVE, CA 95624**  
**Site 1 of 2 in cluster Q**

**LUST** **S101308003**  
**HIST CORTESE** **N/A**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**LUST:**  
 Name: ARCO #5696  
 Address: 9215 ELK GROVE BLVD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700579](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700579)  
 Global Id: T0606700579  
 Latitude: 38.4090984  
 Longitude: -121.3573529  
 Status: Completed - Case Closed  
 Status Date: 04/25/1996  
 Case Worker: Not reported  
 RB Case Number: 340678  
 Local Agency: Not reported  
 File Location: Not reported  
 Local Case Number: C529  
 Potential Media Affect: Soil  
 Potential Contaminants of Concern: Gasoline  
 Site History: Not reported

**LUST:**  
 Global Id: T0606700579  
 Contact Type: Regional Board Caseworker  
 Contact Name: VERA FISCHER  
 Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
 Address: 11020 SUN CENTER DRIVE #200  
 City: RANCHO CORDOVA  
 Email: vera.fischer@waterboards.ca.gov  
 Phone Number: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #5696 (Continued)**

**S101308003**

LUST:

Global Id: T0606700579  
Action Type: Other  
Date: 12/03/1992  
Action: Leak Reported

Global Id: T0606700579  
Action Type: ENFORCEMENT  
Date: 02/17/1993  
Action: \* No Action

Global Id: T0606700579  
Action Type: ENFORCEMENT  
Date: 02/17/1993  
Action: \* Historical Enforcement

Global Id: T0606700579  
Action Type: ENFORCEMENT  
Date: 01/04/2006  
Action: Technical Correspondence / Assistance / Other

LUST:

Global Id: T0606700579  
Status: Open - Case Begin Date  
Status Date: 11/13/1992

Global Id: T0606700579  
Status: Open - Site Assessment  
Status Date: 11/13/1992

Global Id: T0606700579  
Status: Open - Remediation  
Status Date: 01/27/1993

Global Id: T0606700579  
Status: Completed - Case Closed  
Status Date: 04/25/1996

LUST REG 5:

Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340678  
Case Type: Soil only  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

HIST CORTESE:

edr\_fname: ARCO #5696

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #5696 (Continued)**

**S101308003**

edr\_fadd1: 9215 ELK GROVE  
City,State,Zip: ELK GROVE, CA  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340678

**CERS:**

Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 253066  
CERS ID: T0606700579  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**Q86**  
**North**  
**1/2-1**  
**0.847 mi.**  
**4472 ft.**

**ARCO #5696**  
**9215 ELK GROVE BLVD**  
**ELK GROVE, CA**  
**Site 2 of 2 in cluster Q**

**RGA LUST S114574453**  
**N/A**

**Relative:**  
**Higher**

**RGA LUST:**

**Actual:**  
**51 ft.**

Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2012 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2011 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2010 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2009 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ARCO #5696 (Continued)

S114574453

2008 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2007 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2006 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2005 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2003 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2002 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2001 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2000 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1998 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1997 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1996 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1995 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO #5696 (Continued)**

**S114574453**

Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1994 ARCO #5696 9215 ELK GROVE BLVD  
Name: ARCO #5696  
Address: 9215 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1993 ARCO #5696 9215 ELK GROVE BLVD

**R87**  
**North**  
**1/2-1**  
**0.852 mi.**  
**4496 ft.**

**HARCROW PROPERTY**  
**9251 ELK GROVE BLVD**  
**ELK GROVE, CA**  
**Site 1 of 2 in cluster R**

**RGA LUST S114630743**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**RGALUST:**  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2012 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2011 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2010 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2009 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2008 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2007 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2006 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2005 HARCROW PROPERTY 9251 ELK GROVE BLVD  
Name: HARCROW PROPERTY

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**HARCROW PROPERTY (Continued)**

**S114630743**

Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 2003 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 2002 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 2001 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 2000 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 1998 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 1997 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 1996 HARCROW PROPERTY 9251 ELK GROVE BLVD  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 1995 HARCROW PROPERTY 9251 ELK GROVE BLVD

**R88**  
**North**  
**1/2-1**  
**0.852 mi.**  
**4496 ft.**

**HARCROW PROPERTY**  
**9251 ELK GROVE**  
**ELK GROVE, CA 95624**  
**Site 2 of 2 in cluster R**

**LUST**  
**Sacramento Co. CS**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**CERS**

**S104580224**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**LUST:**  
 Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700774](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700774)  
 Global Id: T0606700774  
 Latitude: 38.4090652  
 Longitude: -121.3553136  
 Status: Completed - Case Closed  
 Status Date: 11/28/1994

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HARCROW PROPERTY (Continued)**

**S104580224**

Case Worker: DWB  
RB Case Number: 340935  
Local Agency: SACRAMENTO COUNTY LOP  
File Location: Not reported  
Local Case Number: A332  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

LUST:

Global Id: T0606700774  
Contact Type: Local Agency Caseworker  
Contact Name: DANA BOOTH  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 8475 JACKSON ROAD, SUITE 240  
City: SACRAMENTO  
Email: boothd@sacounty.net  
Phone Number: Not reported

Global Id: T0606700774  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606700774  
Action Type: Other  
Date: 05/03/1994  
Action: Leak Discovery

Global Id: T0606700774  
Action Type: Other  
Date: 05/24/1994  
Action: Leak Reported

LUST:

Global Id: T0606700774  
Status: Open - Case Begin Date  
Status Date: 05/03/1994

Global Id: T0606700774  
Status: Completed - Case Closed  
Status Date: 11/28/1994

LUST REG 5:

Name: HARCROW PROPERTY  
Address: 9251 ELK GROVE BLVD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340935

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HARCROW PROPERTY (Continued)**

**S104580224**

Case Type: Soil only  
Substance: DIESEL  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

Sacramento Co. CS:

Name: ELK GROVE EQUIPMENT  
Address: 9251 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA  
State Site Number: A322  
Lead Staff: Booth, D.  
Lead Agency: HM  
Remedial Action Taken: YE, S  
Substance: Diesel  
Date Reported: 5/19/1994  
Facility Id: RO0000377  
Case Type: Soil only  
Case Closed: Y  
**Date Closed: 12/2/1994**  
**Case Type: Soil only affected**  
**Substance: Diesel**

HIST CORTESE:

edr\_fname: HARCROW PROPERTY  
edr\_fadd1: 9251 ELK GROVE  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340935

Sacramento Co. ML:

Name: ANY-EVENT PARTY RENTALS  
Address: 9251 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**HARCROW PROPERTY (Continued)**

**S104580224**

AST Bill Code: Not reported  
 CALARP Bill Code: Not reported

**CERS:**

Name: HARCROW PROPERTY  
 Address: 9251 ELK GROVE BLVD  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 217222  
 CERS ID: T0606700774  
 CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Local Agency Caseworker  
 Entity Name: DANA BOOTH - SACRAMENTO COUNTY LOP  
 Entity Title: Not reported  
 Affiliation Address: 8475 JACKSON ROAD, SUITE 240  
 Affiliation City: SACRAMENTO  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
 Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
 Entity Title: Not reported  
 Affiliation Address: 11020 SUN CENTER DRIVE #200  
 Affiliation City: RANCHO CORDOVA  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

**S89**  
**NNW**  
 1/2-1  
 0.898 mi.  
 4739 ft.

**ELK GROVE PAINT AND WALLP**  
**9097 ELK GROVE**  
**ELK GROVE, CA 95624**  
**Site 1 of 2 in cluster S**

**LUST** **S102313985**  
**Sacramento Co. CS** **N/A**  
**HIST CORTESE**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

**LUST:**  
 Name: ELK GROVE PAINT AND WALLPAPER  
 Address: 9097 ELK GROVE BLVD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606701004](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606701004)  
 Global Id: T0606701004  
 Latitude: 38.4090994  
 Longitude: -121.362498  
 Status: Completed - Case Closed  
 Status Date: 12/29/2010  
 Case Worker: CLA  
 RB Case Number: 341179  
 Local Agency: SACRAMENTO COUNTY LOP  
 File Location: Local Agency  
 Local Case Number: D509  
 Potential Media Affect: Aquifer used for drinking water supply  
 Potential Contaminants of Concern: Gasoline



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE PAINT AND WALLP (Continued)**

**S102313985**

Site History: Gasoline tanks removed in 1998. Soil and groundwater contamination confirmed by site investigation. Site assessment completed through drilling of soil borings and groundwater monitoring well installation. GEOCON remediated site using soil vapor extraction. Groundwater contaminant concentrations declined significantly in response to remedial efforts. GEOCON performed a human-health-risk assessment to evaluate the risk posed to building occupants by residual contamination. Acceptable risk parameters were not exceeded. On July 19, 2010 sent email to CVRWQCB asking for closure concurrence. Not reported

LUST:

Global Id: T0606701004  
Contact Type: Local Agency Caseworker  
Contact Name: CHRISTINE ABAD  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 10590 Armstrong Avenue, Suite A  
City: MATHER  
Email: abadc@saccounty.net  
Phone Number: 9168769830

Global Id: T0606701004  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 05/08/2006  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 07/16/2010  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 06/11/2010  
Action: File review

Global Id: T0606701004  
Action Type: Other  
Date: 07/10/1997  
Action: Leak Discovery

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 11/30/2006  
Action: File review

Global Id: T0606701004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE PAINT AND WALLP (Continued)**

**S102313985**

Action Type:	ENFORCEMENT
Date:	02/21/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	07/19/2010
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	12/29/2010
Action:	Closure/No Further Action Letter
Global Id:	T0606701004
Action Type:	REMEDIATION
Date:	04/19/2004
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0606701004
Action Type:	REMEDIATION
Date:	04/05/2006
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	01/24/2006
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	11/14/2005
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	11/02/2007
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	02/20/2004
Action:	File review
Global Id:	T0606701004
Action Type:	Other
Date:	03/16/1998
Action:	Leak Reported
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	07/26/2007
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	08/26/2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE PAINT AND WALLP (Continued)**

**S102313985**

Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 02/04/2005  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 05/19/2005  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 02/04/2008  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 06/08/2004  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 05/21/2004  
Action: \* Verbal Communication

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 05/02/2005  
Action: \* Verbal Communication

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 01/30/2008  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 05/01/2008  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 08/15/2005  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 08/13/2008  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 07/29/2008  
Action: File review

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE PAINT AND WALLP (Continued)**

**S102313985**

Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	03/18/1998
Action:	Notice of Responsibility
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	11/25/2008
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	01/27/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	01/15/2009
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	12/01/2005
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	08/02/2006
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	02/25/2004
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	11/16/2004
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	07/12/2010
Action:	Clean Up Fund - Case Closure Review Summary Report (RSR)
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	01/22/2007
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT
Date:	02/27/2006
Action:	File review
Global Id:	T0606701004
Action Type:	ENFORCEMENT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE PAINT AND WALLP (Continued)**

**S102313985**

Date: 03/28/2006  
Action: File review

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 06/25/2010  
Action: Preparation of Agenda Item

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 01/28/2011  
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0606701004  
Action Type: ENFORCEMENT  
Date: 05/09/2007  
Action: File review

**LUST:**

Global Id: T0606701004  
Status: Open - Case Begin Date  
Status Date: 06/11/1997

Global Id: T0606701004  
Status: Open - Site Assessment  
Status Date: 06/11/1997

Global Id: T0606701004  
Status: Open - Remediation  
Status Date: 03/24/2003

Global Id: T0606701004  
Status: Open - Remediation  
Status Date: 04/19/2004

Global Id: T0606701004  
Status: Completed - Case Closed  
Status Date: 12/29/2010

**LUST REG 5:**

Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
Region: 5  
Status: Remedial action (cleanup) Underway  
Case Number: 341179  
Case Type: Drinking Water Aquifer affected  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**Sacramento Co. CS:**

Name: ELK GROVE PAINT & WALLPAPER

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE PAINT AND WALLP (Continued)**

**S102313985**

Address: 9097 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA  
State Site Number: D509  
Lead Staff: Abad, C.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Automotive(motor gasoline and additives)  
Date Reported: 7/10/1997  
Facility Id: RO0000376  
Case Type: Other ground water affected  
Case Closed: Y  
**Date Closed: 12/29/2010**  
**Case Type: Other Groundwater affected (uses other than drinking water)**  
**Substance: Automotive(motor gasoline and additives)**

HIST CORTESE:  
edr\_fname: ELK GROVE PAINT AND WALLP  
edr\_fadd1: 9097 ELK GROVE  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 341179

CERS:  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 198402  
CERS ID: T0606701004  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:  
Affiliation Type Desc: Local Agency Caseworker  
Entity Name: CHRISTINE ABAD - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: MATHER  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: 9168769830

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

S90  
NNW  
1/2-1  
0.898 mi.  
4739 ft.

ELK GROVE PAINT AND WALLPAPER  
9097 ELK GROVE BLVD  
ELK GROVE, CA

RGA LUST S114614325  
N/A

Site 2 of 2 in cluster S

Relative:  
Higher  
Actual:  
51 ft.

RGA LUST:

Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2012 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2011 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2010 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2009 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2008 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2007 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2006 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2005 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2003 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2002 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
Name: ELK GROVE PAINT AND WALLPAPER  
Address: 9097 ELK GROVE BLVD

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ELK GROVE PAINT AND WALLPAPER (Continued)**

**S114614325**

City: ELK GROVE  
 State: ELK GROVE  
 Name: 2001 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
 Address: ELK GROVE PAINT AND WALLPAPER  
 9097 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2000 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
 Address: ELK GROVE PAINT AND WALLPAPER  
 9097 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 1998 ELK GROVE PAINT AND WALLPAPER 9097 ELK GROVE BLVD  
 Address: ELK GROVE PAINT AND WALLPAPER  
 9097 ELK GROVE BLVD

**T91**  
**NNW**  
**1/2-1**  
**0.921 mi.**  
**4864 ft.**

**HORNING PROPERTY**  
**9020 ELK GROVE BLVD**  
**ELK GROVE, CA**

**RGA LUST**

**S114633463**  
**N/A**

**Site 1 of 3 in cluster T**

**Relative:**  
**Lower**  
**Actual:**  
**47 ft.**

**RGALUST:**  
 Name: HORNING PROPERTY  
 Address: 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2012 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2011 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2010 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2009 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2008 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2007 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD  
 City: ELK GROVE  
 State: ELK GROVE  
 Name: 2006 HORNING PROPERTY 9020 ELK GROVE BLVD  
 Address: HORNING PROPERTY  
 9020 ELK GROVE BLVD



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HORNING PROPERTY (Continued)**

**S114633463**

City: ELK GROVE  
State: ELK GROVE  
2005 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2003 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2002 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2001 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2000 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1998 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1997 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1996 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1995 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1994 HORNING PROPERTY 9020 ELK GROVE BLVD  
Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1993 HORNING PROPERTY 9020 ELK GROVE BLVD



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HORNING PROPERTY (Continued)**

**S101300678**

Date: 08/13/1992  
Action: Leak Stopped

Global Id: T0606700546  
Action Type: REMEDIATION  
Date: 08/13/1992  
Action: Excavation

Global Id: T0606700546  
Action Type: REMEDIATION  
Date: 06/20/2005  
Action: Excavation

Global Id: T0606700546  
Action Type: ENFORCEMENT  
Date: 05/05/2005  
Action: Notice of Responsibility

Global Id: T0606700546  
Action Type: Other  
Date: 07/01/1992  
Action: Leak Reported

Global Id: T0606700546  
Action Type: ENFORCEMENT  
Date: 09/03/1992  
Action: Other Report - #9/3/1992

Global Id: T0606700546  
Action Type: ENFORCEMENT  
Date: 11/22/2005  
Action: Closure/No Further Action Letter

Global Id: T0606700546  
Action Type: Other  
Date: 01/15/1992  
Action: Leak Discovery

**LUST:**

Global Id: T0606700546  
Status: Open - Case Begin Date  
Status Date: 01/15/1992

Global Id: T0606700546  
Status: Open - Site Assessment  
Status Date: 01/15/1992

Global Id: T0606700546  
Status: Open - Remediation  
Status Date: 08/13/1992

Global Id: T0606700546  
Status: Open - Site Assessment  
Status Date: 08/13/1992

Global Id: T0606700546  
Status: Completed - Case Closed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HORNING PROPERTY (Continued)**

**S101300678**

Status Date: 11/22/2005  
  
Global Id: T0606700546  
Status: Open - Reopen Case  
Status Date: 03/22/2007  
  
Global Id: T0606700546  
Status: Completed - Case Closed  
Status Date: 08/03/2007

**LUST REG 5:**

Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340641  
Case Type: Undefined  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**Sacramento Co. CS:**

Name: PODESTA-DANIELS  
Address: 9020 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA  
State Site Number: C304  
Lead Staff: Langer, C.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Not reported  
Date Reported: Not reported  
Facility Id: RO0001587  
Case Type: Undefined  
Case Closed: Y  
**Date Closed: 3/26/2007**  
**Case Type: Undetermined affected**  
**Substance: Not reported**

**HIST CORTESE:**

edr\_fname: HORNING PROPERTY  
edr\_fadd1: 9020 ELK GROVE  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340641

**CERS:**

Name: HORNING PROPERTY  
Address: 9020 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HORNING PROPERTY (Continued)**

**S101300678**

Site ID: 234503  
CERS ID: T0606700546  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:  
Affiliation Type Desc: Local Agency Caseworker  
Entity Name: CHARLEY LANGER - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 10590 ARMSTRONG AVENUE, SUITE A  
Affiliation City: MATHER  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: 9168758474

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**T93  
NNW  
1/2-1  
0.943 mi.  
4977 ft.**

**ARCO  
9000 ELK GROVE BLVD  
ELK GROVE, CA  
Site 3 of 3 in cluster T**

**RGA LUST S114576898  
N/A**

**Relative:  
Lower  
Actual:  
47 ft.**

RGALUST:  
Name: ARCO  
Address: 9000 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1996 ARCO 9000 ELK GROVE BLVD

Name: ARCO  
Address: 9000 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1995 ARCO 9000 ELK GROVE BLVD

Name: ARCO  
Address: 9000 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1994 ARCO 9000 ELK GROVE BLVD

Name: ARCO  
Address: 9000 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1993 ARCO 9000 ELK GROVE BLVD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

EDR ID Number  
EPA ID Number

U94  
NNW  
1/2-1  
0.977 mi.  
5160 ft.

**UNOCAL SS #4829(CLOSED BY CO)**  
**8999 ELK GROVE BLVD**  
**ELK GROVE, CA**

**RGALUST S114713553**  
**N/A**

**Relative:**  
**Lower**  
**Actual:**  
**47 ft.**

**Site 1 of 4 in cluster U**  
RGALUST:  
Name: UNOCAL SS #4829(CLOSED BY CO)  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1993 UNOCAL SS #4829(CLOSED BY CO) 8999 ELK GROVE BLVD

U95  
NNW  
1/2-1  
0.977 mi.  
5160 ft.

**UNOCAL #4829**  
**8999 ELK GROVE BLVD**  
**ELK GROVE, CA**

**RGALUST S114711274**  
**N/A**

**Relative:**  
**Lower**  
**Actual:**  
**47 ft.**

**Site 2 of 4 in cluster U**  
RGALUST:  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2012 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2011 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2010 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2009 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2008 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2007 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2006 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2005 UNOCAL #4829 8999 ELK GROVE BLVD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNOCAL #4829 (Continued)**

**S114711274**

Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2003 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2002 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2001 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
2000 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1998 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1997 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1996 UNOCAL #4829 8999 ELK GROVE BLVD  
Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1995 UNOCAL #4829 8999 ELK GROVE BLVD

**U96**  
**NNW**  
**1/2-1**  
**0.977 mi.**  
**5160 ft.**

**UNOCAL SS #4829**  
**8999 ELK GROVE BLVD**  
**ELK GROVE, CA**  
**Site 3 of 4 in cluster U**

**RGA LUST S114713554**  
**N/A**

**Relative:**  
**Lower**  
**Actual:**  
**47 ft.**

**RGALUST:**  
Name: UNOCAL SS #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
State: ELK GROVE  
1994 UNOCAL SS #4829 8999 ELK GROVE BLVD

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**U97 UNOCAL #4829**  
**NNW 8999 ELK GROVE**  
**1/2-1 ELK GROVE, CA 95624**  
**0.977 mi.**  
**5160 ft. Site 4 of 4 in cluster U**

**LUST S103991785**  
**HIST CORTESE N/A**  
**CERS**

**Relative:**  
**Lower**  
**Actual:**  
**47 ft.**

**LUST:**  
 Name: UNOCAL #4829  
 Address: 8999 ELK GROVE BLVD  
 City,State,Zip: ELK GROVE, CA 95624  
 Lead Agency: SACRAMENTO COUNTY LOP  
 Case Type: LUST Cleanup Site  
 Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700425](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700425)  
 Global Id: T0606700425  
 Latitude: 38.409247  
 Longitude: -121.367403  
 Status: Completed - Case Closed  
 Status Date: 03/18/1991  
 Case Worker: Not reported  
 RB Case Number: 340507  
 Local Agency: Not reported  
 File Location: Not reported  
 Local Case Number: Not reported  
 Potential Media Affect: Soil  
 Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
 Site History: Not reported

**LUST:**  
 Global Id: T0606700425  
 Contact Type: Regional Board Caseworker  
 Contact Name: VERA FISCHER  
 Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
 Address: 11020 SUN CENTER DRIVE #200  
 City: RANCHO CORDOVA  
 Email: vera.fischer@waterboards.ca.gov  
 Phone Number: Not reported

**LUST:**  
 Global Id: T0606700425  
 Action Type: RESPONSE  
 Date: 01/23/1991  
 Action: Correspondence

Global Id: T0606700425  
 Action Type: ENFORCEMENT  
 Date: 03/18/1991  
 Action: Staff Letter - #3/18/1991

Global Id: T0606700425  
 Action Type: ENFORCEMENT  
 Date: 01/11/1991  
 Action: Other Report - #1/11/1991

Global Id: T0606700425  
 Action Type: ENFORCEMENT  
 Date: 03/20/1991  
 Action: Unauthorized Release Form - #3/20/1991

Global Id: T0606700425



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNOCAL #4829 (Continued)**

**S103991785**

Action Type: Other  
Date: 03/13/1991  
Action: Leak Reported

LUST:

Global Id: T0606700425  
Status: Open - Case Begin Date  
Status Date: 03/13/1991

Global Id: T0606700425  
Status: Open - Remediation  
Status Date: 03/13/1991

Global Id: T0606700425  
Status: Completed - Case Closed  
Status Date: 03/18/1991

LUST REG 5:

Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340507  
Case Type: Soil only  
Substance: WASTE OIL  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

HIST CORTESE:

edr\_fname: UNOCAL #4829  
edr\_fadd1: 8999 ELK GROVE  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340507

CERS:

Name: UNOCAL #4829  
Address: 8999 ELK GROVE BLVD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 194289  
CERS ID: T0606700425  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNOCAL #4829 (Continued)**

**S103991785**

Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Count: 2 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
ELK GROVE	S106782303	KINGSFORD CHARCOAL PLANT	WATERMAN RD		Sacramento Co. CS
ELK GROVE	S106782302	KINGSFORD CHARCOAL COMPANY	WATERMAN RD		Sacramento Co. CS

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **STANDARD ENVIRONMENTAL RECORDS**

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: N/A
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 02/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: N/A
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 02/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: EPA  
Telephone: N/A  
Last EDR Contact: 02/05/2020  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019  
Date Data Arrived at EDR: 04/05/2019  
Date Made Active in Reports: 05/14/2019  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 04/05/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 14

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 02/05/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 800-424-9346
Date Made Active in Reports: 11/21/2019	Last EDR Contact: 02/05/2020
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/27/2020
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/16/2019	Source: EPA
Date Data Arrived at EDR: 12/16/2019	Telephone: 800-424-9346
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/04/2019	Source: Department of the Navy
Date Data Arrived at EDR: 11/13/2019	Telephone: 843-820-7326
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 02/10/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/22/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/22/2019	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/22/2019
Number of Days to Update: 67	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/22/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/22/2019	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/22/2019
Number of Days to Update: 67	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 09/23/2019

Number of Days to Update: 14

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 12/19/2019

Next Scheduled EDR Contact: 04/06/2020

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/28/2019

Date Data Arrived at EDR: 10/29/2019

Date Made Active in Reports: 01/07/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/28/2019

Date Data Arrived at EDR: 10/29/2019

Date Made Active in Reports: 01/07/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020

Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/11/2019

Date Data Arrived at EDR: 11/12/2019

Date Made Active in Reports: 01/08/2020

Number of Days to Update: 57

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 02/11/2020

Next Scheduled EDR Contact: 05/25/2020

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001  
Date Data Arrived at EDR: 04/23/2001  
Date Made Active in Reports: 05/21/2001  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-637-5595  
Last EDR Contact: 09/26/2011  
Next Scheduled EDR Contact: 01/09/2012  
Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-570-3769  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: State Water Resources Control Board  
Telephone: see region list  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Quarterly

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005  
Date Data Arrived at EDR: 02/15/2005  
Date Made Active in Reports: 03/28/2005  
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-4496  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004  
Date Data Arrived at EDR: 02/26/2004  
Date Made Active in Reports: 03/24/2004  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)  
Telephone: 760-776-8943  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/06/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: No Update Planned

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005  
Date Data Arrived at EDR: 06/07/2005  
Date Made Active in Reports: 06/29/2005  
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)  
Telephone: 760-241-7365  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003  
Date Data Arrived at EDR: 09/10/2003  
Date Made Active in Reports: 10/07/2003  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)  
Telephone: 530-542-5572  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2019  
Date Data Arrived at EDR: 07/29/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 80

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/01/2019	Source: EPA Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

**INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land**  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019	Source: EPA Region 6
Date Data Arrived at EDR: 12/04/2019	Telephone: 214-665-6597
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

**INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land**  
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019	Source: EPA, Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-7439
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

**INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land**  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019	Source: EPA Region 7
Date Data Arrived at EDR: 12/17/2019	Telephone: 913-551-7003
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 12/16/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

**INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land**  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-8677
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

**INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land**  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

**INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land**  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/02/2019	Source: EPA Region 8
Date Data Arrived at EDR: 10/22/2019	Telephone: 303-312-6271
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

## SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

## SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

## SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: No Update Planned

## ***State and tribal registered storage tank lists***

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019  
Date Data Arrived at EDR: 08/28/2019  
Date Made Active in Reports: 11/11/2019  
Number of Days to Update: 75

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/09/2019	Source: SWRCB
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-341-5851
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Semi-Annually

## UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 09/06/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-327-7844
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 12/11/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/30/2020
	Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2019	Source: EPA Region 9
Date Data Arrived at EDR: 07/29/2019	Telephone: 415-972-3368
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019	Source: EPA Region 6
Date Data Arrived at EDR: 12/04/2019	Telephone: 214-665-7591
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-9424
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/02/2019	Source: EPA Region 8
Date Data Arrived at EDR: 10/22/2019	Telephone: 303-312-6137
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-6136
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 7
Date Data Arrived at EDR: 12/04/2019	Telephone: 913-551-7003
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA, Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 01/24/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***State and tribal voluntary cleanup sites***

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 12/17/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

### VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/28/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/29/2019	Telephone: 916-323-3400
Date Made Active in Reports: 01/07/2020	Last EDR Contact: 01/28/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

## ***State and tribal Brownfields sites***

### BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/23/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/24/2019	Telephone: 916-323-7905
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/19/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/04/2019	Telephone: 202-566-2777
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/30/2020
	Data Release Frequency: Semi-Annually



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### **WMUDS/SWAT: Waste Management Unit Database**

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 01/24/2020
Number of Days to Update: 30	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: No Update Planned

### **SWRCY: Recycler Database**

A listing of recycling facilities in California.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-323-3836
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

### **HAULERS: Registered Waste Tire Haulers Listing**

A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 11/15/2019	Telephone: 916-341-6422
Date Made Active in Reports: 01/23/2020	Last EDR Contact: 02/07/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: Varies

### **INDIAN ODI: Report on the Status of Open Dumps on Indian Lands**

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 01/27/2020
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Varies

### **ODI: Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### **DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations**

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 01/17/2020
Number of Days to Update: 137	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/31/2020
Number of Days to Update: 176	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Varies

## Local Lists of Hazardous waste / Contaminated Sites

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/13/2019	Telephone: 202-307-1000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: No Update Planned

### HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

### SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/28/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/29/2019	Telephone: 916-323-3400
Date Made Active in Reports: 01/07/2020	Last EDR Contact: 01/28/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

### CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/16/2019	Telephone: 916-255-6504
Date Made Active in Reports: 09/24/2019	Last EDR Contact: 01/06/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Varies

### CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/21/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: CalEPA  
Telephone: 916-323-2514  
Last EDR Contact: 01/22/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Quarterly

## TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019  
Date Data Arrived at EDR: 06/13/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Quarterly

## PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 57

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## **Local Lists of Registered Storage Tanks**

### SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994  
Date Data Arrived at EDR: 07/07/2005  
Date Made Active in Reports: 08/11/2005  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/03/2005  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 08/20/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/01/2019	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 08/02/2019	Telephone: 415-252-3896
Date Made Active in Reports: 10/11/2019	Last EDR Contact: 01/31/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Varies

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/21/2019	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/22/2019	Telephone: 916-323-2514
Date Made Active in Reports: 01/03/2020	Last EDR Contact: 01/22/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Quarterly

## **Local Land Records**

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/02/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 12/04/2019	Telephone: 916-323-3400
Date Made Active in Reports: 02/04/2020	Last EDR Contact: 12/02/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/07/2019	Telephone: 202-564-6023
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 02/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/03/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 12/04/2019	Telephone: 916-323-3400
Date Made Active in Reports: 02/04/2020	Last EDR Contact: 12/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 12/06/2019
Number of Days to Update: 89	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

### CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/15/2019	Source: Office of Emergency Services
Date Data Arrived at EDR: 06/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 01/22/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Semi-Annually

### LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

### MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

## **Other Ascertainable Records**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/16/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 4	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/12/2019	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 11/19/2019	Telephone: 202-528-4285
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/10/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Semi-Annually

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 01/09/2020
Number of Days to Update: 574	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: N/A

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 02/13/2020
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/23/2019  
Date Data Arrived at EDR: 09/24/2019  
Date Made Active in Reports: 12/20/2019  
Number of Days to Update: 87

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 02/03/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017  
Date Data Arrived at EDR: 05/08/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 73

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 02/07/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 06/21/2017  
Date Made Active in Reports: 01/05/2018  
Number of Days to Update: 198

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 12/20/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 11/16/2018  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 370

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 02/05/2020  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/01/2019  
Date Data Arrived at EDR: 10/23/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 84

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 02/05/2020  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 14

Source: EPA  
Telephone: 202-564-6023  
Last EDR Contact: 02/06/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/09/2019  
Date Data Arrived at EDR: 10/11/2019  
Date Made Active in Reports: 12/20/2019  
Number of Days to Update: 70

Source: EPA  
Telephone: 202-566-0500  
Last EDR Contact: 01/10/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016  
Date Data Arrived at EDR: 11/23/2016  
Date Made Active in Reports: 02/10/2017  
Number of Days to Update: 79

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Quarterly

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667  
Last EDR Contact: 08/18/2017  
Next Scheduled EDR Contact: 12/04/2017  
Data Release Frequency: No Update Planned

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA  
Telephone: 202-566-1667  
Last EDR Contact: 08/18/2017  
Next Scheduled EDR Contact: 12/04/2017  
Data Release Frequency: No Update Planned

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 10/25/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 82

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Quarterly

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 12/04/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 42

Source: Department of Energy  
Telephone: 202-586-8719  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/12/2017  
Date Data Arrived at EDR: 03/05/2019  
Date Made Active in Reports: 11/11/2019  
Number of Days to Update: 251

Source: Environmental Protection Agency  
Telephone: N/A  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019  
Date Data Arrived at EDR: 11/06/2019  
Date Made Active in Reports: 02/10/2020  
Number of Days to Update: 96

Source: Environmental Protection Agency  
Telephone: 202-566-0517  
Last EDR Contact: 02/07/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019  
Date Data Arrived at EDR: 07/01/2019  
Date Made Active in Reports: 09/23/2019  
Number of Days to Update: 84

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 12/20/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2007  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 10/01/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 78

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 01/28/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2019	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 10/09/2019	Telephone: Varies
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 01/06/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015	Source: EPA/NTIS
Date Data Arrived at EDR: 02/22/2017	Telephone: 800-424-9346
Date Made Active in Reports: 09/28/2017	Last EDR Contact: 12/16/2019
Number of Days to Update: 218	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014	Source: USGS
Date Data Arrived at EDR: 07/14/2015	Telephone: 202-208-3710
Date Made Active in Reports: 01/10/2017	Last EDR Contact: 01/07/2020
Number of Days to Update: 546	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017	Source: Department of Energy
Date Data Arrived at EDR: 09/11/2018	Telephone: 202-586-3559
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 01/31/2020
Number of Days to Update: 3	Next Scheduled EDR Contact: 05/18/2020
	Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019	Source: Department of Energy
Date Data Arrived at EDR: 11/15/2019	Telephone: 505-845-0011
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/15/2019
Number of Days to Update: 74	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/07/2019	Telephone: 703-603-8787
Date Made Active in Reports: 11/20/2019	Last EDR Contact: 02/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 12/03/2019  
Date Data Arrived at EDR: 12/03/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Administration  
Telephone: 202-693-9424  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019  
Date Data Arrived at EDR: 11/25/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 64

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 11/22/2019
Number of Days to Update: 97	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2019	Source: Department of Interior
Date Data Arrived at EDR: 09/10/2019	Telephone: 202-208-2609
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 12/04/2019
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/12/2019	Source: EPA
Date Data Arrived at EDR: 09/04/2019	Telephone: (415) 947-8000
Date Made Active in Reports: 12/03/2019	Last EDR Contact: 12/04/2019
Number of Days to Update: 90	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 11/20/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017	Source: Department of Defense
Date Data Arrived at EDR: 01/17/2019	Telephone: 703-704-1564
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 01/13/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 04/27/2020
	Data Release Frequency: Varies

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/06/2019  
Date Data Arrived at EDR: 10/08/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 86

Source: Environmental Protection Agency  
Telephone: 202-564-2280  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Quarterly

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/18/2019  
Date Data Arrived at EDR: 11/19/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 70

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 11/19/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Quarterly

## CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/23/2019  
Date Data Arrived at EDR: 09/24/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 43

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 12/20/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019  
Date Data Arrived at EDR: 05/14/2019  
Date Made Active in Reports: 07/17/2019  
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department  
Telephone: 925-454-2361  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 02/24/2020  
Data Release Frequency: Varies

## CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 10/31/2019  
Date Data Arrived at EDR: 11/01/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 40

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 10/11/2019  
Date Made Active in Reports: 12/12/2019  
Number of Days to Update: 62

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Annually

**DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing**  
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 12/02/2019  
Date Data Arrived at EDR: 12/03/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 63

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

**DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing**  
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 09/27/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 37

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

**EMI: Emissions Inventory Data**

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/24/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 59

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 03/29/2020  
Data Release Frequency: Varies

**ENF: Enforcement Action Listing**

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/19/2019  
Date Data Arrived at EDR: 07/22/2019  
Date Made Active in Reports: 09/26/2019  
Number of Days to Update: 66

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 01/22/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

**Financial Assurance 1: Financial Assurance Information Listing**  
Financial Assurance information

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

**Financial Assurance 2: Financial Assurance Information Listing**

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/08/2019  
Date Data Arrived at EDR: 11/12/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 57

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 02/07/2020  
Next Scheduled EDR Contact: 05/25/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 05/29/2019	Telephone: 916-255-1136
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 01/24/2020
Number of Days to Update: 54	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Annually

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/18/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/19/2019	Telephone: 877-786-9427
Date Made Active in Reports: 01/23/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/18/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/19/2019	Telephone: 916-323-3400
Date Made Active in Reports: 01/23/2020	Last EDR Contact: 11/19/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Quarterly

## HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/07/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/08/2019	Telephone: 916-440-7145
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 01/07/2020
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Quarterly

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-322-1080
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/22/2019	Source: Department of Public Health
Date Data Arrived at EDR: 12/04/2019	Telephone: 916-558-1784
Date Made Active in Reports: 02/04/2020	Last EDR Contact: 12/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/11/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/12/2019	Telephone: 916-445-9379
Date Made Active in Reports: 01/08/2020	Last EDR Contact: 02/11/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/03/2019	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 12/04/2019	Telephone: 916-445-4038
Date Made Active in Reports: 02/04/2020	Last EDR Contact: 12/04/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/09/2019	Source: Department of Conservation
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-323-3836
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/16/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/18/2019	Telephone: 916-445-3846
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 12/11/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/30/2020
	Data Release Frequency: No Update Planned

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 08/20/2019	Source: Department of Conservation
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-445-2408
Date Made Active in Reports: 11/18/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 90	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resource Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018  
Date Data Arrived at EDR: 07/11/2018  
Date Made Active in Reports: 09/13/2018  
Number of Days to Update: 64

Source: RWQCB, Central Valley Region  
Telephone: 559-445-5577  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007  
Date Data Arrived at EDR: 06/20/2007  
Date Made Active in Reports: 06/29/2007  
Number of Days to Update: 9

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: No Update Planned

## WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009  
Date Data Arrived at EDR: 07/21/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board  
Telephone: 213-576-6726  
Last EDR Contact: 12/17/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: No Update Planned

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 58

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Quarterly

## CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 12/03/2019  
Date Data Arrived at EDR: 12/04/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 62

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/21/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/03/2020  
Number of Days to Update: 73

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 01/22/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## HWTS: Hazardous Waste Tracking System -> Description here.

Date of Government Version: 10/15/2019  
Date Data Arrived at EDR: 11/14/2019  
Date Made Active in Reports: 02/07/2020  
Number of Days to Update: 85

Source: -> Agency name here.  
Telephone: -> Phone here.  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Varies

## MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 04/06/2018  
Date Data Arrived at EDR: 10/21/2019  
Date Made Active in Reports: 10/24/2019  
Number of Days to Update: 3

Source: USGS  
Telephone: 703-648-6533  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019  
Date Data Arrived at EDR: 01/11/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 53

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019  
Date Data Arrived at EDR: 10/03/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 34

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/24/2047  
Data Release Frequency: Semi-Annually

## AMADOR COUNTY:

### CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 09/10/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 51

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## BUTTE COUNTY:

### CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 12/02/2019  
Date Data Arrived at EDR: 12/03/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 63

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 12/03/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 02/13/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/02/2019  
Date Data Arrived at EDR: 12/04/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 62

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 01/27/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

### CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 10/11/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 43

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 09/12/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 49

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/08/2019  
Date Data Arrived at EDR: 10/10/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 62

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: No Update Planned

## HUMBOLDT COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 11/13/2019  
Date Data Arrived at EDR: 11/14/2019  
Date Made Active in Reports: 01/23/2020  
Number of Days to Update: 70

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 10/30/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

### CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 72

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 02/13/2020  
Next Scheduled EDR Contact: 06/01/2020  
Data Release Frequency: Varies

## KERN COUNTY:

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 10/28/2019  
Date Data Arrived at EDR: 11/05/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 64

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/25/2019  
Date Data Arrived at EDR: 12/05/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 61

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 02/13/2020  
Next Scheduled EDR Contact: 06/01/2020  
Data Release Frequency: Varies

## LAKE COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/16/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 01/08/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/22/2019  
Date Data Arrived at EDR: 07/23/2019  
Date Made Active in Reports: 09/26/2019  
Number of Days to Update: 65

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: N/A  
Telephone: N/A  
Last EDR Contact: 12/11/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/15/2020  
Date Data Arrived at EDR: 01/16/2020  
Date Made Active in Reports: 02/07/2020  
Number of Days to Update: 22

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/15/2019  
Date Data Arrived at EDR: 10/16/2019  
Date Made Active in Reports: 12/12/2019  
Number of Days to Update: 57

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 01/14/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

### LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 01/15/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 51

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/20/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Varies

## LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 01/17/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 04/27/2020
	Data Release Frequency: No Update Planned

## LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/20/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Varies

## LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 12/20/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Varies

## SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 10/01/2019	Source: Community Health Services
Date Data Arrived at EDR: 10/29/2019	Telephone: 323-890-7806
Date Made Active in Reports: 01/08/2020	Last EDR Contact: 01/14/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 04/27/2020
	Data Release Frequency: Annually

## UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 01/13/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/27/2020
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST LONG BEACH: City of Long Beach Underground Storage Tank  
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 01/17/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 01/17/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/04/2020
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/18/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 11/20/2019	Telephone: 559-675-7823
Date Made Active in Reports: 01/27/2020	Last EDR Contact: 11/14/2019
Number of Days to Update: 68	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites  
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 12/19/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 04/13/2020
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 11/18/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 11/20/2019	Telephone: 209-381-1094
Date Made Active in Reports: 01/03/2020	Last EDR Contact: 02/13/2020
Number of Days to Update: 44	Next Scheduled EDR Contact: 06/01/2020
	Data Release Frequency: Varies

MONO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 11/20/2019  
Date Data Arrived at EDR: 12/02/2019  
Date Made Active in Reports: 02/07/2020  
Number of Days to Update: 67

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 11/06/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 62

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

### UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 10/30/2019  
Date Data Arrived at EDR: 10/30/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 42

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 01/24/2020  
Next Scheduled EDR Contact: 05/11/2020  
Data Release Frequency: Varies

## ORANGE COUNTY:

### IND\_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/04/2019  
Date Data Arrived at EDR: 12/02/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 64

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 02/03/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups  
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/04/2019  
Date Data Arrived at EDR: 12/02/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 64

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 02/03/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities  
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/04/2019  
Date Data Arrived at EDR: 11/05/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 64

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 02/04/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/02/2019  
Date Data Arrived at EDR: 12/03/2019  
Date Made Active in Reports: 02/07/2020  
Number of Days to Update: 66

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites  
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 52

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 02/10/2020  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/03/2020  
Number of Days to Update: 73

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 02/10/2020  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/06/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 37

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/23/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

### ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/07/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/08/2019  
Number of Days to Update: 38

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/23/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 11/14/2019  
Date Data Arrived at EDR: 11/15/2019  
Date Made Active in Reports: 01/23/2020  
Number of Days to Update: 69

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/26/2019  
Date Data Arrived at EDR: 11/27/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 69

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 02/03/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 12/03/2019  
Date Data Arrived at EDR: 12/04/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 62

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 56

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/16/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 52

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: No Update Planned

### UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2019  
Date Data Arrived at EDR: 08/02/2019  
Date Made Active in Reports: 10/08/2019  
Number of Days to Update: 67

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018  
Date Data Arrived at EDR: 06/26/2018  
Date Made Active in Reports: 07/11/2018  
Number of Days to Update: 15

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 12/11/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 12/11/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/03/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019  
Date Data Arrived at EDR: 03/29/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/05/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SANTA CLARA: Cupa Facility List Cupa facility list

Date of Government Version: 11/18/2019  
Date Data Arrived at EDR: 11/19/2019  
Date Made Active in Reports: 01/23/2020  
Number of Days to Update: 65

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

## LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

## SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 10/30/2019  
Date Data Arrived at EDR: 11/01/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 68

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 01/31/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 08/13/2019  
Number of Days to Update: 68

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/28/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 06/18/2019  
Date Data Arrived at EDR: 06/25/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Varies

### LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/01/2019  
Date Data Arrived at EDR: 10/02/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 36

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 12/17/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 62

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

## SUTTER COUNTY:

### UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2019  
Date Data Arrived at EDR: 12/03/2019  
Date Made Active in Reports: 02/07/2020  
Number of Days to Update: 66

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 01/23/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 11/25/2019  
Date Data Arrived at EDR: 11/27/2019  
Date Made Active in Reports: 02/04/2020  
Number of Days to Update: 69

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 02/03/2020  
Next Scheduled EDR Contact: 05/18/2020  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 01/17/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Varies

## VENTURA COUNTY:

### BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/2019  
Date Data Arrived at EDR: 07/29/2019  
Date Made Active in Reports: 09/30/2019  
Number of Days to Update: 63

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Quarterly

### LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites  
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 02/07/2020  
Next Scheduled EDR Contact: 05/25/2020  
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2019  
Date Data Arrived at EDR: 10/23/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 51

Source: Ventura County Resource Management Agency  
Telephone: 805-654-2813  
Last EDR Contact: 01/21/2020  
Next Scheduled EDR Contact: 05/04/2020  
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/26/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 09/25/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 30

Source: Yolo County Department of Health  
Telephone: 530-666-8646  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 11/04/2019  
Date Data Arrived at EDR: 11/06/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 63

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 02/07/2020  
Next Scheduled EDR Contact: 05/25/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/14/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 12/05/2019	Telephone: 860-424-3375
Date Made Active in Reports: 02/03/2020	Last EDR Contact: 01/30/2020
Number of Days to Update: 60	Next Scheduled EDR Contact: 05/25/2020
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 01/06/2020
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/20/2020
	Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/01/2019	Telephone: 518-402-8651
Date Made Active in Reports: 06/21/2019	Last EDR Contact: 01/31/2020
Number of Days to Update: 51	Next Scheduled EDR Contact: 05/11/2020
	Data Release Frequency: Quarterly

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 01/14/2020
Number of Days to Update: 53	Next Scheduled EDR Contact: 04/07/2020
	Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018	Source: Department of Environmental Management
Date Data Arrived at EDR: 10/02/2019	Telephone: 401-222-2797
Date Made Active in Reports: 12/10/2019	Last EDR Contact: 11/14/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018	Source: Department of Natural Resources
Date Data Arrived at EDR: 06/19/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 12/18/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

### Electric Power Transmission Line Data

Source: Endeavor Business Media

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

## STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

APNS 134-0100-084/-085  
9195 BRINKMAN COURT  
ELK GROVE, CA 95624

### TARGET PROPERTY COORDINATES

Latitude (North):	38.396211 - 38° 23' 46.36"
Longitude (West):	121.356867 - 121° 21' 24.72"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	643491.2
UTM Y (Meters):	4250848.5
Elevation:	51 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	5629052 ELK GROVE, CA
Version Date:	2012
Northwest Map:	5619710 FLORIN, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

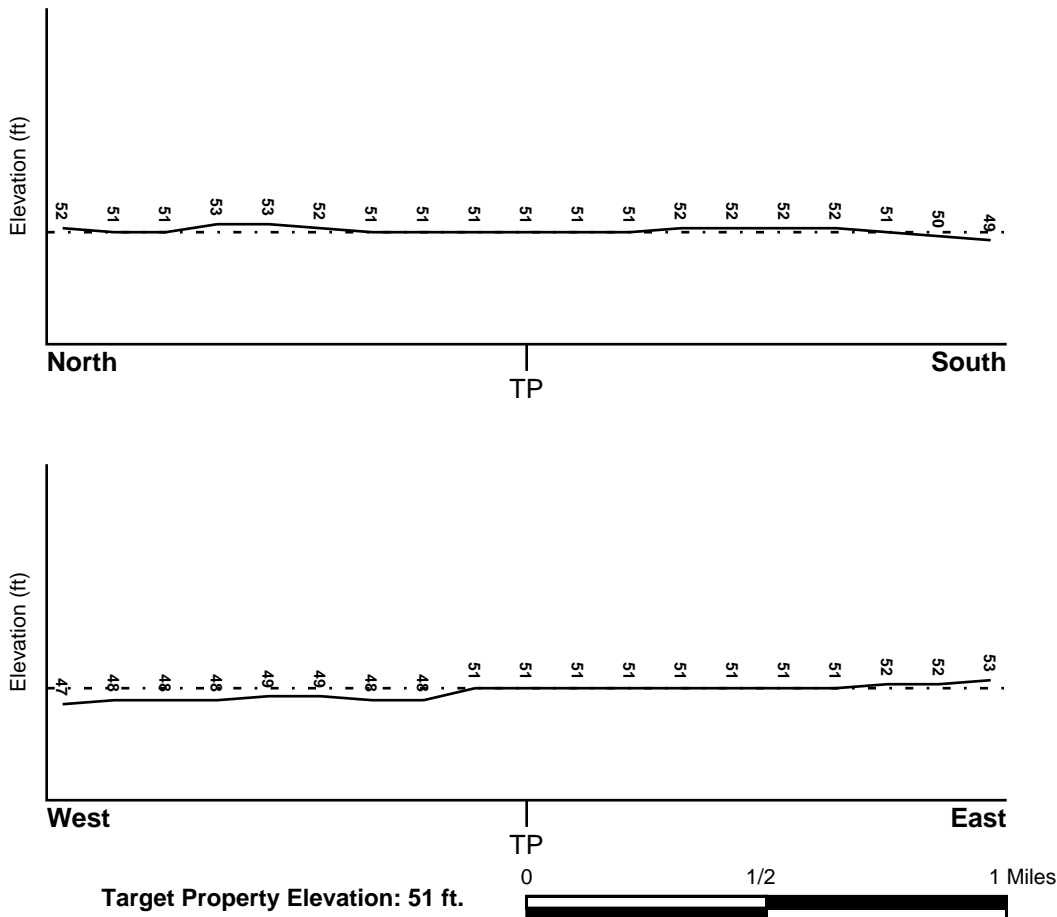
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06067C0338H	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06067C0336H	FEMA FIRM Flood data
06067C0337H	FEMA FIRM Flood data
06067C0319H	FEMA FIRM Flood data
06067C0339H	FEMA FIRM Flood data

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
ELK GROVE	YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Status:	Not found

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

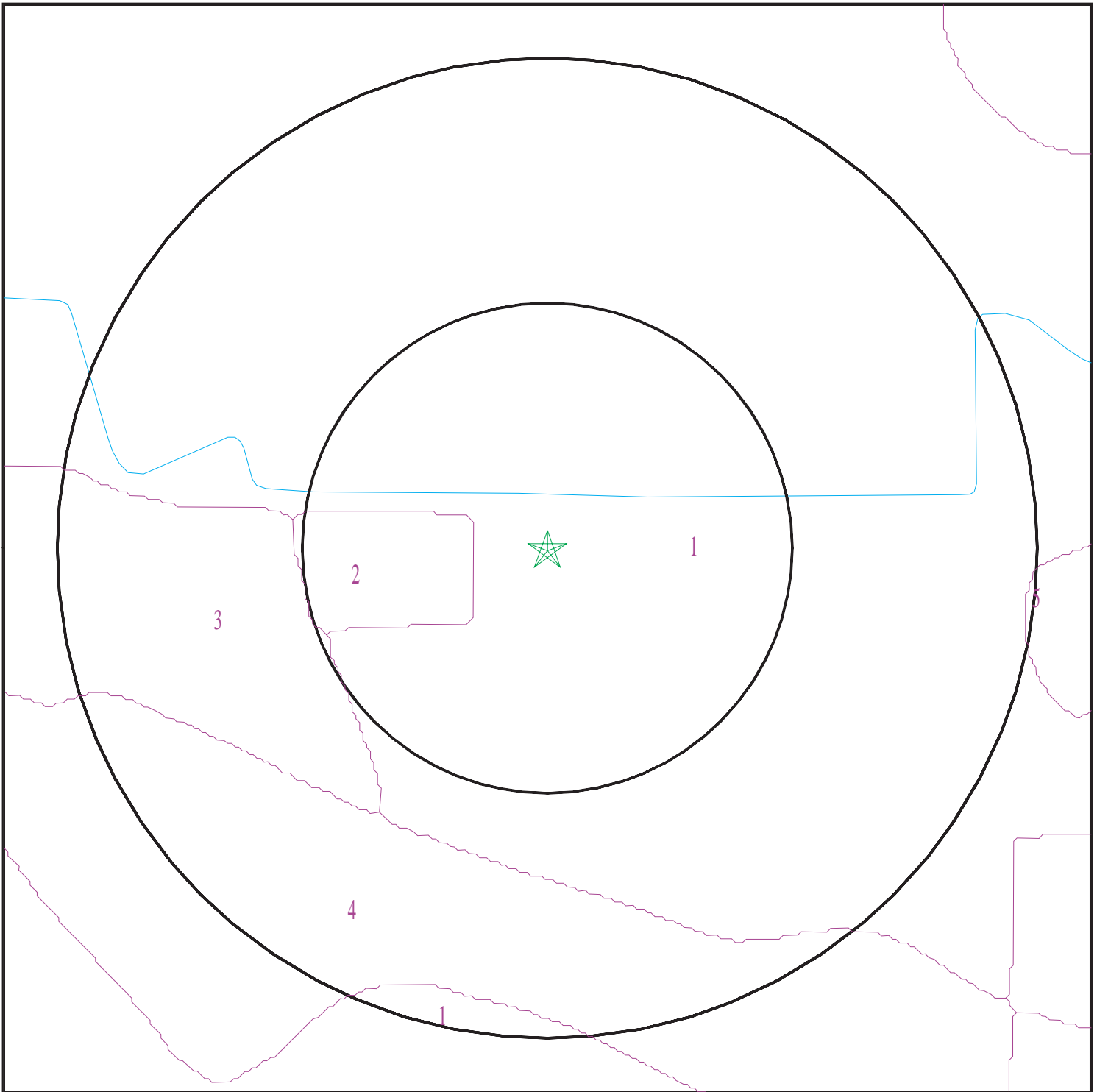
Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

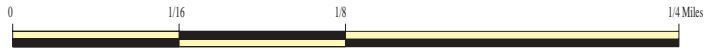
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 5973221.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Apts 134-0100-084/-085  
ADDRESS: 9195 Brinkman Court  
Elk Grove CA 95624  
LAT/LONG: 38.396211 / 121.356867

CLIENT: Bole and Associates  
CONTACT: David Bole  
INQUIRY #: 5973221.2s  
DATE: February 14, 2020 2:07 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
4	53 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

---

### Soil Map ID: 2

Soil Component Name: Water

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:  
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

---

### Soil Map ID: 3

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	53 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

### Soil Map ID: 4

Soil Component Name: GALT

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	12 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	31 inches	59 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

### Soil Map ID: 5

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	14 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	20 inches	46 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	46 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000188086	1/8 - 1/4 Mile South
5	USGS40000188073	1/4 - 1/2 Mile South
6	USGS40000188129	1/2 - 1 Mile NNE
7	USGS40000188111	1/2 - 1 Mile ENE
8	USGS40000188134	1/2 - 1 Mile NNE
9	USGS40000188140	1/2 - 1 Mile North
C12	USGS40000188099	1/2 - 1 Mile West
14	USGS40000188068	1/2 - 1 Mile SSE
15	USGS40000188057	1/2 - 1 Mile SSW
D16	USGS40000188112	1/2 - 1 Mile WNW
18	USGS40000188145	1/2 - 1 Mile NW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

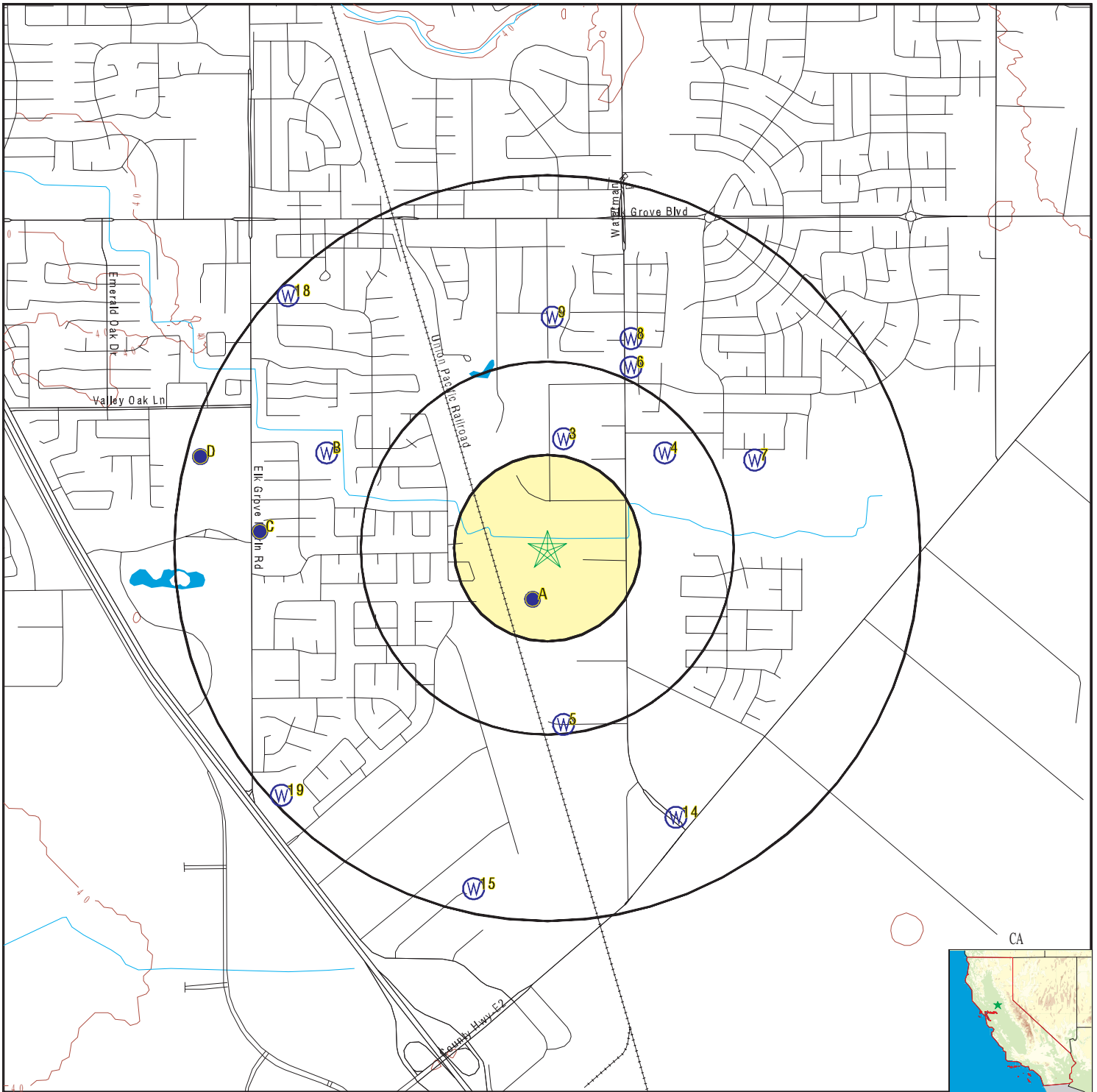
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	CADWR8000037858	1/8 - 1/4 Mile SSW
3	6558	1/4 - 1/2 Mile North
4	6557	1/4 - 1/2 Mile NE
B10	6556	1/2 - 1 Mile WNW
B11	6555	1/2 - 1 Mile WNW
C13	6559	1/2 - 1 Mile West
D17	6523	1/2 - 1 Mile WNW
19	CADWR8000037838	1/2 - 1 Mile SW

# PHYSICAL SETTING SOURCE MAP - 5973221.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Apts 134-0100-084/-085  
 ADDRESS: 9195 Brinkman Court  
 Elk Grove CA 95624  
 LAT/LONG: 38.396211 / 121.356867

CLIENT: Bole and Associates  
 CONTACT: David Bole  
 INQUIRY #: 5973221.2s  
 DATE: February 14, 2020 2:07 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**  
**South**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS      USGS40000188086**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E07A002M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19660101	Well Depth:	364
Well Depth Units:	ft	Well Hole Depth:	364
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1982-07-07
Feet below surface:	108.88	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1977-10-04	Feet below surface:	118.0
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-10-04	Feet below surface:	104.4
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-10-03	Feet below surface:	105.5
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-03-08	Feet below surface:	94.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-03-05	Feet below surface:	95.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-10-11	Feet below surface:	93.8
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-03-09	Feet below surface:	92.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-02-18	Feet below surface:	93.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1966-01-01	Feet below surface:	97.00
Feet to sea level:	Not Reported	Note:	Not Reported

**A2**  
**SSW**  
**1/8 - 1/4 Mile**  
**Higher**

**CA WELLS      CADWR8000037858**

State Well #:	06N06E07A002M	Station ID:	5603
Well Name:	Not Reported	Well Use:	Residential
Well Type:	Unknown	Well Depth:	364
Basin Name:	South American	Well Completion Rpt #:	9651

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**3**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      6558**

Seq:	6558	Prim sta c:	06N/06E-06J01 M
Frds no:	3410008011	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 11 - DINO	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	382402.0	Longitude:	1212118.0
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**4**  
**NE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      6557**

Seq:	6557	Prim sta c:	06N/06E-06H01 M
Frds no:	3410008004	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 04 - WEBB STREET	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	382400.0	Longitude:	1212100.0
Precision:	8	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**5**  
**South**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000188073**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18020109
Monitor Location:	006N006E07H001M	Drainage Area Units:	Not Reported
Description:	Not Reported		
Drainage Area:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	376
Well Depth Units:	ft	Well Hole Depth:	383
Well Hole Depth Units:	ft		

**6**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188129**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E05E002M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19760101	Well Depth:	165
Well Depth Units:	ft	Well Hole Depth:	250
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1976-01-01
Feet below surface:	106.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**7**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188111**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E05L001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19751024	Well Depth:	188
Well Depth Units:	ft	Well Hole Depth:	315
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1975-10-24
Feet below surface:	103.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**8**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188134**

Organization ID:	USGS-CA
Organization Name:	USGS California Water Science Center

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Monitor Location:	006N006E05E001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system	Aquifer Type:	Not Reported
Formation Type:	Not Reported	Well Depth:	160
Construction Date:	19660101	Well Hole Depth:	173
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1966-01-01
Feet below surface:	91.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**9  
North  
1/2 - 1 Mile  
Higher**

**FED USGS    USGS40000188140**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E06H001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system	Aquifer Type:	Not Reported
Formation Type:	Not Reported	Well Depth:	296
Construction Date:	19580101	Well Hole Depth:	330
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

**B10  
WNW  
1/2 - 1 Mile  
Lower**

**CA WELLS    6556**

Seq:	6556	Prim sta c:	06N/06E-06D02 M
Frds no:	3410008005	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 05 - EMERALD PARK	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	382400.0	Longitude:	1212200.0
Precision:	8	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**B11**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      6555**

Seq:	6555	Prim sta c:	06N/06E-06D01 M
Frds no:	3410008002	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 02 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	382400.0	Longitude:	1212200.0
Precision:	8	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**C12**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000188099**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E06N001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19780101	Well Depth:	264
Well Depth Units:	ft	Well Hole Depth:	407
Well Hole Depth Units:	ft		

**C13**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      6559**

Seq:	6559	Prim sta c:	06N/06E-06N01 M
Frds no:	3410008007	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 07 - PARKSIDE	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	382349.0	Longitude:	1212212.0
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**14  
SSE  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000188068**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E08M002M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19770101	Well Depth:	175
Well Depth Units:	ft	Well Hole Depth:	235
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1982-07-13
Feet below surface:	108.05	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1977-01-01	Feet below surface:	90.00
Feet to sea level:	Not Reported	Note:	Not Reported

**15  
SSW  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000188057**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E07Q001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Laguna Formation	Aquifer Type:	Not Reported
Construction Date:	19661126	Well Depth:	232
Well Depth Units:	ft	Well Hole Depth:	330
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1982-07-09
Feet below surface:	121.25	Feet to sea level:	Not Reported
Note:	The site was being pumped.		

Level reading date:	1966-11-26	Feet below surface:	102.50
Feet to sea level:	Not Reported	Note:	Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**D16**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000188112**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18020109
Monitor Location:	006N005E01J001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	368
Aquifer:	Central Valley aquifer system	Well Hole Depth:	368
Formation Type:	Not Reported		
Construction Date:	19630901		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels, Number of Measurements:	2	Level reading date:	1982-07-15
Feet below surface:	120.38	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1963-09-01	Feet below surface:	99.00
Feet to sea level:	Not Reported	Note:	Not Reported

**D17**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      6523**

Seq:	6523	Prim sta c:	06N/04E-01J01 M
Frds no:	3400247001	County:	34
District:	64	User id:	34C
System no:	3400247	Water type:	G
Source nam:	WELL A	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	382359.0	Longitude:	1212223.0
Precision:	3	Status:	AR
Comment 1:	9800 ELK GROVE-FLORIN RD ELK GROVE CA 95624	Comment 3:	Not Reported
Comment 2:	Not Reported	Comment 5:	Not Reported
Comment 4:	Not Reported	Comment 7:	Not Reported
Comment 6:	Not Reported		

System no:	3400247	System nam:	Elk Grove Hi
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

**18**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000188145**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18020109
Monitor Location:	006N006E06D002M		
Description:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19720101	Well Depth:	204
Well Depth Units:	ft	Well Hole Depth:	492
Well Hole Depth Units:	ft		

**19  
SW  
1/2 - 1 Mile  
Lower**

**CA WELLS    CADWR8000037838**

State Well #:	06N06E07M001M	Station ID:	5604
Well Name:	Not Reported	Well Use:	Irrigation
Well Type:	Unknown	Well Depth:	210
Basin Name:	South American	Well Completion Rpt #:	Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95624	18	1

Federal EPA Radon Zone for SACRAMENTO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for Zip Code: 95624

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	3.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

#### California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### RADON

#### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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## **APPENDIX D: HISTORICAL RESEARCH DOCUMENTATION**

*ENVIRONMENTAL LIEN SEARCH REPORT*

*HISTORIC AERIAL PHOTOGRAPHS*

*HISTORICAL TOPOGRAPHIC MAPS*

*SANBORN MAP REPORT*

*PROPERTY TAX MAP REPORT*

*BUILDING DEPARTMENT RECORDS REPORT*

*CITY DIRECTORY REPORT*



**Apns 134-0100-084/-085**

9195 Brinkman Court  
Elk Grove, CA 95624

Inquiry Number: 5973221.7  
February 18, 2020

## EDR Environmental Lien and AUL Search

## EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

***Thank you for your business.***

Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EDR Environmental Lien and AUL Search

### TARGET PROPERTY INFORMATION

#### **ADDRESS**

9195 Brinkman Court  
Apts 134-0100-084/-085  
Elk Grove, CA 95624

### ENVIRONMENTAL LIEN

Environmental Lien:                      Found                       Not Found

### OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs:    Found     Not Found

**RESEARCH SOURCE**

---

**Source 1:**

Sacramento Recorder  
Sacramento, CA

**PROPERTY INFORMATION**

**Deed 1:**

Type of Deed: deed  
Title is vested in: PW Fund B LP  
Title received from: Buzz Oates Enterprises II LLC  
Deed Dated: 11/10/2017  
Deed Recorded: 11/13/2017  
Book: NA  
Page: na  
Volume: na  
Instrument: na  
Docket: NA  
Land Record Comments:  
Miscellaneous Comments:

**Legal Description:** See Exhibit

**Legal Current Owner:** PW Fund B LP

**Parcel # / Property Identifier:** 134-0100-084

**Comments:** See Exhibit

## **Deed Exhibit 1**



WHEN RECORDED MAIL  
AND MAIL TAX STATEMENTS TO:

**Sacramento County**  
**Donna Allred, Clerk/Recorder**

Pac West Industrial Equities, LP  
Attn: Legal Dept  
555 Capitol Mall, Suite 900  
Sacramento, CA 95814

Doc # **201711131175**

Fees \$24.00

11/13/2017 10:40:06 AM

Taxes \$12,455.85

FCA

PCOR \$0.00

Titles 1

Paid \$12,479.85

Pages 4

APN: 134-0181-001, 002 & 003; 134-0100-084 & 085

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**GRANT DEED**

19123

THE UNDERSIGNED GRANTOR DECLARES:

DOCUMENTARY TRANSFER TAX is \$ 12,455<sup>85</sup> ; CITY TAX is \$ \_\_\_\_\_

computed on full value of property conveyed, or

computed on full value less value of liens or encumbrances remaining at time of sale,

Unincorporated area  City of Elk Grove

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

BUZZ OATES ENTERPRISES II, LLC, a Delaware limited liability company, who acquired title as Buzz Oates Enterprises II, a California general partnership

hereby GRANTS to

PW FUND B, LP, a California limited partnership

the real property situated in the City of Elk Grove, County of Sacramento, State of California, described as set forth in Exhibit A, attached hereto and incorporated herein by this reference.

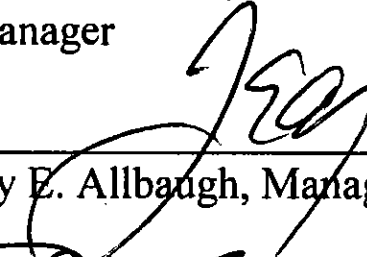
**GRANTOR:**

BUZZ OATES ENTERPRISES II, LLC, a Delaware limited liability company

By: Buzz Oates LLC, a California limited liability Company, Manager

By: Oates Advisors LLC, a California limited liability company, Manager

Dated: November 10, 2017

By:   
Larry E. Allbaugh, Manager

Dated: November 10, 2017

By:   
Philip D. Oates, Manager

ACKNOWLEDGMENT

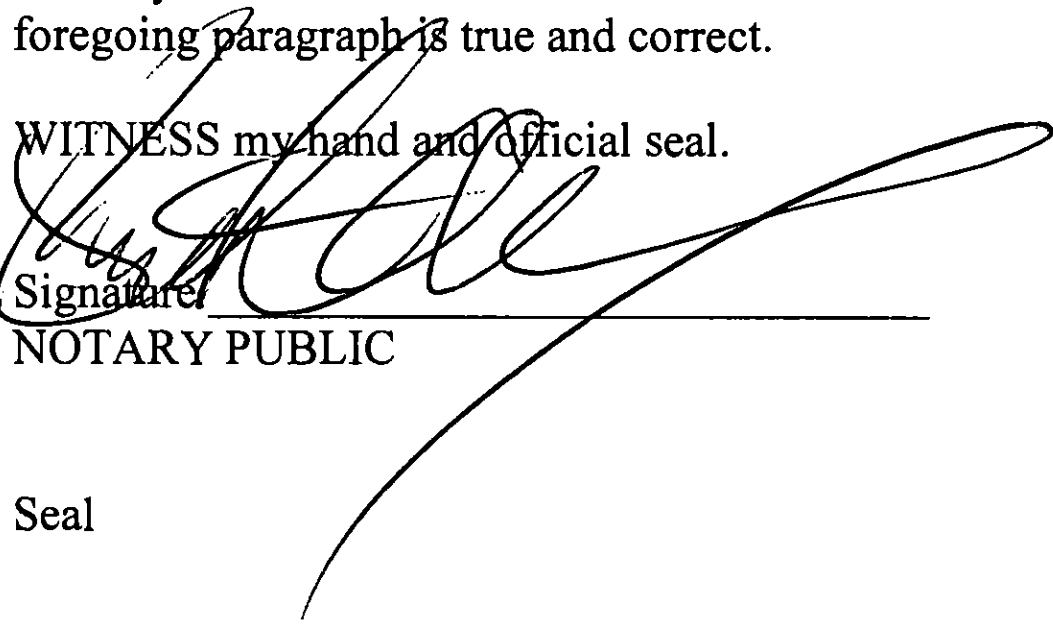
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA )  
 )  
COUNTY OF SACRAMENTO )

On November 8, 2017, before me, Ruth Alexander, Notary Public, personally appeared Larry E. Allbaugh and Philip D. Oates, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is~~/are subscribed to the within instrument and acknowledged to me that ~~he~~/~~she~~/they executed the same in ~~his~~/~~her~~/their authorized capacity(ies), and that by ~~his~~/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

  
\_\_\_\_\_  
Signature  
NOTARY PUBLIC



Seal



**Exhibit "A"**  
**Legal Description**

**Parcel One:**

That portion of the Northeast quarter of Section 7, Township 6 North, Range 6 East, M.D.B. & M., described according to the United States Survey thereof, as follows:

Beginning at the Northeast corner of Section 7, in Township 6 North, Range 6 East, of Mount Diablo Base and Meridian and running thence South along the East line of said Section 7, a distance of 331.9 feet to the Northeast corner of that certain tract of land conveyed by Christoph Docktor and Maregaratha Docktor, his wife and others, to George A. Helzer and Mary Helzer, his wife June 17, 1927 recorded September 13, 1927 in Book 154 of Official Records, Page 43, thereof, Sacramento County Records; thence along the North line of said tract of land so conveyed North  $89^{\circ}52\text{-}1/2'$  West 1601.3 feet to a fence line running parallel to the centerline of the Central Pacific Railway Company's right of way and along said fence line of 344.4 feet to the point of intersection thereof with the North line of said Section 7; thence South  $89^{\circ}55\text{-}1/2'$  East along said North line of Section 7, a distance of 1695.24 feet, more or less to the point of beginning.

Excepting therefrom all that portion thereof lying West of a line parallel with and distant Northeasterly 200 feet at right angles from the center line of the right of way of the Southern Pacific Railroad Company.

APN: 134-0181-001

**Parcel Two:**

That portion of the Northeast quarter of Section 7, Township 6 North, Range 6 East, M.D.B. & M., described according to the United States Survey thereof, as follows:

Beginning at the Northeast corner of Section 7, in Township 6 North, Range 6 East, Mount Diablo Base and Meridian and running thence South along the East line of said Section 7, a distance of 331.9 feet to the Northeast corner of that certain tract of land conveyed by Christoph Docktor and Maregaratha Docktor, his wife, and others, to George A. Helzer and Mary Helzer, his wife by Deed dated June 17, 1927, recorded September 13, 1927, in Book 154 of Official Records, Page 43, thereof, Sacramento County Records; thence along the North line of said tract of land so conveyed North  $89^{\circ}52\text{-}1/2'$  West 1601.3 feet to a fence line running thence parallel to the centerline of the Central Pacific Railway Company's right of way and distant Easterly approximately 50 feet therefrom North  $15^{\circ}43'$  West along said fence line of 344.4 feet to the point of intersection thereof with the North line of said Section 7; thence South  $89^{\circ}55\text{-}1/2'$  East along said North line of Section 7, a distance of 1695.24 feet, more or less to the point of beginning.

Excepting therefrom all that portion of the above described parcel as conveyed by deed to D.R. Stephens & Company, a California Limited Partnership, recorded March 13, 1998 in Book 980313, Page 22, Official Records, which portion is described in said deed as Parcel Four.

Apn: 134-0181-002

**Exhibit "A"**  
**Legal Description**

**Parcel Three:**

A Portion of Section 7, Township 6 North, Range 6 East, M.D.B. & M., more particularly described as follows:

Beginning at a point on the East line of said Section 7, which point is 331.9 feet South from the Northeast corner of said Section 7; thence North  $89^{\circ}52\text{-}1/2'$  West 1601.3 feet to the East line of the right of way line of the Southern Pacific Railroad; thence south  $15^{\circ}43\text{-}1/2'$  East along said right of way 674.4 feet; thence East 1416.1 feet to the East line of said Section 7; thence North  $0^{\circ}14'$  East along the Section line 645.6 feet to the place of beginning.

Apn: 134-0181-003

**Parcel Four:**

All that portion of Lots 8 and 35, as shown on the Plat of Gunter's Addition to Elk Grove filed in Book 13 of Maps, Map No. 21, Official Records of Sacramento County, described as follows:

Beginning at the Northeast corner of said Lot 8; thence from said point of beginning, along the Easterly line of said Lot 8 and along the Westerly line of that certain Grant Deed to the Sacramento County Water Agency filed in Book 990810, Page 219, Official Records of Sacramento County, South  $00^{\circ}02'30''$  West 405.82 feet to the Southwest corner of said Grant Deed; thence leaving said Easterly line of said Lot 8 North  $89^{\circ}55'30''$  West 1122.89 feet to a point in the Easterly line of that certain 200' Railroad right-of-way by Congressional Grant of July 1862; thence along said Easterly line North  $15^{\circ}42'30''$  west 341.91 feet to a point in the Northerly line of said Lot 35, said point also being a found  $1/2''$  rebar marking the Southwest corner of Parcel 4 as shown on that certain Parcel Map filed in Book 56 of Parcel Maps, Page 30, Official Records of Sacramento County; thence along the Northerly line of said Lot 35, along the Westerly and Northerly line of said Lot 8 and along the Southerly line of said Parcel Map the following three (3) courses: (1) South  $89^{\circ}55'30''$  East 678.08 feet; (2) North  $00^{\circ}02'30''$  East 76.80 feet and (3) South  $89^{\circ}55'30''$  East 537.62 feet to the point of beginning, being described as Parcel 1 in that certain Lot Line Adjustment recorded January 29, 2002 in Book 20020129, Page 927, Official Records.


APN: 134-0100-084

**Parcel Five:**

All that portion of Lots 8 and Lot 35 as shown on the Plat of Gunter's Addition to Elk Grove filed in Book 13 of Maps, Map No. 21, Official Records of Sacramento County, described as follows:

Beginning at the Southwest corner of that certain Grant Deed to the Sacramento County Water Agency filed in Book 990810, Page 219, Official Records of Sacramento County, said point also being a point in the Easterly line of said Lot 8; thence from said point of beginning along said Easterly line South  $00^{\circ}02'30''$  West 406.08 feet to the Southeast corner of said Lot 8; thence along the Southerly line of said Lots 8 and 35 North  $89^{\circ}55'30''$  West 1008.35 feet to a point in the Easterly line of that certain 200' Railroad right-of-way by Congressional Grant of July 1862; thence along said Easterly line North  $15^{\circ}42'30''$  West 421.99 feet; thence leaving said Easterly line South  $89^{\circ}55'30''$  East 1122.89 feet to the point of beginning, being described as Parcel 2 in that certain Lot Line Adjustment recorded January 29, 2002 in Book 20020129, Page 927, Official Records.

APN: 134-0100-085



**Apns 134-0100-084/-085**

9195 Brinkman Court

Elk Grove, CA 95624

Inquiry Number: 5973221.11

February 14, 2020

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

02/14/20

**Site Name:**

Apns 134-0100-084/-085  
9195 Brinkman Court  
Elk Grove, CA 95624  
EDR Inquiry # 5973221.11

**Client Name:**

Bole and Associates  
6898 Penny Way  
Brown Valley, CA 95918  
Contact: David Bole



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

## Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Flight Date: May 23, 1993	USDA
1984	1"=500'	Flight Date: June 08, 1984	USDA
1972	1"=500'	Flight Date: June 28, 1972	USDA
1966	1"=500'	Flight Date: August 05, 1966	USGS
1964	1"=500'	Flight Date: May 19, 1964	USDA
1957	1"=500'	Flight Date: September 09, 1957	USDA
1947	1"=500'	Flight Date: July 28, 1947	USGS
1937	1"=500'	Flight Date: August 17, 1937	USDA

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INQUIRY #: 5973221.11

YEAR: 2016

— = 500'







INQUIRY #: 5973221.11

YEAR: 2012

— = 500'







INQUIRY #: 5973221.11

YEAR: 2009

— = 500'







INQUIRY #: 5973221.11

YEAR: 2006

— = 500'







INQUIRY #: 5973221.11

YEAR: 1993

— = 500'







INQUIRY #: 5973221.11

YEAR: 1984

— = 500'







INQUIRY #: 5973221.11

YEAR: 1972

— = 500'





INQUIRY #: 5973221.11

YEAR: 1966

— = 500'







INQUIRY #: 5973221.11

YEAR: 1964

— = 500'







INQUIRY #: 5973221.11

YEAR: 1957

— = 500'







INQUIRY #: 5973221.11

YEAR: 1947

— = 500'







INQUIRY #: 5973221.11

YEAR: 1937

— = 500'





Apns 134-0100-084/-085

9195 Brinkman Court

Elk Grove, CA 95624

Inquiry Number: 5973221.4

February 14, 2020

## EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor  
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# EDR Historical Topo Map Report

02/14/20

**Site Name:**

Apns 134-0100-084/-085  
9195 Brinkman Court  
Elk Grove, CA 95624  
EDR Inquiry # 5973221.4

**Client Name:**

Bole and Associates  
6898 Penny Way  
Brown Valley, CA 95918  
Contact: David Bole



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Bole and Associates were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:**

**Coordinates:**

<b>P.O.#</b>	NA	<b>Latitude:</b>	38.396211 38° 23' 46" North
<b>Project:</b>	1907	<b>Longitude:</b>	-121.356867 -121° 21' 25" West
		<b>UTM Zone:</b>	Zone 10 North
		<b>UTM X Meters:</b>	643487.61
		<b>UTM Y Meters:</b>	4251055.03
		<b>Elevation:</b>	51.00' above sea level

**Maps Provided:**

2012	1894
1979, 1980	
1975	
1968	
1952, 1953	
1947	
1941	
1909, 1910	

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## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2012 Source Sheets



Florin  
2012  
7.5-minute, 24000



Elk Grove  
2012  
7.5-minute, 24000

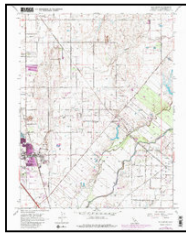


Galt  
2012  
7.5-minute, 24000

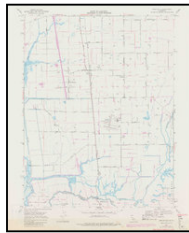


Bruceville  
2012  
7.5-minute, 24000

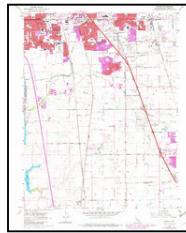
### 1979, 1980 Source Sheets



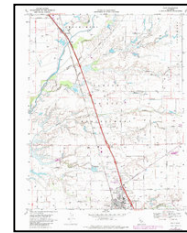
Elk Grove  
1979  
7.5-minute, 24000  
Aerial Photo Revised 1978



Bruceville  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978

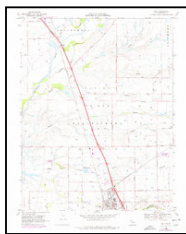


Florin  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978

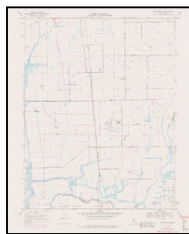


Galt  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978

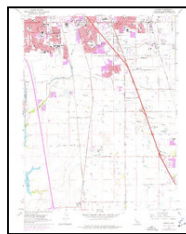
### 1975 Source Sheets



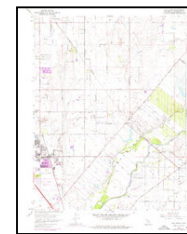
Galt  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975



Bruceville  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975

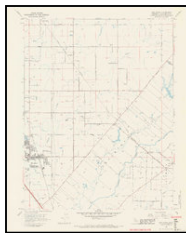


Florin  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975

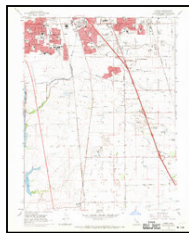


Elk Grove  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975

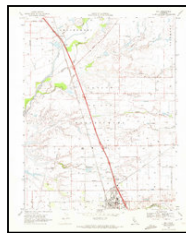
### 1968 Source Sheets



Elk Grove  
1968  
7.5-minute, 24000  
Aerial Photo Revised 1966



Florin  
1968  
7.5-minute, 24000  
Aerial Photo Revised 1966



Galt  
1968  
7.5-minute, 24000  
Aerial Photo Revised 1967

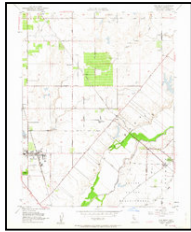


Bruceville  
1968  
7.5-minute, 24000  
Aerial Photo Revised 1967

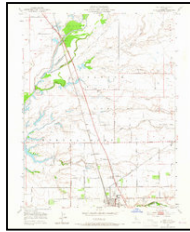
## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1952, 1953 Source Sheets



Elk Grove  
1952  
7.5-minute, 24000  
Aerial Photo Revised 1949



Galt  
1953  
7.5-minute, 24000



Florin  
1953  
7.5-minute, 24000  
Aerial Photo Revised 1949



Bruceville  
1953  
7.5-minute, 24000  
Aerial Photo Revised 1949

### 1947 Source Sheets



GALT  
1947  
15-minute, 50000

### 1941 Source Sheets



Franklin  
1941  
15-minute, 62500  
Aerial Photo Revised 1939

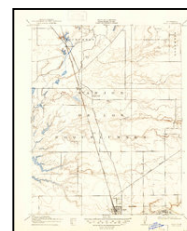
### 1909, 1910 Source Sheets



Florin  
1909  
7.5-minute, 31680



Elk Grove  
1909  
7.5-minute, 31680



Galt  
1910  
7.5-minute, 31680

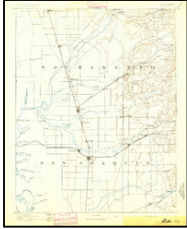


Bruceville  
1910  
7.5-minute, 31680

## ***Topo Sheet Key***

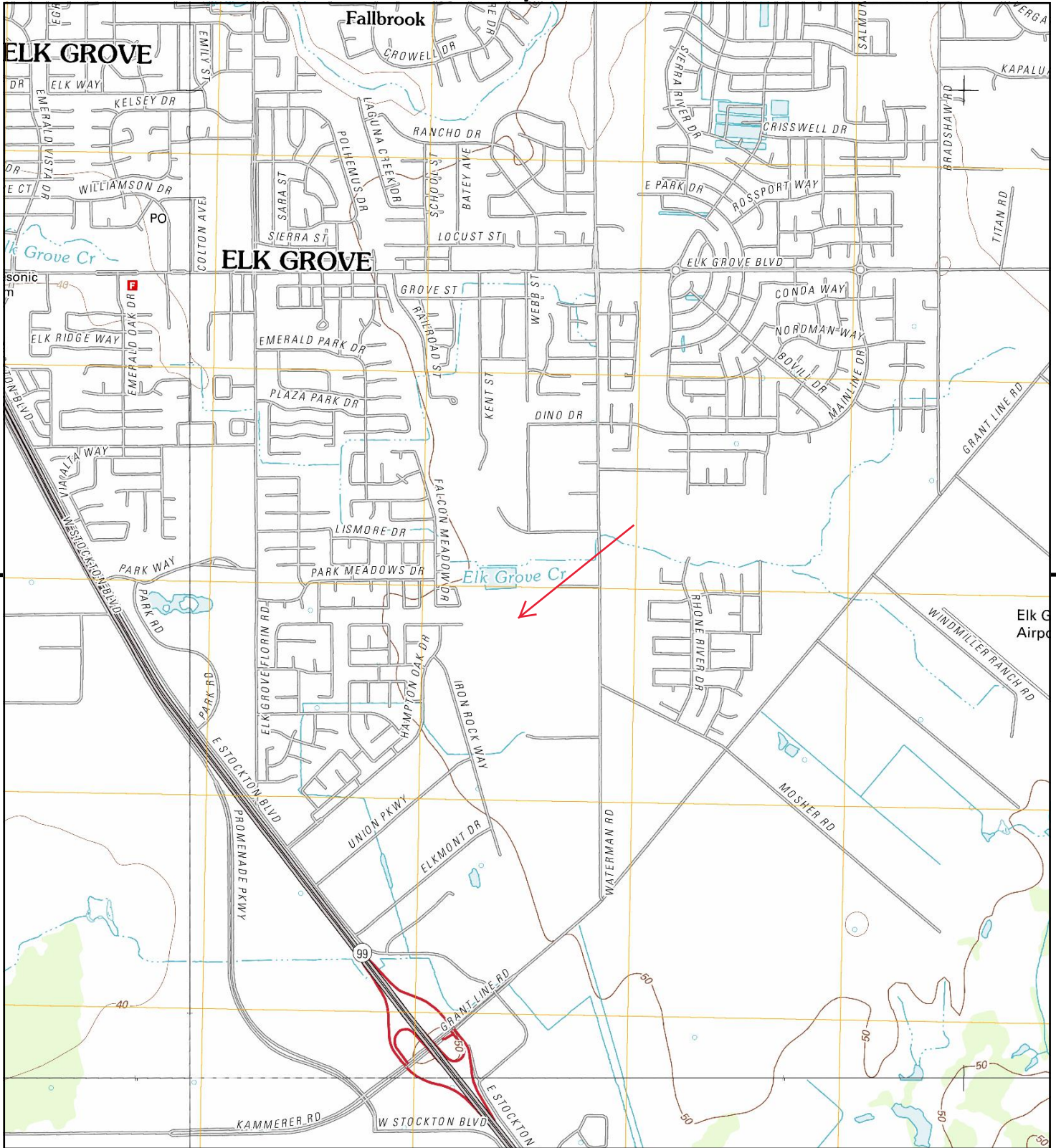
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1894 Source Sheets**

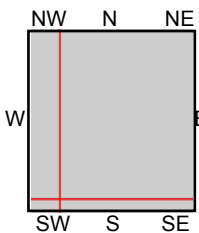


Lodi  
1894  
30-minute, 125000





This report includes information from the following map sheet(s).

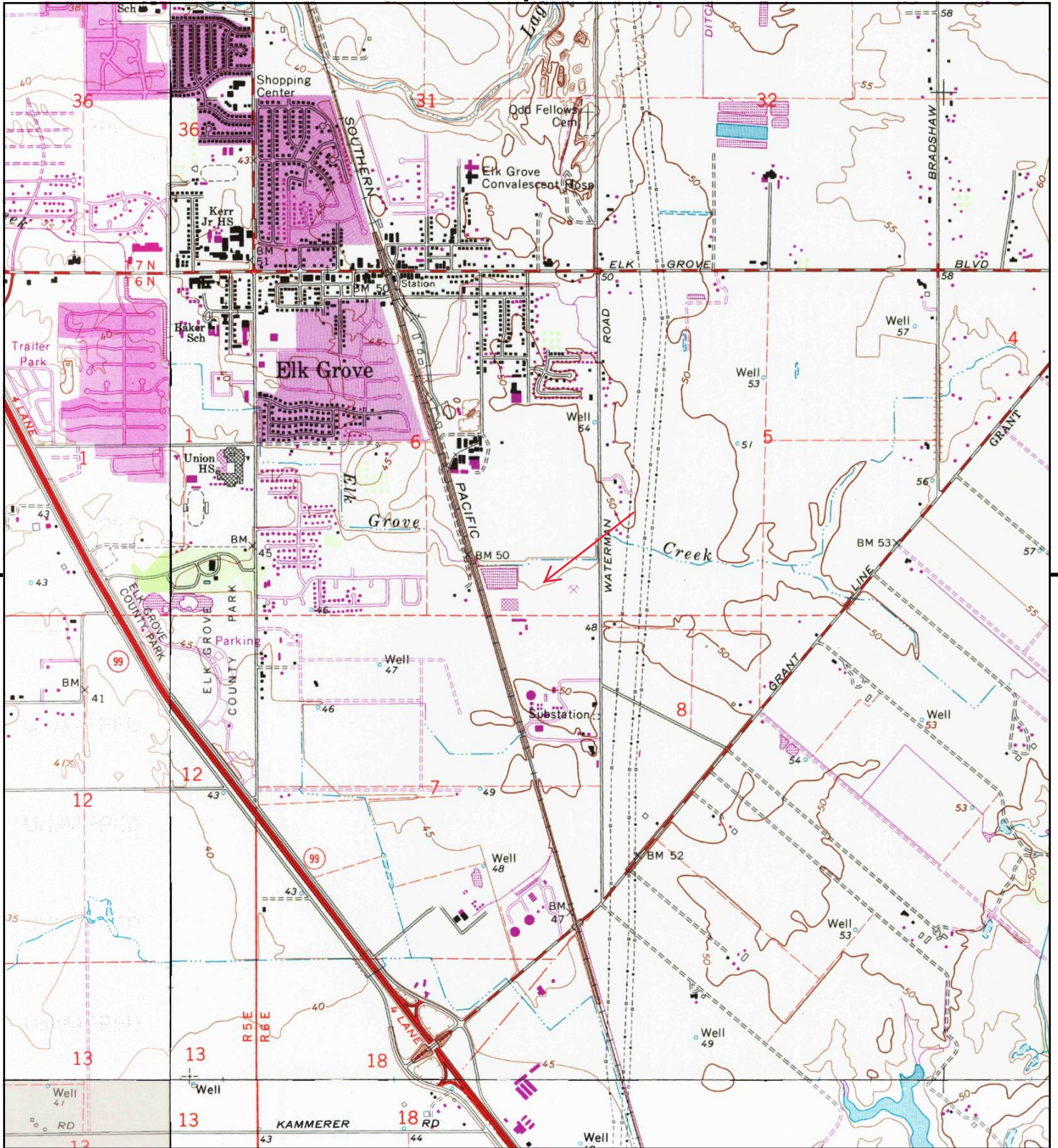


TP, Elk Grove, 2012, 7.5-minute  
 SE, Galt, 2012, 7.5-minute  
 SW, Bruceville, 2012, 7.5-minute  
 NW, Florin, 2012, 7.5-minute

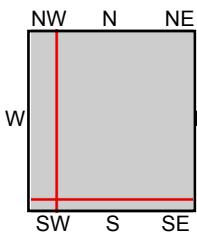
**SITE NAME:** Apsn 134-0100-084/-085  
**ADDRESS:** 9195 Brinkman Court  
 Elk Grove, CA 95624  
**CLIENT:** Bole and Associates







This report includes information from the following map sheet(s).

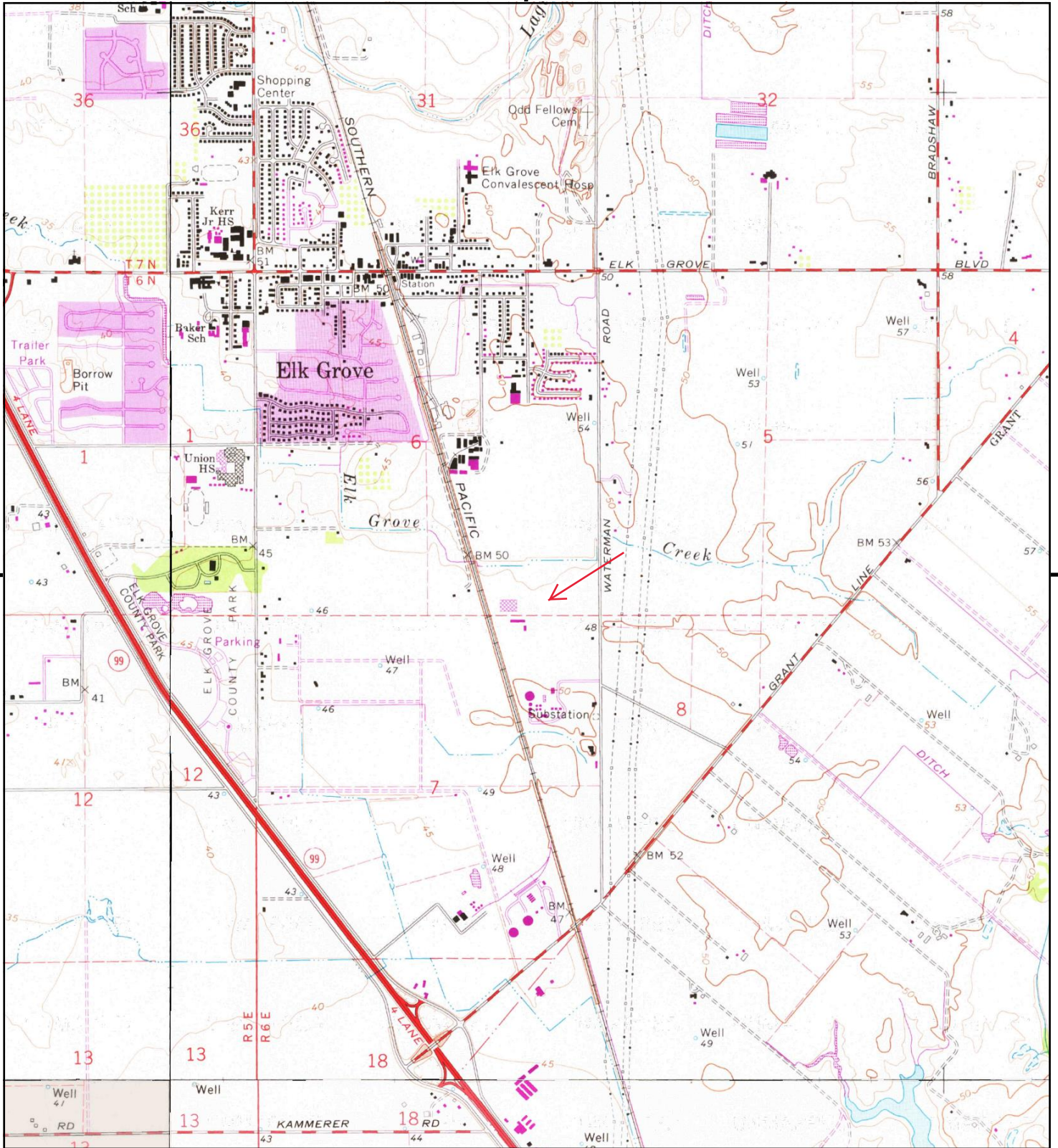


TP, Elk Grove, 1979, 7.5-minute  
SE, Galt, 1980, 7.5-minute  
SW, Bruceville, 1980, 7.5-minute  
NW, Florin, 1980, 7.5-minute

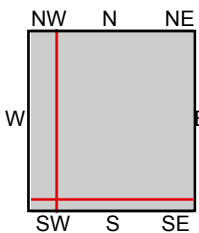
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This report includes information from the following map sheet(s).

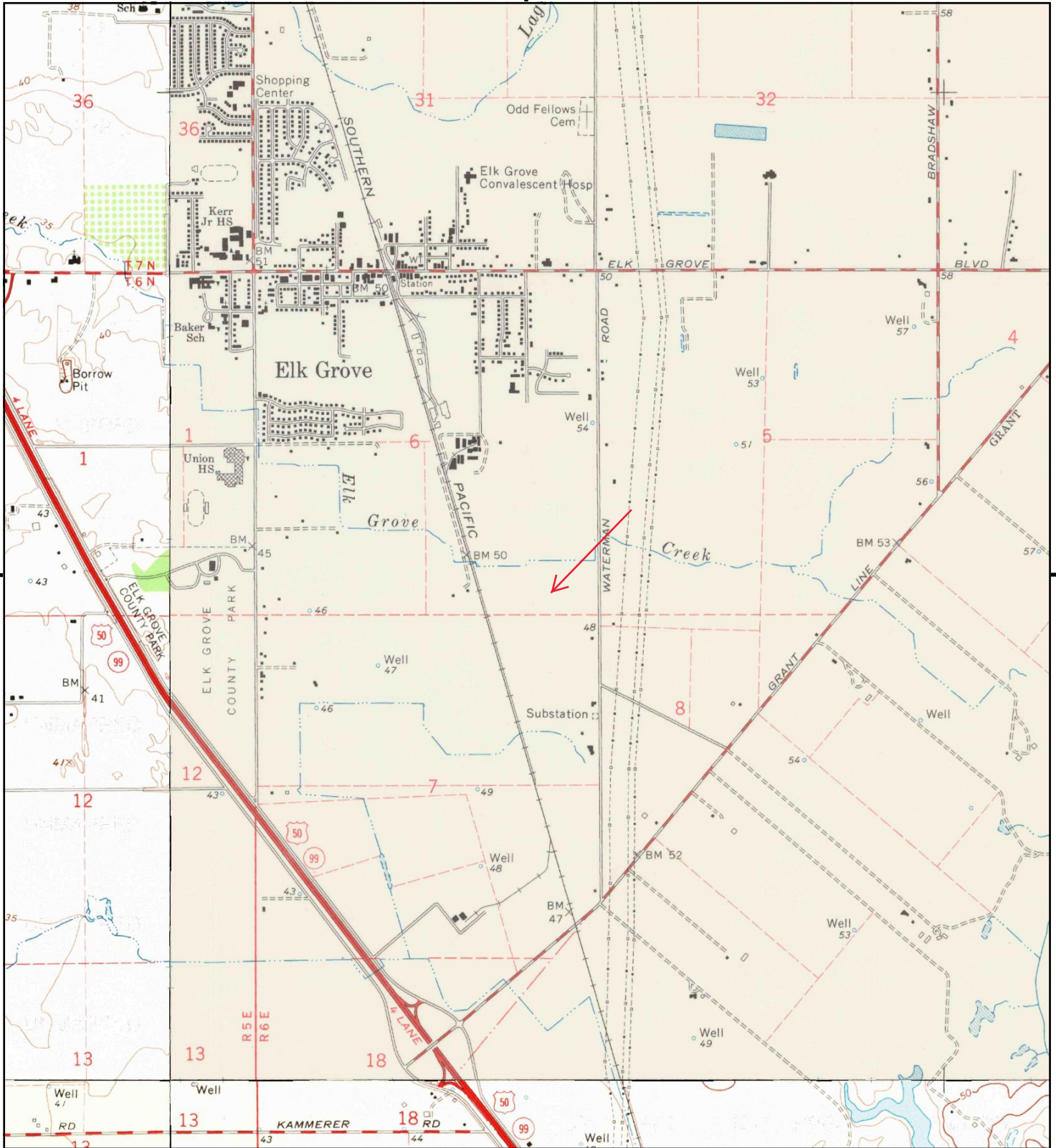


TP, Elk Grove, 1975, 7.5-minute  
 SE, Galt, 1975, 7.5-minute  
 SW, Bruceville, 1975, 7.5-minute  
 NW, Florin, 1975, 7.5-minute

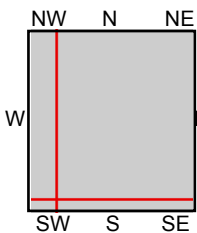
**SITE NAME:** Aps 134-0100-084/-085  
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This report includes information from the following map sheet(s).

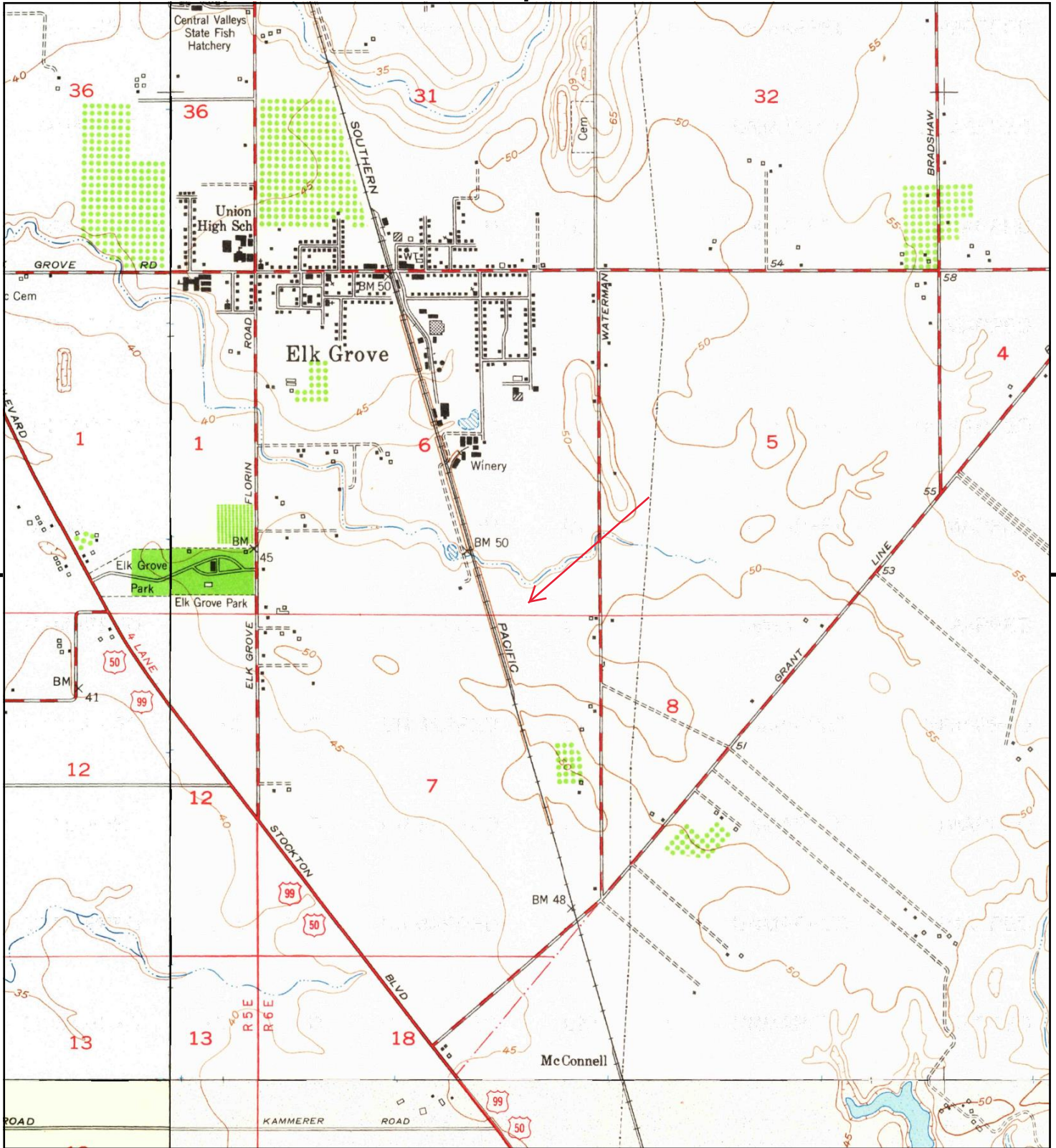


TP, Elk Grove, 1968, 7.5-minute  
 SE, Galt, 1968, 7.5-minute  
 SW, Bruceville, 1968, 7.5-minute  
 NW, Florin, 1968, 7.5-minute

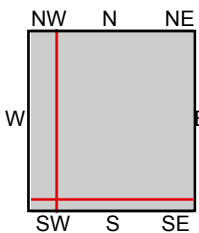
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**ADDRESS:** 9195 Brinkman Court  
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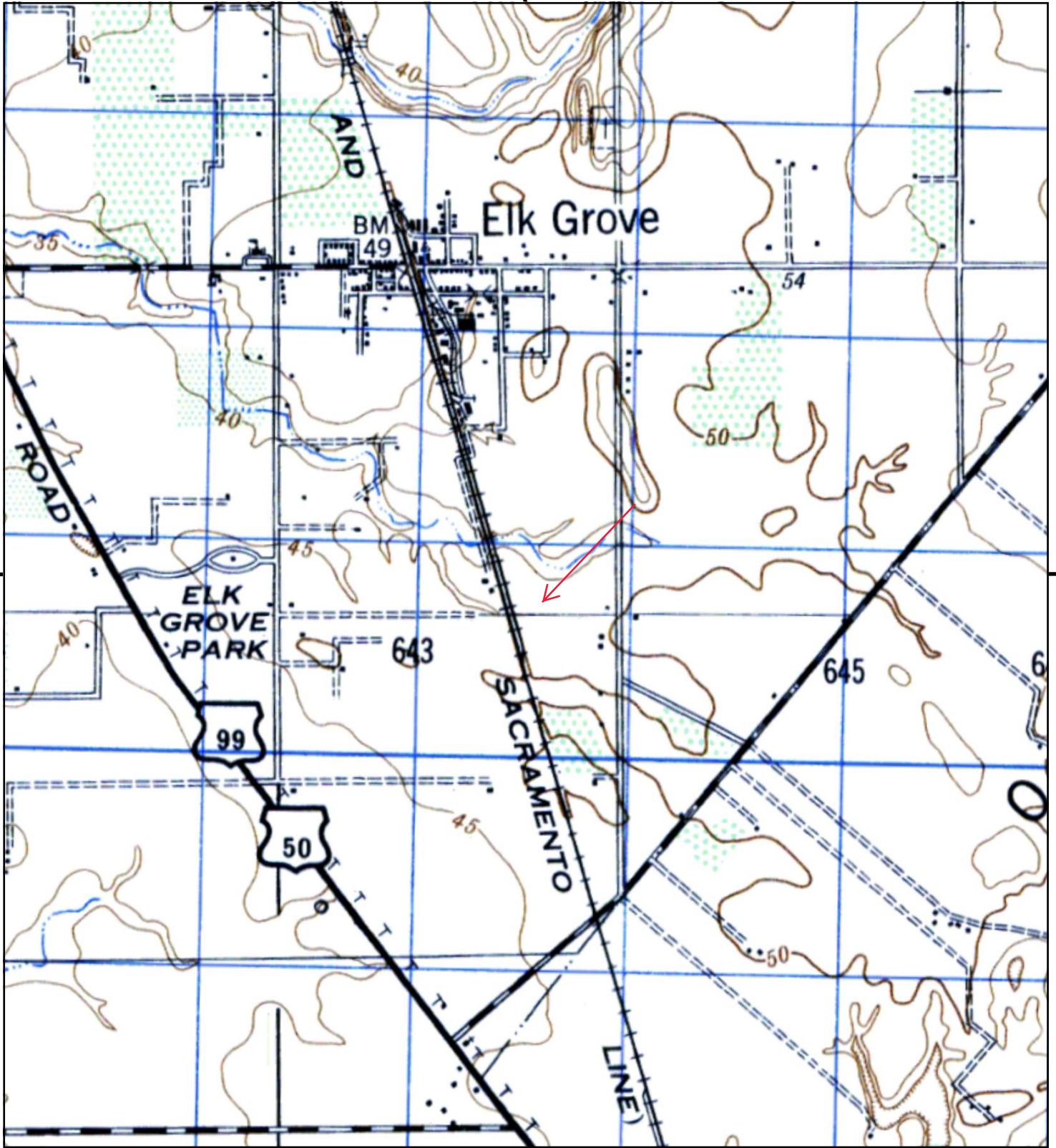


TP, Elk Grove, 1952, 7.5-minute  
 SE, Galt, 1953, 7.5-minute  
 SW, Bruceville, 1953, 7.5-minute  
 NW, Florin, 1953, 7.5-minute

**SITE NAME:** Apsns 134-0100-084/-085  
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This report includes information from the following map sheet(s).

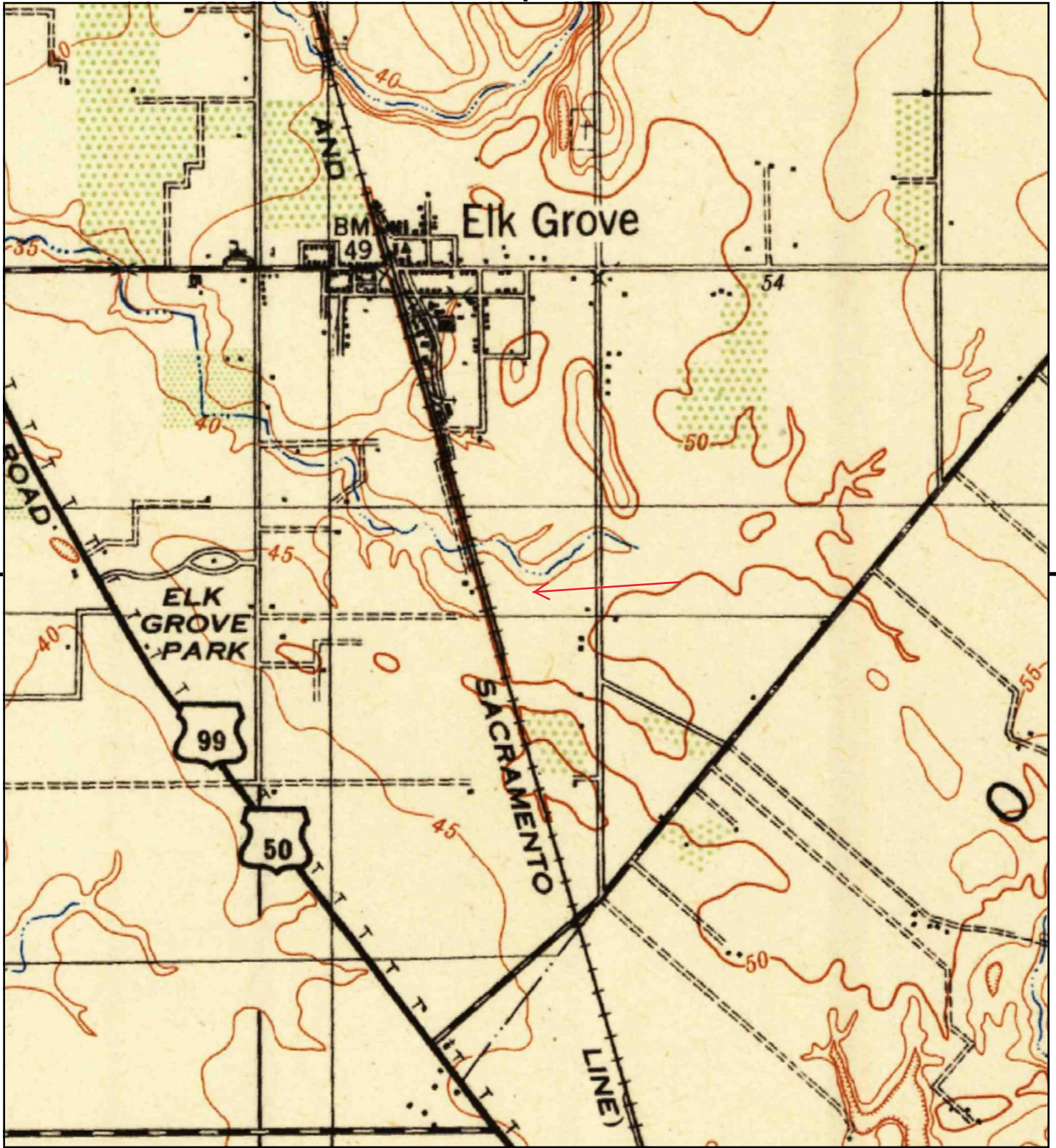


TP, GALT, 1947, 15-minute

SITE NAME: Apsn 134-0100-084/-085  
 ADDRESS: 9195 Brinkman Court  
 Elk Grove, CA 95624  
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This report includes information from the following map sheet(s).

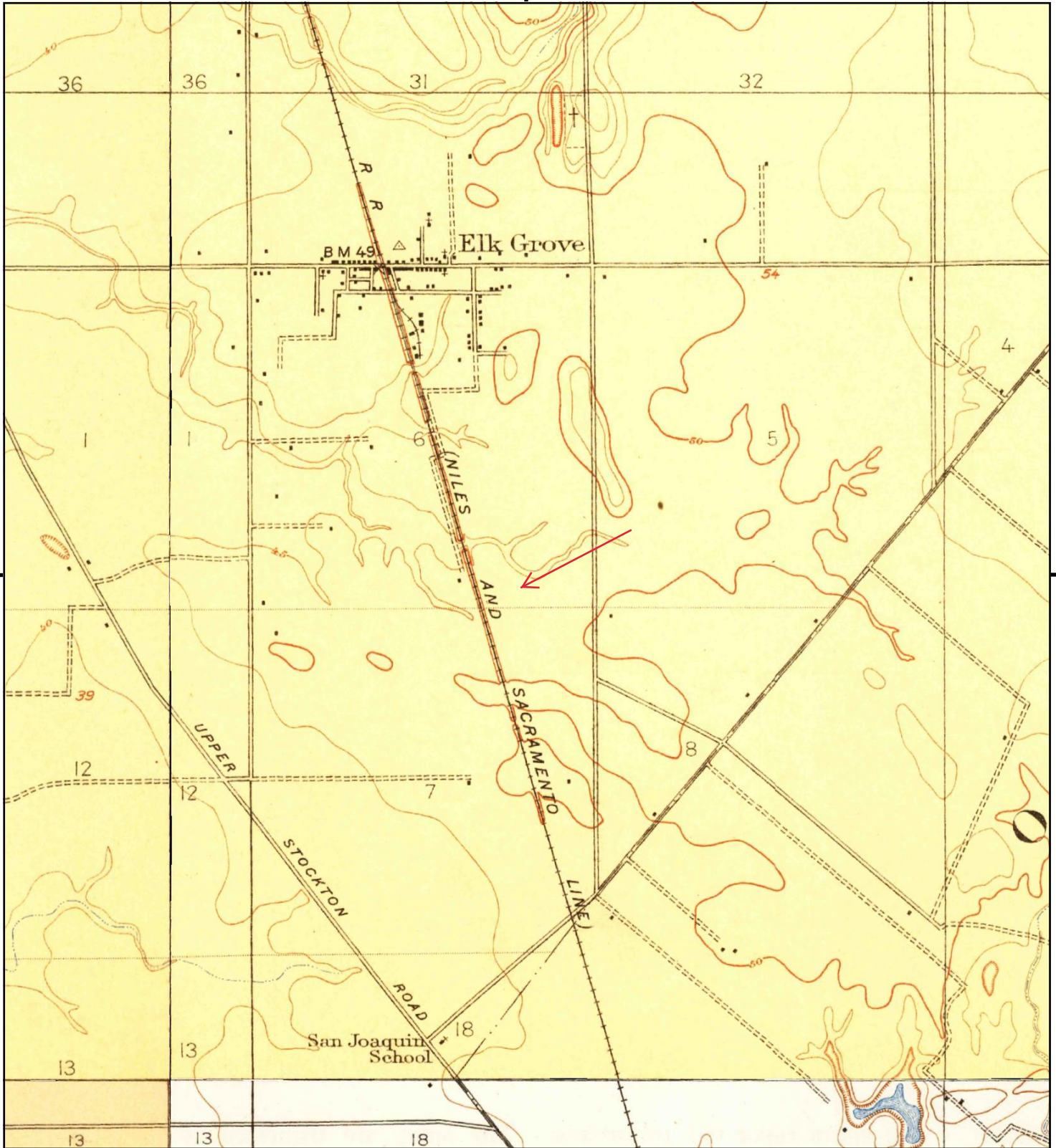


TP, Franklin, 1941, 15-minute

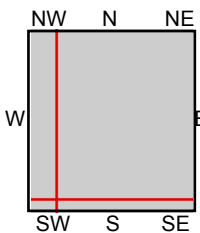
SITE NAME: Apsns 134-0100-084/-085  
 ADDRESS: 9195 Brinkman Court  
 Elk Grove, CA 95624  
 CLIENT: Bole and Associates







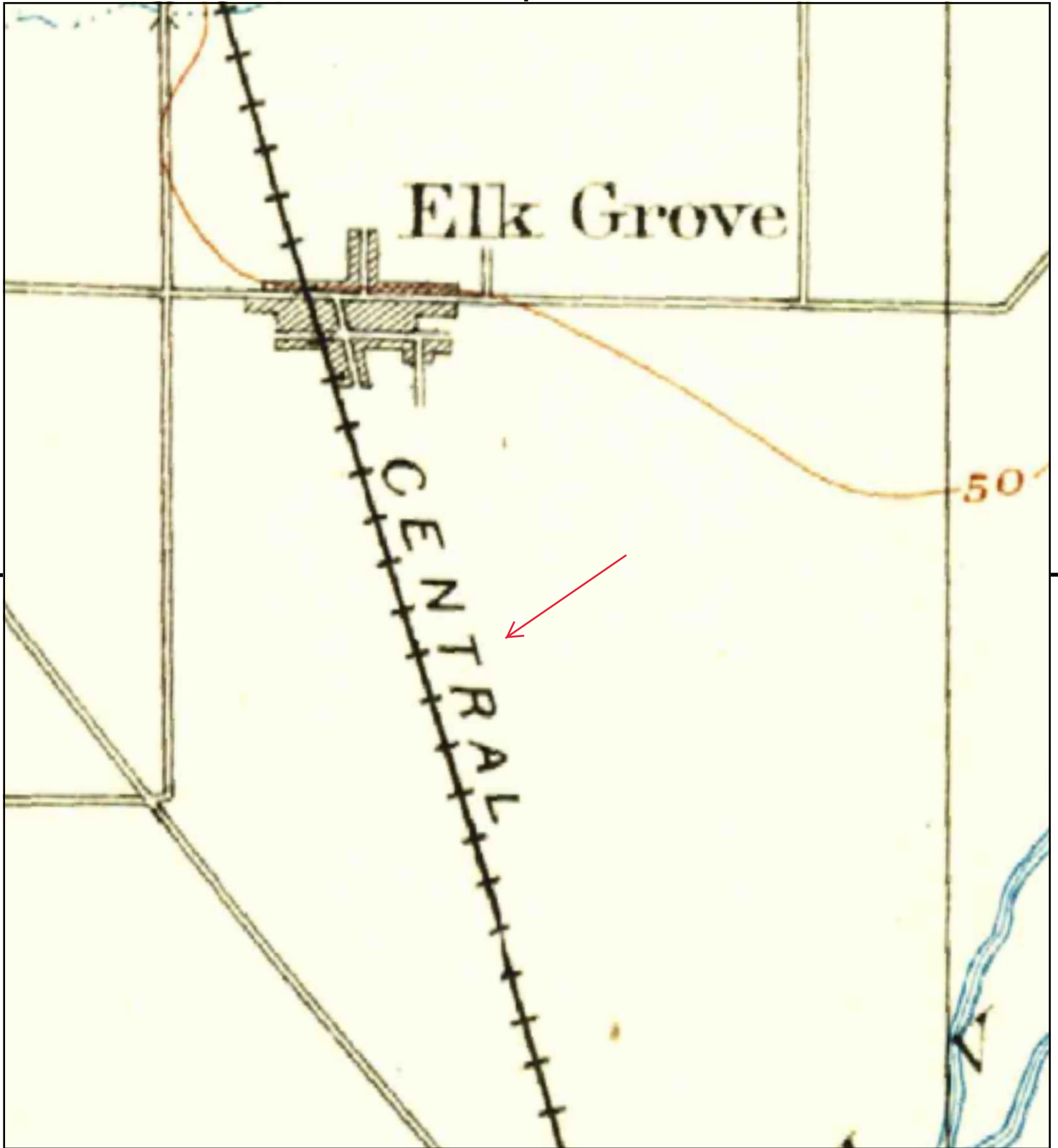
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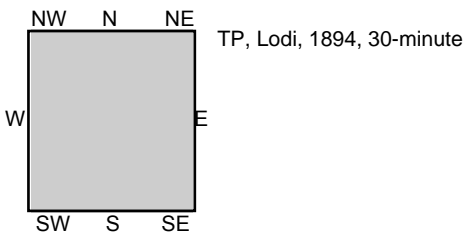
TP, Elk Grove, 1909, 7.5-minute  
 SE, Galt, 1910, 7.5-minute  
 SW, Bruceville, 1910, 7.5-minute  
 NW, Florin, 1909, 7.5-minute

**SITE NAME:** Apsns 134-0100-084/-085  
**ADDRESS:** 9195 Brinkman Court  
 Elk Grove, CA 95624  
**CLIENT:** Bole and Associates





This report includes information from the following map sheet(s).



SITE NAME: Apns 134-0100-084/-085  
ADDRESS: 9195 Brinkman Court  
Elk Grove, CA 95624  
CLIENT: Bole and Associates



Apns 134-0100-084/-085

9195 Brinkman Court

Elk Grove, CA 95624

Inquiry Number: 5973221.3

February 14, 2020

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6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
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# Certified Sanborn® Map Report

02/14/20

**Site Name:**

Apns 134-0100-084/-085  
9195 Brinkman Court  
Elk Grove, CA 95624  
EDR Inquiry # 5973221.3

**Client Name:**

Bole and Associates  
6898 Penny Way  
Brown Valley, CA 95918  
Contact: David Bole



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### Certified Sanborn Results:

**Certification #** 17B7-4468-9B31  
**PO #** NA  
**Project** 1907

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This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 17B7-4468-9B31

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- Library of Congress
- University Publications of America
- EDR Private Collection

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**Apns 134-0100-084/-085**

9195 Brinkman Court  
Elk Grove, CA 95624

Inquiry Number: 5973221.6  
February 14, 2020

# The EDR Property Tax Map Report

## EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

***Thank you for your business.***

Please contact EDR at 1-800-352-0050  
with any questions or comments.

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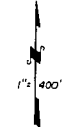
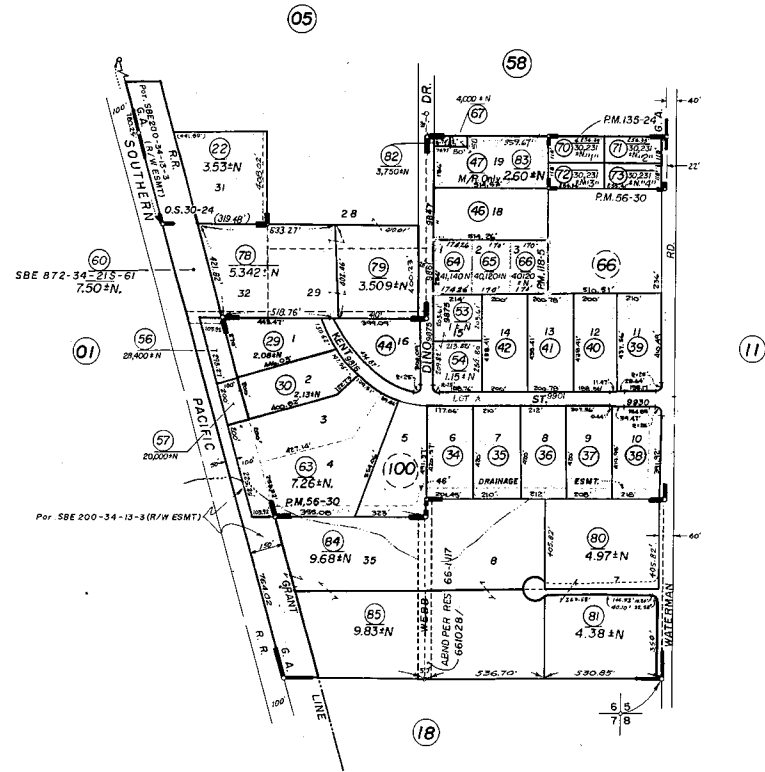
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POR. SE 1/4, SEC.6, T.6N., R.6E., M.D.B. & M.

134-10



Por Record of Survey O. S. Bk. 30, Pg. 24  
Gunters Addition, R. M. Bk. 13, Pg. 21

NOTE—Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 134—Pg. 10  
County of Sacramento, Calif.

**Apns 134-0100-084/-085**

9195 Brinkman Court  
Elk Grove, CA 95624

Inquiry Number: 5973221.8  
February 14, 2020

# EDR Building Permit Report

Target Property and Adjoining Properties

## TABLE OF CONTENTS

### **SECTION**

**About This Report**

**Executive Summary**

**Findings**

**Glossary**

***Thank you for your business.***

Please contact EDR at 1-800-352-0050  
with any questions or comments.

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# EDR BUILDING PERMIT REPORT

## About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

## ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

## Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.



## EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Bole and Associates on Feb 14, 2020.

### TARGET PROPERTY

9195 Brinkman Court  
Elk Grove, CA 95624

### SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

### RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

### Elk Grove

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>
2019	City of Elk Grove, Building Division		
2018	City of Elk Grove, Building Division		X
2017	City of Elk Grove, Building Division		
2016	City of Elk Grove, Building Division		
2015	City of Elk Grove, Building Division		
2014	City of Elk Grove, Building Division		
2013	City of Elk Grove, Building Division		
2012	City of Elk Grove, Building Division		
2011	City of Elk Grove, Building Division		X
2010	City of Elk Grove, Building Division		X
2009	City of Elk Grove, Building Division		
2008	City of Elk Grove, Building Division		
2007	City of Elk Grove, Building Division		X
2006	City of Elk Grove, Building Division		X
2005	City of Elk Grove, Building Division		
2004	City of Elk Grove, Building Division		
2003	City of Elk Grove, Building Division		
2002	City of Elk Grove, Building Division		
2001	City of Elk Grove, Building Division		
2000	City of Elk Grove, Building Division		
1999	City of Elk Grove, Building Division		

Name: JurisdictionName  
Years: Years  
Source: Source  
Phone: Phone

**BUILDING DEPARTMENT RECORDS SEARCHED**

Name: Elk Grove  
Years: 1999-2019  
Source: City of Elk Grove, Building Division, ELK GROVE, CA  
Phone: (916) 478-2235

Name: Sacramento  
Years: 1902-2019  
Source: City of Sacramento, Community Development, SACRAMENTO, CA  
Phone: (916) 264-5011

Name: Sacramento County  
Years: 1980-2019  
Source: Sacramento County, Planning and Community Development Department, SACRAMENTO, CA  
Phone: (916) 874-6141



## TARGET PROPERTY FINDINGS

### TARGET PROPERTY DETAIL

**9195 Brinkman Court  
Elk Grove, CA 95624**

No Permits Found

**Apns 134-0100-084/-085**

9195 Brinkman Court  
Elk Grove, CA 95624

Inquiry Number: 5973221.5  
February 14, 2020

# The EDR-City Directory Image Report

## TABLE OF CONTENTS

### SECTION

Executive Summary

Findings

City Directory Images

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

#### **Disclaimer - Copyright and Trademark Notice**

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1999	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1994	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1989	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1985	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1980	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1974	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1970	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory

## FINDINGS

### TARGET PROPERTY STREET

9195 Brinkman Court  
Elk Grove, CA 95624

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### BRINKMAN CT

2014	pg A1	EDR Digital Archive	
2010	pg A4	EDR Digital Archive	
2005	-	Haines Criss-Cross Directory	Street not listed in Source
1999	-	Haines Criss-Cross Directory	Street not listed in Source
1994	-	Haines Criss-Cross Directory	Street not listed in Source
1989	-	Haines Criss-Cross Directory	Street not listed in Source
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1974	-	Haines Criss-Cross Directory	Street not listed in Source
1970	-	Haines Criss-Cross Directory	Street not listed in Source

# FINDINGS

## CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
<b><u>KENT ST</u></b>		
2014	pg. A2	EDR Digital Archive
2010	pg. A5	EDR Digital Archive
2005	pg. A7	Haines Criss-Cross Directory
2005	pg. A8	Haines Criss-Cross Directory
1999	pg. A9	Haines Criss-Cross Directory
1994	pg. A10	Haines Criss-Cross Directory
1994	pg. A11	Haines Criss-Cross Directory
1989	pg. A12	Haines Criss-Cross Directory
1985	pg. A13	Haines Criss-Cross Directory
1980	pg. A14	Haines Criss-Cross Directory
1974	pg. A15	Haines Criss-Cross Directory
1970	pg. A16	Haines Criss-Cross Directory

## **City Directory Images**

**BRINKMAN CT 2014**

9200 WATERMAN SELF STORAGE



**KENT ST 2014**

9601 ANSARI, AHMED  
BAKER, ANNETTE  
BASA, MARTINA A  
BOBO, GARY  
CANADY, SEAN A  
FARROW, PAUL V  
FITZGERALD, LINDA A  
FRANCESCONI, STEVEN C  
GIL, GERARDO  
KEMMIS, MELODY  
KENT PLACE APARTMENTS  
ROTH, MICHELLE E  
TORRES, RUSSELL J  
VERRERAS, KYLE  
9612 JOHNSON JOHN AND SARAH  
JOHNSON, JOHN E  
9640 BOUCK, ROBERT W  
CALIFORNIA HEAVY EQUIPMENT  
9643 WOLDHAGEN, KEVIN  
9644 LEMERT, LANG K  
9648 HOLMES, MARGARET H  
9651 OCCUPANT UNKNOWN,  
9654 CAMPOS, CAMERON G  
SMART DESIGN  
9657 PADILLA, GILBERT  
9664 HARTMAN, KYMBERLY L  
9666 AU, CRYSTAL  
9668 HAUGHT, JASON T  
9674 CRUMP, KELLI R  
9675 CIOLI, PAUL C  
9677 GARDNER, ROSS W  
9683 THOMPSON, STEVEN L  
9688 MYSTERY, MACEY  
9689 DISQUE, ERIC L  
ELITE FIRE SYSTEMS INC  
9692 FOX MATTHEW T CONSTRUCTION  
FOX, MATTHEW T  
9695 DANIEL, SHERIDA M  
9696 GARCIA, ROSA M  
9704 OLIVER LANDSCAPE MANAGEMENT  
SHARON  
WALTERS, SCOTT G  
9716 BARNETT, DAMIAN E  
IT WORKS  
9717 LLORET, ANDREW  
9720 DENNAOUI, MIRKA  
9721 ADKINS, JEFFREY A  
9728 CHRISTINA INVESTMENTS LLC  
9750 ANDREWS AUTO BODY  
9796 PACIFIC EXCAVATION INC

**KENT ST      2014      (Cont'd)**

9796    T&J EQUIPMENT INC  
          TIM PAXINS PACIFIC EXCAVATION  
9800    BEDROCK SAND & GRAVEL LLC  
          HANFORD READY-MIX INC  
          HANFORD SAND & GRAVEL INC  
9850    NUTRISHARE INC  
9862    EVO - EMRGNCY VCHILE OTFITTERS  
9880    KEVIN YOUNG CONCRETE COMPANY  
9883    EMERALD SITE SERVICES  
          NORTH COAST RESOURCE CONS  
          NORTH COAST RESOURCES MGT  
9888    ROBERTSON BRYAN INC  
9900    GSS MOTOR CORP  
          LINK TRUCK & TRAILER REPAIR  
          THOMPSON BROTHERS MECHANICAL  
9901    GLASS PROS  
9911    BELLISSIMA DANCE ART LLC  
9914    DIALED IN AUTOMOTIVE  
          MOUER LABS INC  
9918    DCE INVESTMENT  
          NORTH CAL BUILDERS INC  
9919    SCHWANS HOME SERVICE INC  
          TONYS PIZZA SERVICE  
9930    CLOSET FACTORY OF SACRAMENTO  
          FEIST CABINETS & WOODWORKS INC



-

**BRINKMAN CT 2010**

9200 U HAUL CO ELK GROVE AREA  
WATERMAN SELF STORAGE

**KENT ST 2010**

9601 BARDSLEY, SANDRA  
 BOBO, GARY  
 DELACRUZ, PEDRO C  
 ELLIOTT, ELIZABETH  
 FITZGERALD, LINDA A  
 OLIVARES, THERESA  
 WENGER, TODD R  
 9612 JOHNSON, JOHN E  
 9625 MING, ALBERT  
 9640 DERR, CINDY A  
 9643 JOHNSON, LARRY L  
 9644 LEMERT, LANG K  
 9648 OCCUPANT UNKNOWN,  
 9651 LECROY, ROY W  
 9654 CAMPOS, CAMERON G  
 SMART DESIGN  
 9657 PEREZ, JUSTINA P  
 9664 OCCUPANT UNKNOWN,  
 9665 CRUMP, RICHARD I  
 9666 OCCUPANT UNKNOWN,  
 9668 HAUGHT, JASON T  
 9674 CRUMP, CAROLE L  
 9675 BATES, BILL  
 9677 GARDNER, RICHARD R  
 9683 THOMPSON, STEVEN L  
 9688 OCCUPANT UNKNOWN,  
 9689 DISQUE, ERIC L  
 ELITE FIRE SYSTEMS INC  
 9692 FOX MATTHEW T CONSTRUCTION  
 FOX, MATTHEW T  
 9695 TERRAZAS, JACOB  
 9704 SHARON  
 WALTERS, SHURREL H  
 9716 DAY, SYDNEY  
 IT WORKS  
 9717 MATZELLE, MICHAEL P  
 9720 YOUNG, CHERYL E  
 9728 BOBO, CHRIS D  
 CHRISTINA INVESTMENTS LLC  
 9750 SACRAMENTO PARTY JUMPS  
 STS A CALIFORNIA GENERAL PARTN  
 9756 SOCCER WORLD  
 9796 PACIFIC EXCAVATION INC  
 T&J EQUIPMENT INC  
 TIM PAXINS PACIFIC EXCAVATION  
 9800 AMERICAN ALLIANCE CEM CO INC  
 BEDROCK SAND & GRAVEL LLC  
 HANFORD READY-MIX INC  
 9850 DIAMOTO MEDICAL INC  
 NUTRISHARE INC

**KENT ST      2010      (Cont'd)**

9858    SP GRAPHICS  
9880    ALL-COMM INDUSTRIES INC  
          YOUNG KEVIN CONCRETE CO INC  
9883    DUPZYK JIM CONCRETE PUMPING  
9888    ROBERTSON BRYAN INC  
9900    BC LAWSON DRAYAGE INC  
          THOMPSON BROTHERS MECHANICAL  
9901    G M P PARTS COMPANY  
          GLASS PROS  
9914    PARDENT LABS INC  
9918    COVER ME WINDOWS  
          SPECIALTY AUTO  
9919    SCHWANS HOME SERVICE INC  
          TONYS PIZZA SERVICE  
9930    FEIST CABINETS & WOODWORKS INC

## KENT ST 2005

9704	★ GRAY CHUCK/HEALTH FOOD PRODS	916-685-4143	3
	● WALTERS Sharon	916-685-5050	
9717	● COLE Dennis	OO	7
9720	XXXX	OO	
9722	★ D A BENDER MECHANICAL	916-685-8521	
	★ EVERET AUTOMOTIVE	916-686-6770	
	★ R L WELLS&ASSOCIATES INC	916-686-4500	
9726	★ RAILROAD MINI STORAGE	916-685-2378	3
9728	★ BOBO CONSTR INC	916-685-2285	
	★ CARLOS LINDA E MA	916-685-5258	
	★ COVINGTON MINDY MFT	916-685-5258	9
	★ WONG ALISA T PSYD	916-685-5258	
	★ WOODWARD PAUL PSYD	916-685-5258	
	★ YOUNG LIFE	916-686-8612	3
9736	★ ANDREWS BODY SHOP	916-686-2529	0

## KENT ST 2005

KENT ST		95624 CONT.	
9750	* RED RIVER LUMBER COMPANY	916-686-2522	9
9796	* PAC EXCAVATION INC	916-686-2800	3
X	DINO DR		
9800	* HANFORD READY MIX	916-423-3177	
	* HANFORD READY MIX INC	916-685-9774	
9830	* CORDEIRO VAULT CO	916-686-6080	
9833	* BERRYMAN PRDCTS INC	916-685-1662	
9888	* BENCO BRIDGES	916-686-5030	3
	* BENCO CONTRNG&ENGR	916-686-5030	
9900	* LAWSON DRAYAGE INC	916-686-2600	9
9901	* GLOBAL BUSINESS SOLUTIONS	916-685-6427	2
	* GOLDMAN J D CO INC	916-686-1420	0
	* GORDON AUTOMOTIVE SERVICE	916-686-2887	+5
	* J D GOLDMAN CO INC	916-686-1420	8
	* Y T GLASS&WINDOWS INC	916-714-3020	2
9911	* CRACKAWAY ENGINE MACHINE	916-686-1961	9
	* JENKINS BEVERAGE INC	916-686-1800	0
	* WESTERN SUPPLIES	916-685-4302	0
	* WESTRN SUPPLIES	916-685-4302	3
9914	* APPLIED TCHNLGY CONST SV INC	916-714-8757	+5
	* ELK GRV GRANITE	916-714-7887	3
	* GANN'S BODY SHOP	916-686-1212	9
	* JO-LYNNS	916-685-2218	8
9918	* A 1 TOWING	916-395-8600	+5
	* ELK GROVE DOOR&HARDWARE	916-686-8682	
	* ELK GROVE WOODWORKING CO INC	916-686-1188	
	* ELK GRV BUILDERS INC	916-685-1100	8
	* RED BAG MOBILE CATERING	916-691-3191	+5
	* RED BAG PARTY CONSULTANTS	916-714-5417	3
	* TRUCK SHOPPE THE	916-714-3566	3
9919	* SCHWAN SALES	916-686-8662	
	* SCHWANS SALES	916-686-1011	7
	* TONY'S PIZZA SERVICE	916-686-6888	8
9930	* FEIST CABINETS&WOODWORKS INC	916-686-8230	
X	WATERMAN RD		
	* 47 BUS 30 RES 7 NEW		

## KENT ST 1999

9704	● GRAY Chuck	916-685-5050	
9716	XXXX	OO	
9717	● COLE Dennis	OO	7
9720	XXXX	OO	
9722	● BOBO Gary	OO	+9
	★ D A BENDER	916-685-8521	5
	MECHANICAL		
	★ EVERT AUTOMOTIVE	916-686-6770	5
	★ R L	916-686-4500	5
	WELLS&ASSOCIATES INC		
9726	XXXX	OO	
9728	★ BOBO CONSTR INC	916-685-2285	2
	★ ROTA ATO ENGINE REPAIR&SERVICE	916-686-1866	+9
	★ YOUNG LIFE	916-686-8612	+9
9728C	★ ARNOLD SALLY M	916-685-5258	8
C	★ CARLOS LINDA E MA	916-685-5258	3
C	★ COVINGTON MINDY MFT	916-685-5258	+9
C	★ WONG ALISA T PSYD	916-685-5258	5
C	★ WOODWARD PAUL PSYD	916-685-5258	3
9730	XXXX	OO	
9736	★ ANDREWS BODY SHOP	916-686-2530	7
9750	★ AMCOT INDUSTRIES	916-685-6543	7
	★ RED RIVER LUMBER COMPANY	916-686-2522	+9
9760	XXXX	OO	
X	WATERMAN RD		
9800	★ HANFORD READY MIX	916-423-3177	
	★ HANFORD READY MIX INC	916-685-9774	
9816	● HANFORD Preston	OO	+9
9830	★ CORDEIRO VAULT CO	916-686-6080	1
9833	★ BERRYMAN PRDCTS INC	916-685-1682	
	● BLANKENSHIP Robert	OO	+9
9888	★ BENCO CONTRNG&ENGR	916-686-5030	
9900	★ LAWSON DRAYAGE INC	916-686-2600	+9
	★ LAWSON DRAYAGE INC OR	916-686-2660	+9
9901	★ G M P PARTS COMPANY	916-685-1055	7
	★ J D GOLDMAN CO INC	916-686-1420	8
	★ TOTAL CONTROL PRODUCTS LLC	916-685-1790	8
	★ US PUBLISHING AGENCY	916-685-6427	+9
9911	★ CRACKAWAY ENGINE MACHINE	916-686-1961	+9
	★ GORDON AUTOMOTIVE SERVICE	916-686-2887	+9
	★ PARKERS AUTOMOTIVE	916-685-5662	+9
	★ WESTRN SUPPLIES	916-685-4302	+9
9914	★ EXPERT AUTOMOTIVE	916-685-7997	8
	★ GANNS BODY SHOP	916-686-1212	+9
	★ JO LYNNS	916-685-2218	8
9918	★ A-1 TOWING	916-686-1008	+9
	★ ELK GROVE DOOR&HARDWARE	916-686-8682	5
	★ ELK GROVE WOODWORKING CO INC	916-686-1188	5
	★ PFT ROBERSON	916-686-1211	+9
	★ SUDA INC	916-685-1100	8
	★ TERRA COTTA CONNECTION	916-685-5806	6
9919	★ SCHWAN SALES	916-686-8662	1
	★ SCHWANS SALES	916-686-1011	7
	★ TONY'S PIZZA SERVICE	916-686-6888	8
9930	★ FEIST CABINETS&WOODWO- RKS INC	916-686-8230	2
	★ 43 BUS 35 RES 31 NEW		



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✓

**KENT ST 1994**

9704	★ CA GRADING & PAVING	685-5050	1
	GRAY Chuck	685-5050	
9716	XXXX	00	
9717	XXXX	00	
9720	XXXX	00	

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## KENT ST 1994

KENT		95624 CONT..	
9726	XXXX	00	
9728	★BOBO CONSTR INC	685-2285	2
	★INFO SCRTY IMMIGRTN	686-1355	3
	★MACHEK CAROLE MFCC	685-1098	+4
9730	XXXX	00	
9736	★DANIELS PLUMBING	686-8479	2
	★RELIANCE HEATNG&AC	686-8321	2
9750	★GIBSON WINE CO	685-9594	
9760	XXXX	00	
9800	★HANFORD READY MIX	423-3177	5
	★HANFORD READY MIX	685-9774	5
9830	★CORDEIRO VAULT CO	686-6080	1
9833	★BERRYMAN PRODUCTS	685-1662	5
9888	★BENCO CONTR&ENGRG	686-5030	9
9900	★CA WASTE REMOVL SYS	685-4061	3
9914	★ELK GRV TOWING	686-8233	3
	★GANNS BODY SHOP	686-1212	3
	★JO LYNNS	685-2218	+4
9918	★SUDA INC	685-1100	0
9919	★SCHWAN SALES	686-8662	1
	★SCHWANS SALES NORTH	686-1010	2
	★TONYS PIZZA SERVICE	686-6888	1
9930	★FEIST CABINETS INC	686-8230	2
	★ 21 BUS	25 RES	2 NEW

## KENT ST 1989

9704	★ CA GRADING & PAVING	685-5050	1
	GRAY Chuck	685-5050	4
9716	XXXX	00	
9717	XXXX	00	
9720	XXXX	00	
9726	XXXX	00	
9750	★ GIBSON WINE CO	685-9594	
9760	XXXX	00	
9800	★ HANFORD READY MIX	423-3177	5
	★ HANFORD READY MIX	685-9774	5
9833	★ BERRYMAN PRODUCTS	685-1662	5
9888	★ BENCO CONTR & ENGRG	686-5030	+9
9900	★ THOMPSON BROS MECH	685-5398	8
NO #	PATTERSON John F	685-3493	+9
	★ 7 BUS	29 RES	6 NEW

## KENT ST 1985

9704	CA GRADING&PAVING	685-5050	
	CALIF GRADING&PAVING	685-5050	1
	GRAY CHUCK	685-5050	4
9716	VERZASCONI O	685-9890	
9717	XXXX	00	
9720	XXXX	00	
9730	XXXX	00	
9750	GIBSON WINE CO	685-9594	
9760	XXXX	00	
9800	HANFORD READY MIX	423-3177	+
	HANFORD READY MIX	685-9774	+
9833	BERRYMAN PRODUCTS	685-1662	+
NO #	COONS AMY	685-3493	
NO #	DERR BERNICE G MRS	685-9508	
★	7 BUS	27 RES	6 NEW

## KENT ST 1980

9704	CALIF GRADNG&PAYNG	685-5050	7
	GRAY CHUCK	685-5050	+0
	SHAKLEE PRODUCTS	685-4143	5
9716	VERZASCONI O	685-9890	3
9717	HARP OLIVER	685-4779	
9720	XXXX	00	
9730	ELK GROVE READY MIX	685-5900	5
9750	GIBSON WINE CO	685-9594	2
9760	SHORT CARL M	685-3325	2
NO #	COONS AMY	685-3493	
NO #	DERR BERNICE G MRS	685-9508	1
★	4 BUS	25 RES	4 NEW

## KENT ST 1974

9704*	CALIF GRADNG&PAVING	421-8521	
	*CALIF GRADNG&PAVNG	685-4143	
	*GRAY CHUCK	421-8521	3
	*GRAY ENTERPRISES	421-8521	+4
9716	VERZASCONI O	685-9890	3
9717	HARP OLIVER	685-4779	
9720	BURTTS JOE MRS	685-9614	
9750*	GIBSON WINE CO	685-9594	2
9760	SHORT CARL M	685-3325	2
NO #	COONS AMY	685-3493	
NO #	CRUMP C F	685-4050	
NO #	DERR BERNICE G MRS	685-9508	1
NO #	DERR HOMER	685-9930	
NO #	KORTH G STACY	685-4938	
	* 5 BUS 23 RES	4 NEW	

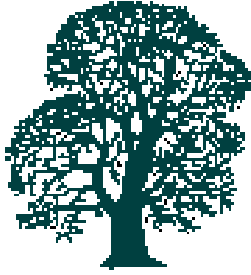
## KENT ST 1970

9704*	CALIF GRADNG&PAVING	421-8521
	*CALIF GRADNG&PAVNG	685-4143
	GRAY SHURREL CHUCK	421-8521
	GRAY SHURREL CHUCK	685-4143
9717	HARP OLIVER	685-4779
9720	BURTTS JOE MRS	685-9614
NO #	COONS AMY	685-3493
NO #	CRUMP C F	685-4050
NO #	DERR BERNICE G	685-9508
NO #	DERR HOMER	685-9930
NO #	FROST FLOYD	685-4141
NO #	*GIBSON WINE CO	685-9594
NO #	KORTH G STACY	685-4938
NO #	VERZASCONI ETTORE	685-9890
	* 3 BUS 23 RES	

# **APPENDIX E: QUALIFICATIONS**

*MR. DAVID BOLE, ENVIRONMENTAL PROFESSIONAL*  
*BOLE AND ASSOCIATES STATEMENT OF QUALIFICATIONS*





# ***Bole and Associates***

*An Environmental Consulting Firm*

**Environmental Site Assessments      Biological & Botanical Studies**  
**Threatened & Endangered Species      Wildlife Surveys & Evaluations**  
**Wetland Delineations & Permits      SWPPP Developer/Practitioner**

*Bole and Associates is a professional environmental consulting firm that specializes in property characterization and assessment. Our team of experts pioneered the integration of biology, hydrology, engineering, architecture, and subsurface interface radar to become a leader in innovative site resource evaluation and restoration. Drawing upon our broad experience and expertise we have become a leader in providing evaluation, planning, design, and permitting services to clients in both private and public sectors. Our environmental science staff scientists provide expert CEQA/NEPA Environmental Assessments, Initial Studies, Biological Inventories, Wetland Delineations, and Phase I Environmental Site Assessments in accordance with the latest ASTM Standards, Federal AAI Requirements, and Small Business Administration Procedures. Marcus H. Bole and David H. Bole, Principals, have over 50 years of experience with environmental project management. The State of California has designated Bole and Associates a Disabled Veteran Small Business Enterprise (DVBE # 0000847) and the Department of Veterans Affairs has designated Bole and Associates as a Service Disabled Veteran Owned Small Business (SDVOSB). The National Registry of Environmental Professionals (NREP) has designed Bole & Associates as Registered Environmental Property Assessors.*

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*104 Brock Drive, Wheatland CA 95692 (530) 633-0117 FAX (530) 633-0119, email: [mbole@aol.com](mailto:mbole@aol.com)  
6898 Penny Way, Browns Valley CA 95918 (530) 415-6623 email: [davidhbole@yahoo.com](mailto:davidhbole@yahoo.com)*

## *OUR APPROACH*

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To meet or exceed our customers expectations by consistently providing high quality, timely and cost effective solutions to your environmental evaluation, planning, management, permitting, design and construction needs.

## *OUR NUMBER ONE GOAL IS SATISFIED CUSTOMERS*

Your project will be done right the first time.

Work will be performed by professionals familiar with your requirements.

We will communicate with you during all phases of the project and keep you informed of all important events.

We guarantee compliance with all applicable laws and regulations.

You will be completely satisfied with the quality of our work 100% of the time.

## *PROFESSIONAL AND COMMUNITY PARTICIPATION*

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*In keeping with our commitment to build our profession and our community, BOLE & ASSOCIATES participate in the following organizations:*

American Society for Testing and Materials  
Association of Official Analytical Chemists  
Association of Environmental Professionals  
Beale Air Force Base Restoration Advisory Board  
Beale Military Liaison Committee (BMLC)  
California Stormwater Quality Association  
California Construction General Permit Training Team  
Institute of Inspection, Cleaning and Restoration Certification  
International Society of Arboriculture  
International Society of Indoor Air Quality and Climate  
National Geographic Society  
National Registry of Environmental Professionals (NREP)  
Northern California Society of Environmental Professionals  
Redbud Chapter, California Native Plant Society  
Society for California Archaeology  
Society of American Foresters  
Society for Ecological Restoration  
The Association for Service Disabled Veterans  
Yuba/Sutter Economic Development Committee

## ***ENVIRONMENTAL CONSULTING FIRM PROFILE KEY PERSONNEL & ASSOCIATES***

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***Marcus H. Bole*** - Principal Environmental Scientist and co-founder of BOLE & ASSOCIATES. Mr. Bole is a graduate of North Dakota State University, Fargo, North Dakota with a Master of Science in Environmental Science. He holds a Bachelors Degree in Social Science / Geography from California State University, Sacramento. After a twenty-three year career in the United State Air Force, Lt. Colonel Bole retired from Beale Air Force Base in 1993, his last assignment being Chief, Environmental Management for a 23,000 acre federal military installation. An U. S. Army Corps of Engineers trained and certified wetland delineator, the National Registry of Environmental Professionals (NREP) has certified Mr. Bole as a Registered Environmental Property Assessor. The State of California Department of General Services has designated Mr. Bole as a Disabled Veteran Business Enterprise (DVBE # 0000847). The Veterans Administration has designated Mr. Bole as a Service Disabled Veteran Owned Small Business (SDVOSB).

***Charlene J. Bole*** – Environmental Scientist, Chief Executive Officer and co-founder of BOLE & ASSOCIATES. Ms. Bole is a graduate of North Dakota State University, Fargo, North Dakota with a Master of Science in Environmental Science. She holds a Bachelor of Arts in Social Science from California State University, Sacramento. Ms. Bole has over twenty-five years of experience in project management, educational consulting, and classroom instruction. A recognized expert in research development and management, she has supervised work forces of professional educators, government officers and technicians responsible for a wide array of environmental issues. The National Registry of

*Environmental Professionals (NREP) has certified Ms. Bole as a Registered Environmental Property Assessor.*

**David H. Bole** – *Environmental Scientist, Biologist & Wildlife Specialist. David joined Bole & Associates in 199 and became a Principal in 2012. He holds a Bachelor of Science in Biology from California State University, Long Beach. Mr. Bole has extensive experience in research & project management of exotic animals, including rare birds and reptiles. He specializes in the threatened and endangered plant and animal species of California. The National Registry of Environmental Professionals (NREP) has certified Mr. Bole as a Registered Environmental Property Assessor. With over 12 years of experience as an environmental scientist, David has completed over 200 Phase I and Transaction Screens throughout California.*

**Skye A. Bole:** *Environmental Scientist and co-founder of Bole & Associates. Skye joined BOLE & ASSOCIATES in 2010. Ms. Bole holds a Bachelor of Science from California State University, Sacramento. Ms. Bole has experience in research and project management. She specializes in Environmental Site Assessments and is a certified wetland delineator (Certificate #6424).*

**James A. Gibson** – *Certified Asbestos Consultant. Jim brings over twenty years of environmental management of hazardous materials experience to B&A. A State of California Certified Asbestos Consultant (CAC) and Site Surveillance Technician (SST), Jim performs all our asbestos inspections and testing in compliance with local, state and federal asbestos regulations. An American Indoor Air Quality Council, Certified Microbial Investigator (CMI), he conducts all mold and bio-hazard inspections and testing in accordance with the highest*

*industry standards. B&A specializes in the evaluation of water/fire damaged structures, pre-demolition asbestos surveys, asbestos operations and maintenance plans, and indoor air quality investigations.*

***Thomas Nicholson*** – *Licensed General Contractor, structural building defects investigator, geophysical and Subsurface Investigations. Thomas Nicholson is founder of Sierra Nevada GSI, a leading environmental consulting firm specializing in ground penetrating radar (subsurface) investigations. Thomas joined BOLE and ASSOCIATES in 2007 and has held a State of California General Contractor's license since 1978. An expert in all phases of construction, he has investigated structural defects for numerous insurance companies including the California State Automobile Association, Allstate, Farmers, State Farm and the Kemper Insurance companies. Thomas has conducted investigations into the presence of underground petroleum storage tanks (USTs), hazardous waste dump sites, burial grounds, post tension cables and rebar, and mining shafts and geological structures. He is certified by California OSHA as a utility locator.*

## PROFESSIONAL REFERENCES

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*The following individuals may be contacted and can provide you with substantiation of BOLE & ASSOCIATES' technical knowledge, the quality of service provided and on-time delivery of products. We urge you to do so.*

TMC Financing (SBA)

**Jim Azevedo**

3300 Douglas Blvd, Suite 270

Roseville, CA 95771

(916) 724-5002

**Jim@tmcfinancing.com**

American River Bank

**Mary Billingsley**

3100 Zinfandel Drive, Suite 450

Rancho Cordova, CA

(916) 231-6120

**Mbillingsley@american  
riverbank.com**

Browns Valley Irrigation District

**Walter Cotter, General Manager**

P.O. Box 34860

Browns Valley, CA 95918

(530) 743-5703

**Walter@bvid.org**

Meagher & Tomlinson, Realtors

**Bill Meagher, Partner**

1007 Live Oak Blvd., # A-4

Yuba City, CA 95991

(530) 671-0000

**Deal@wmmt.com**

Community First Bank

**Hinson Thomas**

2250 Douglas Blvd., Ste 100

Roseville, CA 95661

(916) 724-2427

**Hthomas@Community1bank.com**

Roy Hastings & Associates

**Roy Hastings**

1765 Carson Road

Placerville, CA 95667

(916) 359-0626

**roy@rlhastings.com**

# PROJECTS

## *Phase I and Transaction Screen Evaluations*

*The professional team at Bole & Associates has worked together for over twenty years on over 1,800 environmental projects located throughout California. This broad experience makes us one of the most diverse private groups of professionals in our field. We draw upon on in-house expertise in biology, botany, hydrology, forestry, and related fields of environmental science to provide planning, design, permitting, and construction services to both private and public sectors.*

*At Bole & Associates, project success depends on strong coordination between multiple professions; our work history illustrates this approach. To demonstrate how our experience might be helpful on your project, we have selected the following summaries of our work.*

***TMC Financing (Small Business Administration):*** *designed specifications and performed a Level one (Phase I) Environmental Liability Site Assessment, utilizing the "American Society for Testing and Materials" (ASTM 1527-05), AAI federal directives, and the Small Business Administration's Standard Operating Procedures 50-10 5 for the Shell Gas Station, 2556 Lake Tahoe Boulevard, South Lake Tahoe, California. The Phase I included: 1) an evaluation of the historic transfer of title, and regulatory agency information; 2) site inspection of the property to determine existence of possible sources of contamination; 3) an evaluation of possible contingent off-site liabilities; 4) an asbestos survey in accordance with Pacific Mutual's "Guidelines for Asbestos Surveys and O & M Programs", and 4) area/site maps. Point of contact: Jim Azevedo, 3300 Douglas Blvd, Suite 270, Roseville, CA 95661, phone: 916-724-5002, fax: 916-724-5039 and email: [Jim@tmcfinancing.com](mailto:Jim@tmcfinancing.com) . During the 2000 to 2013 time period conducted over 250 Phase I ESAs and Transactional Screen Analyses for Small Business Administration contracts.*

***Meagher & Tomlinson:*** *designed specifications and performed a Level one (Phase I) Environmental Liability Site Assessment, utilizing the "American Society for Testing and Materials" (ASTM 1527-05), AAI federal directives, and the Small Business Administration's Standard Operating Procedures 50-10 (5) for the Canova Moving and Storage Company, 717 Bridge Street, Yuba City, California. The Phase I included: 1) an evaluation of the historic transfer of title, and regulatory agency information; 2) site inspection of the property to determine existence of possible sources of contamination; 3) an evaluation of possible contingent off-site liabilities; 4) an asbestos survey in accordance with Pacific Mutual's "Guidelines for Asbestos Surveys and O & M Programs", and 4) area/site maps. Point of contact: Bill Meagher, 1007 Live Oak Blvd., Suite A-4, Yuba City, California 95991, phone: 530-671-0000, fax: 530-671-2717 and email: [deal@wmmt.com](mailto:deal@wmmt.com) .*

***Sunrise Bank of San Diego:*** *designed specifications and performed a Transactional Screen Process (TSP), utilizing the "American Society for Testing and Materials" (ASTM), and Small Business Administration's Standard Operating Procedures 50-10(4)(B) guidelines for the property located at 819 Bridge Street, Colusa, CA 95932. The TSP included: 1) an interview with property owners that included a comprehensive Environmental Questionnaire form asking specific environmentally related questions that*



requires a visual inspection to complete; 2) site inspection of the property to determine existence of possible sources of contamination; 3) an evaluation of possible contingent off-site liabilities; 4) an environmental records review conducted at appropriate regulatory agencies, and 4) area/site maps and photographs. Point of contact: Harmanjit S. Gosal, 1227 Bridge Street, Suite D, Yuba Cit, CA 95991, phone: 530-755-4413, fax: 530-755-3088 and email: [Harman.Gosal@capitolbancorp.com](mailto:Harman.Gosal@capitolbancorp.com) .

**Wells Fargo SBA Lending:** designed specifications and performed a Transactional Screen Process (TSP), utilizing the "American Society for Testing and Materials" (ASTM), and Small Business Administration's Standard Operating Procedures 50-10(4)(B) guidelines for the L&A Body Shop, 5031 Franklin Blvd., Sacramento, California. The TSP included: 1) an interview with property owners that included a comprehensive Environmental Questionnaire form asking specific environmentally related questions that requires a visual inspection to complete; 2) site inspection of the property to determine existence of possible sources of contamination; 3) an evaluation of possible contingent off-site liabilities; 4) an environmental records review conducted at appropriate regulatory agencies, and 4) area/site maps and photographs. Point of contact: Mary Norris, 1504 Eureka Road, Suite 370, Roseville, California 95661, phone: 916-780-7054, fax: 916-720-0577 and email: [norrism@wellsfargo.com](mailto:norrism@wellsfargo.com) .

## **Biological, Botanical, & Wetland Delineations**

**Clearlake Oaks Eskaton:** Designed and performed investigations and site-specific biological inventories to determine the presence of special status species or habitat for such species that may be affected by development of the Clearlake Oaks Eskaton Senior Housing Project. In addition, several other studies were conducted to include: 1) an investigation to determine the presence of wetlands subject to the jurisdiction of the US Army Corps of Engineers (Corps), pursuant to their authority under Section 404 of the Clean Water Act; and 2) a riparian determination. Permits were obtained from the United States Army Corps of Engineers, California Department of Fish & Game and the Regional Water Quality Control Board. Point of contact: Mr. Roy Hastings, 1610 El Nido Way, Sacramento, CA 95864, and email: [roy.hastings@rlhastingsassociates.com](mailto:roy.hastings@rlhastingsassociates.com) . Phone: (916) 359-0626.

**City of Elk Grove:** Designed and conducted biological resources inventories, and conducted feasibility evaluations for the widening of Bond Road, Elk Grove Blvd., Sheldon Road and Grant Line Roads, City of Elk Grove, California. Habitat evaluation and botanical assessments were conducted both before and after the project. Wetland delineations were accomplished and certified by the U. S. Army Corps of Engineers, Sacramento District Regulatory Branch. Point of contact: Melanie J. Halajian, Senior Planner, 10461 Old Placerville Road, Suite 110, Rancho Cordova, CA 95827. (916) 361-8384, [MHalajian@PMWorld.com](mailto:MHalajian@PMWorld.com) .

**Yuba County Public Works Department:** Designed and conducted Wetland Delineations and biological inventories for endangered plant and wildlife for the Star Bend Dredging Project on the Feather River, Yuba County, CA. Wetland delineations were accomplished and verified by the U. S. Army Corps of Engineers, Sacramento District Regulatory Branch (point of contact: Erin Hess, 916-557-6740, [Erin.E.Hess@spk01.usace.army.mil](mailto:Erin.E.Hess@spk01.usace.army.mil)) Reports were coordinated with the United States Fish & Wildlife Service and the United States Department of Commerce, National Oceanic and Atmospheric Administration. CEQA lead agency was the County of Yuba (point of contact, Ken Godleski, Senior Engineer, [kgodleski@co.yuba.ca.us](mailto:kgodleski@co.yuba.ca.us) , phone 530-749-5416)

**Browns Valley Irrigation District:** Designed and conducted Wetland Delineations and biological inventories for endangered plant and wildlife for the Tailwater Recapture Project on the French Dry Creek and Yuba River, Yuba County, CA. Wetland delineations were accomplished and verified by the U. S. Army Corps of Engineers, Sacramento District Regulatory Branch (point of contact: Peck Ha, 916-557-6617, [Peck.Ha@usace.army.mil](mailto:Peck.Ha@usace.army.mil). CEQA lead agency was the Browns Valley Irrigation District (point of contact, Walter Cotter, General Manager, [walter@bvid.or](mailto:walter@bvid.or) , phone 530-743-5703).

## **MARCUS H. BOLE, Principal, B&A**

### **EXPERTISE:**

Environmental Project Management  
Natural Resource Management  
Environmental Site Assessment, Phase I and Phase II  
Wetland Delineation, Mitigation, and Permitting

### **EDUCATION:**

Masters Degree in Environmental Science  
North Dakota State University, Fargo, 1976  
Baccalaureate in Social Science, Political Science & Geography  
California State University, Sacramento, 1970  
Registered Environmental Property Assessor (REPA)  
Certificate Program, Site Assessment and Remediation, UC Davis  
Certificate Program, Land Use and Environmental Planning, UC Davis  
California Community College Instructor Credential (Life), Environmental Sciences  
Certified (OSMB) Disabled Veteran Business Enterprise (DVBE)  
California Department of General Services (#0000847)  
Certified OSHA Hazardous Materials  
Certified FAA Airline Transport Pilot (#2168155)

### **PROFESSIONAL HISTORY:**

Bole & Associates, Principal, 1991 - Present  
U. S. Federal Government Manager of Environmental Engineering,  
Compliance and Community Planning, 1970 - 1993  
California State Division of Forestry, Engineer, 1966 - 1970

### **REPRESENTATIVE EXPERIENCE:**

Mr. Bole has over thirty-five years of experience in environmental project management. A recognized expert in state and federal agency environmental regulations and procedures, he has directed operations throughout Northern California and Southern California. He has supervised work forces of professional engineers, scientists and technicians responsible for pollution monitoring, permitting, abatement, environmental impact analysis, natural resource restoration programs and hazardous waste characterization, storage and disposal. After a distinguished twenty-three year career in the United States Air Force as Chief, Environmental Management Division, Beale Air Force Base, Mr. Bole retired in the rank of Lieutenant Colonel and started Bole & Associates, Registered Environmental Assessors in Wheatland, Yuba County, California.

## **CHARLENE J. BOLE, Principal, B&A**

### **EXPERTISE:**

Environmental Project Management  
Environmental Site Assessments (Phase I & II)  
Threatened and Endangered Species  
Wetland Delineation, Mitigation and Permitting

### **EDUCATION:**

Masters Degree in Environmental Science  
North Dakota State University, Fargo, 1979  
Baccalaureate in Social Science  
California State University, Sacramento, 1974  
Graduate Course work in Environmental Sciences, Botany  
Registered Environmental Property Assessor (REPA)  
State of California Standard Teaching Credential  
State of California Pupil Personnel Credential  
California Community College Instructor, Psychology  
California Community College Counselor Credential

### **PROFESSIONAL HISTORY:**

Bole & Associates, Principal, 1991 - Present  
Consultant, Instructor for US Army, Department of Defense, Belgium, 1988 - 1991  
Senior Project Manger, Environmental Development Center, Belgium, 1988 - 1991  
Consultant and Instructor for Department of Defense, Japan, 1985 - 1987  
Teacher, Wheatland School District, CA, 1980 - 1984  
Counselor, Minot Public Schools, ND, 1977 - 1979

### **REPRESENTATIVE EXPERIENCE:**

Ms. Bole has over twenty-five years of experience in environmental project management, environmental science instruction and consulting. She has directed major environmental projects for the Department of Defense, both in the United States and in foreign countries. A recognized expert in research development and management, she has supervised work forces of professional scientists and technicians responsible for a wide array of environmental issues in Northern California and Yuba County. Her areas of expertise include wildlife ecology, regulatory compliance, natural resource and habitat conservation planning, and the delineation of waters of the United States. Her organizational skills have consistently resulted in finding the most cost effective means for project implementation and completion.

## **DAVID H. BOLE, Senior Wildlife Biologist, B&A**

### **EXPERTISE:**

Wildlife Biology  
Environmental Project Management  
Natural Resource Conservation Management  
Environmental Site Assessment, Phase I ESA  
Wetland Delineation, Mitigation, and Permitting

### **EDUCATION:**

Baccalaureate in Biology  
California State University Long Beach, 2000  
Graduate Studies leading to Masters Degree, Biology  
California State University Long Beach, In Progress  
Registered Environmental Property Assessor (REPA)  
Certified Wetland Delineator, U. S. Army Corps of Engineers  
Certified Open Water SCUBA, Advanced PADI

### **REPRESENTATIVE EXPERIENCE:**

As senior staff biologist, David H. Bole has been instrumental in the implementation of a wide variety of wildlife surveys, habitat evaluations, wetland determinations, and natural resource management projects. Based on his advanced knowledge of herpetology, David was selected to lead a team of biologists in support of studies of the Salton Sea for the San Diego Museum of Natural History. He has conducted comprehensive Natural Environment Studies for the California Department of Transportation, and participated in the evaluation of spawning and rearing habitats associated with the Yuba River Fisheries Habitat Enhancement Project. A recognized expert in the field of environmental science, David is a State of California Registered Environmental Assessor who has completed over 200 Phase I Environmental Site Assessments in Northern and Southern California. As a project manager, David pioneered the integration of biology, hydrology, subsurface interface radar and computer science in providing environmental planning services for private and public agencies throughout California. During the early stages of project design, David has conducted over 300 endangered wildlife surveys and evaluations that have resulted in the avoidance of costly special status species and wetland mitigation measures while preserving the natural habitat associations in the Central Valley.

## **JAMES A. GIBSON, Certified Asbestos Consultant, B&A**

### **EXPERTISE:**

Certified Asbestos Surveys  
Sampling & Packaging Samples for Lab Delivery  
Indoor Air Quality Evaluations (Mold)  
Air Clearance Sampling for Mold & Asbestos  
BioTrace Clearance Sampling for Bio-Hazard & Sewage Remediation

### **EDUCATION & CERTIFICATIONS:**

State of California Certified Asbestos Consultant, DOSH #01-2960  
Certified Microbial Investigator (American Indoor Air Quality Assoc.)  
Forensic Analytical Workshop, Microbial Contamination  
Asbestos Contractor Supervisor Refresher

### **REPRESENTATIVE EXPERIENCE:**

Jim brings over twenty years of environmental management of hazardous materials experience to B&A. A State of California Certified Asbestos Consultant (CAC) and Site Surveillance Technician (SST), Jim performs all our asbestos inspections and testing in compliance with local, state and federal asbestos regulations. An American Indoor Air Quality Council, Certified Microbial Investigator (CMI), he conducts all mold and bio-hazard inspections and testing in accordance with the highest industry standards. Jim has conducted hundreds of asbestos inspections in Yuba County with a list of clients that include: Yuba County Public Works, Yuba County Airport, Yuba County Risk Management, Yuba County Planning Department, Yuba County Water Agency, and numerous public agencies in Sutter County. B&A specializes in the evaluation of water/fire-damaged structures, pre-demolition asbestos surveys, asbestos operations and maintenance plans, and indoor air quality investigations. We provide detailed written reports that guide and assist the abatement/remediation contractors throughout the abatement process. Jim also conducts post remediation/clearance testing upon project completion.

**Bole & Associates**  
*An Environmental Consulting Company*

***Labor Rates, Bole & Associates***

Rates Effective October 1, 2012

<b>Project Manager</b>	<b>\$95 per Hour</b>
<b>Environmental Technician (Asbestos)</b>	<b>\$65 per Hour</b>
<b>Environmental Scientist (Phase I)</b>	<b>\$95 per Hour</b>
<b>Archaeologist</b>	<b>\$95 per Hour</b>
<b>Wildlife Biologist</b>	<b>\$85 per Hour</b>
<b>Botanist</b>	<b>\$85 per Hour</b>
<b>Hydrologist</b>	<b>\$95 per Hour</b>
<b>Clerical</b>	<b>\$30 per Hour</b>

*BOLE & ASSOCIATES are covered by Worker's Compensation and Liability Insurance, Commercial General Liability, and Profession Liability policies issued through Frenkel of California, 350 Hudson Street, 4<sup>th</sup> Floor, New York, New York 10014. Phone 212-488-1869, Fax 212-488-0246, Contact Renee Molina at: email: [rmolina@frenkel.com](mailto:rmolina@frenkel.com)*

Client#: 71524

BOLEASSO



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/20/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).**

<b>PRODUCER</b> Frenkel & Company 350 Hudson Street 4th Floor New York, NY 10014		<b>CONTACT NAME:</b> Christi Nistler			
		<b>PHONE (A/C, No, Ext):</b> 212-488-0230	<b>FAX (A/C, No):</b> 646-514-9597		
<b>INSURED</b>  Bole and Associates 6898 Penny Way Browns Valley, CA 95918		<b>E-MAIL ADDRESS:</b> cnistler@frenkel.com			
		<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>	
		<b>INSURER A :</b> Westchester Surplus Lines Co		<b>10172</b>	
		<b>INSURER B :</b> State Compensation Ins. Fund		<b>35076</b>	
		<b>INSURER C :</b>			
		<b>INSURER D :</b>			
		<b>INSURER E :</b>			
		<b>INSURER F :</b>			


**COVERAGES    CERTIFICATE NUMBER:**    **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b>			G24299223004	07/09/2018	07/09/2020	EACH OCCURRENCE <b>\$1,000,000</b>
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) <b>\$50,000</b>
	<input checked="" type="checkbox"/> <b>Contractors Poll.</b>						MED EXP (Any one person) <b>\$10,000</b>
	<input checked="" type="checkbox"/> <b>Occurrence Form</b>						PERSONAL & ADV INJURY <b>\$1,000,000</b>
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE <b>\$2,000,000</b>
	<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG <b>\$2,000,000</b>
	OTHER:						
	<b>AUTOMOBILE LIABILITY</b>						COMBINED SINGLE LIMIT (Ea accident)     \$
	<input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY		<input type="checkbox"/> SCHEDULED AUTOS				BODILY INJURY (Per person)     \$
	<input type="checkbox"/> HIRED AUTOS ONLY		<input type="checkbox"/> NON-OWNED AUTOS ONLY				BODILY INJURY (Per accident)     \$
	<input type="checkbox"/>						PROPERTY DAMAGE (Per accident)     \$
	<input type="checkbox"/>						
	<input type="checkbox"/> <b>UMBRELLA LIAB</b>		<input type="checkbox"/> OCCUR				EACH OCCURRENCE     \$
	<input type="checkbox"/> <b>EXCESS LIAB</b>		<input type="checkbox"/> CLAIMS-MADE				AGGREGATE     \$
	<input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						
B	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>			901110319	04/19/2019	04/19/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	<b>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)</b>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	N / A				E.I. EACH ACCIDENT <b>\$1,000,000</b>
	<b>If yes, describe under DESCRIPTION OF OPERATIONS below</b>						E.I. DISEASE - EA EMPLOYEE <b>\$1,000,000</b>
A	<b>Professional Liability</b>			G24299223004	07/09/2018	07/09/2020	<b>Each Claim: \$1,000,000</b> <b>Ded.: \$2,500</b>

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**Proof of Insurance**

<b>CERTIFICATE HOLDER</b>  Proof of Insurance	<b>CANCELLATION</b>
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  

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## **APPENDIX F: SUPPORTING DOCUMENTATION**

*NRCS WEB SOIL SURVEY SOILS MAP*

*NWI MAP*

*FINAL KINGSFORD CHARCOAL BRIQUET PLANT CLOSURE REPORT PREPARED  
BY HARDING LAWSON ASSOCIATES, MAY 1991*

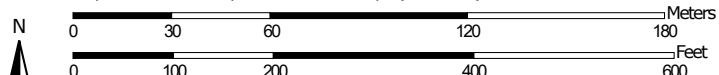
*NFA DOCUMENTATION FOR USTS AT FORMER KINGSFORD PROPERTY, 10000  
WATERMAN ROAD*



Soil Map—Sacramento County, California  
(9195 Brinkman Court Soils Map)




Map Scale: 1:2,300 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sacramento County, California  
Survey Area Data: Version 18, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
213	San Joaquin silt loam, leveled, 0 to 1 percent slopes	16.9	78.4%
214	San Joaquin silt loam, 0 to 3 percent slopes	1.3	6.2%
247	Water	3.3	15.4%
<b>Totals for Area of Interest</b>		<b>21.5</b>	<b>100.0%</b>





U.S. Fish and Wildlife Service, National Standards and Support Team,  
wetlands\_team@fws.gov

March 2, 2020

**Wetlands**

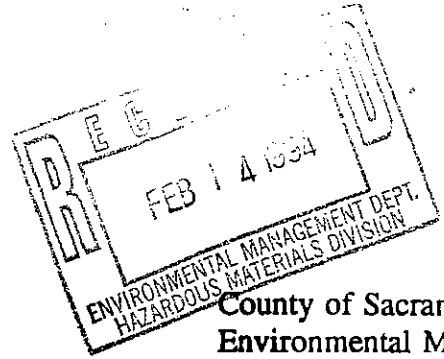
- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  |  Freshwater Pond                   |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

W. D. Dornier  
Lorenson  
Robert  
Stacy



SD



August 16, 1993

County of Sacramento  
Environmental Management Department  
Hazardous Materials Division  
8475 Jackson Road, Suite 230  
Sacramento, CA 95826

Attention: Mr. Barry Marcus  
Hazardous Materials Specialist

Subject: Kingsford Company  
10,000 Waterman Road  
Elk Grove, CA 95624  
Final Closure Report

Dear Mr Marcus:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, of those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete.

The Clorox Company  
*Daniel D. Musgrove*  
Daniel D. Musgrove, R.E.  
Environmental Engineering Associate



License Expires 12/31/95

P.O. Box 493  
Sacramento, California  
94566-0803  
(510) 847-6100  
Telex: (510) 463-1187

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Harding Lawson Associates



A Report Prepared for

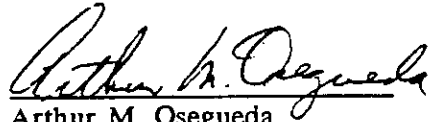
The Clorox Company  
Technical Center  
P.O. Box 493  
Pleasanton, California 94566

**FINAL  
KINGSFORD CHARCOAL BRIQUET PLANT  
CLOSURE REPORT  
ELK GROVE, CALIFORNIA**

HLA Job No. 19892,010.13

by

  
Peter A. Crispell  
Staff Geologist

  
Arthur M. Osegueda  
Associate Environmental Scientist

Harding Lawson Associates  
10324 Placer Lane  
Sacramento, California 95827  
916/364-0793

May 2, 1991

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## TABLE OF CONTENTS

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LIST OF TABLES.....		v
LIST OF ILLUSTRATIONS.....		v
EXECUTIVE SUMMARY.....		1
1.0 INTRODUCTION .....		1
1.1 Location.....		1
1.2 Plant History.....		2
1.3 Facility Description .....		3
1.4 Plant Operations.....		4
1.5 Dismantling Activities.....		5
2.0 SITE DESCRIPTION .....		6
2.1 Topography .....		6
2.2 Regional Geology.....		6
2.3 Hydrology.....		7
3.0 REGULATORY REQUIREMENTS .....		8
4.0 AREAS OF ENVIRONMENTAL CONCERN AND SITE SAMPLING .....		10
4.1 Mineral Spirits Storage Area/Lube Oil Drum Shed.....		12
4.2 Maintenance Shop/Stores Building.....		13
4.3 Retort Area .....		13
4.4 Dirt Berm .....		14
4.5 Pretreatment Sump .....		14
4.6 Raw Material Piles .....		15
4.7 Oil Drum Storage Area .....		15
4.8 Drainage Ditches, Settling Pond, and Evaporation Ponds.....		16
4.9 South Vacant Lot.....		17
4.10 Equipment Storage Yard .....		17
4.11 ACI Unit.....		18
4.12 Industrial Wells #1 and #2 .....		18

**TABLE OF CONTENTS  
(CONTINUED)**

5.0	CLEARANCE SAMPLING AND TEST RESULTS .....	19
	5.1 Mineral Spirits Storage Area/Lube Oil Drum Shed.....	19
	5.2 Maintenance Shop/Stores Building .....	20
	5.3 Retort Area .....	21
	5.4 Dirt Berm .....	21
	5.5 Pretreatment Sump .....	21
	5.6 Raw Material Piles .....	22
	5.7 Oil Drum Storage Area .....	22
	5.8 Drainage Ditches, Settling Pond, and Evaporation Ponds.....	23
	5.9 South Vacant Lot.....	23
	5.10 Equipment Storage Yard .....	24
	5.11 ACI Unit .....	24
	5.12 Industrial Wells # 1 and # 2.....	24
	5.13 Additional Areas.....	24
6.0	CLOSURE OF KINGSFORD FACILITY.....	27
	6.1 Sump and UST Closure.....	27
	6.2 Evaporation Ponds .....	28
	6.3 Drainage Ditches.....	28
	6.4 Plant Facilities .....	29
	6.5 Materials Handling .....	29
	6.5.1 Demolition Materials.....	30
	6.5.2 Asbestos Containing Materials .....	30
	6.5.3 Excavated Materials .....	30
	6.5.4 Cleaning Materials.....	31
	6.5.5 Plant Materials-Used and Unused .....	31
	6.6 Permits Closure.....	31
7.0	CONCLUSIONS AND RECOMMENDATIONS.....	33
8.0	REFERENCES .....	35

LIST OF TABLES

LIST OF ILLUSTRATIONS



TABLE OF CONTENTS  
(CONTINUED)

---

APPENDICES

- A-I LAB REPORTS
- A-II CORRESPONDENCE
- A-III HAZARDOUS WASTE MANIFESTS
- A-IV NON-HAZARDOUS WASTE MANIFESTS/CERTIFICATES OF RECEIVERSHIP
- A-V HLA STANDARD SAMPLING PROCEDURES AND BORING LOGS
- A-VI MATERIAL SAFETY DATA SHEETS (MSDS)
- A-VII LUFT TABLE 2.1

**LIST OF TABLES**

---

Table 1 Preliminary Samples

**LIST OF ILLUSTRATIONS**

---

Plate 1 Site Location Map  
Plate 2 Site Vicinity Map  
Plate 3 Site Plan  
Plate 4 Soil Boring Locations  
Plate 5 Lube Oil Sump Stockpile  
Plate 6 Surface Sample Locations  
Plate 7 Hand Auger Boring Locations  
Plate 8 Sample Locations - South Vacant Lot  
Plate 9 Lube Oil Sump  
Plate 10 Maintenance Shop/Stores Building  
Plate 11A Pretreatment Sump  
Plate 11B Pretreatment Sump  
Plate 12 Pretreatment Sump Stockpile  
Plate 13 Charcoal Settling Pond - West  
Plate 14 South Vacant Lot

## EXECUTIVE SUMMARY

In September 1989, the Kingsford Company (Kingsford) discontinued operating its charcoal briquet manufacturing plant, located in Elk Grove, California. In a cooperative effort with Harding Lawson Associates (HLA), a geotechnical and environmental consulting firm in Sacramento, California, Kingsford fulfilled its goal of closing the plant in an environmentally sound manner. HLA assisted Kingsford in developing a Site Characterization Work Plan, performed extensive onsite field investigations, including soil and water sampling, laboratory analysis, and site characterization, and provided Kingsford with guidance on materials handling and closure permits. In addition, HLA provided Kingsford with this final closure report, designed to aid in expediting future property transfer transactions.

The plant closure occurred in two phases: preliminary site sampling and analysis, and post-closure clearance sampling and subsequent re-analysis of areas of potential environmental concern. During the preliminary phase, areas of potential environmental concern were identified, then sampled and analyzed for potential contamination. Any areas in which potential environmental problems were found were remediated and re-tested. During the clearance phase, additional samples were removed and analyzed to verify that the plant had been closed in an environmentally acceptable manner.

The resulting laboratory reports indicate that the Kingsford plant has complied with all guidelines set forth in federal, state, and local regulations regarding acceptable levels of soil and groundwater constituents. A small quantity of soil from a sump excavation contained excessive levels of petroleum hydrocarbons; Kingsford elected to transport the soil offsite to a permitted RCRA treatment facility in Stockton, California. All other excavated soil piles were remediated

onsite in accordance with local agency guidelines, re-tested, and found to be free of chemicals. The soil was then re-used by Kingsford for onsite grading.

The following report describes Kingsford's and HLA's multi-faceted, cooperative effort in closing the Elk Grove charcoal briquet manufacturing plant in an environmentally sound manner.

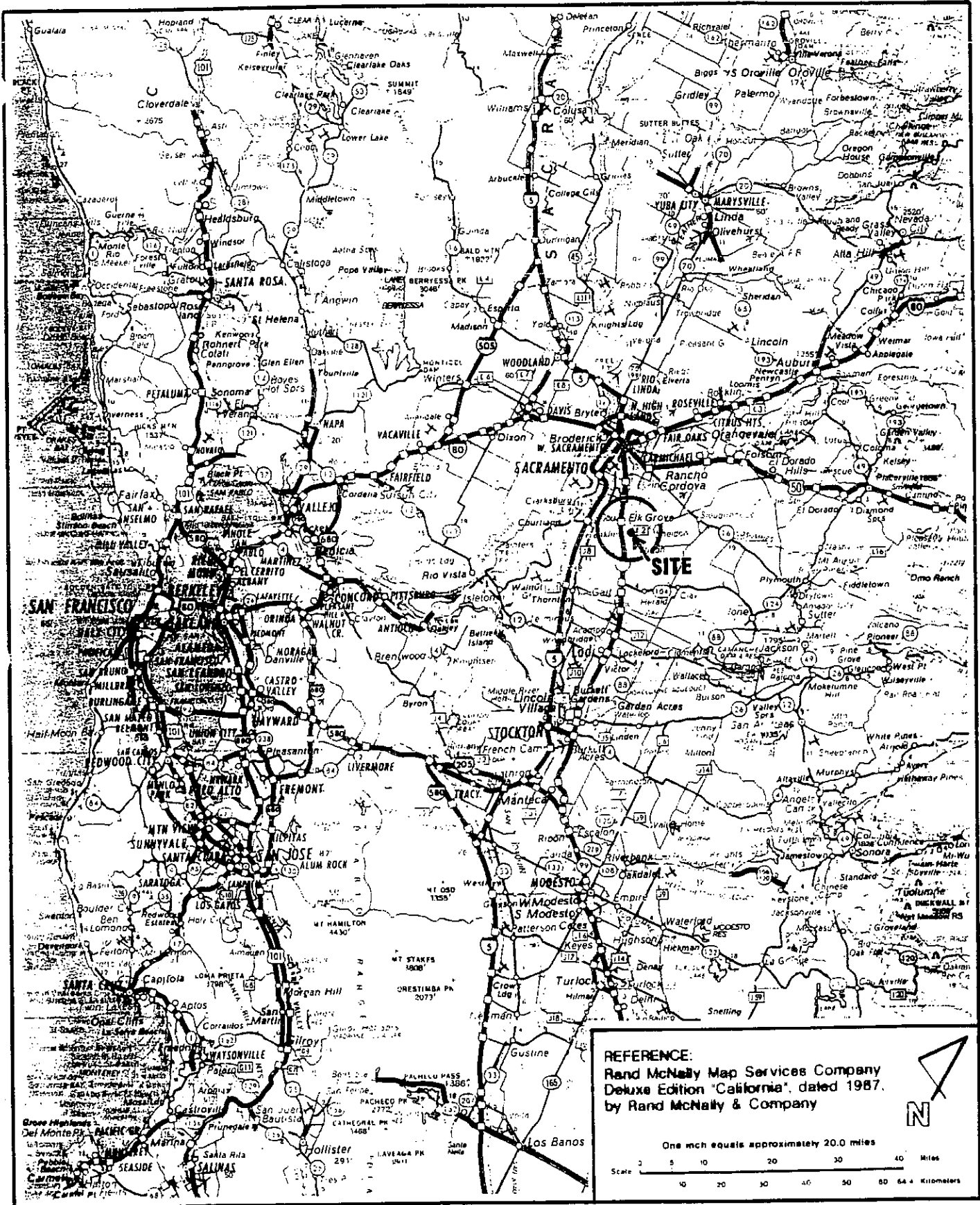
## 1.0 INTRODUCTION

This report was prepared by Harding Lawson Associates (HLA) on behalf of the Kingsford Company (Kingsford) for the closure of the Kingsford Charcoal Plant, Elk Grove, California. The report is based primarily on information gathered from the Kingsford Company, HLA onsite observations and site characterization activities (Site Characterization Work Plan, July 17, 1990), and discussions with the Clorox Company (parent company of Kingsford Company) environmental staff in meetings and telephone conversations.

### 1.1 Location

The Kingsford Company (Kingsford), operated a charcoal briquet manufacturing plant at 10000 Waterman Road in Elk Grove, California. The 37.7 acre site is located on the west side of Waterman Road, approximately 0.8 miles north of Grant Line Road (Plates 1 and 2). A Southern Pacific Railroad (SP) easement is adjacent to the western boundary of the Kingsford facility. Residential development lies to the west of the SP railroad easement. A Sacramento County drainage easement (Elk Grove Creek) and vacant land bound the property on the north. Waterman Road and agricultural land lie to the east. The Conoco asphalt plant bounds the site on the south.

There are approximately 22 acres of vacant land south of the plant, which Kingsford used as a buffer zone for dust abatement (Plate 3). A picnic area, formerly occupied by a ranch house, is located on the northeast portion of the buffer zone. A chain-link fence borders the north, south, and east sides of the property.



**Harding Lawson Associates**  
 Engineering and  
 Environmental Services

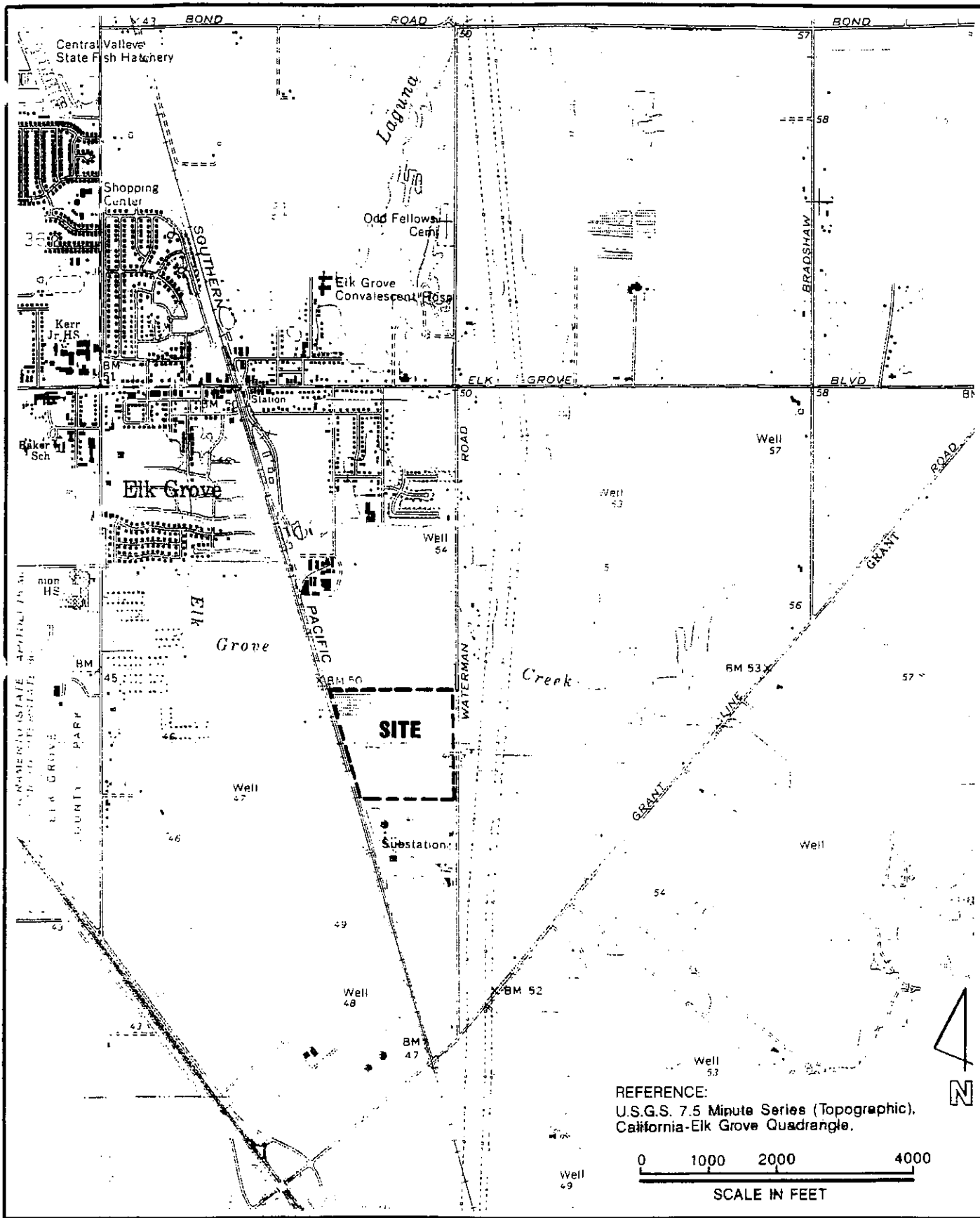
**Site Location Map**  
 Kingsford Plant  
 Elk Grove, California

PLATE  
**1**

DRAWN RS  
 JOB NUMBER 19892.010.13

APPROVED *GM*

DATE 2/91  
 REVISED DATE



**Hardig Lawson Associates**  
 Engineering and  
 Environmental Services

**Site Vicinity Map**

Kingsford Plant  
 Elk Grove, California

PLATE

**2**

DRAWN: RS  
 JOB NUMBER: 19892,010.13

APPROVED: *[Signature]*

DATE: 2/91

REVISED DATE

## 1.2 Plant History

The C.B. Hobbes Company began manufacturing charcoal briquets at this location during the mid-1960's. Kingsford purchased the plant from C.B. Hobbes in 1977 and continued plant operations.

Charcoal was produced by a pyrolysis process utilizing walnut shells, almond hulls, peach pits, and other agricultural solids in a retort unit to produce char. The char was mixed with other raw materials (sawdust, lignite, sodium nitrate, borax, and cornstarch), dried at a high temperature, and packaged as charcoal briquets. Two products were manufactured at this facility: 1) the standard Kingsford charcoal briquet, and 2) Match light instant lighting charcoal briquets. The Match light briquetting process began in 1980. Total briquet production was about 100 tons per day.

In September 1984, an American Carbons Incorporated (ACI) pyrolysis unit was introduced as a Research and Development (R&D) facility. It was never used as an on-line charcoal production unit for Kingsford. The ACI unit was an enclosed system, producing char with enhanced energy recovery through the utilization of pyrolysis gas and pyrolysis oil, which were burned to provide heat for the ACI manufacturing process.

On November 27, 1988, a fire completely destroyed the Kingsford Company's onsite warehouse and its inventory of charcoal briquets. The volume of charcoal briquets stored in the warehouse at the time of the fire was estimated to be 2,600 tons. All that remains of the warehouse is the concrete foundation.

Kingsford performed environmental clearance sampling and analysis on the ashes to assess the potential presence of mineral spirits. No mineral spirits residue was found; the ashes were then transported to a Class II landfill. Kingsford's test results of the ashes and



correspondence are found in Appendix A-II. The Certificate of Disposal from Forward, Inc. of Stockton, California, a Class II landfill, is in Appendix A-IV.

In Fall 1989, Kingsford ceased plant operations and initiated a program for the demolition and removal of buildings and equipment from the site.

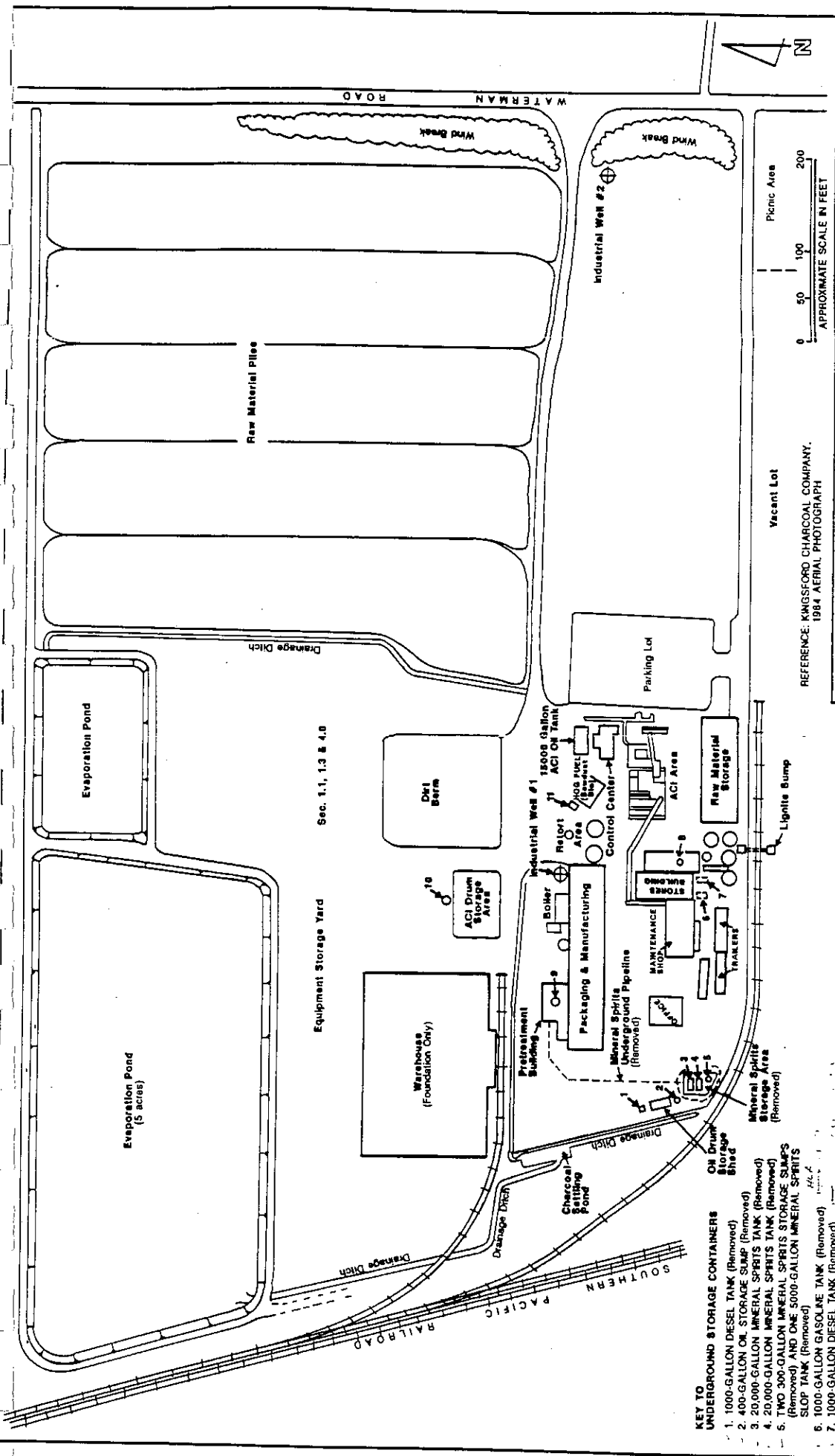
### 1.3 Facility Description

Aboveground structures at the facility consisted of the packaging and manufacturing building, maintenance shop, stores building, and a number of support buildings and trailers (Plate 3). A boiler, retort unit, and the ACI unit were located on the east side of the packaging and manufacturing building. Raw material storage areas were located on the south and northeast sides of the plant. Mineral spirits storage and lubricating oils were located on the west side of the plant; the ACI pyrolysis oil drum storage was located north of the retort unit.

Several underground storage tanks (USTs) and a mineral spirits storage sump were located at the site (Plate 3). The USTs were removed under the guidance of Woodward Clyde Consultants (WCC) and HLA.

SP railroad spurs on the property are located on the north side of the packaging and manufacturing building and south of the stores and maintenance shops.

Peach pits, almond hulls, walnut shells, and other raw materials used in the manufacturing process were stored on approximately 8 acres on the northeast quarter of the facility. In the winter, rainwater which leached through the stockpiled raw materials and runoff from other parts of the facility drained into two 3-foot-wide drainage ditches located on the north and west side of the facility. Runoff from the ditches discharged into two evaporation ponds (650' x 300' x 7' and 200' x 125' x 8') located on the north side of the



0 50 100 200  
APPROXIMATE SCALE IN FEET

REFERENCE: KINGSFORD CHARCOAL COMPANY,  
1984 AERIAL PHOTOGRAPH



Harding Lawson Associates  
Engineering and  
Environmental Services

DRAWN RS  
JOB NUMBER 19892.010.13  
DATE

Site Plan  
Kingsford Plant  
Elk Grove, California

PLATE 3

REVISOR DATE

**KEY TO UNDERGROUND STORAGE CONTAINERS**

1. 1000-GALLON DIESEL TANK (Removed)
2. 400-GALLON OIL STORAGE SUMP (Removed)
3. 20,000-GALLON MINERAL SPIRITS TANK (Removed)
4. 20,000-GALLON MINERAL SPIRITS TANK (Removed)
5. TWO 300-GALLON MINERAL SPIRITS STORAGE SUMPS (Removed) AND ONE 5000-GALLON MINERAL SPIRITS SLOP TANK (Removed)
6. 1000-GALLON GASOLINE TANK (Removed)
7. 1000-GALLON DIESEL TANK (Removed)
8. MAINTENANCE SHOP SUMP (Removed)
9. 475 GALLON PROCESS WASTE SUMP (Removed)
10. ACI DRUM STORAGE AREA SUMP (Removed)
11. HOG FUEL BIN

facility. The ponds were claylined and designed to contain the maximum runoff of a 10-year frequency storm.

A charcoal settling pond (70' x 15' x 10') was located on the west side of the property near the packaging and manufacturing building.

#### 1.4 Plant Operations

Fine charcoal particles that spilled from the manufacturing and packaging areas were washed into the charcoal settling pond on the west side of the property. Sludge from the charcoal settling pond was dredged twice yearly and piled onsite to be dried and reused in briquet production.

Pyrolysis and filter cake oils used in the ACI unit were stored in 55-gallon drums and a 10,000-gallon aboveground tank. The mineral spirits were stored in two 20,000-gallon underground tanks (mineral spirits storage station) located at the southwest corner of the plant. The mineral spirits were piped via an underground pipeline to the Match light pretreatment building. Mineral spirits spills and washwater from the pretreatment process were collected in a 475-gallon process waste sump located in the pretreatment building. Contents of the sump were pumped via a 2-inch-diameter underground pipeline to the mineral spirits storage area where the mineral spirits/water mixture was collected in a 5,000-gallon aboveground "slop" tank. The mineral spirits were then separated from the water using a solvent/water separator. After separation, the mineral spirits were recycled back to the process and the remaining water was discharged to the evaporation ponds.

Spent lubricating oils from the maintenance shop were stored in 55-gallon drums and a 300-gallon aboveground tank at the lubricating oil drum storage shed. Incidental spillage was drained into a 400-gallon underground sump, located on the south side of the shed. The

contents of the sump and tank were periodically pumped into drums and the liquid removed for recycling once a year by Barton Oil Company.

**1.5 Dismantling Activities**

Kingsford contracted Plant Reclamation, Inc. of Richmond, California to dismantle the Kingsford plant in February 1990. The dismantling included the ACI and retort units, storage silos, and some associated buildings. Plant dismantling also included decontaminating the ACI unit of residual pyrolysis oil from process vessels, and interconnecting lines, fittings, and valves. The demolition and decontamination activities resulted in several types of demolition materials which were handled by the contractor and which are discussed further in Section 6.0 of this report.

All USTs were removed as part of ongoing operations or dismantling activities.

## 2.0 SITE DESCRIPTION

### 2.1 Topography

The site is relatively flat and slopes gently to the west (USGS Elk Grove Quadrangle, 1986). The surface elevation of the Kingsford Plant is approximately 50 feet above mean sea level (MSL).

### 2.2 Regional Geology

Elk Grove lies in the south-central portion of the Sacramento Valley, a structural trough bounded on the east by the north-south trending foothills of the Sierra Nevada and on the west by the similarly trending Coast Range. The valley extends from north of Red Bluff southward to the Sacramento-San Joaquin Delta. Stream channels and floodplains of the southward-flowing Sacramento River and its tributaries are the dominant features of the relatively flat valley floor. The Sacramento County Drainage Easement located at the northern property boundary is contiguous with Elk Grove Creek.

The predominant geologic unit in this area is the Victor Formation (DWR, 1978). The Victor Formation is composed of a heterogeneous assemblage of fluvial sediments deposited by streams that drained the Sierra Nevada during the mid- to late Pleistocene. These deposits consist of sand and gravel in stream channels which grade laterally and vertically into silt and clay. The Victor Formation typically contains a thick clay layer within its surface soils and is up to 90 feet thick in most of Sacramento County.

At depths below 90 feet, the area is underlain by a sequence of Pliocene Age sediments (Fair Oaks Formation) which consist of consolidated silts, sands, and clays with intermittent hardpan layers. The Fair Oaks is distinguished from the Victor Formation by the presence of white to gray tuffaceous silts.

Underlying the Fair Oaks Formation is the Mehrten Formation. The Mehrten Formation is estimated to be mid-Miocene to mid-Pliocene in age. Dark andesite sandstone interbedded with tuff breccia is the primary component of the Mehrten Formation. Soft sands, believed to have washed down from the nearby mountains, also contribute to this formation.

### 2.3 Hydrology

The groundwater depth was measured in an onsite well at 100 feet below groundsurface (BGS). Seasonal groundwater fluctuations are unknown, but low levels of rainfall during the past few years may have increased the depth to groundwater. The groundwater flow direction is estimated to be to the west or northwest (DWR, 1986). Under natural conditions, groundwater flows from the margins of the valley to its trough. However, north and south of the Elk Grove area, two large pumping depressions created by extensive groundwater withdrawals exist altering the natural gradient.

### 3.0 REGULATORY REQUIREMENTS

There are no specific regulatory agencies requirements mandating the closure of this facility. The Kingsford closure is a business decision; due to the economics of the charcoal briquet industry, manufacturing at this location is no longer profitable.

At the request of Kingsford management, HLA contacted the following government agencies regarding the closure:

- **Regional Water Quality Control Board (RWQCB), Central Valley Region**

On August 17, 1990, HLA contacted RWQCB, Central Valley Region regarding pond closures. The RWQCB advised HLA to follow the guidance of Subchapter 15, Title 23 of the California Code of Regulations, *Discharges of Waste to Land*. RWQCB advised Kingsford to provide the Board with a pond closure plan and laboratory reports. Kingsford sent a pond closure plan to RWQCB on September 9, 1990. On October 10, 1990, RWQCB directed Kingsford to proceed with leveling and filling the evaporation ponds. Correspondence is provided in Appendix A-II.

- **Sacramento Metropolitan Air Quality Management District (AQMD)**

On August 9, 1990, HLA contacted AQMD regarding the stockpiling of soil. The AQMD requested a written soil aeration plan. Kingsford sent a letter to AQMD, dated September 4, 1990, discussing the amount of soil that was to be aerated. AQMD provided Kingsford with a copy of their general aeration guidance letter, dated September 19, 1990 and approved the aeration plan. Correspondence is in Appendix A-II.

- **Sacramento County Environmental Management Department (SCEMD), Hazardous Materials Division**

On August 30, 1990, HLA discussed plant closure with EMD. EMD requested copies of laboratory analyses of soil samples taken from the pretreatment sump and 1,000-gallon UST excavations. HLA hand-delivered a copy of the laboratory reports and site plan to EMD on September 25, 1990. EMD also requested that HLA send a copy of the final closure report when completed.

- State of California, Department of Health Services (DHS)

On May 4, 1990, HLA contacted DHS regarding their involvement on the project. DHS had no concerns regarding closure of this facility provided that it did not appear on any of their lists of sites scheduled for clean-up of hazardous materials, and that Kingsford had initiated actions for closure themselves.

Policy and permitting issues are discussed further in Section 6.6, Permits Closure.



#### 4.0 AREAS OF ENVIRONMENTAL CONCERN AND SITE SAMPLING

Based on HLA's review of records, site visits, an environmental audit (Appendix A-II), and conversations with Kingsford personnel, twelve areas of potential environmental concern have been identified and are addressed in this report. These areas are:

- 1) Mineral Spirits Storage Area/Lube Oil Drum Shed;
- 2) Maintenance Shop and Stores Building;
- 3) Retort Area;
- 4) Dirt Berm;
- 5) Pretreatment Waste Sump;
- 6) Raw Material Piles;
- 7) Oil Drum Storage Area;
- 8) Drainage Ditches, Settling Pond, and Evaporation Ponds;
- 9) South Vacant Lot;
- 10) Equipment Storage Yard;
- 11) ACI Unit; and
- 12) Industrial Wells #1 and #2

HLA provided Kingsford with their *Site Characterization Work Plan* on July 17, 1990. The work plan describes the areas of the plant that were sampled, the types of samples (i.e. soil boring, hand-auger, etc.), the number of samples taken per sample type, and the laboratory analysis requested for each sampling group. HLA's Standard Sampling Procedures are provided in Appendix A-V.

HLA's field investigation was based on information gathered from previous site visits, documentation from prior environmental work (Woodward Clyde, 1989), conversations with Kingsford and Clorox Company environmental personnel, and Kingsford's correspondence with

government agencies. The work plan provided a preliminary evaluation of the distribution of petroleum hydrocarbons, volatile and semi-volatile organic compounds (VOCs and SVOs), pesticides, and heavy metals in soil and groundwater.

Site characterization activities commenced on July 25, 1990; All Terrain Drilling Company was contracted to perform the soil borings. For the safety of personnel, and to determine which samples were to be submitted for laboratory analysis, HLA used a photo-ionization detector (PID) to detect VOCs .

HLA used Eureka Laboratories of Sacramento for all soil and water sample analyses. Eureka Laboratories is a State of California certified laboratory for hazardous waste analysis.

HLA field personnel sampled eleven of the twelve areas of potential environmental concern utilizing one or more of the following sampling methods:

- Groundwater Monitoring Well (MW)
- Surface Samples (SS)
- Soil Boring Samples (SB)
- Hand-Auger Samples (HA)
- Industrial Wells Water Samples (IW)
- Clearance Samples (CS)
- PID Readings

The preliminary investigation included 27 samples which were submitted for laboratory analysis. The sample identification and requested analysis are summarized in Table 1.

The following sections describe the areas of environmental concern that were sampled during the preliminary phase of the site assessment.

#### 4.1 Mineral Spirits Storage Area/Lube Oil Drum Shed

The mineral spirits storage area/lube oil drum shed is located on the southwest corner of the Kingsford site. Two 20,000-gallon underground solvent storage tanks, one 1,000-gallon diesel tank, and associated pumps and piping were removed in May, 1989. Approximately 1,200 cubic yards (cy) of soil contaminated with mineral spirits was excavated and stockpiled onsite. The soil was aerated, re-tested for the presence of hydrocarbons and semi-volatile organics in accordance with RWQCB guidelines, and the holes backfilled with clean soil. The aerated excavated dirt was used in the final site grading (WCC, 1990).

Small quantities of lube oil and industrial shop solvent drippings were channeled into a 400-gallon underground sump located on the south side of the lube oil drum shed. HLA removed two soil samples from soil boring SB-1 at the 1- and 4.5-foot levels, and tested the samples for TPH, oil and grease, and VOCs. The test results are shown on Plate 4. At the 1-foot level, TPH-motor oil, and oil and grease were reported at 240 parts per million (ppm) and 220 ppm, respectively. TPH-gasoline was reported at 6 ppm, below the LUFT manual action level of 100 ppm for this site. The 400-gallon sump was excavated down to the 4-foot level, where soil staining was noticed on the west and south walls of the excavation. PID readings were taken from soils around the excavation at the 4-foot level. The readings exceeded a background level of 0.0 units in an area extending 15 feet to the east and south, and 10 feet to the west of the former sump. The contaminated soil was excavated to a depth of 18 feet; PID readings were taken at different levels to evaluate the amount of contamination. A total of four soil samples (SP-1N, SP2-S, SP-3E, and SP-4W) were taken from the stockpiled soil. The samples were composited at the laboratory and analyzed for TPH, oil and grease, and BTEX. Results are indicated on Plate 5. TPH-motor oil exceeded the detection limit.

#### 4.2 Maintenance Shop/Stores Building

One 1,000-gallon gasoline tank located on the south side of the stores building (formerly a maintenance shop) was abandoned in 1981. A second 1,000-gallon diesel tank located nearby was removed in 1986 under the guidance of WCC (Appendix A-II). The 1,000-gallon gasoline tank was excavated on August 3, 1990. The tank contained water with a sheen of gasoline on the surface; however, the tank was in good condition and no leakage of product was detected. The tank was pumped by Recycletron, Inc., a licensed oil recycler, triple rinsed, purged with dry ice to evacuate vapors, and removed offsite. Two PID readings were taken (Plate 10). An underground concrete sump located on the east side of the stores building, formerly containing solvents and oils, was removed after being tripled rinsed. Both excavations were backfilled with surrounding clean dirt from the plant.

A soil sample (SMP-1) was taken from the beneath stores building sump at a depth of 6 inches (Plate 6) and tested for TPH, oil and grease, and total lead compounds. All constituents tested were below the detection limit except lead, with a reported value of 10.3 ppm. According to the California Code of Regulations (CCR), Title 22, this value is slightly above the Soluble Threshold Limit Concentration (STLC) of 5.0 ppm and well below the Total Threshold Limit Concentration (TTLC) of 1,000 ppm.

#### 4.3 Retort Area

The retort unit was located on the east side of the packaging and manufacturing building (Plate 3). Approximately 25 cubic yards of metal ducting and flanges with asbestos containing material (ACM) was found in the retort and dryer. The ACM was removed by Environmental Transfer Services, a State of California licensed asbestos abatement contractor, in accordance with established standards. The laboratory analysis was performed by National Asbestos Testing Laboratories of San Leandro, CA.

Boiler water blowdown was discharged outside the packaging and manufacturing building into an underground area of broken concrete. HLA investigated the boiler blowdown area by hand augering to a depth of 3 feet, then testing the soil samples for heavy metal compounds that might have been used as scale and corrosion inhibitors in boiler feed water. As indicated on Plate 7, all metals reported were below the TTLC and did not exceed their respective STLC values by 10 times, as specified in Title 22 of the California Code of Regulations. Also, as indicated on the MSDS shown in Appendix A-VI, Kingsford used non-toxic metal/compounds for this purpose.

#### 4.4 Dirt Berm

This berm consisted of about 500 cy of dirt interspersed with approximately 10 cy of char. The char was comprised of burnt wood material (i.e., almond hulls and tree bark) which originated from processed briquets that did not meet Kingsford's specifications. HLA determined that this area was of minimal environmental concern, but removed a surface sample (SS-1) for verification in the equipment yard just to the west of the berm. Test results indicate no impact from the char material. All values reported were below detection limits (Plate 6).

#### 4.5 Pretreatment Sump

The 475-gallon pretreatment sump was located in the Match light pretreatment building. Washdown water from the building was collected in the sump along with mineral spirits spillage. The mineral spirits were subsequently reclaimed in the Match light pretreatment process.

Upon removal of the sump, soil containing mineral spirits was detected below and around the former sump. The pretreatment building was demolished and the lateral and vertical extent of mineral spirits was investigated. The mineral spirits extended from 35 feet north to 50 feet west of the former pretreatment building, and 30 feet to the east of the former sump.

The soil in the area was excavated to a depth of approximately 35 feet, with mineral spirits still being detected. The excavation was then backfilled to a depth of 15 feet for further investigation. Soil borings were drilled to determine the vertical extent of migration.

Four soil borings, ML-1 through ML-4 (Plate 11A), were drilled from an approximate level of 15 feet (BGS) to a depth of 40 to 45 feet BGS. Samples were collected every 5 feet for laboratory analysis or lithological reference. The vertical extent of contamination below the former sump location was found to stop at 45 feet BGS. The soil containing mineral spirits was removed from this location in the initial excavation. Clearance samples were taken from the bottom of the soil borings and along the walls. Locations and results of the clearance samples are shown on Plates 11A and 11B. Boring logs are presented in Appendix A-V. The soil was removed from this area and stockpiled for remediation.

#### 4.6 Raw Material Piles

Raw material (walnut shells, almond hulls, peach pits, and other agricultural solids) used in the manufacturing process were stored on the northeast quarter of the facility. HLA considered these materials to be of no consequential environmental concern; therefore, no soil samples were taken. The above-mentioned piles consisted of non-hazardous materials.

#### 4.7 Oil Drum Storage Area

The oil drum storage area was a concrete pad located on the north side of the packaging and manufacturing building. Fifty-five-gallon drums containing wood oil used in the ACI unit were stored in this area and in the equipment storage yard just to the north. A steel-lined sump located on the north side of the concrete pad was used to capture oil spillage and stormwater. HLA investigated for potential hydrocarbons in soil surrounding the concrete pad, which was frequently washed-down.

One surface sample (SMP-2) was removed from a depth of 6 inches and tested for EPA 8270 semi-volatile organic compounds (SVOs), EPA 418.1 oil and grease (O and G), and EPA 8040 phenols. Bis (2-ethylhexyl) phthalate, a SVO compound, was present at slightly above detection levels. All other constituents tested at non-detectable levels (Plate 6). A soil boring (SMP-2) was taken at the 6-foot-level BGS and tested for the above-mentioned constituents. No contamination by oil and grease, SVOs, or phenols were detected, as indicated in Plate 4.

#### 4.8 Drainage Ditches, Settling Pond, and Evaporation Ponds

Water and char were washed into the drainage ditches located on the west and northeast sides of the plant, the settling pond, and the evaporation ponds. Product from the ACI area drained into the settling pond to the northeast. HLA investigated the potential of sludge and washwater to contain elevated levels of heavy metals, PAH, petroleum hydrocarbons, and phenol compounds.

Five hand-auger borings, HA-3 through HA-7, and three soil borings, SB-1, SB-4, and SB-5, were augered or drilled to various depths. The hand borings were augered to approximately 5 feet BGS and the soil borings drilled to approximately 15 feet BGS (Appendix A-V). A total of 12 soil samples were collected from the borings at different depths and analyzed for EPA 418.1 O and G, EPA 8015M TPH-G, TPH-D, TPH-motor oil, EPA 8040 phenols, and EPA 8270 SVOs. Bis (2-ethylhexyl) phthalate was detected in borings HA-3, 5, and 7. TPH-G and TPH-motor oil were detected in boring SB-1 in the 1-foot sample. Oil and grease was detected in borings SB-5, in both the 1- and 4.5-foot samples, SB-4 in the 1-foot sample, and SB-1 in the 1-foot sample. Test results are shown on Plates 4 and 7. A surface sample (SS-2) was taken at 6 inches BGS and was tested for TPH and SVOs. Test results are shown on Plate 6.

#### 4.9 South Vacant Lot

Prior to 1976, approximately 22 acres of land south of the plant was used for agricultural purposes; however this land is currently undeveloped. A ranch house and barn were formerly located in the picnic area at the northeast corner of the vacant lot. A CONOCO asphalt plant is located on the southern boundary of this area. Bulk petroleum storage tanks are present at the CONOCO facility. HLA investigated the potential for groundwater contamination resulting from operations at the CONOCO facility.

Two borings, SB-6 and MW-1, were drilled in the south vacant lot to respective depths of 15 and 115 feet BGS. Soil samples were collected every 5 feet for laboratory analysis and lithological reference. Two samples from each boring were analyzed for EPA 413.1 oil and grease, CAM metals, EPA 8240 VOCs, EPA 8270 SVOs, TPH-G, TPH-D, TPH-motor oil, EPA 8040 phenols, and EPA 7421 total lead. Detectable levels of TPH-motor oil were found in MW-1 in the 1-foot sample. No detectable levels of constituents were found in the 4.5-foot sample, SB-6, or the water sample. Thirteen of the 17 CAM metals were detected in MW-1; 10 CAM metals were detected in SB-6. Test results are on Plate 8.

#### 4.10 Equipment Storage Yard

Approximately 20 unlabeled 55-gallon drums containing pyrolysis oil residues and four unlabeled 55-gallon drums containing pyrolysis oil were noted in this area during an inspection of the site by the DHS in 1984. HLA investigated potential soil contamination from pyrolysis oil leaked or spilled into this area.

One 6-inch surface sample (SS-3) was taken. No constituents exceeded detection limits (Plate 6).



#### 4.11 ACI Unit

The ACI unit manufactured a low pH pyrolysis oil in the R&D charcoal manufacturing process. The oil contained phenol, phenol compounds, and other organic oils. The entire ACI process was a closed-loop system; any oil which escaped into the ACI area was pumped back into the system via concrete troughs. HLA investigated potential leakage of pyrolysis oil into the surrounding soils.

Two soil borings, SB-2 and SB-3, were drilled to a depth of 15-feet BGS. Soil samples were collected every 5 feet for laboratory analysis or lithological reference. Two samples from each boring were analyzed for oil and grease, SVOCs, and phenols. No detectable levels of the constituents were found in SB-3; however, detectable levels of the constituents were present in SB-2 (Plate 4). There are no established EPA maximum limits or DHS action levels for these constituents at this time.

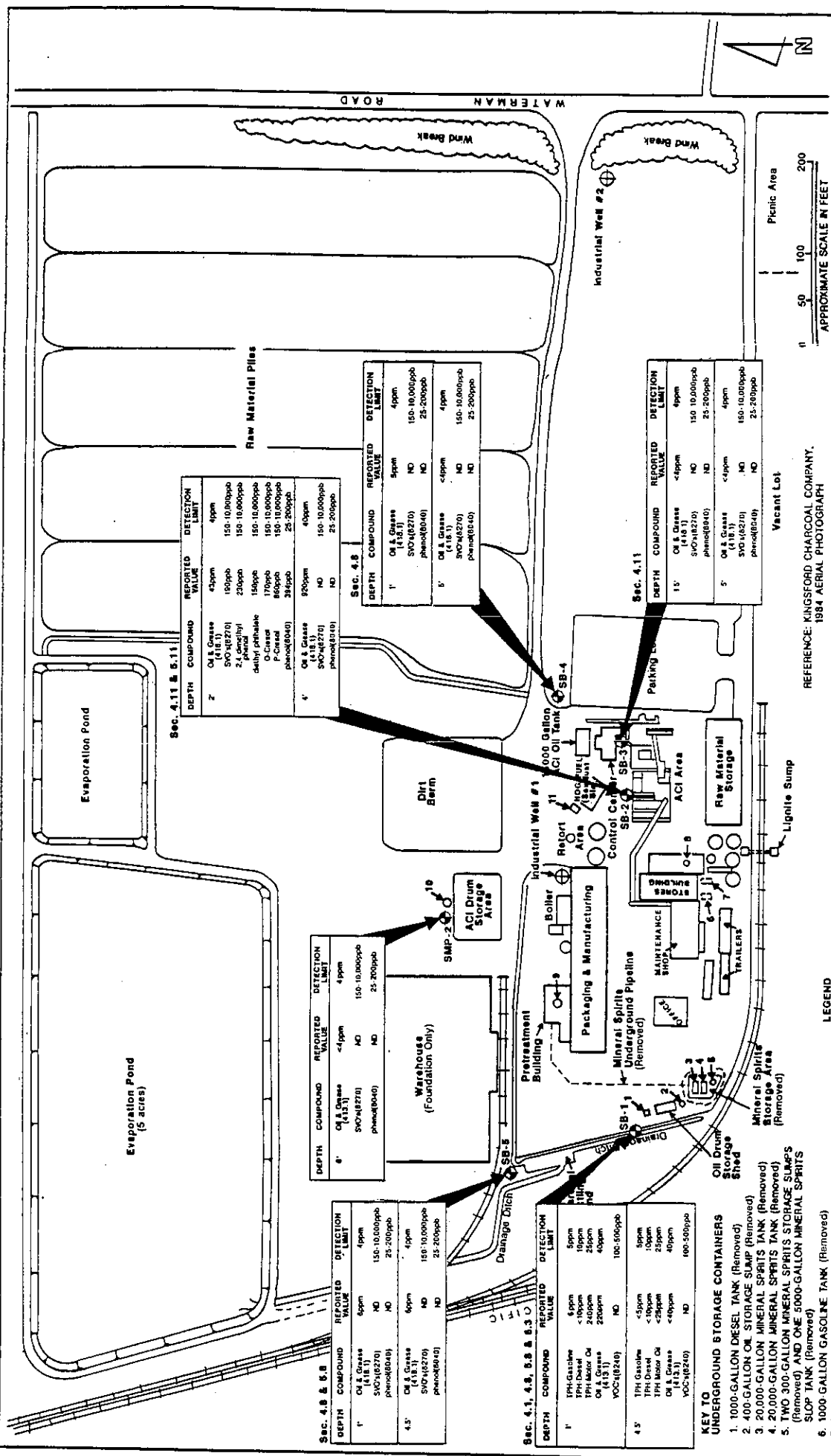
#### 4.12 Industrial Wells #1 and #2

Two industrial wells are located on the east side of the plant near Waterman Road (WW-2) and west of the retort area (WW-1). HLA investigated the potential for leachates from raw material piles to effect water quality.

One water sample from each well was taken at the valve and analyzed for EPA 604 phenols, EPA 418.1 oil and grease, EPA 6010 Arsenic, Title 22 total dissolved solids (TDS), and EPA 8015M TPH. All constituents tested below the detection limit except for TDS, with levels of 196 ppm for both wells (Plate 6).

Table 1  
Preliminary Samples

Number	Sample ID & Location	Depth	EPA 8040 Phenols	EPA 413.1 Oil&Grease	SVDs	EPA 7421 Ttl Lead	TPH	Oil&Grease CAM Metals	EPA 6010 pH	EPA 9045 PAN	EPA 8100 VOCs	EPA 8240 Arsenic	EPA 6010 Ttl	EPA 604 Phenols
1	SS-1 Dirt Berm	6"	X		X			X						
2	SS-2 East Drainage Ditch	6"	X		X		X							
3	SS-3 Equipment Yard	6"	X		X			X						
4	SMP-1 Stores Building Sump	6"		X		X								
5	SMP-2 ACI Sump	6"	X		X			X						
6	HA-1 Boiler Drain	3"	X		X					X				
7	HA-3 Evaporation Ponds	6"	X		X		X							
8	HA-4 Evaporation Ponds	6"	X		X		X							
9	HA-5 Evaporation Ponds	6"	X		X		X							
10	HA-6 Evaporation Ponds	6"	X		X		X							
11	HA-7 Evaporation Ponds	6"	X		X		X							
12	SB-1 West Drainage Ditch	1'		X		X					X			
13		4.5'		X		X					X			
14	SB-2 West ACI Area	2'	X		X			X						
15		4'	X		X			X						
16	SB-3 East ACI Area	1.5'	X		X			X						
17		5'	X		X			X						
18	SB-4 East ACI Settling Pond	1'	X		X			X						
19		5'	X		X			X						
20	SB-5 Charcoal Settling Pond	1'	X		X			X						
21		4.5'	X		X			X						
22	SB-6 South Vacant Lot	1'	X	X	X			X			X			
23		4.5'	X	X	X			X			X			
24	MW-1 Monitoring Well South Lot	1'	X	X	X	X		X			X			
25		4.5'	X	X	X			X			X			
26	MW-1 Well 1 Boiler Area	at valve						X				X	X	X
27	MW-2 Well 2 Waterman Road	at valve						X				X	X	X



**Sec. 4.11 & 5.11**

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
2'	Oil & Grease (418.1)	43ppm	4ppm
	SVOC(B270)	10ppb	150-10,000pb
	2-phenoxyethyl phenyl ether	21ppb	150-10,000pb
	dibutyl phthalate	18ppb	150-10,000pb
	O-Cresol	17ppb	150-10,000pb
	P-Cresol	86ppb	150-10,000pb
	phenol(B040)	39ppb	25-200ppb
4'	Oil & Grease	920ppm	40ppm
	(418.1)	ND	150-10,000pb
	SVOC(B270)	ND	25-200ppb
	phenol(B040)	ND	25-200ppb

**Sec. 4.8**

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
0'	Oil & Grease (418.1)	<4ppm	4ppm
	SVOC(B270)	ND	150-10,000pb
	phenol(B040)	ND	25-200ppb

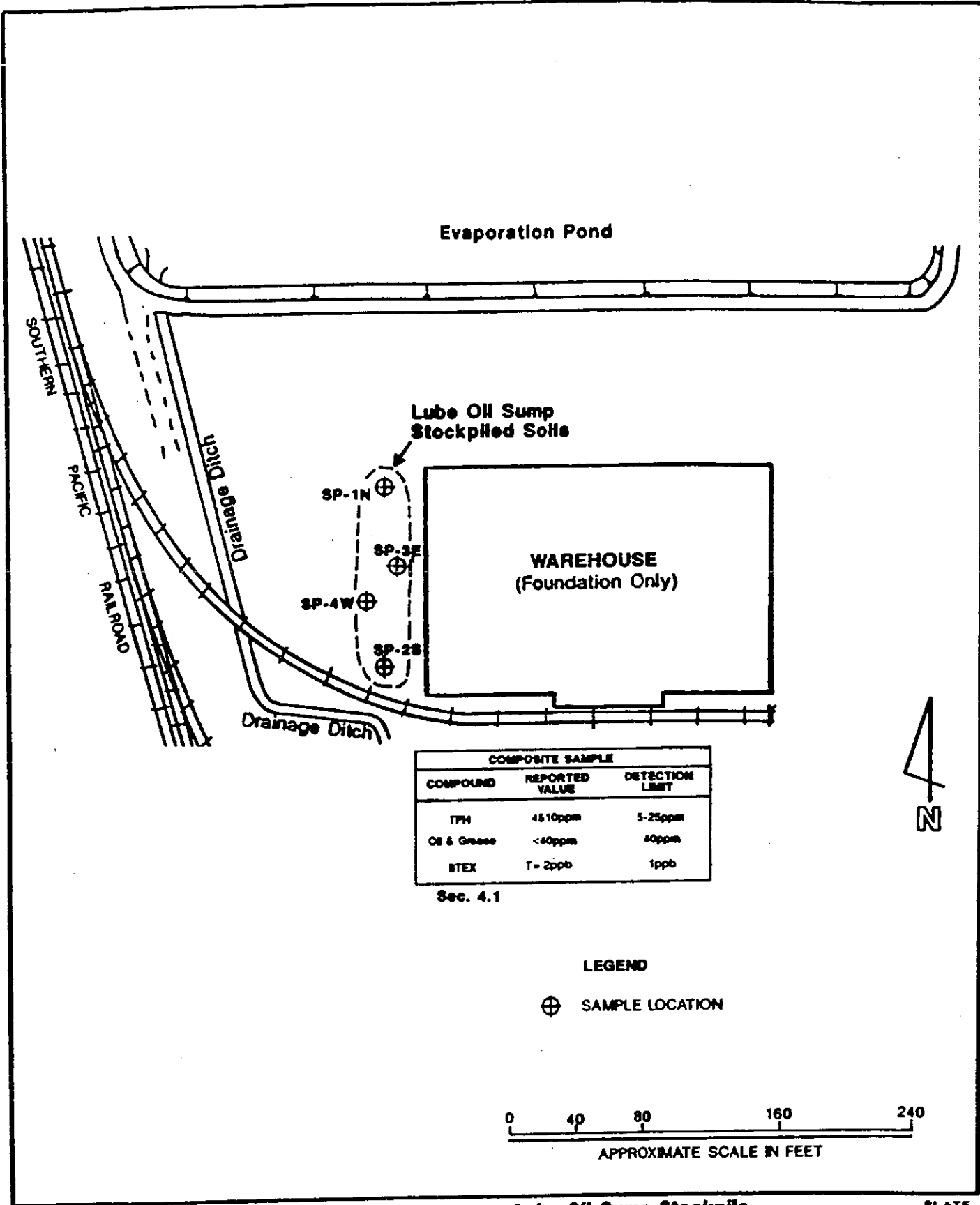
**Sec. 4.8 & 5.8**

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
1'	Oil & Grease	6ppm	4ppm
	SVOC(B270)	ND	150-10,000pb
	phenol(B040)	ND	25-200ppb
4.5'	Oil & Grease	6ppm	4ppm
	SVOC(B270)	ND	150-10,000pb
	phenol(B040)	ND	25-200ppb

**Sec. 4.1, 4.8, 5.8 & 6.3**

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
1'	TPH-Gasoline	6ppm	6ppm
	TPH-Diesel	20ppm	20ppm
	TPH-Motor Oil	20ppm	40ppm
	Oil & Grease (418.1)	20ppm	40ppm
4.5'	VOC(B240)	ND	100-500ppb
	TPH-Gasoline	<5ppm	6ppm
	TPH-Diesel	<20ppm	20ppm
	TPH-Motor Oil	<20ppm	40ppm
	Oil & Grease (418.1)	<40ppm	40ppm
	VOC(B240)	ND	100-500ppb

- KEY TO UNDERGROUND STORAGE CONTAINERS**
- 1000-GALLON DIESEL TANK (Removed)
  - 400-GALLON OIL STORAGE SLUMP (Removed)
  - 20,000-GALLON MINERAL SPIRITS TANK (Removed)
  - 20,000-GALLON MINERAL SPIRITS TANK (Removed)
  - TWO 300-GALLON MINERAL SPIRITS STORAGE SLUMPS (Removed) AND ONE 5000-GALLON MINERAL SPIRITS SLOP TANK (Removed)
  - 1000-GALLON GASOLINE TANK (Removed)
  - 1000-GALLON DIESEL TANK (Removed)
  - MAINTENANCE SHOP SLUMP (Removed)
  - 475-GALLON PROCESS WASTE SLUMP (Removed)
  - ACI DRUM STORAGE AREA SLUMP (Removed)
  - HOG FUEL BIN



COMPOSITE SAMPLE		
COMPOUND	REPORTED VALUE	DETECTION LIMIT
TPH	4510ppm	5-25ppm
Oil & Grease	<40ppm	40ppm
BTEX	T = 2ppb	1ppb

Sec. 4.1

LEGEND

⊕ SAMPLE LOCATION



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Lube Oil Sump Stockpile**  
Baseline Sampling  
Kingsford Plant  
Elk Grove, California

PLATE

**5**

DRAWN  
RS

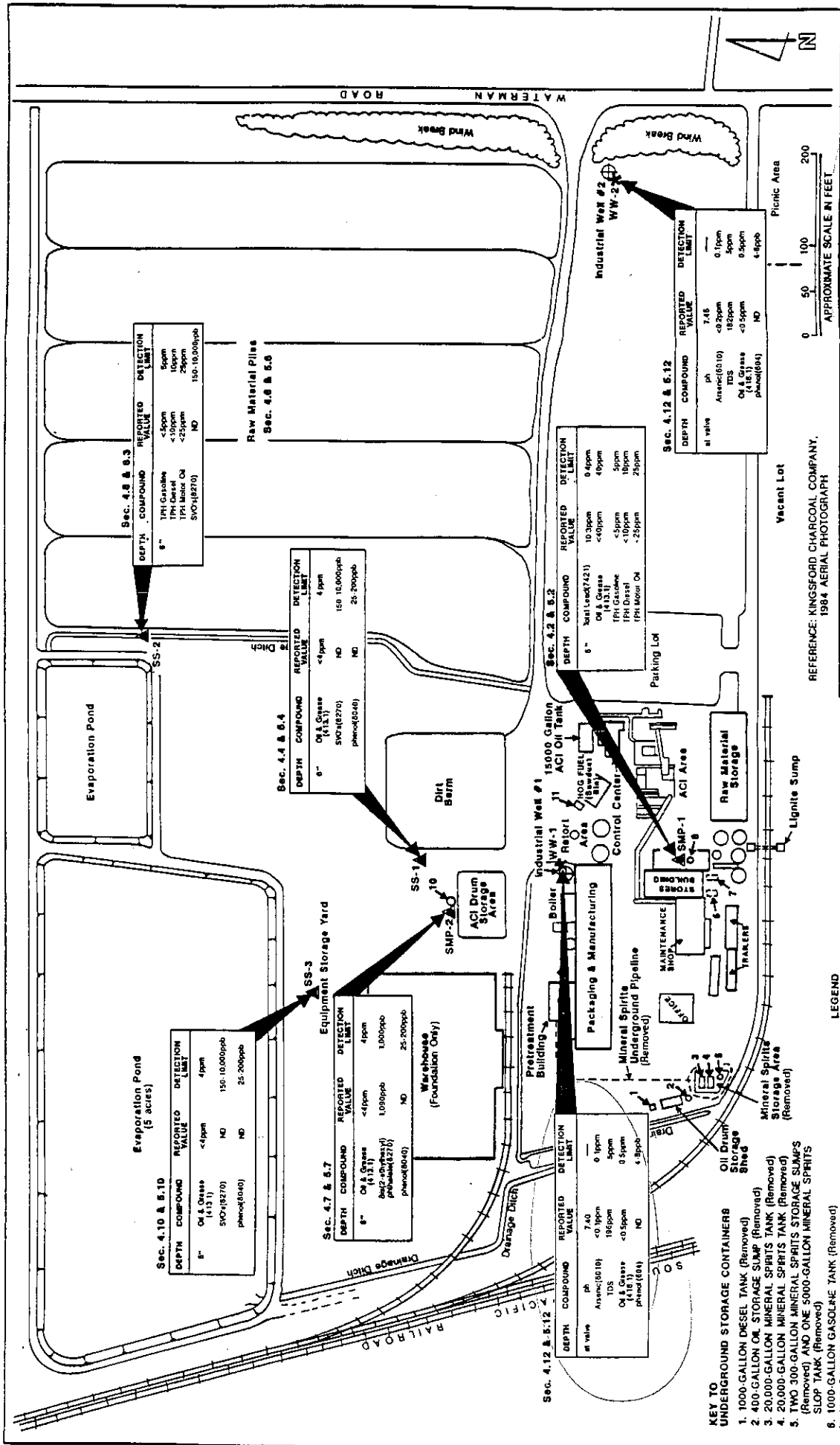
JOB NUMBER  
19892,013.13

APPROVED

*AMO*

DATE  
9/90

REVISED DATE



- KEY TO UNDERGROUND STORAGE CONTAINERS**
- 1000-GALLON DIESEL TANK (Removed)
  - 400-GALLON OIL STORAGE SUMP (Removed)
  - 20,000-GALLON MINERAL SPIRITS TANK (Removed)
  - 20,000-GALLON MINERAL SPIRITS TANK (Removed)
  - TWO 300-GALLON MINERAL SPIRITS STORAGE SUMPS (Removed) AND ONE 5000-GALLON MINERAL SPIRITS SLOP TANK (Removed)
  - 1000-GALLON GASOLINE TANK (Removed)
  - 1000-GALLON DIESEL TANK (Removed)
  - MAINTENANCE SHOP SUMP (Removed)
  - 475-GALLON PROCESS WASTE SUMP (Removed)
  - ACI DRUM STORAGE AREA SUMP (Removed)
  - HOG FUEL BIN

- LEGEND**
- SS-1 ▲ SURFACE SAMPLE LOCATION
  - SMP-1 ▲ SUMP SAMPLE LOCATION
  - WW-1 ★ WATER WELL SAMPLE LOCATION

REFERENCE: KINGSFORD CHARCOAL COMPANY, 1984 AERIAL PHOTOGRAPH

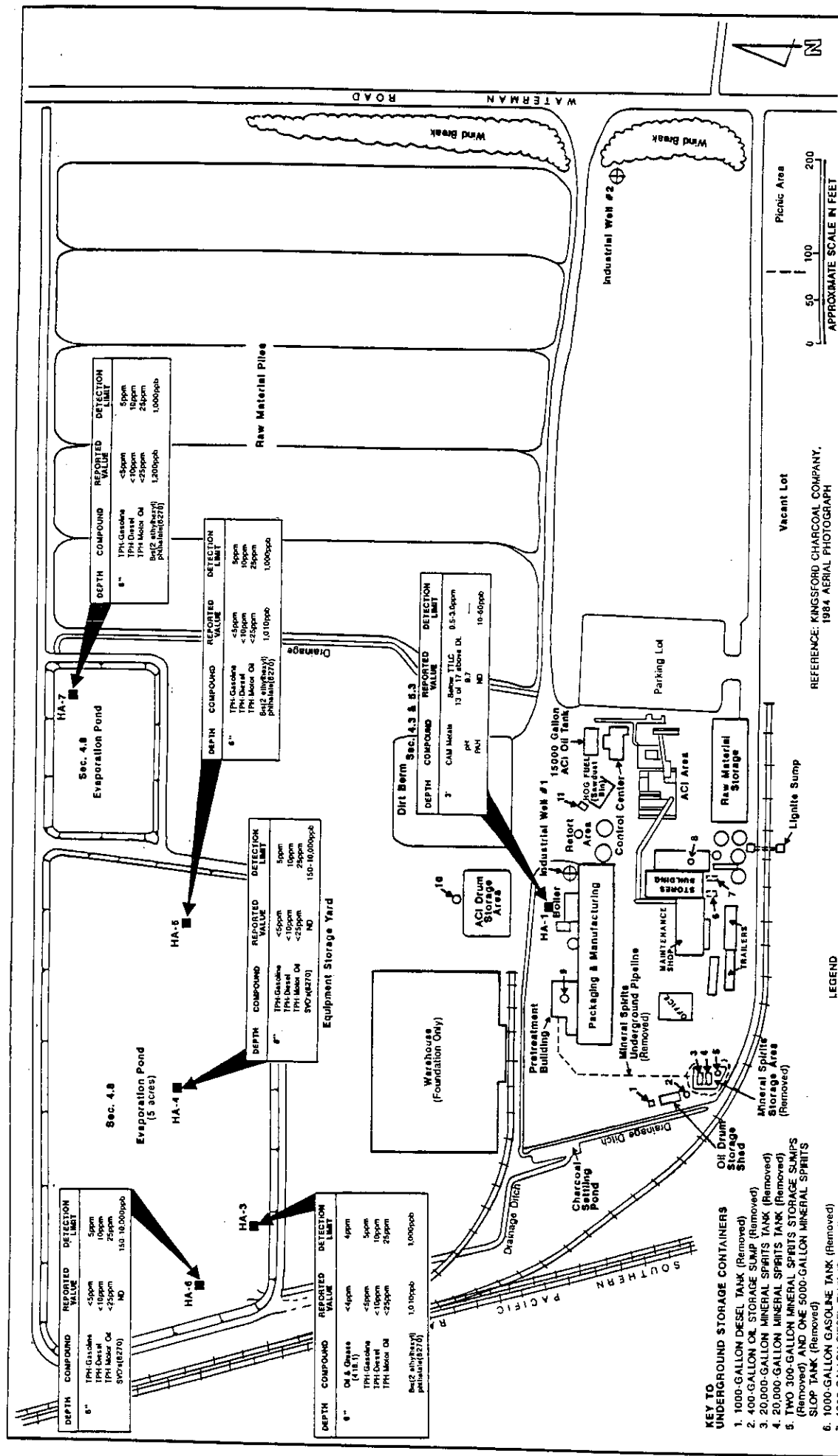


Harding Lawson Associates  
Engineering and Environmental Services

**Surface Sample Locations**  
Baseline Sampling  
Kingsford Plant  
Elk Grove, California

DRAWN BY: RS  
JOB NUMBER: 19892.010.13  
APPROVED BY: [Signature]

DATE: 1/91  
REVISED DATE:



DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
6"	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel Oil	<10ppm	10ppm
	TPH-Motor Oil	<25ppm	25ppm
	SPV-10(270)	ND	150-10,000ppb

- KEY TO UNDERGROUND STORAGE CONTAINERS**
- 1000-GALLON DIESEL TANK (Removed)
  - 400-GALLON OIL STORAGE SUMP (Removed)
  - 20,000-GALLON MINERAL SPIRITS TANK (Removed)
  - 20,000-GALLON MINERAL SPIRITS TANK (Removed)
  - TWO 300-GALLON MINERAL SPIRITS STORAGE SUMPS (Removed) AND ONE 5000-GALLON MINERAL SPIRITS SUMP TANK (Removed)
  - 1000-GALLON GASOLINE TANK (Removed)
  - 1000-GALLON DIESEL TANK (Removed)
  - MAINTENANCE SHOP SUMP (Removed)
  - 475-GALLON PROCESS WASTE SUMP (Removed)
  - ACI DRUM STORAGE AREA SUMP (Removed)
  - HOG FUEL BIN



REFERENCE: KINGSFORD CHARCOAL COMPANY, 1984 AERIAL PHOTOGRAPH

HA-1 ■ HAND AUGER BORING LOCATION



Harding Lawson Associates  
Engineering and Environmental Services

**Hand Auger Boring Locations**  
Baseline Sampling  
Kingsford Plant  
Elk Grove, California

DRAWN: RS  
JOB NUMBER: 19892.010.13  
DATE: 1/91  
REVISED DATE:

PLATE 7

**Sec. 4.9 & 5.9**

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
1'	Oil & Grease (413.1)	<40ppm	40ppm
	VOC's(8240)	ND	100-500ppb
	SVO's(8270)	ND	150-10,000ppb
	phenol(8040)	ND	25-200ppb
	CAM Metals	13 of 17 above DL	0.5-3.0ppm
	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel	<10ppm	10ppm
4.5'	Oil & Grease (413.1)	<40ppm	40ppm
	VOC's(8240)	ND	100-500ppb
	SVO's(8270)	ND	150-10,000ppb
	phenol(8040)	ND	25-200ppb
	CAM Metals	13 of 17 above DL	0.5-3.0ppm
	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel	<10ppm	10ppm
TPH-Motor Oil	<25ppm	25ppm	

**KINGSFORD PLANT**

Site Boundary

**BUFFER ZONE**

Picnic Area

LUTHERN

PACIFIC

SB-6

MW-1 (Soil Boring)

**Sec. 4.9 & 5.9**

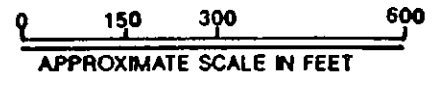
DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
1'	Oil & Grease (413.1)	72ppm	40ppm
	Total Lead(7421)	4.18ppm	0.4ppm
	CAM Metals	11 of 17 above DL	0.5-3.0ppm
	TPH-Gasoline	<5ppm	5ppm
	TPH-Diesel	<10ppm	10ppm
	TPH-Motor Oil	245ppm	25ppm
	VOC's(8240)	ND	100-500ppb
	phenol(8040)	ND	25-200ppb
	Bis(2-ethylhexyl) phthalate(8270)	1,910ppb	1,000ppb
	4.5'	Oil & Grease (413.1)	<40ppm
Total Lead(7421)		2.98ppm	0.4ppm
CAM Metals		10 of 17 above DL	0.5-3.0ppm
TPH-Gasoline		<5ppm	5ppm
TPH-Diesel		<10ppm	10ppm
TPH-Motor Oil		<25ppm	25ppm
Bis(2-ethylhexyl) phthalate(8270)		1,460ppb	1,000ppb

**CONOCO ASPHALT PLANT**

WATERMAN ROAD

**LEGEND**

- MW-1 ● MONITORING WELL LOCATION
- SB-6 ⊕ SOIL BORING LOCATION



Harding Lawson Associates  
Engineering and Environmental Services

**Sample Locations-South Vacant Lot**  
Baseline Sampling  
Kingsford Plant  
Elk Grove, California

PLATE  
**8**

DRAWN RS	JOB NUMBER 19892.010.13	APPROVED <i>[Signature]</i>	DATE 1/91	REVISED DATE
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## 5.0 CLEARANCE SAMPLING AND TEST RESULTS

After initial sampling was completed, clearance sampling was conducted to verify that no hydrocarbons were present. Of the twelve areas of concern, four primary areas of hydrocarbons were found and remediated. They included the lube oil shed sump, the maintenance shop UST, the pretreatment sump, and the west ditch, which included the cha settling pond. Initial sampling showed most of the areas to be free of hydrocarbons. Upon removal of the sumps and USTs, soils below the containers were excavated to remediate an hydrocarbons. The vertical and lateral extent of migration was characterized through the use of PID readings and visual evidence of staining. When PID readings indicated no VOCs, clearance samples were collected and sent to a state certified laboratory for analysis. Upon verbal notification of test results, the excavations were either backfilled with clean soils or re-excavated to new extents to remediate the hydrocarbon problem. Laboratory results are enclosed in Appendix A-I. The following sections discuss sampling and test results in greater detail.

*what is 4*

### 5.1 Mineral Spirits Storage Area/Lube Oil Drum Shed

The mineral spirits storage area investigation was conducted by WCC. All related work can be found in the WCC, 1990 document (Appendix A-II).

Soils containing hydrocarbons were excavated around and beneath the lube oil sump to a depth of approximately 18 feet BGS. Clearance samples were taken from beneath the former oil storage shed at 5 feet. Below the former sump, clearance samples were collected from the bottom of the excavation at 18 feet BGS, and at locations along the lower walls of the excavation. All samples were analyzed for EPA 8240 VOCs, EPA 8015M as mineral spirits



(MS), and EPA 413.1 as oil and grease. No detectable levels of constituents were reported (Plate 9).

A fresh water bioassay (LC 50/96) was conducted on the stockpiled soil of the lube oil sump excavation. Test results reported a survivability rate of 90% to 95% for the organisms tested (flathead minnows). Other tests conducted on the lube oil stockpiled soil included: corrosivity (pH), flammability, SVOs (8240), TPH, CAM metals, and Title 22 metals. All constituents tested within the range of acceptability as non-hazardous wastes for a Class II disposal site. The test results are included in Appendix A-I. The tests were conducted to determine whether the soil was acceptable for Class II landfill disposal, as well as for Kingsford to self-certify the stockpiled soil as non-hazardous waste. Currently, there is no LUFT action level for TPH as motor oil, but RWQCB, Central Valley Region, recommended that the stockpiled soil be treated or disposed offsite at a permitted facility.

## 5.2 Maintenance Shop/Stores Building

A sump was removed from the east side of the maintenance/stores building and soils excavated to 5 feet BGS. A clearance sample was collected 6 inches below the bottom of the excavation, with no detectable amounts of hydrocarbons reported. Test results are shown on Plate 6.

A 1000-gallon gasoline UST was excavated and removed from the south side of the maintenance/stores building. PID readings indicated hydrocarbons were confined to the upper soils surrounding the tank. A clearance sample (Tank 1) was collected at 6 feet BGS and analyzed for TPH-G, EPA 7421 total lead, and EPA 8020 benzene, toluene, ethyl benzene, and xylenes (BTEX). Test results are shown on Plate 10. Based on Table 2.1 of the LUFT manual

(RWQCB, 1989) and shown in Appendix A-VII, the allowable concentrations for petroleum hydrocarbons in the soil at the Kingsford plant are listed as:

Gasoline	100 ppm
Diesel	1,000 ppm
B/T/E/X	.3/.3/1/1 ppm

Clearance samples (TSP1, 2, 3 and 4) were collected from the stockpiled soil of the UST, using random locations and depths on the stockpile. The samples were composited at the laboratory into a single sample for analysis.

**5.3 Retort Area**

Clearance samples from the hand-auger boring HA-1 were tested for CAM metals, polyaromatic hydrocarbons (PAH), and pH (Plate 7). Thirteen of the 17 metals tested were present above detection limits. All of the detected levels were below state action levels. No detected levels of PAH were reported. A complete list of metals analyzed is located (Appendix A-I).

**5.4 Dirt Berm**

This area was determined to be of minimal environmental concern by both Kingsford management and HLA. A clearance sample obtained from the vicinity of the dirt berm showed no detectable levels of constituents (Plate 6). No additional work was performed in this area.

**5.5 Pretreatment Sump**

Clearance samples were collected from the bottom of soil borings ML-1 through ML-4. The depths ranged from 31 feet BGS in ML-1 to 46 feet BGS in ML-3 (Appendix A-V).

Additional clearance samples were collected from along the lower walls of the excavation from approximately 15 to 30 feet BGS. All samples were analyzed for TPH-MS. No detectable levels of hydrocarbons were reported. Locations of borings, samples, and test results are enclosed (Plates 11A and 11B).

The excavated soils were stockpiled for further remediation on the former warehouse foundation. Clearance samples were collected randomly for compositing by the laboratory. The composited sample was analyzed for TPH-MS and BTEX. Test results from the clearance samples taken on December 20, 1990 reported TPH-G below 100 ppm. TPH reported as mineral spirits, diesel, and motor oil were non-detectable (Plate 12).

A fresh water bioassay (LC 50/96) was conducted on the stockpiled soil of the pretreatment sump. Test results reported a survivability rate of 90 to 100% for the organisms tested.

#### 5.6 Raw Material Piles

There was no work performed on the raw material piles since this area was determined to be of little environmental concern. The remainder of the charcoal piles were mixed with clean soils from the surrounding site and used in the general site grading plan.

#### 5.7 Oil Drum Storage Area

One clearance sample was collected next to the cement pad and below the sump. Test results indicate that there is no hydrocarbon contamination in the above-mentioned areas. The sump excavation was backfilled with clean soil from the surrounding area. The pad was left in place and the area graded into the general grading plan.

**5.8 Drainage Ditches, Settling Pond, and Evaporation Ponds**

Clearance samples from the west settling pond and east drainage ditch contained no hydrocarbons or phenols. The ditches and evaporation ponds were subsequently backfilled with clean soils on the site and graded. Samples from the west ditch (SB-1 at 4.5 feet, and SB-5) detected hydrocarbons below action levels (Plate 4). The ditch was filled with clean soils and graded.

Soils were excavated from the west side ditch, where charcoal was separated from drainage water. The soils were excavated to a depth of approximately 28 feet BGS. PID readings were taken at different intervals to evaluate constituents, before further excavation. Clearance samples were collected from locations along the lower walls of the excavation by removing samples from the excavator bucket. The samples were analyzed for TPH-MS and BTEX. Mineral Spirits was detected in three of the five clearance samples, but levels were below the LUFT action level for diesel. The average of all five samples was below the LUFT action level for gasoline. Sample locations and test results are shown on Plate 13. The excavation was then backfilled with clean soils from the site to protect a sewer access next to the east wall.

**5.9 South Vacant Lot**

Clearance samples show that no, or few, hydrocarbons were present in the upper soils of the south parcel (Plate 8). CAM metals were detected in both of the areas sampled. Both of the reported constituents are below the state action levels and the EPA MCLs (Marshack, 1986). The soils were either left in place or used in the general site grading plan.

**5.10 Equipment Storage Yard**

Clearance sample (SS-3) showed no tested constituents were present in the equipment storage area (Plate 6). No further work was warranted and the soils were used in the general grading plan.

**5.11 ACI Unit**

Results from soil boring SB-2 found oil and grease, SVOs, and phenols (Plate 4). Since there are no DHS action levels or EPA MCLs for these constituents, the soils were left in place.

**5.12 Industrial Wells # 1 and # 2**

Water samples collected from the industrial wells tested below detection limits for most of the constituents. The TDS level of 196 ppm may be indicative of natural solids found in the groundwater. No additional work was performed on the wells.

**5.13 Additional Areas**

Based on preliminary test results, the following sumps were designated clean. The sumps were abandoned but not excavated:

**Retort Area**

- "Hogfuel" (sawdust) Sump

**South of Stores Building**

- Lignite Storage Sump

**ACI Area**

- ACI Sump

Test results from the south vacant lot, retort area, ACI plant, oil drum storage area, evaporation ponds, and equipment storage yard indicate that these areas are relatively clean. The samples from these latter areas reported levels of petroleum hydrocarbons below detection

limits and action levels; heavy metals below detection limits, TTLC limits, and STLC limits (wet extraction requirements); and SVOs and VOCs below detection limits or any required action level as determined by the LUFT Manual and/or Title 22.

Test results for the EPA 8270 group of SVOs indicate that Bis (2, ethylhexyl) phthalate (BpH) is present in the parts per billion (ppb) range throughout the plant. BpH is a compound found in plastic products. The presence of BpH throughout the Kingsford plant was discussed with the Sacramento County Environmental Management Department (EMD) during the course of plant closure. EMD suggested to HLA that background confirmation samples be tested using Title 22 guidance for testing compounds by the Wet Extraction Test (WET) method and applying the guidance criteria found in *The Designated Level Methodology* (Marshack, 1986).

On October 10, 1990, HLA extracted a surface sample from the south vacant lot and tested for the presence of BpH. HLA instructed Eureka Laboratory to test the sample using the WET method with citric acid as the testing medium. The test results indicated BpH to be below the laboratory detection limit of 40 ug/l (ppb) (Plate 14). The calculated designated level for BpH remaining in the soil as a leachate is illustrated in the following calculation:

$$SDL^{sBph} = \frac{mg/l \times n}{10}$$

SDL = Soluble Detection Limit

sBph = Bis (2, ethylhexyl) phthalate in soil

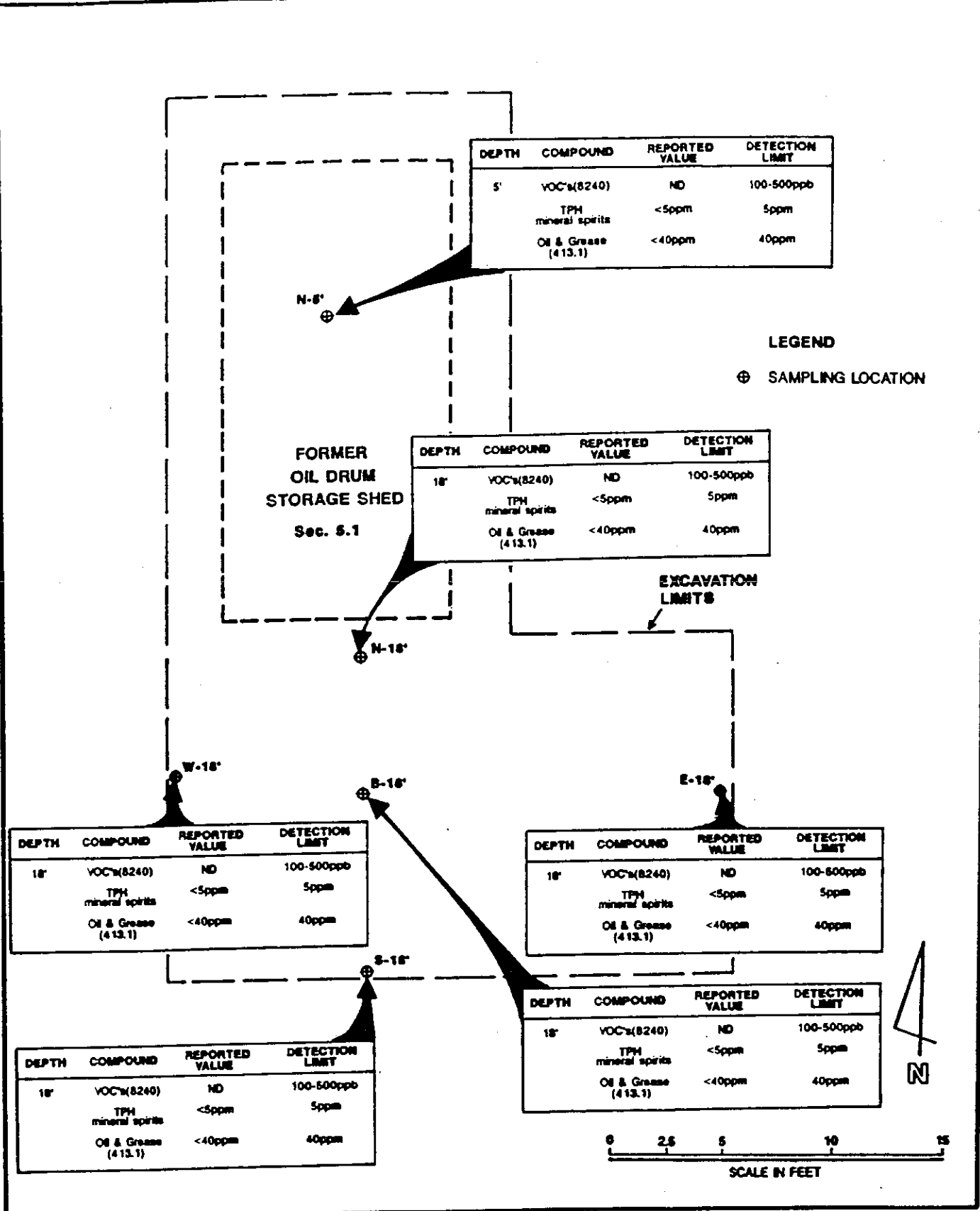
mg/l = concentration of compound designated in liquid to protect groundwater quality (Marshack, 1986)

n = environmental attenuation factor

10 = ten fold dilution factor used in the WET method

Applying 40 ug/l in the above calculation, .4 mg/l or 400 ug/l BpH may be present in the soil without requiring remediation.

EMD allowed HLA to apply an attenuation factor of 100 in the calculation. The calculated SDL value is based on designated levels for a hypothetical "average" site to protect groundwater. There are no DHS action levels, STLC, or TTLC for BpH.



**Harding Lawson Associates**  
Engineering and Environmental Services

**Lube Oil Sump**  
Clearance Sample Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

9

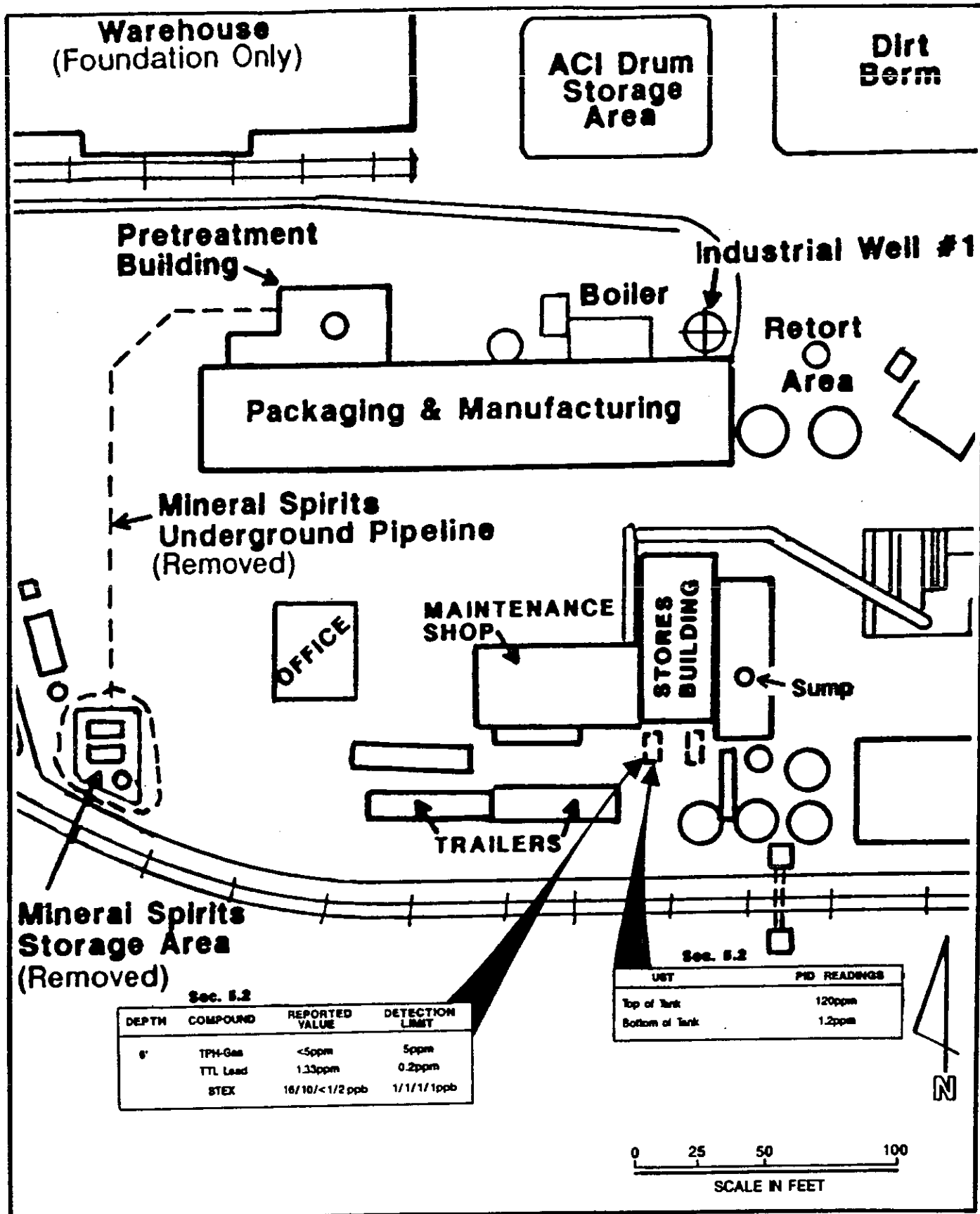
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APPROVED *[Signature]*

DATE 2/9-1

REVISED DATE





**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Maintenance Shop/Stores Building**

Clearance Sample Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

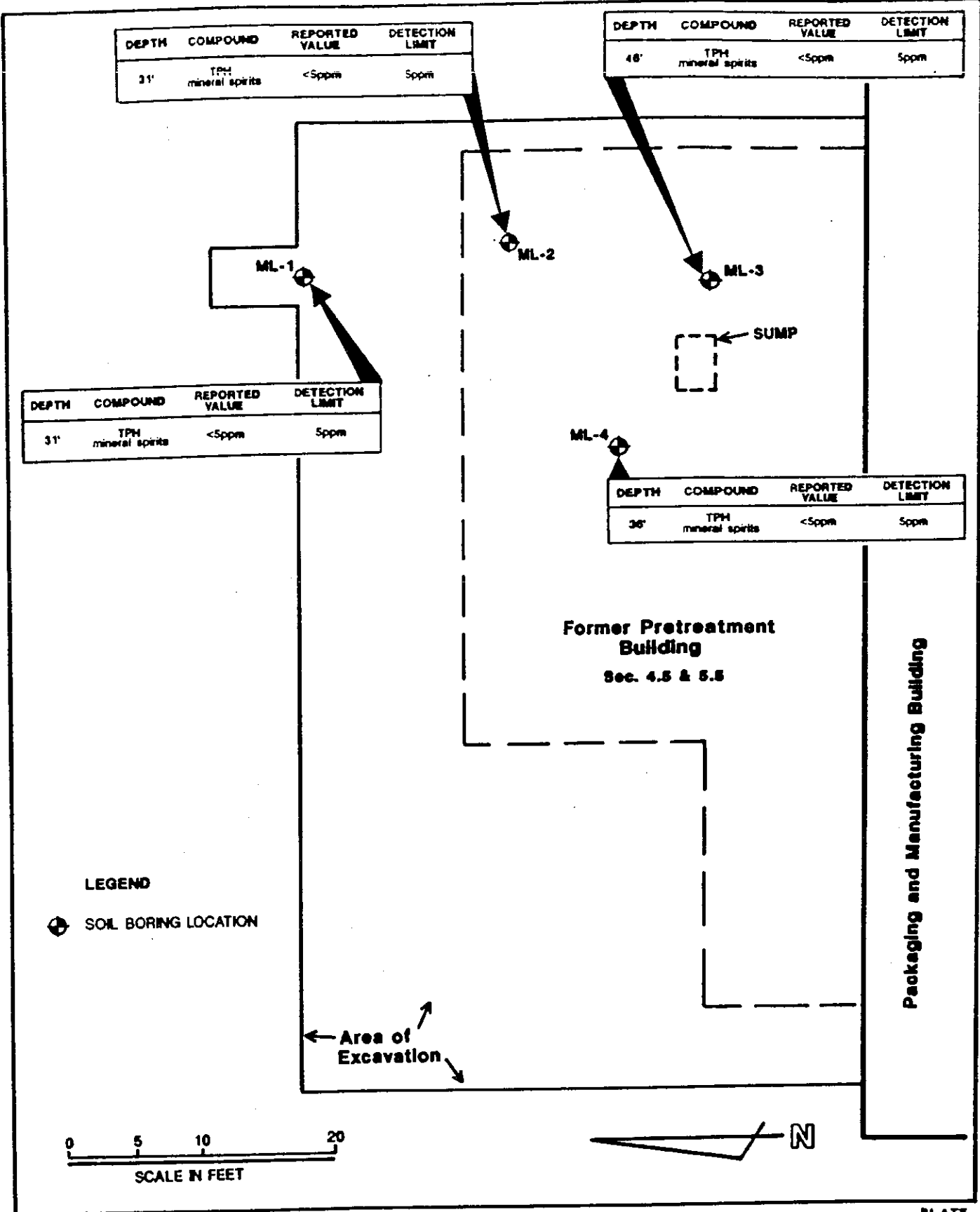
**10**

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DATE 2/91

REVISED DATE



**Harding Lawson Associates**  
Engineering and Environmental Services

**Pretreatment Sump**  
Soil Boring Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

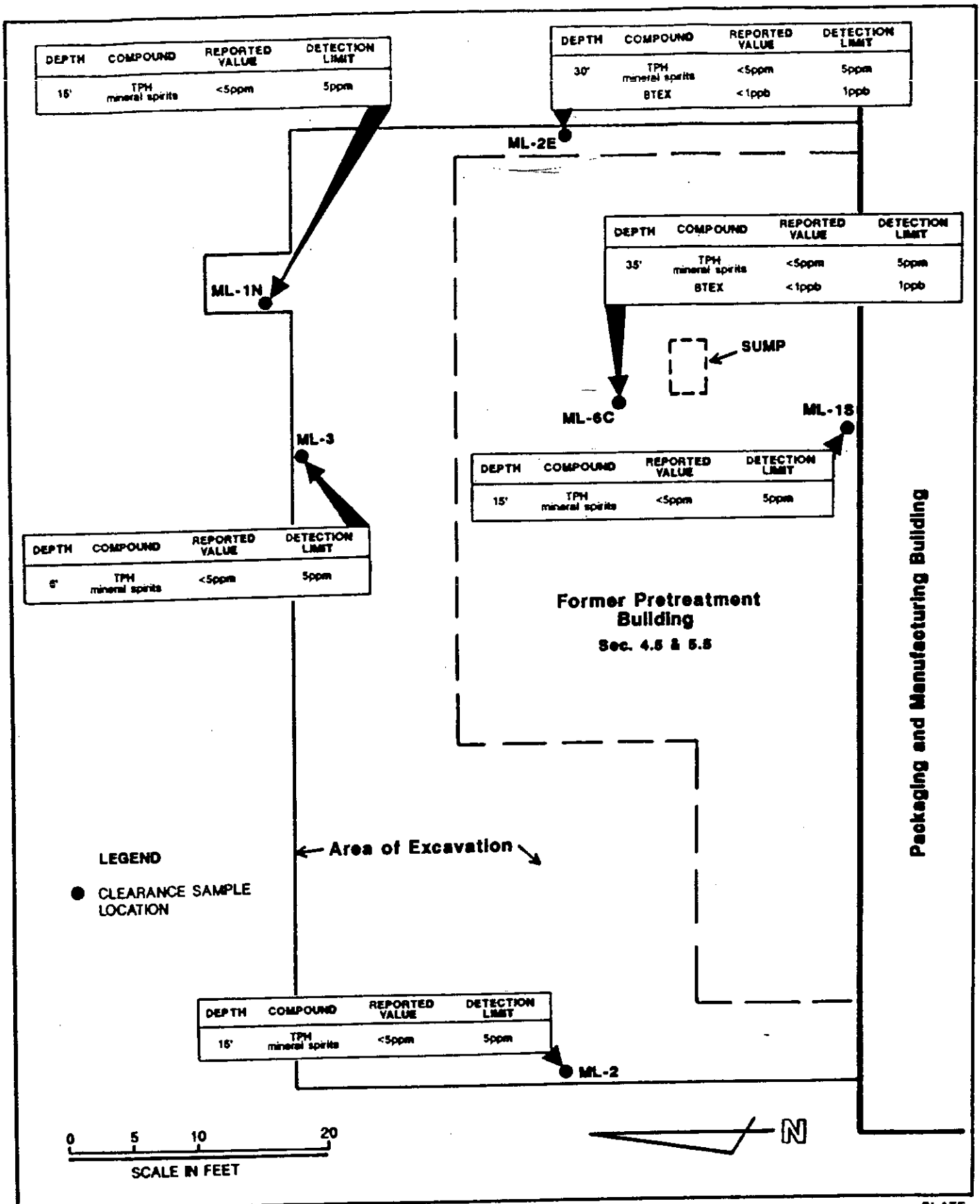
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DATE 2/91

REVISED DATE



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Pretreatment Sump**

Clearance Sample Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

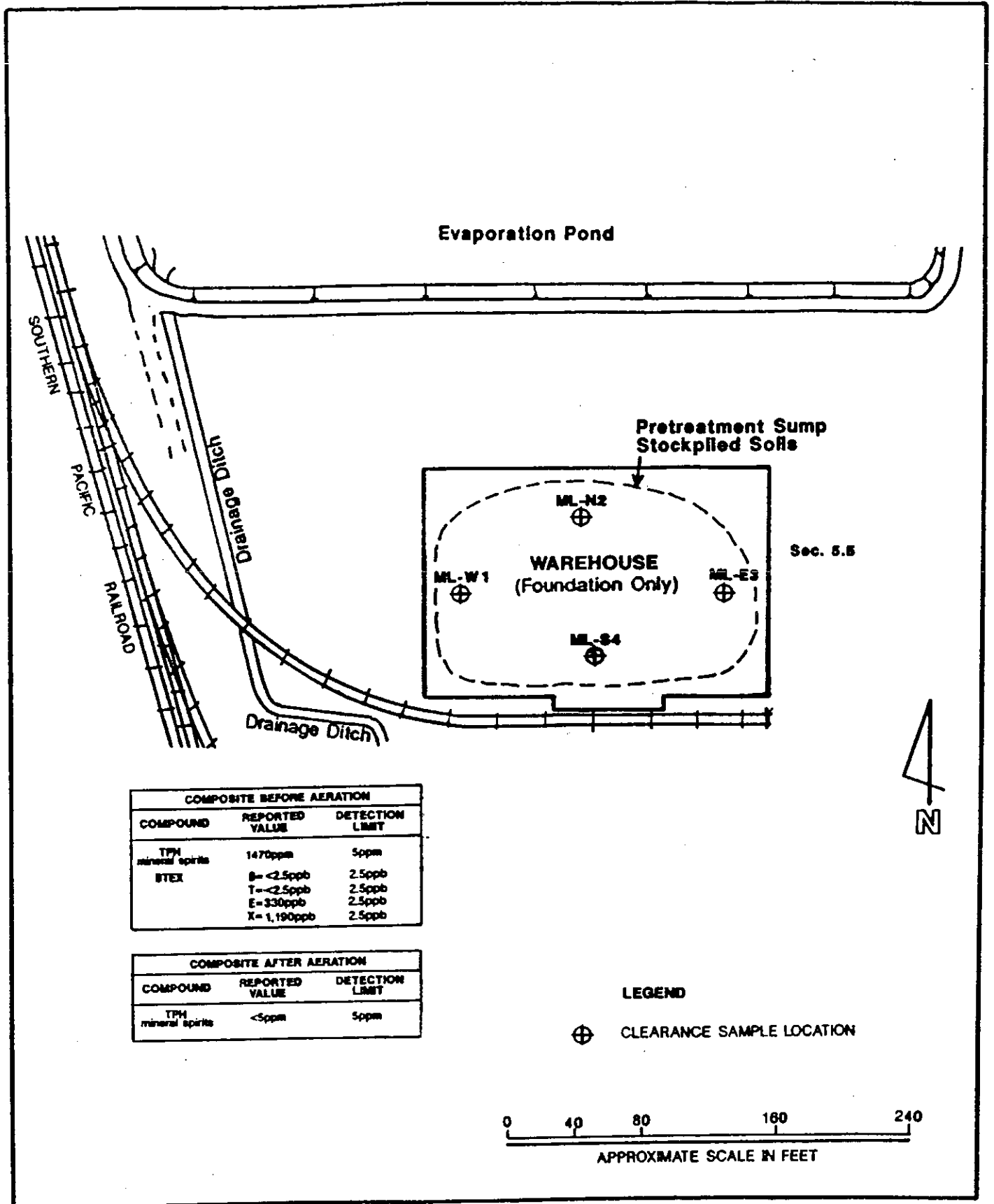
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DATE **2/91**

REVISED DATE



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Pretreatment Sump Stockpile**  
Clearance Sample Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

**12**

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DATE  
9/90

REVISED DATE

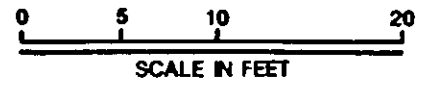
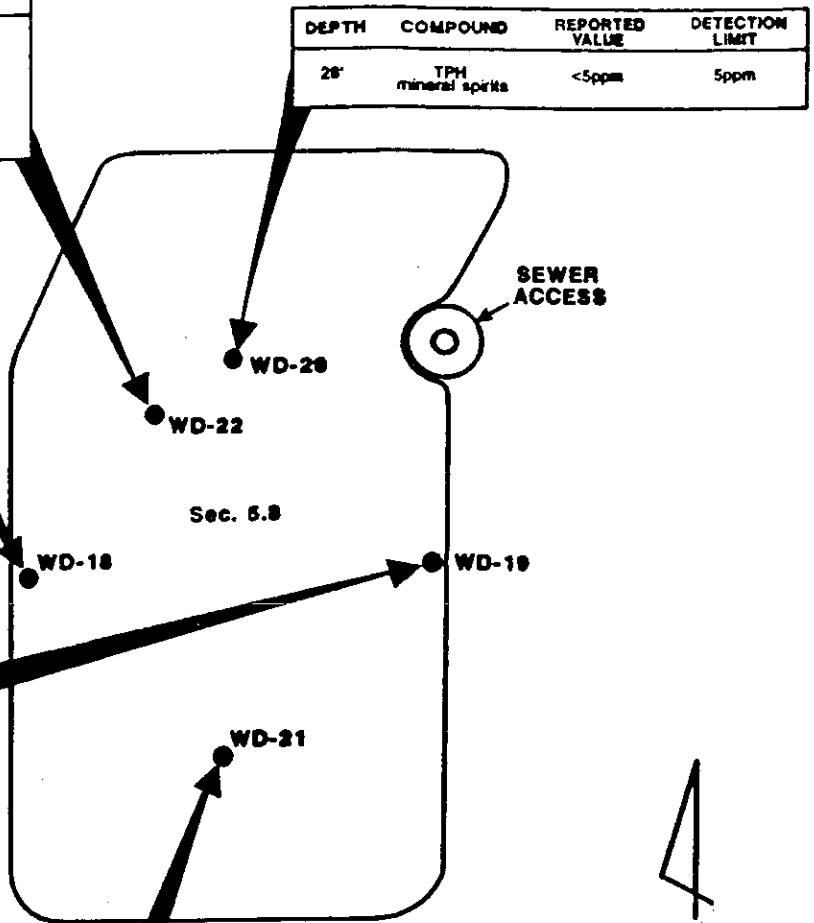
DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
28'	TPH	94ppm	5ppm
	mineral spirits		
	BTEX	B-<1ppb	1ppb
		T-<1ppb	1ppb
		E-163ppb	1ppb
		X-1070ppb	1ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
28'	TPH	<5ppm	5ppm
	mineral spirits		

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
25'	TPH	183ppm	5ppm
	mineral spirits		
	BTEX	B-<1ppb	1ppb
		T-<1ppb	1ppb
		E-<1ppb	1ppb
		X-56ppb	1ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
25'	TPH	180ppm	5ppm
	mineral spirits		
	BTEX	B-<1ppb	1ppb
		T-<1ppb	1ppb
		E-187ppb	1ppb
		X-1070ppb	1ppb

DEPTH	COMPOUND	REPORTED VALUE	DETECTION LIMIT
25'	TPH	<5ppm	5ppm
	mineral spirits		
	BTEX	B-<1ppb	1ppb
		T-<1ppb	1ppb
		E-<1ppb	1ppb
		X-<1ppb	1ppb



**LEGEND**

● HAND SAMPLE LOCATION



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Charcoal Settling Pond-West**

Clearance Sample Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

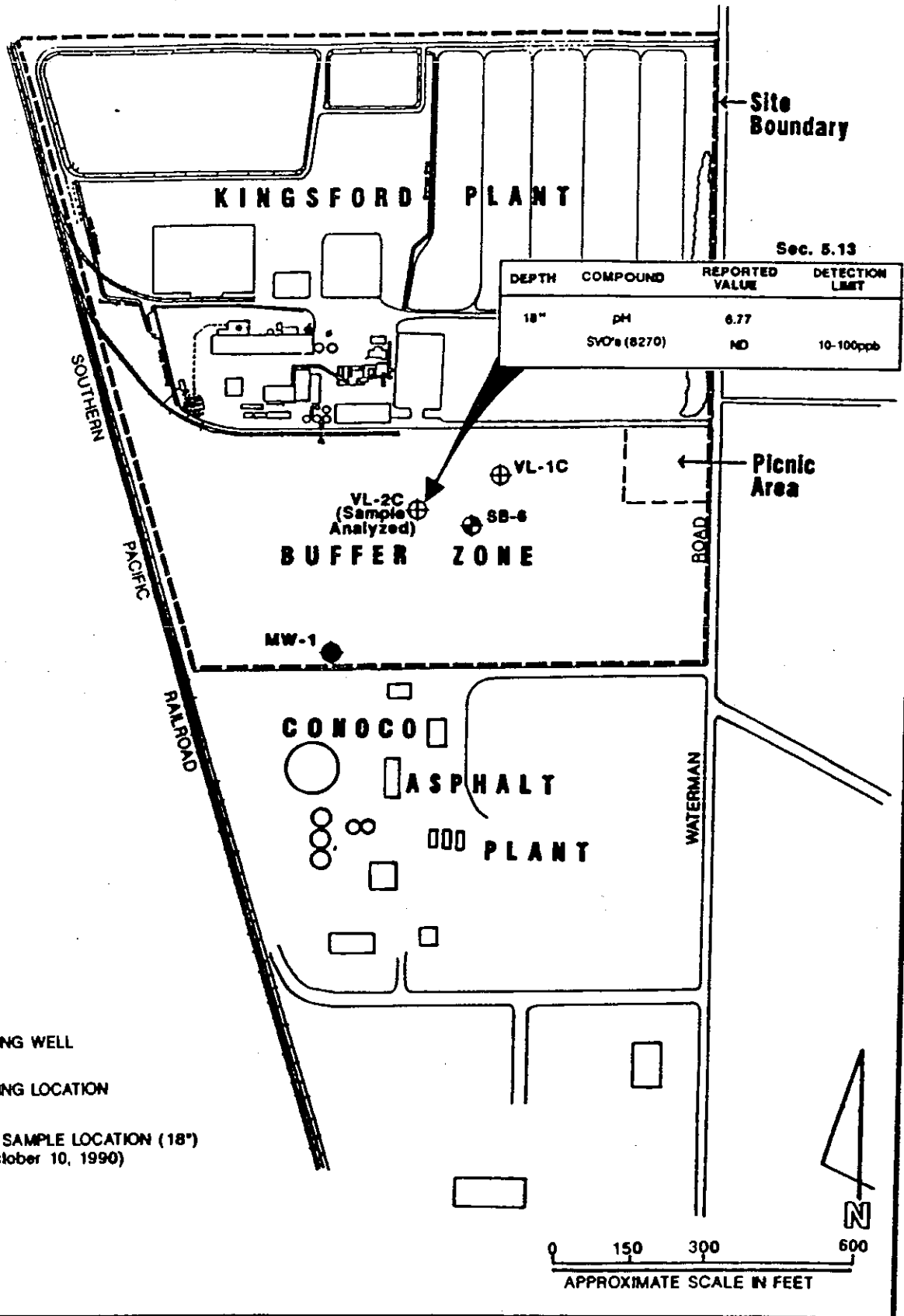
**13**

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DATE 2/91

REVISED DATE



**Harding Lawson Associates**  
Engineering and Environmental Services

**South Vacant Lot**

Clearance Sample Locations and Results  
Kingsford Plant  
Elk Grove, California

PLATE

**14**

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RS

JOB NUMBER  
19892.010.13

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DATE  
2/91

REVISED DATE

## 6.0 CLOSURE OF KINGSFORD FACILITY

HLA used four factors to help determine the method of closure for each of the twelve areas of potential environmental concern. These four factors include:

- Preliminary Sampling Test Results
- Clearance Sampling Test Results
- Kingsford Plant Management and Clorox Management Decisions
- Government Agencies' Correspondence (RWQCB and EMD)

Based on the above-mentioned factors, the various areas of environmental concern were closed in accordance with currently accepted procedures for implementing environmentally sound plant closure. Those areas which Kingsford and HLA determined to be of primary concern received additional treatment to ensure that the site was remediated to local and regional guidelines. The following sections detail the closure of each of these areas and the procedures for handling materials used in the closure process.

### 6.1 Sump and UST Closure

The sumps were closed by backfilling the excavations with clean fill from the plant property. The lube oil, maintenance shop, drum storage pad, and Match light pre-treatment sumps were triple-rinsed and removed from their holes prior to backfilling. The "Hog" fuel (sawdust), lignite, and briquetting sumps were washed with fresh water. Holes were then punched in the bottom of the sumps to facilitate rainwater drainage and subsequently backfilled in place.

Because of more extensive excavating, Kingsford backfilled the Match light building sump excavation with surrounding clean fill layered with purchased clay and compacted with a vibrating roller.

The USTs and sumps which were removed under the direction of WCC in the week of May 7, 1989, are addressed in WCC's UST closure report to Kingsford entitled, *Underground Storage Tank Closure Documentation for the Kingsford Company*, September, 1990. Sampling and removal activities are summarized in a letter from WCC to Kingsford dated May 30, 1989 (Appendix A-II).

The excavations for the two-20,000-gallon and two-1,000-gallon USTs, and the 350-gallon sump from the WCC work were backfilled using clean fill from the surrounding area. The remediated soil was used in the site grading plan. The excavations for the 1,000-gallon UST and the stores building sump- from HLA's work were backfilled using clean fill from the surrounding area with the excavated soil being used in the site grading plan.

#### **6.2 Evaporation Ponds**

Kingsford submitted its work plan for evaporation pond closure to the RWQCB by letter, dated September 10, 1990. The closure plan included site grading the ponds with surrounding clean fill and char material excavated from the char settling ponds.

On October 10, 1990, RWQCB gave verbal approval for evaporation pond closure. Kingsford commenced grading on or about November 26, 1990. Site grading was completed on January 1, 1991; a gentle drainage towards the northwestern corner of the former pond now exists.

#### **6.3 Drainage Ditches**

Both drainage ditches, located on the northeast and west sides of the plant, tested free of petroleum hydrocarbon and SVO contamination (Plate 5 and 6). The ditches were backfilled with clean soil as part of the general grading plan.



#### 6.4 Plant Facilities

Plant closure included dismantling the process and building units. These units include the pre-treatment building, equipment in the packaging and manufacturing building, the retort area (including the refractory unit), the ACI plant, and the lignite handling area. Kingsford contracted Plant Reclamation, Inc. of Richmond, California to dismantle the process equipment, including the structural steel process vessels and interconnecting piping and electrical and mechanical services. Erickson Environmental Services, Inc. of Richmond, California was contracted to clean the dismantled ACI unit and prepare all materials for transportation offsite.

The lube oil drum shed was removed and the scrap metal was reclaimed by Plant Reclamation. The 400-gallon underground sump was removed; however, the soil below the sump to a depth of approximately 18 feet was stained with oil. Approximately 200 cubic yards of hydrocarbon contaminated soil was excavated from the vicinity of the sump and transported on January 14, 1991 to Ogden Environmental, a permitted RCRA treatment site near Stockton, California for incineration.

#### 6.5 Materials Handling

Five primary classifications of materials were handled during the Kingsford closure.

These materials include:

- Demolition Materials
- Asbestos Containing Materials (ACM)
- Cleaning Materials
- Excavated Materials
- Unused/Residual Materials

None of the above materials were transported as a RCRA hazardous waste to a Class I landfill.

### 6.5.1 Demolition Materials

All structural steel, and interconnecting valves, flanges, and piping were reclaimed by the dismantling contractor for the scrap metal market. All lignite silos, and electrical and mechanical equipment were shipped to other Kingsford plants. Broken concrete, fiberglass insulating material, and broken refractory were transported to Class III landfills.

### 6.5.2 Asbestos Containing Materials

Approximately 25 cy of material suspected of containing asbestos was found in the retort and dryer. This finding was verified by National Asbestos Laboratories of San Leandro, California using electron scan (test method) to confirm the presence of asbestos. On July 7, 1990 this material was transported to Anderson Solid Waste Landfill in Anderson, California under the Hazardous Waste Manifest listed in Appendix A-III.

### 6.5.3 Excavated Materials

The concrete material from the four triple-rinsed excavated sumps was crushed and transported to a Class III landfill. The stockpiled soil removed from the lube oil sump was transported to Ogden Environmental in Stockton, California. Two representative weighmaster certificates from Ogden are shown in Appendix A-IV. The dirt excavated from the Match light sump was aerated. Laboratory analyses from clearance samples taken on December 20, 1990 indicate TPH levels below 100 ppm. Kingsford used this dirt in the general grading plan.

The 1,000-gallon UST contained a gasoline/water mixture. The mixture was drained and the tank triple-rinsed. The liquid was transported to an oil/solvent recycler located in Patterson, California on or about June 19, 1990. A copy of the Certificate of Receivership is located in Appendix A-III. The cleaned UST was reclaimed as scrap metal.

#### 6.5.4 Cleaning Materials

All cleaning agents were supplied by the cleaning contractor; unused products and spent cleaning materials were returned to the contractor after dismantling was completed. These materials included caustic solution used in cleaning pyrolysis oil from the ACI unit and triple-rinse solutions for cleaning the four excavated sumps.

#### 6.5.5 Plant Materials-Used and Unused

During the dismantling of the ACI, plant lines were disconnected and process vessel manways were opened, allowing residual pyrolysis oil to be drained into 55-gallon Department of Transportation (DOT) drums. All ACI materials, which include pyrolysis oil residue (solids) and liquids, were sent to ROMIC, Inc., located in East Palo Alto, California.

Fiberglass insulation and filter material impregnated with pyrolysis oil was transported to the ROMIC facility between September 1990 and January 1991. Two copies of the Hazardous Waste Manifest are in Appendix A-III.

Clean refractory from the ACI and Retort Units was taken to a Class III landfill.

Unused and partially used drums of clean lube oil were removed by area farmers.

Char from the char piles was used throughout the Kingsford site as fill material for the evaporation ponds and ditches. Soil excavated from the drainage ditches and settling pond was used as fill material in grading the evaporation ponds. Approximately 8 cy of char and dirt contaminated with mineral spirits excavated from the west settling pond was aerated and mixed with clean soils for use in the general grading plan.

#### 6.6 Permits Closure

Kingsford operated process equipment under permits from the Sacramento Metropolitan Air Quality Management District (AQMD). The operation permits were rescinded by Kingsford in September 1989. No emission reduction credits will be applied for future activity by another

owner of the property. AQMD gave Kingsford approval to aerate the excavated soil in their letter of September 19, 1990 ( Appendix A-II).

The evaporation ponds operated under a waste discharge permit from RWQCB (order No. 81-064) shown in Appendix A-II. On October 10,1990, the ponds were closed according to Sub-chapter 15 guidelines and RWQCB verbal approval.

No permits were issued from EMD; however, HLA and Kingsford elected to notify them regarding the closure. Kingsford also notified the Department of Health Services (DHS) and EPA Region IX regarding rescinding the Hazardous Waste Generator's identification number.

No other permits were needed for this closure.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

HLA's investigation indicates that hydrocarbons in the soil were remediated. The majority of hydrocarbons were the result of motor (lube) oil and mineral spirits leakage from the lube oil sump and Match light pretreatment sumps, respectively. The "clean" sumps were backfilled with surrounding soil. Recovered liquid materials, such as motor oil, pyrolysis oil, and cleaning agents, were transported to recyclers or reprocessors in compliance with RCRA and Title 22 guidelines. Small amounts of char and dirt were used for grading material. Cleaned equipment was sent to other Kingsford operations or used equipment dealers. Structural steel was reclaimed by the dismantling contractor for the scrap metal resale market.

During plant closure, the oil from the 400-gallon lube oil sump was recovered on several occasions by Recycletron, an oil/solvent recycler, and sent to their facility in Patterson, California as indicated by Recycletron's invoices shown in Appendix A-III.

All remaining buildings and the warehouse foundation will be sold with the property at a later date.

The soil excavated from the Match light sump has been aerated and laboratory analysis from clearance samples indicates the soil is free of TPH. The soil was used in the general site grading plan.

Groundwater is in excess of 100 feet below ground surface. No impact to groundwater resulted from any onsite activities at Kingsford nor from nearby industries. A water sample taken from either the 110-foot depth of the monitoring well (MW-1), or at first groundwater, was determined to be free of petroleum hydrocarbons. Therefore, HLA concludes that there has been no apparent impact to the groundwater from the CONOCO asphalt plant to the immediate south of the monitoring well.

Contamination by petroleum hydrocarbons and lead were found in soils of the 1,000-gallon UST located next to the maintenance shop and the stores building sump. The constituents were below the LUFT action levels and no further work was required. The excavated soils were used in the site grading plan and the holes backfilled with clean fill.

Based on the above findings, HLA recommends the following course of action:

- Close the monitoring well in the south vacant lot and seal with bentonite cement grout.
- All remaining materials scheduled to leave the plant should be properly packaged and labeled for transportation to accepted recyclers, other Kingsford facilities, RCRA Treatment, Storage or Disposal Facilities (TSDFs).

## 8.0 REFERENCES

- California Code of Regulations, Sub-chapter 15, Title 23: *Discharges of Waste to Land*, 1990.
- California Regional Water Quality Control Board, Central Valley Region: *Leaking Underground Fuel Tank Manual*, March, 1989.
- California Regional Water Quality Control Board, Central Valley Region, *The Designated Level Methodology*, Jon Bruce Marshack, October, 1986.
- California Regional Water Quality Control Board, Central Valley Region, *Water Quality Goals*, Jon Bruce Marshack, November 1989.
- Clorox Company: *Plant Closure Environmental Audit*, January 23, 1990.
- Harding Lawson Associates: *Site Characterization Work Plan*, July 1990
- Musgrove, Daniel - Senior Environmental Engineer, Clorox Company: Telephone conversation, 1990.
- Parschen, Ray - Plant Manager, Kingsford Company: Telephone and onsite conversations, 1990.
- State Department of Water Resources (DWR), *Evaluation of Ground Water Resources: Sacramento Valley*, 1978.
- State Department of Water Resources (DWR): 1986.
- U.S. Geological Survey (USGS): *Elk Grove Quadrangle*, 1986.
- Waste Discharge Requirements, Order No. 81-064, to the Kingsford Company, April 21, 1981.
- Woodward Clyde Consultants (WCC), *Project Status for Underground Storage Tank Closure*, May 30, 1989.
- Woodward Clyde Consultants: *Underground Storage Tank Closure Documentation for the Kingsford Company*, September, 1990.

**APPENDIX A-III**  
**HAZARDOUS WASTE MANIFESTS**



UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: CA DDD000516481  
 Manifest Document No: 2 Page 1 of 1  
 Information in the shaded areas is not required by Federal law.

3 Generator's Name and Mailing Address: Kingsford Product Co  
 PO Box 1022  
 605 R. GROVE CA 95624  
 4 Generator's Phone: (916) 685 3925  
 5 Transporter 1 Company Name: ENVIRONMENTAL TRANSFER SERVICE  
 6 US EPA ID Number: CA D 952452071  
 7 Transporter 2 Company Name: ENVIRONMENTAL TRANSFER SERVICE  
 8 US EPA ID Number: CA D 952452071  
 9 Designated Facility Name and Site Address: ANTHONY SOLID WASTE, INC.  
 1505 CAMBRIDGE ROAD  
 ANTHONY CA 95007  
 10 US EPA ID Number: CA D 951355452

A State Manifest Document Number: 89633434  
 B State Generator's ID: HYH036-007242  
 C State Transporter's ID: 002303  
 D Transporter's Phone: 952330135  
 E State Transporter's ID:  
 F Transporter's Phone:  
 G State Facility's ID: CIAD9811388952  
 H Facility's Phone: 916-347-5236

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. TO	HAZARDOUS SUBSTANCE	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	1. Waste No.
a.	HAZARDOUS SUBSTANCE NA 9189 (ASBESTOS)	001	AM	00015	Y	State: 151 EPA/Other:
b.						State: EPA/Other:
c.						State: EPA/Other:
d.						State: EPA/Other:

J. Additional Descriptions for Materials Listed Above: 100% ASBESTOS CONTAINING MATERIALS  
 20-43

K. Handling Codes for Wastes Listed Above  
 a. 03  
 b.  
 c.  
 d.

15. Special Handling Instructions and Additional Information: ASBESTOS IS A KNOWN CARCINOGEN. AVOID INHALEING ASBESTOS DUST. WEAR APPROVED DUST RESPIRATOR.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: RAY Parschen  
 Signature: Ray Parschen  
 Month Day Year: 11/20/90  
 17. Transporter 1 Acknowledgement of Receipt of Materials  
 Printed/Typed Name: ADAM DILZIA  
 Signature: Adam Dilzia  
 Month Day Year: 10/20/90  
 18. Transporter 2 Acknowledgement of Receipt of Materials  
 Printed/Typed Name: TOM BOELLE  
 Signature: Tom Boelle  
 Month Day Year: 10/21/90

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.  
 Printed/Typed Name: Ron Roberts  
 Signature: Ron Roberts  
 Month Day Year: 10/21/90

GENERATOR  
TRANSPORTER  
FACILITY

2 A (1/88)  
 2 Previous editions are obsolete.

Do Not Write Below This Line

Yellow: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

TRANSPORTER  
 CALL 1-800-424-8802 WITHIN CALIFORNIA CALL 1-800-852-7550

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. CA1D010101516181102191919		Manifest Document No. 9 of 9		2. Page 1 Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address <b>KINGSFORD</b> 10000 Watermen Rd., Elk Grove, CA				A. State Manifest Document Number <b>89796334</b>			
4. Generator's Phone (916) 685-3925				B. State Generator's ID			
5. Transporter 1 Company Name <b>Refineries Service</b>		6. US EPA ID Number CA1D083166728		C. State Transporter's ID 102070		D. Transporter's Phone (209) 892-6742	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address <b>Refineries Service</b> 13331 N. Hwy 33, Patterson, CA 95363				10. US EPA ID Number CA1D083166728		G. State Facility's ID	
						H. Facility's Phone (209) 892-6742	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers	13. Total Quantity	14. Unit	1. Waste No.	
a. <b>Hazardous Waste Liquid N.O.S. Orm-E NA 9189</b>			No.   Type		Wt/Vol	State 134	
b.			201   TIT	15000	G	EPA/Other 820	
c.						State	
d.						EPA/Other	
J. Additional Descriptions for Materials Listed Above <b>RESIDUAL GASOLINE &amp; WATER</b>				K. Handling Codes for Wastes Listed Above			
				a. <b>01R</b>		b.	
				c.		d.	
15. Special Handling Instructions and Additional Information <b>protective gloves, safety glasses/goggles</b>							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name <b>DALE LESLIE FERNST</b>				Signature <i>Dale Leslie Fernst</i>		Month Day Year 12/10/21910	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>SKRUM R Voss</b>				Signature <i>SKRUM R Voss</i>		Month Day Year 08/14/21910	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name <b>Jay R PATTERSON</b>				Signature <i>Jay R Patterson</i>		Month Day Year 01/10/21910	

**Do Not Write Below This Line**

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

2. Page 1 of Information in the shaded areas is not required by Federal law.

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. 0 A D 0 0 0 5 6 4 6 1 0 2 9 0 1 9  
 Manifest Document No.

A. State Manifest Document Number  
89796319

3. Generator's Name and Mailing Address

**Kingsford**  
 10000 Waterman Rd. Elk Grove, CA  
 916-485-3025

B. State Generator's ID

5. Transporter 1 Company Name

~~Refineries Service~~

6. US EPA ID Number

C. State Transporter's ID  
102070

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone  
102070  
 E. State Transporter's ID  
(209)892-6742

9. Designated Facility Name and Site Address

**Refineries Service**  
 13331 N. Highway 33, Patterson, CA 95363

10. US EPA ID Number

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. HAZARDOUS WASTE LIQUID N.O.S.  
ORCA-E NA 3189

12. Containers No. Type Quantity Unit Wt/Vol I. Waste No.

1092 2092-6742

b. pumped from oil sumps

State 241

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

J. Additional Descriptions for Materials Listed Above

OIL WATER - SLENDER

K. Handling Codes for Wastes Listed Above

a. OIL

b.

c.

d.

15. Special Handling Instructions and Additional Information

protective gloves, safety glasses/goggles

16.

**GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

DALE L. FEUST

Signature

Dale L. Feust

Month Day Year

07/26/90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JEROME R. VOSS

Signature

Jerome R. Voss

Month Day Year

07/26/90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name

Jay R. Peterson

Signature

Jay R. Peterson

Month Day Year

07/26/90

Do Not Write Below This Line

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-9303

**RECYCLETRON OIL, INC.**  
**DBA Refineries Service**

P.O. Box 1167  
 Patterson, CA 95363  
 (209) 892-6742  
 (800) 874-4444

11-7-89  
 DATE

STATE MANIFEST # 8865531  
 USED OIL HAULER # 86-050  
 EPA # CAD083166728  
 HAZARDOUS WASTE HAULER # #1500  
 REGISTRATION # 006720  
 INV. # 28134

C54716

40281

COMMERCIAL

NAME Kingsford Briquettes	BILLING ADDRESS IF DIFFERENT
ADDRESS 10000 Waterman Elk Grove Ca.	

DRIVER Larry 5884	TRUCK #
CASH -	
NET 10 DAY charge	
PO # 6685	

CITY STATE ZIP PHONE # 11-10-89 CITY STATE ZIP

*Larry Thompson*  
 - PLEASE PAY FROM THIS INVOICE -

PRODUCT	GALLONS	HOURS	RATE	AMOUNT
Haz Waste Oil <sup>1240</sup> 900	300	RF	2.5	75.00
" " Water <sup>204</sup> 204	300		1.25	375.00

I certify amount shown above to be correct.

*Dave Weismann*  
 (Customer Signature)

*Larry Thompson*  
 (Driver Signature)

WHITE CUSTOMER CANARY ALPHABETICAL PINK NUMERIC GOLDENROD FILE

Total Charges 450.00

**RECYCLETRON OIL, INC.**  
**DBA Refineries Service**

P.O. Box 1167  
 Patterson, CA 95363  
 (209) 892-6742  
 (800) 874-4444

STATE MANIFEST # 8980213  
 USED OIL HAULER # 86-050  
 EPA # CAD083166728  
 HAZARDOUS WASTE HAULER # #1500  
 REGISTRATION # 101945  
 INV. # 36185

40281

7-13-90  
 DATE

CUSTOMER

C55067

T  
 DRIVER Larry 5884 TRUCK #  
 R CASH -  
 M NET 10 DAY charge  
 S PO #

NAME Kingsford  
 ADDRESS 10000 Watermann  
 EIK Grove Ca  
 CITY STATE ZIP PHONE

BILLING ADDRESS IF DIFFERENT

**- PLEASE PAY FROM THIS INVOICE -**

CO.	CENTRE	SIB	HAS FUN	COST CENTER	AMOUNT	
PRODUCT	GALLONS			HOURS	RATE	AMOUNT
Haz. Waste Water	420				1.50	
	1240	1000	50	2047		
			12			

I certify amount shown above to be correct.

*Dale Ernst*  
 (Customer Signature)

*Larry Thompson*  
 (Driver Signature)

PAYMENT DUE UPON RECEIPT OF INVOICE. INTERESTS WILL BE CHARGED ON ANY INVOICE NOT PAID WITHIN 30 DAYS. AT A FIXED RATE AMOUNT OF 1 1/2% PER MONTH WHICH IS 18% ANNUAL PERCENTAGE RATE. MINIMUM CHARGE - \$1.00.

Total Charges 630.00

MPCo. 19503 (9/88) WHITE: CUSTOMER CANARY: ALPHABETICAL PINK: NUMERIC GOLDENROD: FILE

CHARGE ACCOUNT	AREA	COST CENTER	REF. 2	MTL. CODE

TOTAL

PREPARED BY *[Signature]*

AUTHORIZED BY

**RECYCLETRON OIL, INC.**  
**DBA Refineries Service**

P.O. Box 1167  
 Patterson, CA 95363  
 (209) 892-6742  
 (800) 874-4444

6-19-90

DATE

809801116  
 STATE MANIFEST # \_\_\_\_\_  
 USED OIL HAULER # 86-050  
 EPA # CAD083166728  
 HAZARDOUS WASTE HAULER # #1500  
 REGISTRATION # 004216  
 INV. # 30895

CUSTOMER	<u>Kingsford</u>		TERMS	<u>From USA</u>
	NAME <u>10,000 Waterman</u>			DRIVER <u>CASH -</u>
	BILLING ADDRESS IF DIFFERENT <u>El Dorado, Ca</u>			TRUCK # _____
	CITY STATE ZIP _____ PHONE _____			NET 10 DAY -
CITY STATE ZIP _____ PHONE _____		PO # _____		

**- PLEASE PAY FROM THIS INVOICE -**

PRODUCT	GALLONS	HOURS	RATE	AMOUNT
<u>waste auto freeze</u>	<u>50</u>		<u>1.40</u>	<u>70<sup>00</sup></u>
<u>pick up</u>				

I certify amount shown above to be correct.

Dale L. Ernst  
 (Customer Signature)

R. Parout  
 (Driver Signature)

PAYMENT DUE UPON RECEIPT OF INVOICE. INTERESTS WILL BE CHARGED ON ANY INVOICE NOT PAID WITHIN 30 DAYS AT A FIXED RATE AMOUNT OF 1 1/2% PER MONTH WHICH IS 18% ANNUAL PERCENTAGE RATE. MINIMUM CHARGE - \$1.00

Total Charges	<u>70<sup>00</sup></u>
---------------	------------------------

MPCc 19500 (9/86)      WHITE CUSTOMER      CANARY ALPHABETICAL      PINK NUMERIC      GOLDENROD FILE

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL  
 ONSSE CENTER 1-800-424-9802; WITHIN CALIFORNIA CALL 1-800-852-7560  
 GENERATOR  
 TRANSPORTER  
 FACILITY

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No <b>CA1D1010101015161481010101014</b>	Manifest Document No <b>10101014</b>	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address <b>The Kingford Co. 10000 Waterman Rd. Elk Grove, CA 95759</b>			A. State Manifest Document Number <b>89890667</b>		
4. Generator's Phone (916) 685-3925			B. State Generator's ID <b>HYHQB6-007262</b>		
5. Transporter 1 Company Name <b>Erickson, Inc.</b>		6. US EPA ID Number <b>CA1D1010191416131912</b>		C. State Transporter's ID <b>10102YS</b>	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (415) 235-1393	
9. Designated Facility Name and Site Address <b>Romic Chemical Co. 2081 Bay Road E. Palo Alto, CA 94303</b>			10. US EPA ID Number <b>CADDD09452657</b>		E. State Transporter's ID
			F. Transporter's Phone		G. State Facility's ID <b>CA1D101014152161571</b>
					H. Facility's Phone <b>(415) 325-2666</b>
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	1. Waste No.
a. <b>Non-hazardous Waste Liquids</b>		<b>0126</b>	<b>DMODDDE</b>	<b>Y</b>	State <b>352</b> EPA/Other <b>None</b>
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other
J. Additional Descriptions for Materials Listed Above <b>Debris 10-20% Water 5-10% Pyrolysis Oil 30-40% Saw Dust 30-40% From ACT</b>			K. Handling Codes for Wastes Listed Above a. <b>79/11/17</b> b. c. d.		
15. Special Handling Instructions and Additional Information <b>Gloves Profile 012669</b>					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name <b>Ray Parschen</b>		Signature <i>Ray Parschen</i>		Month Day Year <b>10/9/1990</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>Robert Noin</b>		Signature <i>Robert Noin</i>		Month Day Year <b>10/8/1990</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name <b>Ray Parschen</b>		Signature <i>Ray Parschen</i>		Month Day Year <b>10/16/90</b>	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
Printed/Typed Name <b>ANGELA GIULIANI</b>		Signature <i>Angela Giuliani</i>		Month Day Year <b>10/18/1990</b>	

Do Not Write Below This Line

**415-324-1638**

Yellow Form SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

ORDER 1-800-775-8009 WITHIN CALIFORNIA CALL 1-800-852-7860

IN CASE OF AN EMERGENCY OR BRICK CALL THE NATIONAL RESPONSE CENTER AT 1-800-424-9303

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
8. Generator's Name and Mailing Address		3. Generator's US EPA ID No. CA D D 1 0 1 0 1 0 5 1 6 4 8 1 1 1 2 3 1 4 1		A. State Manifest Document Number 90652784	
4. Generator's Phone (916) 685-3925		Kingsford Products P.O. Box 1027 Elk Grove, Ca. 95759		B. State Generator's ID H 1 4 H Q 3 6 1 9 9 7 2 1 6 2 1	
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID		D. Transporter's Phone	
Erickson Inc	CA D 1 0 1 9 4 1 6 6 9 3 2	106284		(415) 235-1393	
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address		10. US EPA ID Number		G. State Facility's ID	
Romic Chemical 2081 Boy Road EAST Palo Alto, Ca. 94303		CA D 1 0 1 9 4 5 2 6 5 7		H 1 4 H Q 3 6 1 9 9 7 2 1 6 2 1	
				H. Facility's Phone (415) 324-1638	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	L Waste No.
a. NON RCRA Hazardous Waste Solid NOS ORM-E UA 9189		119 DIM	1110415	G	State 352 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above			
Pyrolysis oil contaminated insulation Profile # 012669		99/14/07			
15. Special Handling Instructions and Additional Information		16. 24 HR. EMERGENCY CONTACT			
wear gloves and eye protection ERG # 31		RAYMOND PARSCHEN (916) 685-3925			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name		Signature		Month Day Year	
Raymond Parschen		Raymond Parschen		11/17/91	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
Dan Bailey		Dan Bailey		01/17/91	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Month Day Year	
Kristine Nordby		Kristine Nordby		01/17/91	

Do Not Write Below This Line



**APPENDIX A-IV**  
**NON-HAZARDOUS WASTE MANIFESTS/CERTIFICATES OF RECEIVERSHIP**



March 19, 1991

PO Box 6336  
Stockton, California 95206  
(209) 466-5192  
FAX (209) 466-5192

CERTIFICATE OF DISPOSAL

This Certificate is to verify that between February 27, 1990 and February 28, 1990 the KINGSFORD COMPANY brought into our Landfill, 354 Cubic Yards of ASH.

This ASH was properly disposed of in accordance with all applicable Local, State and Federal Regulations.

Facility Name: FORWARD, INC.  
Address: 9999 S. Austin Road  
Manteca, Ca. 95336  
Mailing Address: P.O. BOX 6336  
Stockton, Ca. 95206

Phone:  
Facility: (209) 982-4298  
Office: (209) 466-5192

SIGNED: \_\_\_\_\_

*Lucy Zette Ravensport*

~~16 loads of soil taken to Ogden for Incineration~~  
16 loads of soil taken to Ogden for Incineration  
represented by these two weigh tickets.

# WEIGHMASTER CERTIFICATE

00016 .

1-22-91

TRUCKER NAME ERIKSON/KINGSFORD

SS \_\_\_\_\_

COMMODITY TPH CONT. SOIL

R ID30

0000 lbs GROSS BY DK

8160 lbs TARE BY DK

840 lb NET BY DK

*John King* 1-22-91

TRUCK LICENSE 3X70985

TRAILER LICENSE 1UJ8070

TRAILER LICENSE \_\_\_\_\_

## OGDEN ENVIRONMENTAL SERVICES, INC.

1900 NAVY DRIVE • STOCKTON, CA 95206

TEL: (209) 462-7576 • FAX: (209) 462-5750

### WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

# WEIGHMASTER CERTIFICATE

00001

1-21-91

TRUCKER NAME ERIKSON/KINGSFORD

SS \_\_\_\_\_

COMMODITY TPH CONT SOIL

R ID26

77200 lbs BY DK

38120 lbs BY DK

39080 lb NET BY DK

*John King*

TRUCK LICENSE 3Z88101 CA

TRAILER LICENSE 1UT9907 CA

TRAILER LICENSE \_\_\_\_\_

## OGDEN ENVIRONMENTAL SERVICES, INC.

1900 NAVY DRIVE • STOCKTON, CA 95206

TEL: (209) 462-7576 • FAX: (209) 462-5750

### WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

**APPENDIX A-V**

**HLA STANDARD SAMPLING PROCEDURES AND BORING LOGS**

## FIELD INVESTIGATION PROCEDURES

### Surface Soil Samples

Nine surface samples were collected at the locations shown on Plate 5. Surface soil samples were collected at a depth of 4 to 6 inches below ground surface. All soil samples were collected by driving a stainless steel tube into the ground surface. After the sample was retrieved, the tube was labeled and capped on both ends with plastic caps lined with Teflon. The soil samples were delivered to a laboratory under chain-of-custody procedures. The parameters analyzed are outlined in Table 1.

### Hand-Auger Borings

Six hand-auger borings were collected at the locations shown on Plate 4.

Samples were collected by driving a sampler lined with a stainless-steel tube into the soil at the bottom of the borehole. After the sample tube was removed from the sampler, the tube was labeled and capped on both ends with plastic caps lined with Teflon. The tubes were placed in ice chests for deliver to a state-certified laboratory for chemical analyses. Each sample was accompanied by an appropriate chain-of-custody form. All sampling equipment was decontaminated between sampling efforts. Samples were analyzed in the laboratory according to analyses listed in Table 1.

### Soil Borings

Six soil borings were drilled at the locations shown on Plates 6 and 7. Locations were selected only after utility clearance had been obtained. Borings ranged in depth from 15 to 40 feet.

Soil borings were advanced using a truck-mounted drill rig, equipped with 8-inch hollow stem augers.

All borings were logged by an HLA geologist in accordance with the Unified Soil Classification System. A minimum of one soil sample was collected in the first five feet, and one every five feet thereafter. Soil samples were collected using a split-barrel drive sampler lined with three stainless steel tubes. Samples selected for laboratory analyses were labeled and capped on both ends with plastic caps lined with Teflon. Unless otherwise indicated by field PID data and visual screening, a minimum of two samples per borehole were submitted for laboratory analyses. Soil sample tubes were placed in ice chests for delivery to a state-certified laboratory for chemical analyses. Each soil sample was accompanied by an appropriate chain-of-custody form. All sampling equipment was decontaminated between sampling efforts. Samples were analyzed according to the program outline in Table 1. Boreholes were grouted to the surface upon completion.

#### Monitoring Well Installation

One groundwater monitoring well was installed at the location shown on Plate 7. Utility clearance for the well was obtained before drilling proceeded. Hollow-stem auger techniques were used to drill the well. Prior to drilling the borehole, all downhole equipment was steam-cleaned. All drilling was performed under the supervision of an HLA geologist. Soils were logged in accordance with the Unified Soil Classification System. Soil samples were collected using a split-barrel drive sampler, lined with three stainless steel liners. Samples submitted for laboratory analysis were labeled and capped on both ends with plastic caps lined with Teflon. These soil sample tubes were placed in ice chests for delivery to a state-certified laboratory for chemical analyses. Each soil sample was accompanied by an appropriate chain-of-custody form.

Unless otherwise indicated by field photoionization detector (PID) data and visual screening, at least one sample per borehole was submitted for laboratory analyses.

The well was constructed of 4-inch-diameter, Schedule 40, PVC well casing and screen, with a screen slot size of 0.02 inch. Flush-threaded joints were used. A sand pack of water-washed sand was placed adjacent to the entire screened interval and extended at least 2 feet above the top of the screen. A minimum 2-foot-thick bentonite pellet seal was placed above the sand pack. The annulus above the bentonite seal was grouted to the surface with cement/bentonite grout. The bentonite pellets were hydrated prior to placing the grout.

#### Monitoring Well Development and Sampling

After installation, a submersible pump was used to remove a minimum of 10 casing volumes of water. During development, field parameters (temperature, electrical conductivity, pH, and turbidity) were measured. After the well was developed, the aquifer was allowed to regain equilibrium before the well was purged and samples.

During purging of the well, field parameters (temperature, electrical conductivity, pH, and turbidity) were monitored. Samples were collected after the field parameters had stabilized (normally requiring the removal of three casing volumes). Water samples were collected using a clean, stainless steel, bottom-loading bailer; the water was poured from the top of the bailer into laboratory-supplied containers. Samples collected for metals analyses were filtered through a 0.45 micron filter and acidified in the field. Sample containers were immediately sealed, labeled, placed in a chilled container, and transported under chain-of-custody procedures, to a state-certified laboratory.

**Decontamination**

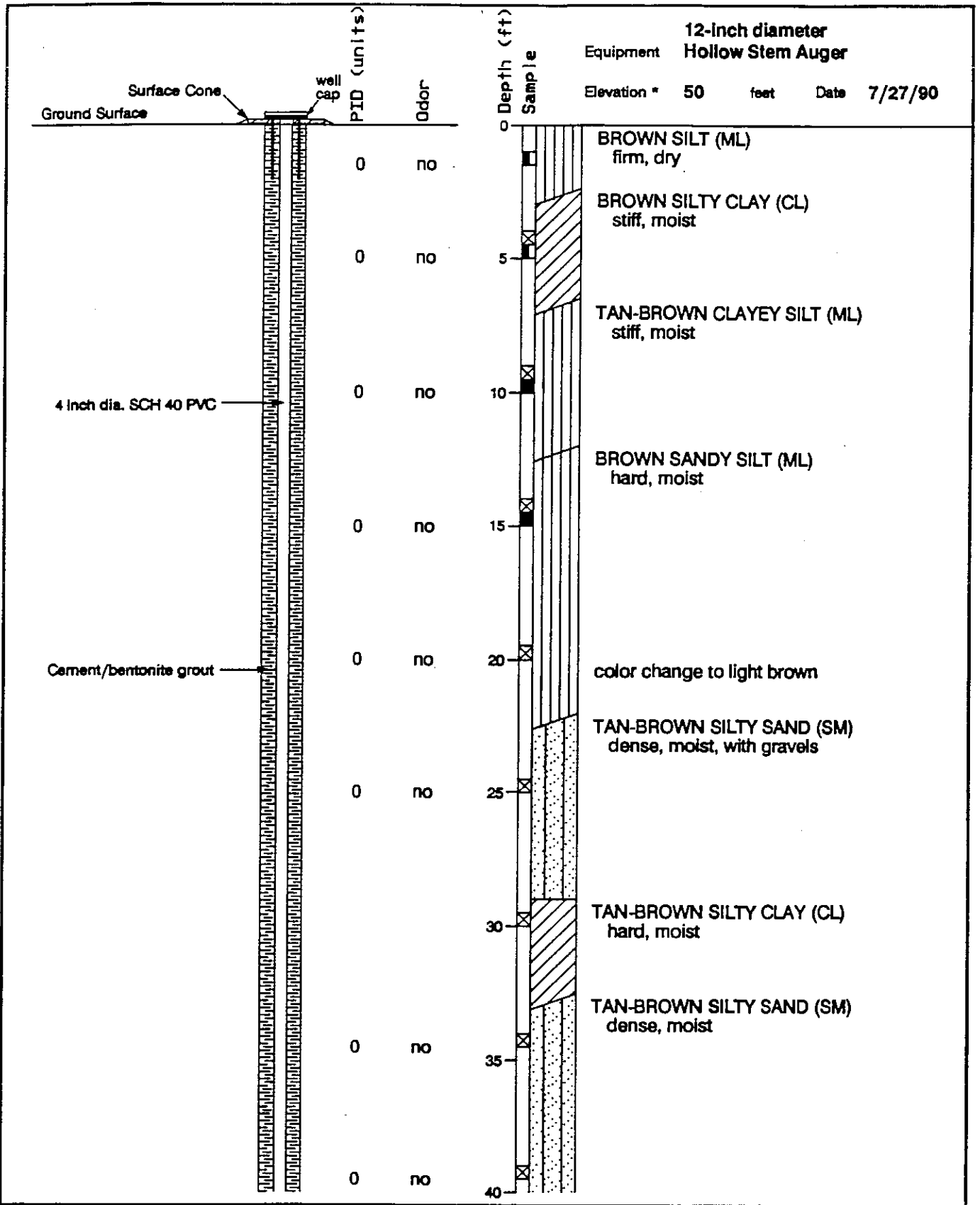
All drilling and soil sampling equipment were steam-cleaned prior to mobilization on site. Between borings, downhole drilling and soil sampling equipment were steam-cleaned; between sampling intervals, soil sampling equipment was washed with trisodium phosphate (TSP) and rinsed with clean water.

All groundwater development and sampling equipment was steam-cleaned and rinsed with deionized water prior to use at each well.

**Waste Material**

Consistent with HLA's standard operating procedures, purge water and soil cuttings were collected and stored onsite in 55-gallon drums. Based on laboratory analyses, recommendations for disposal were provided. HLA was not responsible for disposal of either purge water or soil cuttings, but provided Kingsford with recommendations for disposal.



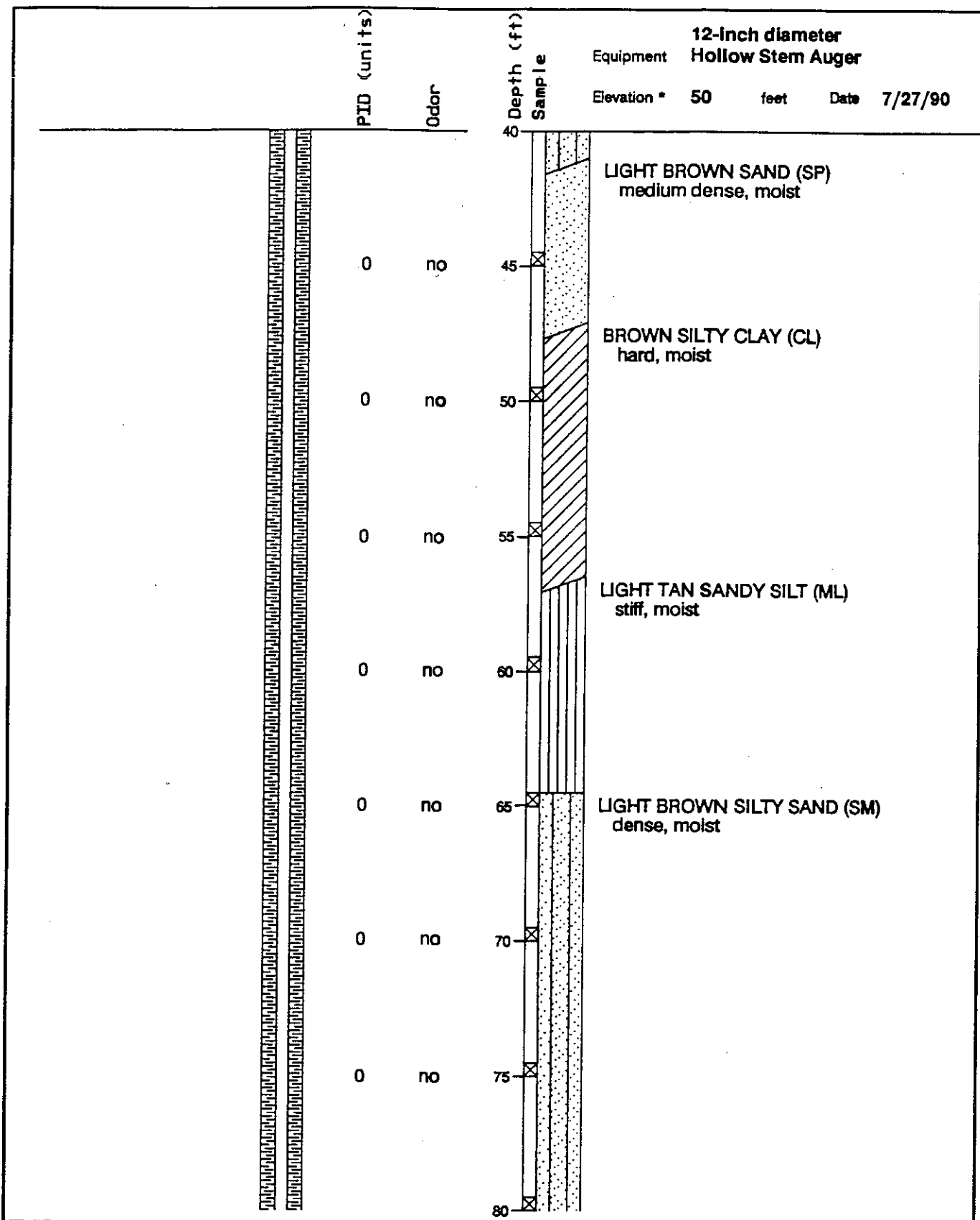


Harding Lawson Associates  
 Engineering and  
 Environmental Services

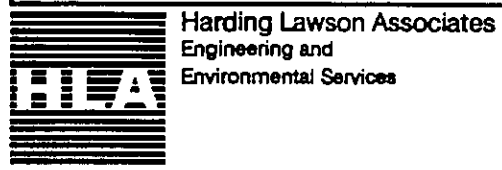
Log of Monitoring Well MW-1  
 and Completion Detail  
 Kingsford Plant  
 Elk Grove, California

PLATE

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	12/90		



Equipment: 12-inch diameter Hollow Stem Auger  
 Elevation \* 50 feet Date 7/27/90

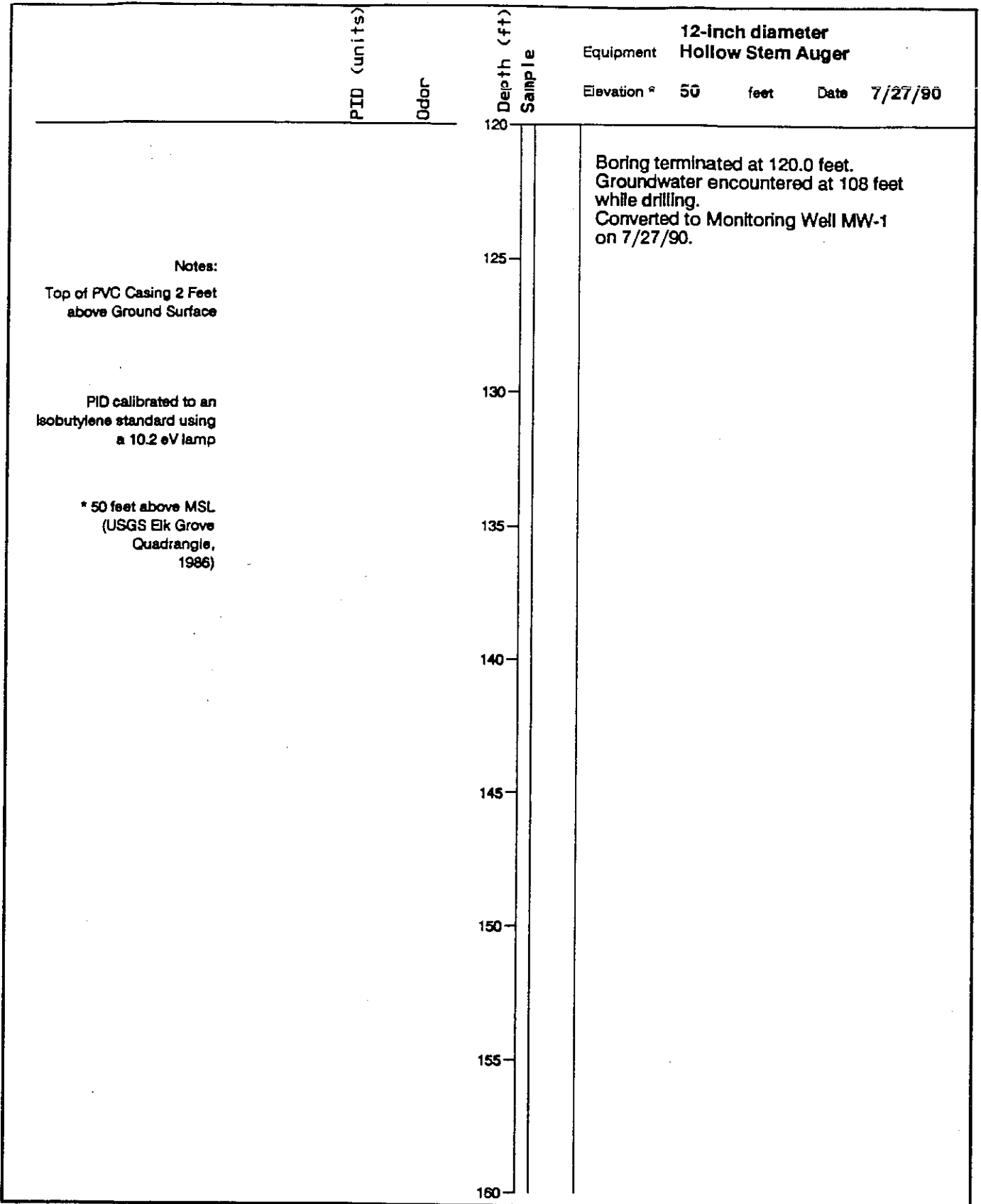


Log of Monitoring Well MW-1  
 and Completion Detail  
 Kingsford Plant  
 Elk Grove, California

PLATE

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	12/90		



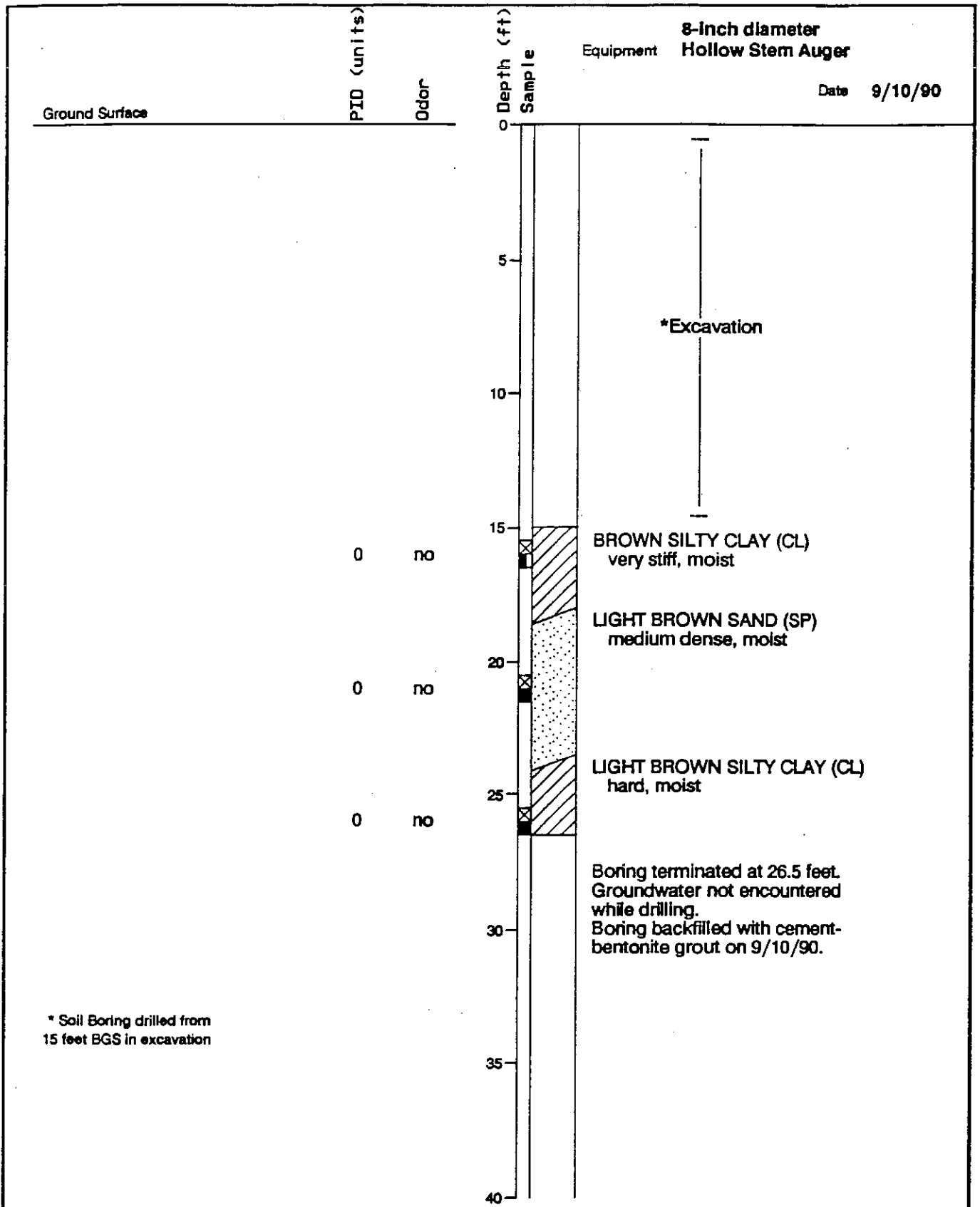


Harding Lawson Associates  
 Engineering and  
 Environmental Services

Log of Monitoring Well MW-1  
 and Completion Detail  
 Kingsford Plant  
 Elk Grove, California

PLATE

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>LMC</i>	12/90		



Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring ML-1

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN

JOB NUMBER

APPROVED

DATE

REVISED

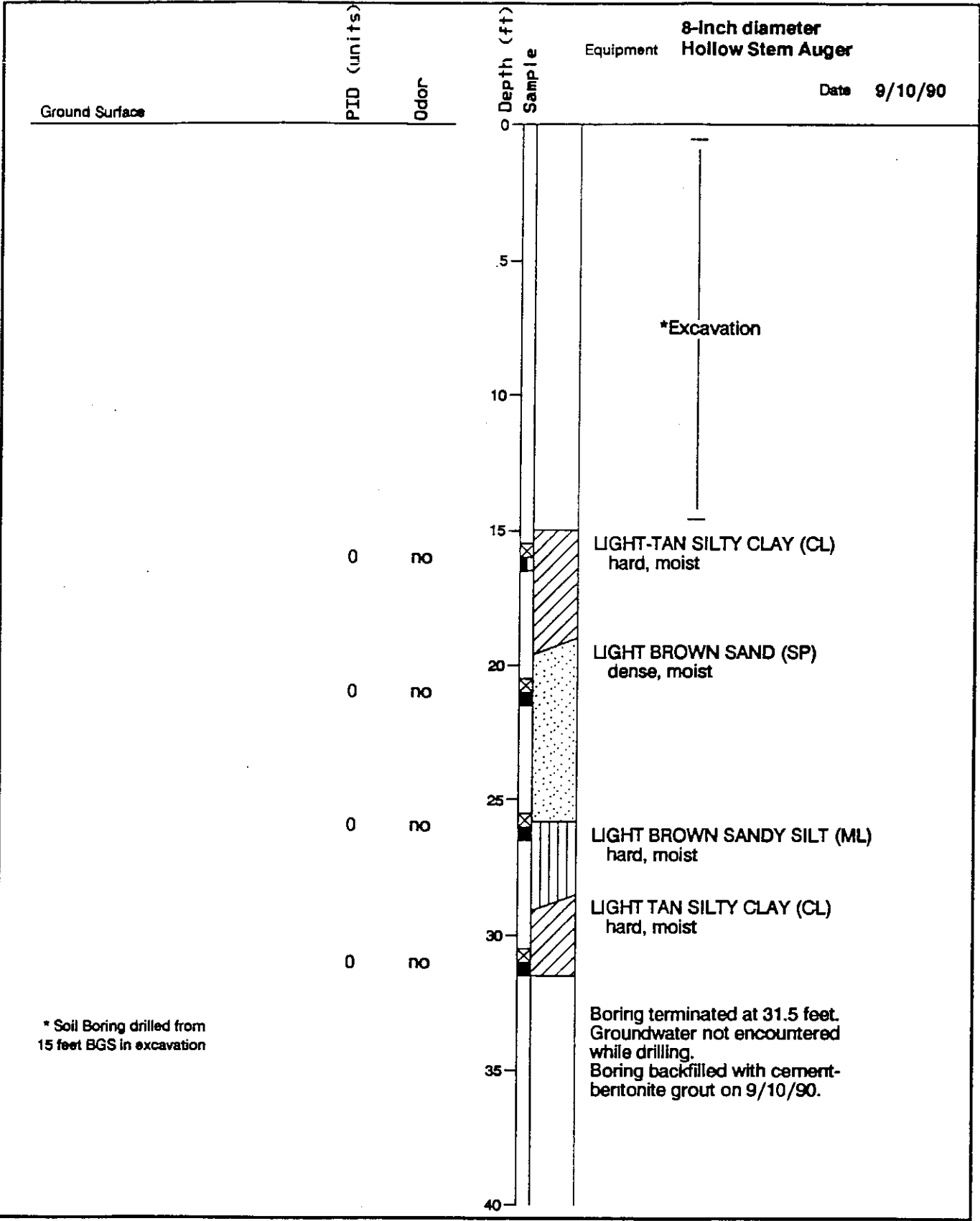
DATE

YG

19892,010.13

*[Signature]*

3/91



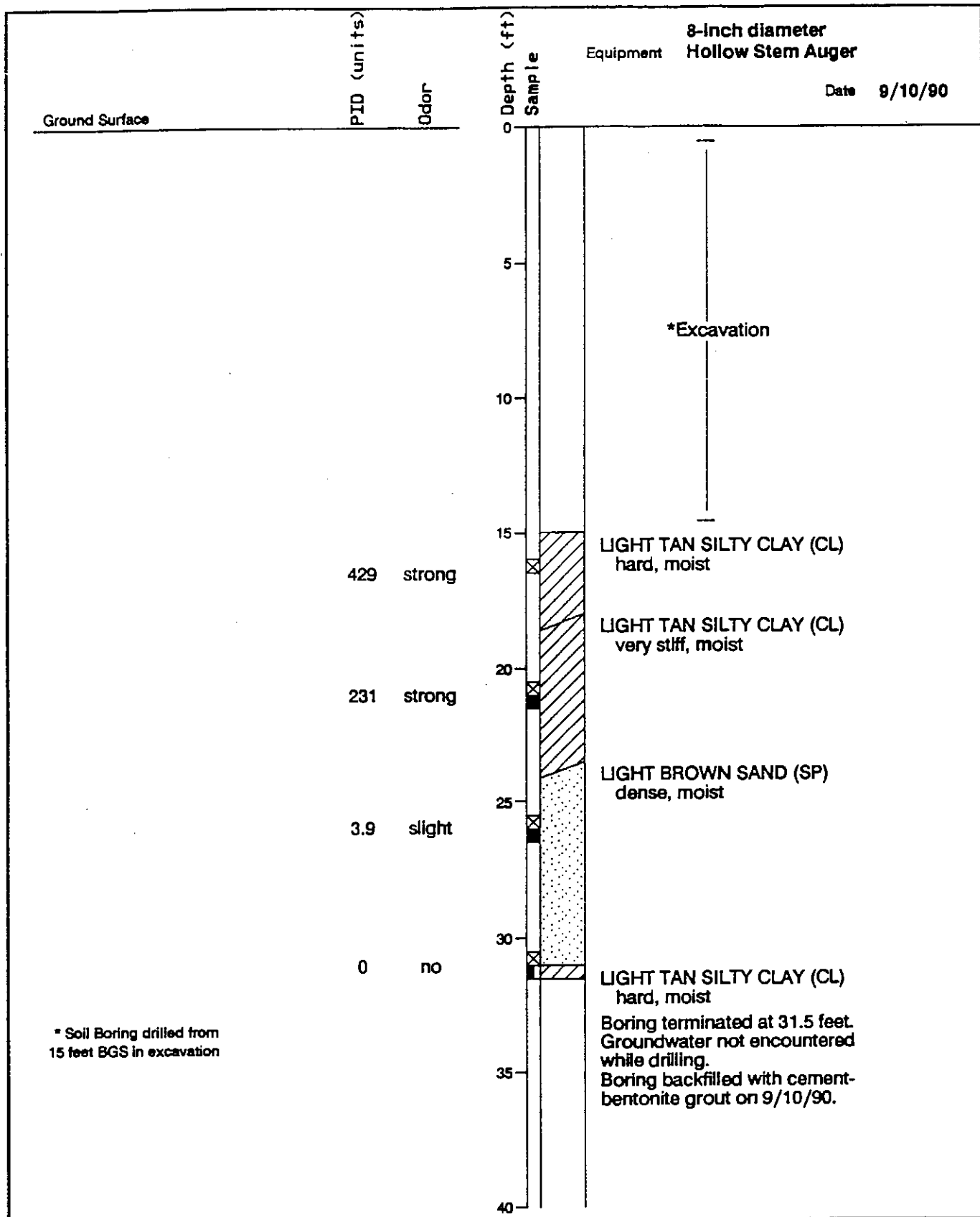
Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring ML-2

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	3/91		



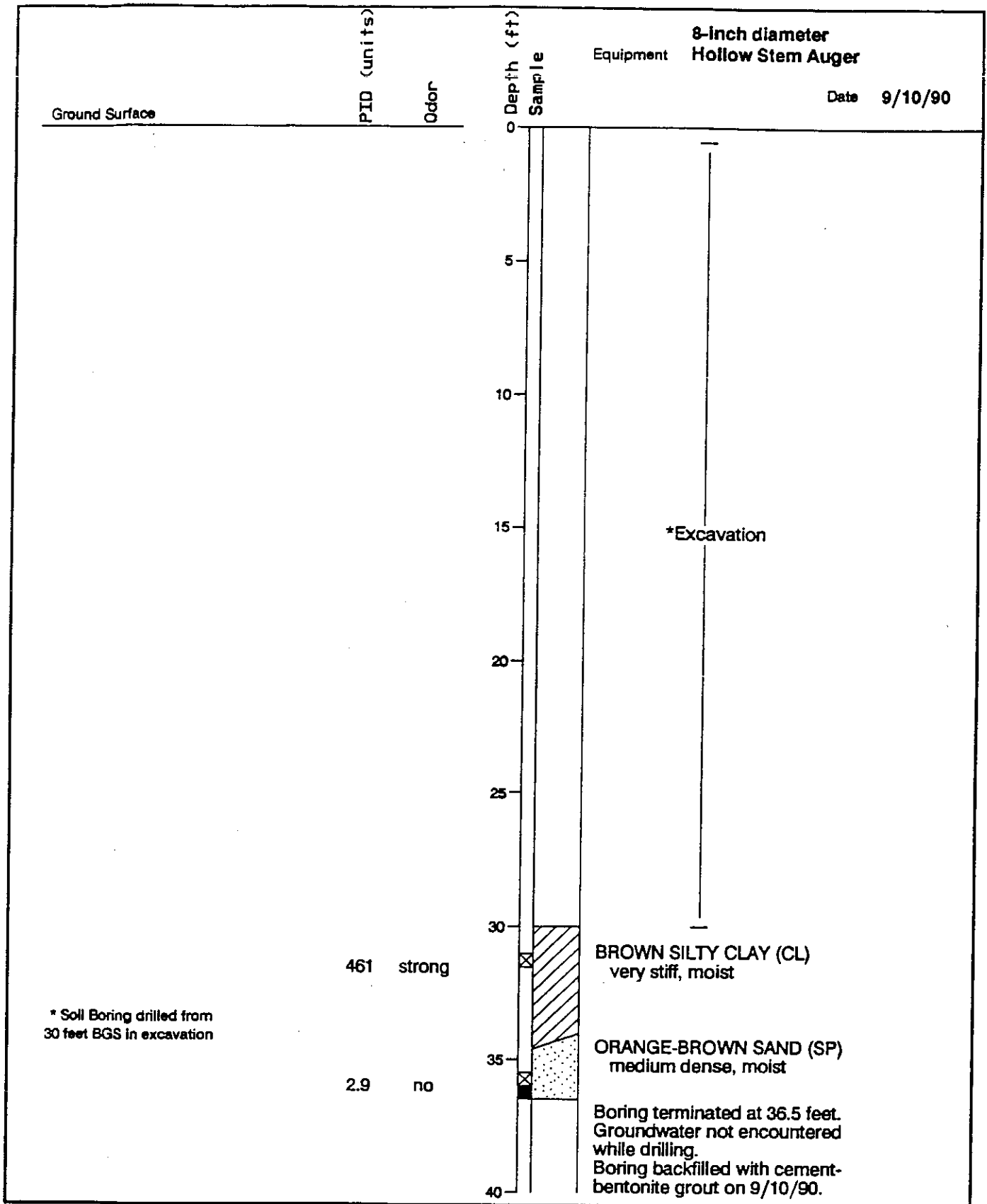
Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring ML-3

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	3/91		



Harding Lawson Associates  
Engineering and  
Environmental Services

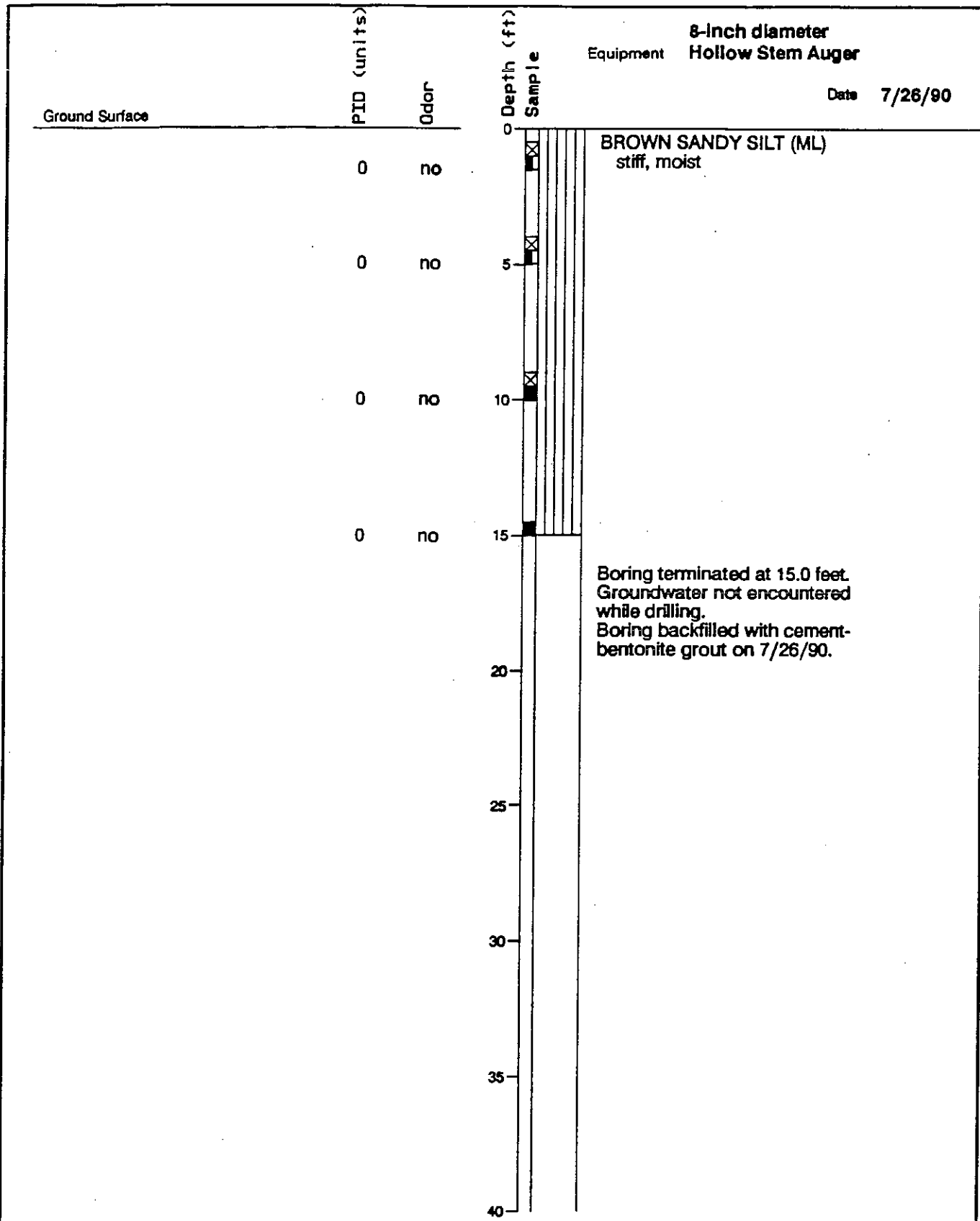
Log of Boring ML-4

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>AMO</i>	3/91		





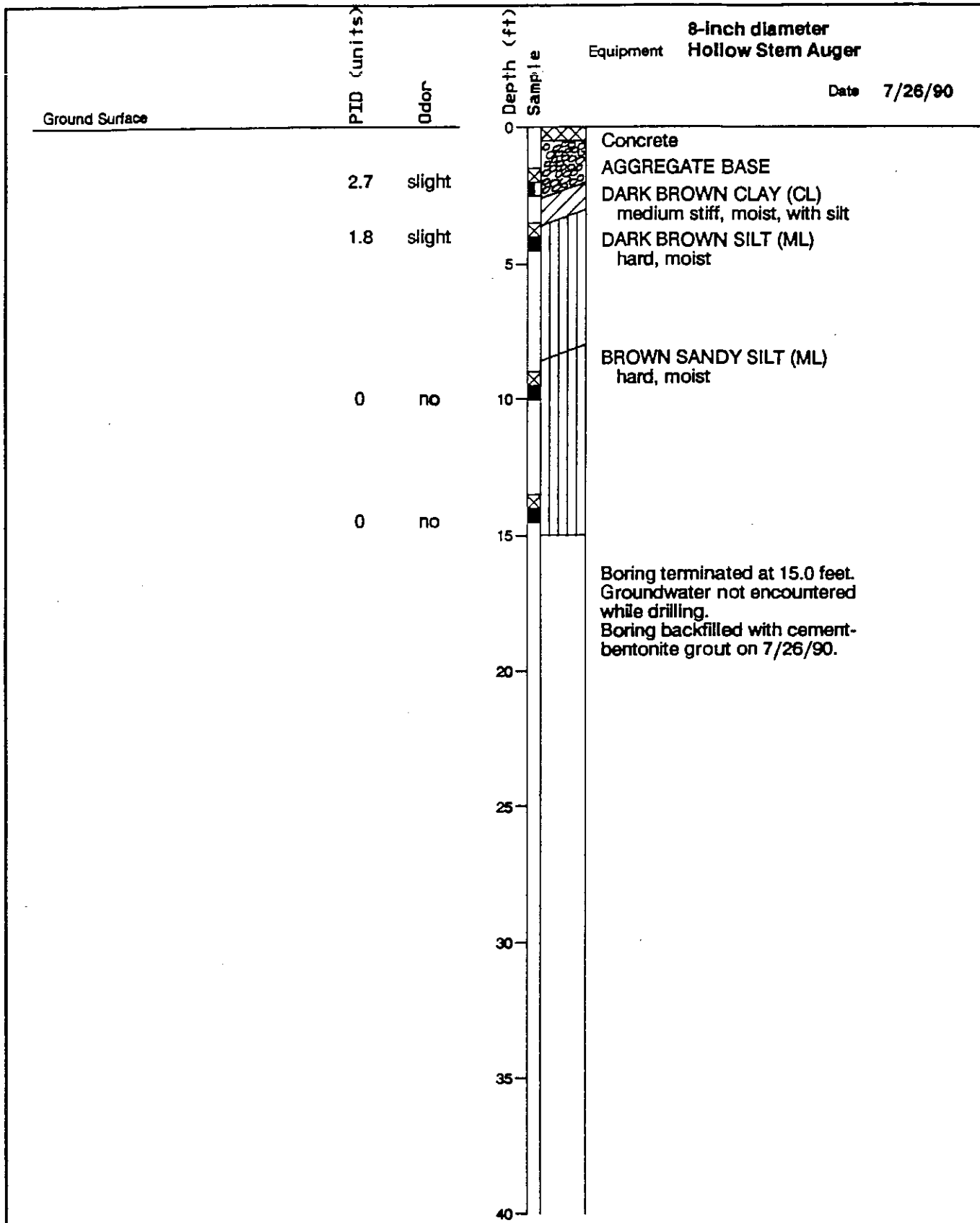
Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring SB-1

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	12/90		



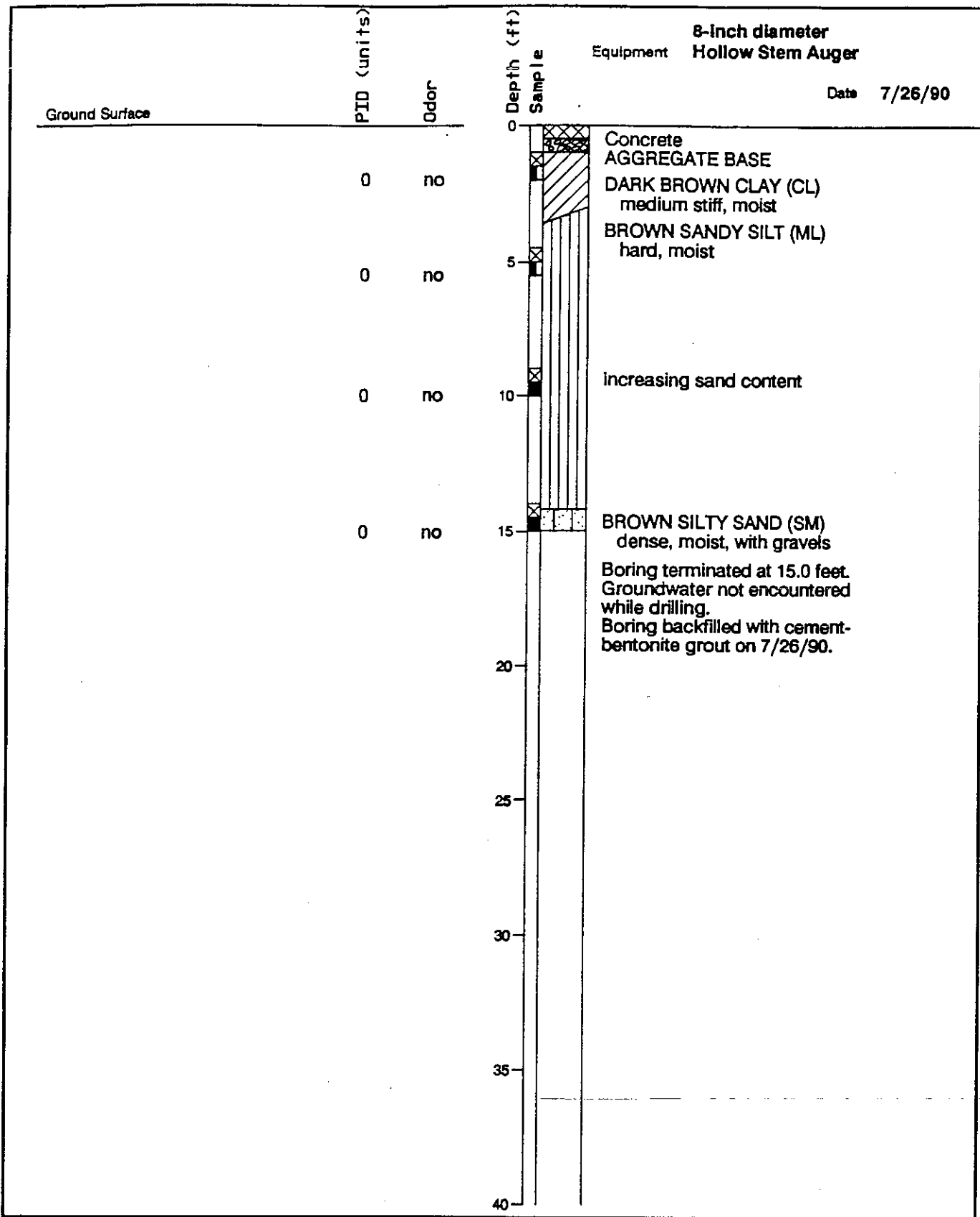
Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring SB-2

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	12/90		



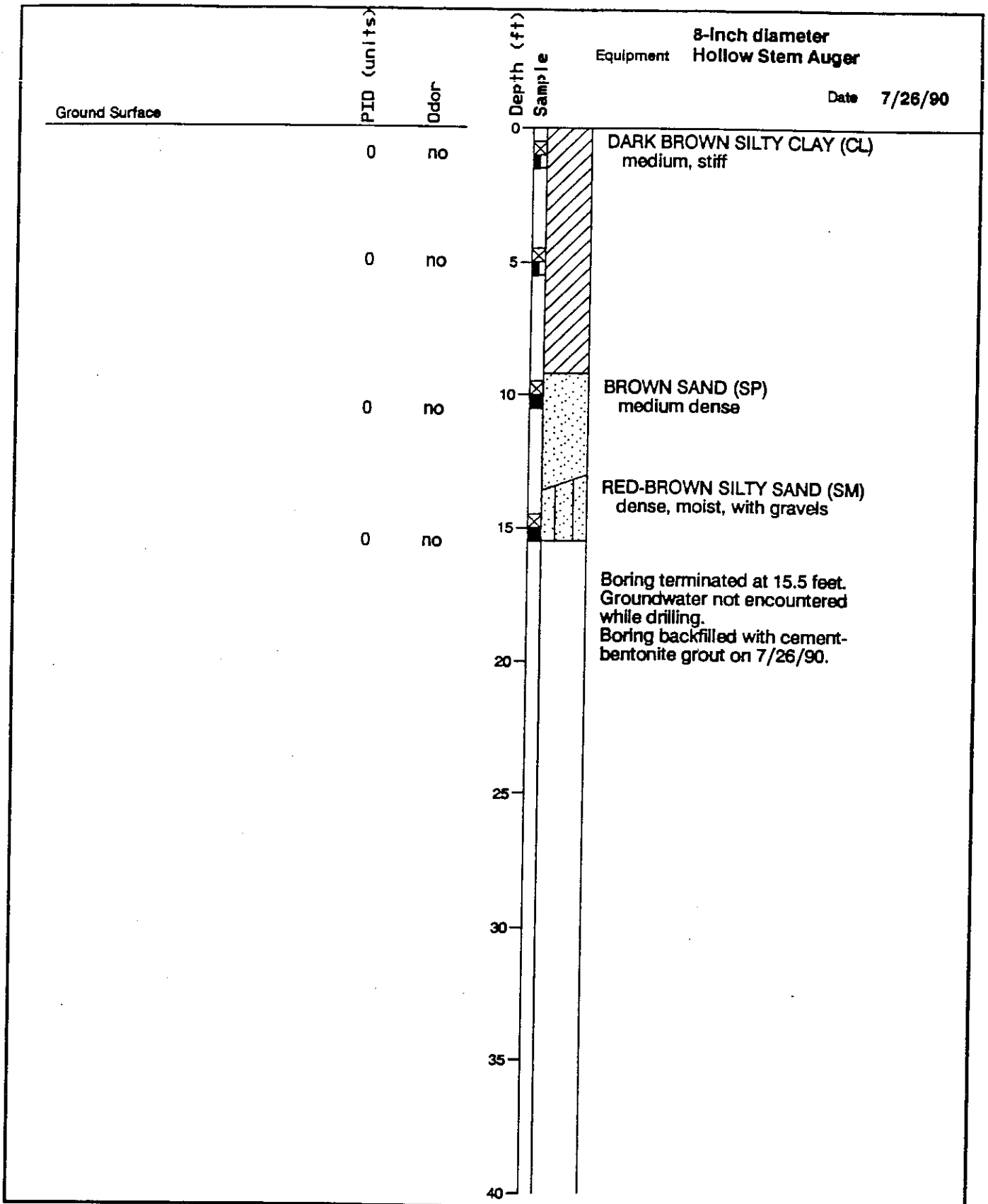
Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring SB-3

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>AMJ</i>	12/90		



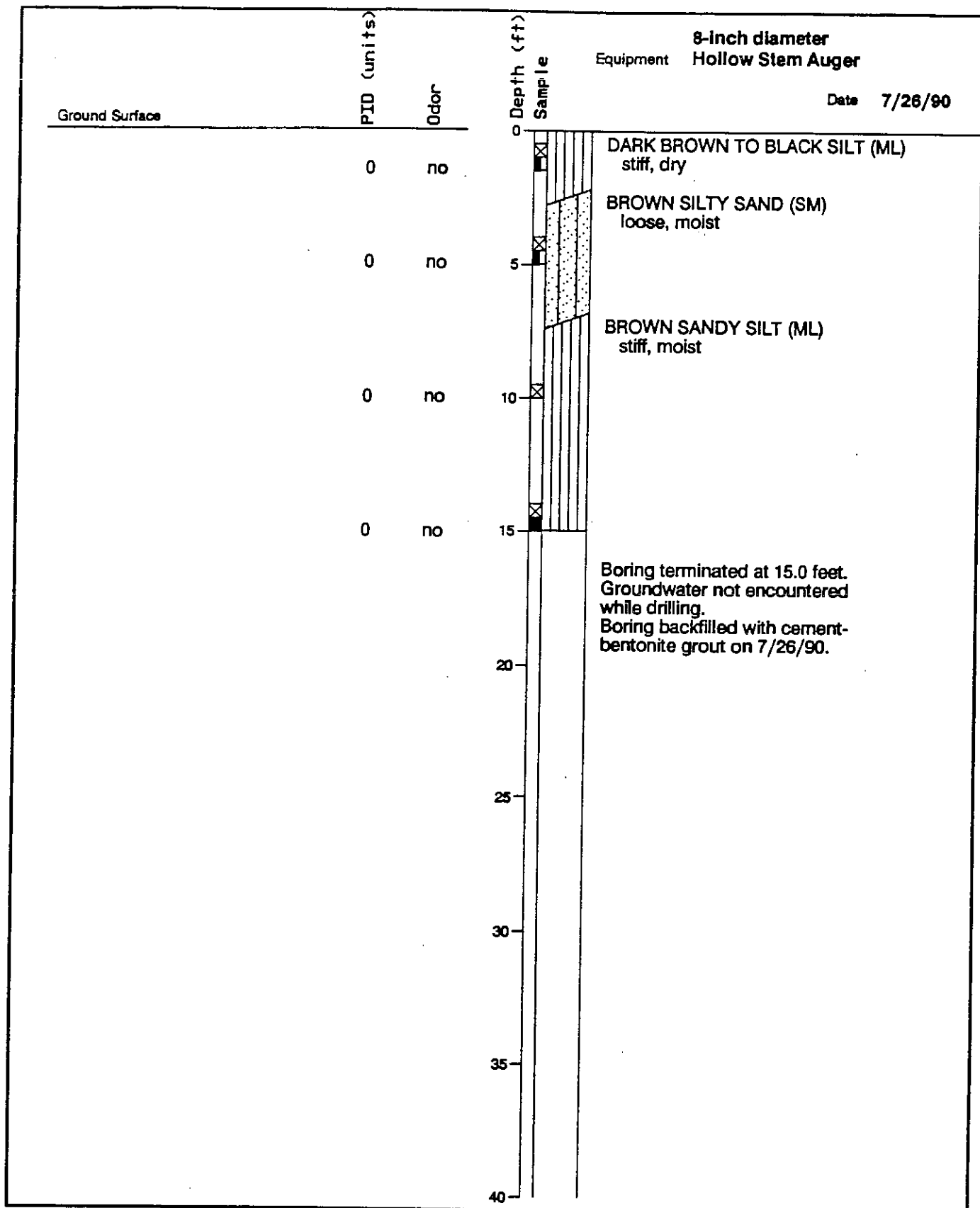
Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring SB-4

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>AMD</i>	12/90		



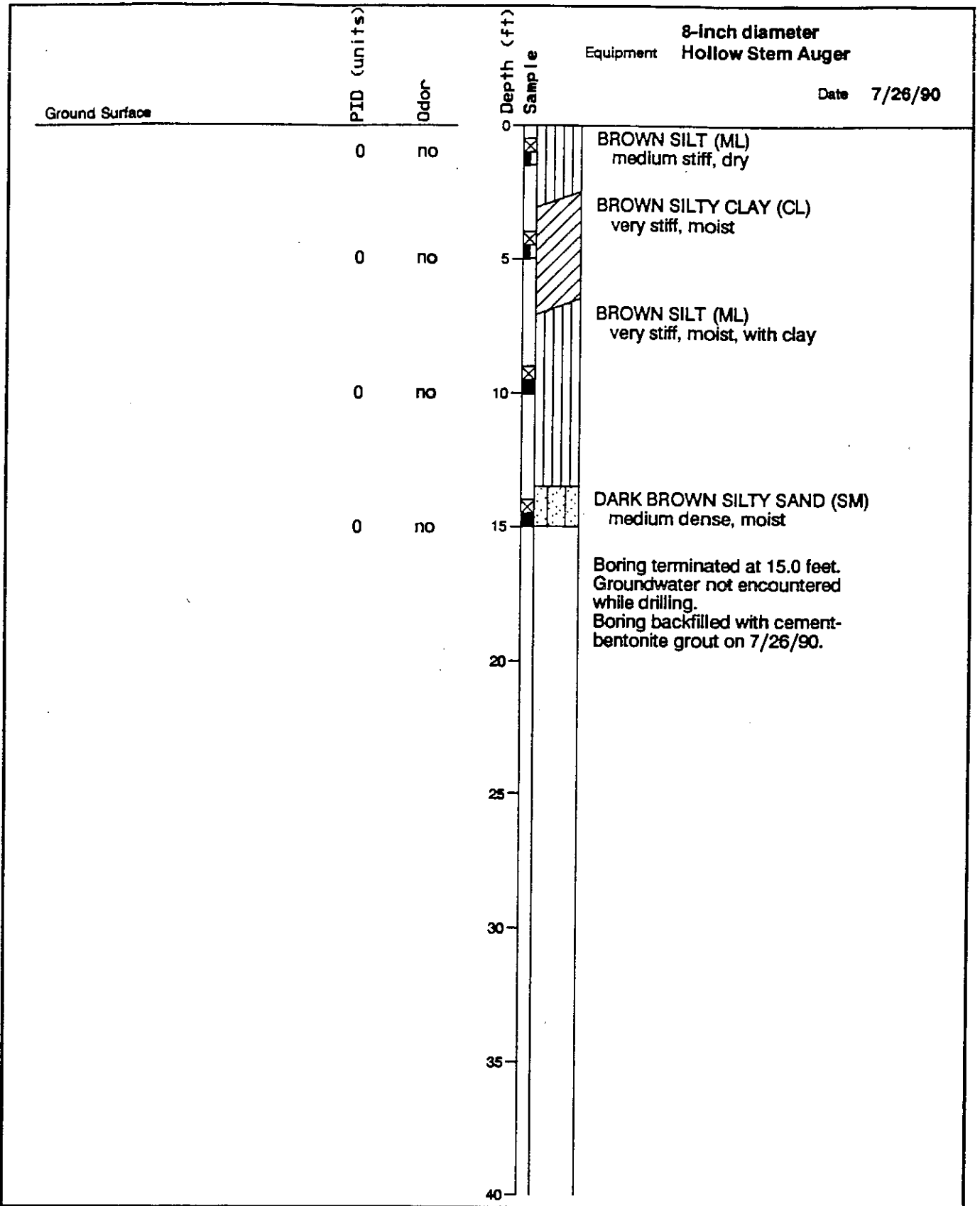
Harding Lawson Associates  
 Engineering and  
 Environmental Services

Log of Boring SB-5

PLATE

Kingsford Plant  
 Elk Grove, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
YG	19892,010.13	<i>[Signature]</i>	12/90		



Harding Lawson Associates  
Engineering and  
Environmental Services

Log of Boring SB-6

PLATE

Kingsford Plant  
Elk Grove, California

DRAWN

JOB NUMBER

APPROVED

DATE

REVISED

DATE

YG

19892,010.13

*[Handwritten Signature]*

12/90

APPENDIX A-VI  
MATERIAL SAFETY DATA SHEETS (MSDS)

110  
**Material Safety Data Sheet**

QUICK IDENTIFIER (In Plant Common Name)

Adjunct C

M, 8

Manufacturer's Name: Garratt-Callahan Company  
Address: 111 Rollins Road  
Millbrae, CA 94030

Emergency Telephone No. Use Number Below\*  
(415) 697-5811  
Other Information Calls (Business Hours)

Signature of Person Responsible for Preparation: *William Degen*

Date Prepared: 10/85

**SECTION 1 - IDENTITY**

Common Name: (used on label) (Trade Name & Synonyms) Adjunct C (See Section 2)

Cas No. 1310-73-2

Chemical Name: sodium hydroxide-flake

Chemical Family: metal hydroxides

Formula: NaOH

**SECTION 2 - HAZARDOUS INGREDIENTS**

Principal Hazardous Component(s) (chemical & common names)	%	Threshold Limit Value (units)
sodium hydroxide CAS No. 1310-73 (lye, caustic soda, flake caustic)	100%	2 mg/M <sup>3</sup> ceiling

**SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)**

Boiling Point: N/A	Specific Gravity (H <sub>2</sub> O=1): 2.13	Vapor Pressure (mm Hg): N/A
Percent Volatile by Volume (%): N/A	Vapor Density (Air = 1): N/A	Evaporation Rate (BUAC = 1): N/A
Solubility in Water: appreciable	Reactivity in Water: generates heat	
Appearance and Odor: white odorless flakes		
Flash Point: none	Flammable Limits in Air % by Volume: N/A	Lower Upper Extinguisher Media: N/A
Special Fire Fighting Procedures: none	Auto-ignition Temperature: N/A	

Unusual Fire and Explosion Hazards: Contact with water generates heat. Contact with some metals, particularly magnesium, aluminum, and zinc (or galvanized) can generate hydrogen gas, which is explosive.



**SECTION 4 - PHYSICAL HAZARDS**

Adjunct C

Stability  Unstable  Stable  Conditions to Avoid

Compatibility (materials to Avoid) Strong acids, metals such as magnesium, aluminum, zinc, tin, chromium, brass and bronze.

Hazardous Decomposition Products May form carbon monoxide with food sugars.

Hazardous Polymerization  May Occur  Will Not Occur  Conditions to Avoid

**SECTION 5 - HEALTH HAZARDS**

Threshold Limit Value 2 mg/M<sup>3</sup> ceiling

Signs and Symptoms of Exposure  1. Acute Overexposure burning and irritation

2. Chronic Overexposure not determined

Medical Conditions Generally Aggravated by Exposure not known

Chemical Listed as Carcinogen or Potential Carcinogen  Yes  No  National Toxicology Program  Yes  No  I.A.R.C. Monographs  Yes  No  OSHA  Yes  No

OSHA Permissible Exposure Limit 2 mg/M<sup>3</sup> ACGIH Threshold Limit Value 2 mg/M<sup>3</sup> Other Exposure Limit Used

Emergency and First Aid Procedures Also see "First Aid in Poisoning" page sent with MSDS.

1. Inhalation Irritation or destruction of respiratory tissues. Call physician.

2. Eyes Severe burns. Flush plenty of water for 15 minutes. Call a physician.

3. Skin Same as for eyes. Wash with water until "slick" feeling is gone. Call a physician.

4. Ingestion Do not induce vomiting. Drink water, orange or tomato juice, soft drinks. Call a physician.

**SECTION 6 - SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type) NIOSH approved dust/mist mask if dust is a problem.

Ventilation  Local Exhaust  yes  Mechanical (General)  Special  Other

Protective Gloves Rubber Eye Protection Chemical worker's goggles or face mask.

Other Protective Clothing or Equipment Rubber boots & apron. Plastic coveralls to prevent skin contact.

**SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES**

Precautions to be Taken in Handling and Storage Wash clothing after handling. Store in a cool, dry place.

Keep container closed when not in use. Wash thoroughly after handling.

Other Precautions Keep in mind that this is a hazardous material.

Steps to be Taken in Case Material is Released or Spilled Wear protective clothing. Shovel spill into dry container.

Reclaim if possible. Flush area with water after spill is cleaned up.

Waste Disposal Methods Approved hazardous waste management facility.

**IMPORTANT**  
Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

# 111

# Material Safety Data Sheet

QUICK IDENTIFIER (In Plant Common Name)

Adjunct SS-Cat *M, 8*

Manufacturer's Name: **Garratt-Callahan Company**  
Address: **111 Rollins Road**  
**Millbrae, CA 94030**

Emergency Telephone No. **Use Number Below**  
Other Information Calls: **(415) 697-5811**  
**(Business Hours)**

Signature of Person Responsible for Preparation: *William Degan*

Date Prepared: *10/85*

## SECTION 1 - IDENTITY

Common Name (used on label) (Trade Name & Synonyms): **Adjunct SS-Cat**

Cas No. **7757-83-7**

Chemical Name: **sodium sulfite**

Chemical Family: **inorganic sulfite**

Formula: **Na<sub>2</sub>SO<sub>3</sub>**

## SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common names)	%	Threshold Limit Value (units)
none		

## SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	<b>N/A</b>	Specific Gravity (H <sub>2</sub> O=1)	<b>2.6</b>	Vapor Pressure (mm Hg)	<b>N/A</b>
Percent Volatile by Volume (%)	<b>N/A</b>	Vapor Density (Air = 1)	<b>N/A</b>	Evaporation Rate (BUC = 1)	<b>N/A</b>
Solubility in Water	<b>appreciable</b>	Reactivity in Water	<b>May generate heat.</b>		
Appearance and Odor	<b>odorless off-white crystals</b>				

Flash Point	<b>none</b>	Flammable Limits in Air % by Volume	<b>N/A</b>	Lower	Upper	Extinguisher Media	<b>N/A</b>	Auto-Ignition Temperature	<b>N/A</b>
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Special Fire Fighting Procedures: **Self contained breathing apparatus may be needed if sulfite decomposes in heat.**

Unusual Fire and Explosion Hazards: **Will emit SO<sub>2</sub> fumes if heated to decomposition.**

SECTION 4 - PHYSICAL HAZARDS

Adjunct SS-Cat

Stability Unstable  Conditions: Stable  to Avoid

Compatibility (Materials to Avoid) Acids may release sulfur dioxide. Strong oxidizers may generate heat.

Hazardous Decomposition Products If heated to decomposition, emits SO<sub>2</sub>

Hazardous Polymerization May Occur  Will Not Occur  Conditions to Avoid

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value none

Signs and Symptoms of Exposure 1. Acute Overexposure Dust may irritate eyes.

2. Chronic Overexposure no data

Medical Conditions Generally Aggravated by Exposure no data

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes  No  I.A.R.C. Monographs Yes  No  OSHA Yes  No

OSHA Permissible Exposure Limit see Section 2 ACGIH Threshold Limit Value see Section 2 Other Exposure Limit Used

Emergency and First Aid Procedures Also see "First Aid in Poisoning" page sent with MSDS.

1. Inhalation Dust may irritate eyes or lungs. Remove to fresh air.

2. Eyes Wash with water. Consult physician if irritation persists.

Skin Wash with water. Consult physician if irritation persists.

4. Ingestion Give water or milk. Induce vomiting. Call a physician.

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type) NIOSH dust mask.

Ventilation normal room Local Exhaust  If dust is a problem Mechanical (General)  Special  Other

Protective Gloves Rubber Eye Protection Chemical worker's goggles or face mask.

Other Protective Clothing or Equipment Rubber apron

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage Store in a cool, dry area.

Other Precautions

Steps to be Taken in Case Material is Released or Spilled Shovel up and put into empty container.

Waste Disposal Methods Approved waste management facility.

IMPORTANT Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

# Material Safety Data Sheet

QUICK IDENTIFIER (In Plant Common Name)

Formula 36

M, 8

Manufacturer's Name: **Garratt-Callahan Company**  
 Address: **111 Rollins Road**  
**Millbrae, CA 94030**

Emergency Telephone No. **Use Number Below**  
 Other Information Calls: **(415) 697-5811**  
**(Business Hours)**

Signature of Person Responsible for Preparation: *William Deegan*  
 Date Prepared: **July 14, 1986**

## SECTION 1 - IDENTITY

Common Name: (used on label): **Formula 36**  
 (Trade Name & Synonyms)

Cas No. **mixture**

Chemical Name **mixture**  
 Chemical Family **mixture**

Formula **mixture**

## SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common names)	%	Threshold Limit Value (units)
sodium dichloro-s-triazine trione (sodium dichloroisocyanurate)	CAS NO. 2893-78-9 25%	none*

\*TLV of 1 ppm for chlorine

Suggested limit of 2 mg/m<sup>3</sup> for Formula 36 as a nuisance dust.

## SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point **N/A**  
 Specific Gravity (H<sub>2</sub>O = 1) **N/A**  
 Vapor Pressure (mm Hg) **N/A**

Percent Volatile by Volume (%) **N/A**  
 Vapor Density (Air = 1) **N/A**  
 Evaporation Rate (BUAC = 1) **N/A**

Solubility in Water **moderate**  
 Reactivity in Water **none**

Appearance and Odor **White granules with chlorine odor.**

Flash Point **none**  
 Flammable Limits in Air % by Volume **N/A** Lower Upper Extinguisher Media **any**  
 Auto-Ignition Temperature **unknown**

Special Fire Fighting Procedures **Wear SCBA, as heat or water may release chlorine gas.**

**High temperatures may also release sulfur dioxide.**

Unusual Fire and Explosion Hazards **This product contains an oxidizing material (organic chlorine donor). Contact with flammable organic materials may ignite them.**

SECTION 4 - PHYSICAL HAZARDS

Formula 36

Stability Unstable  Stable  Conditions to Avoid (Decomposes at 325°F to release chlorine gas.)

Incompatibility (Materials to Avoid) Reducing materials, Acids.

Hazardous Decomposition Products Chlorine gas, sulfur dioxide.

Hazardous Polymerization May Occur  Will Not Occur  Conditions to Avoid

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value See Section 2

Signs and Symptoms of Exposure 1. Acute Overexposure Irritation of eyes, skin, lungs. May cause eye damage.

2. Chronic Overexposure Eye or lung damage.

Medical Conditions Generally Aggravated by Exposure Asthma, bronchitis, emphysema.

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes  No  I.A.R.C. Monographs Yes  No  OSHA Yes  No

OSHA Permissible Exposure Limit See Section 2 ACGIH Threshold Limit Value See Section 2 Other Exposure Limit Used

Emergency and First Aid Procedures Also see "First Aid in Poisoning" page sent with MSDS.

1. Inhalation Remove to fresh air and call a physician.

2. Eyes Flush with water and call a physician.

Skin Flush with water. Call a physician if irritation persists.

4. Ingestion Feed milk followed by olive oil or raw egg whites. Induce vomiting. Call a physician.

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type) NIOSH dust mask. NIOSH chlorine gas mask if chlorine is released.

Ventilation Local Exhaust Preferred Mechanical (General) Special Other

Protective Gloves Rubber Eye Protection Chemical worker's goggles or face mask.

Other Protective Clothing or Equipment Rubber apron

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage Store in a cool, dry area.

Other Precautions See attached label facsimile.

Steps to be Taken in Case Material is Released or Spilled Keep dry. Sweep up but do not mix with other materials.

Waste Disposal Methods Put into clean, dry container for disposal. Approved waste management facility.

IMPORTANT Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

#113

# Material Safety Data Sheet

QUICK IDENTIFIER (In Plant Common Name)

Formula 80-L

M, 8

Manufacturer's Name	Garratt-Callahan Company	Emergency Telephone No.	Use Number Below
Address	111 Rollins Road Millbrae, CA 94030	Other Information Calls	(415) 697-5811 (Business Hours)
Signature of Person Responsible for Preparation	<i>William Degren</i>	Date Prepared	November 27, 1985

## SECTION 1 - IDENTIFY

Common Name: (used on label) (Trade Name & Synonyms)	Formula 80-L	Cas No.	mixture
Chemical Name	mixture	Chemical Family	mixture
Formula	mixture		

## SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	%	Threshold Limit Value (units)
none		

## SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O=1)	N/A	Vapor Pressure (mm Hg)	N/A
Percent Volatile by Volume (%)	0	Vapor Density (Air = 1)	N/A	Evaporation Rate (BIIAC = 1)	N/A
Solubility in Water	approx. 15%	Reactivity in Water	none		
Appearance and Odor	Essentially odorless mixture of brown powder and white granules.				
Flash Point	none	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Special Fire Fighting Procedures	none	Extinguisher Media	N/A	Auto-Ignition Temperature	N/A
Unusual Fire and Explosion Hazards	none				

SECTION 4 - PHYSICAL HAZARDS

Formula 80-L

Stability Unstable  Conditions Stable  to Avoid

Incompatibility (Materials to Avoid) none

Hazardous Decomposition Products none

Hazardous Polymerization May Occur  Will Not Occur  Conditions to Avoid

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value none established

Signs and Symptoms of Exposure 1. Acute Overexposure May irritate eyes. Dust may irritate nose or lungs.

2. Chronic Overexposure no data

Medical Conditions Generally Aggravated by Exposure no data

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes  No  I.A.R.C. Monographs Yes  No  OSHA Yes  No

OSHA Permissible Exposure Limit See Section 2 ACGIH Threshold Limit Value See Section 2 Other Exposure Limit Used

Emergency and First Aid Procedures Also see "First Aid in Poisoning" page sent with MSDS.

1. Inhalation Remove from dusty area to fresh air. Call a doctor if irritation persists.

2. Eyes Flush thoroughly with water. Call a doctor if irritation persists.

3. Skin Flush thoroughly with water. Call a doctor if irritation persists.

4. Ingestion Drink two glasses of water and induce vomiting. Call a doctor.

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type) NIOSH dust mask if dust is a problem.

Ventilation normal room Local Exhaust Mechanical (General) Special Other

Protective Gloves Rubber Eye Protection Chemical worker's goggles or face mask.

Other Protective Clothing or Equipment Rubber apron

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage Store in a cool, dry area.

Other Precautions none

Steps to be Taken in Case Material is Released or Spilled Sweep up.

Waste Disposal Methods Approved waste management facility.

IMPORTANT

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

#114

# Material Safety Data Sheet

QUICK IDENTIFIER (In Plant Common Name)

Formula 291

M, 8

Manufacturer's Name	Garratt-Callahan Company	Emergency Telephone No.	Use number below
Address	111 Rollins Road Millbrae, CA 94030	Other Information Calls	(Business hours) (415) 697-5811
Signature of Person Responsible for Preparation	<i>William D. Dignan</i>	Date Prepared	9/86

## SECTION 1 - IDENTITY

Common Name: (used on label) (Trade Name & Synonyms)	Formula 291	Cas No.	Mixture
Chemical Name	Mixture	Chemical Family	Mixture
Formula	Mixture		

## SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	%	Threshold Limit Value (units)
sodium hydroxide (lye, caustic soda)	CAS No. 1310-73-2 3.5%	2 mg/m <sup>3</sup> ceiling

## SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	circa 208°F	Specific Gravity (H <sub>2</sub> O=1)	1.065	Vapor Pressure (mm Hg)	Unknown
Percent Volatile by Volume (%)	88	Vapor Density (Air = 1)	Unknown	Evaporation Rate (BuAc = 1)	1
Solubility in Water	Complete	Reactivity in Water	None		
Appearance and Odor	Pale yellow liquid with aromatic odor.				
Flash Point	None	Flammable Limits in Air % by Volume	None	Extinguisher Media	Any
Special Fire Fighting Procedures	None				
Auto-ignition Temperature	None				

Unusual Fire and Explosion Hazards: None



SECTION 4 - PHYSICAL HAZARDS

Stability Unstable  Conditions Stable  to Avoid

Incompatibility (Materials to Avoid) Strong acids may evolve heat.

Hazardous Decomposition Products None

Hazardous Polymerization May Occur  Conditions Will Not Occur  to Avoid

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value None established for mixture.

Signs and Symptoms of Exposure 1. Acute Overexposure Will burn or irritate skin & eyes due to caustic.

2. Chronic Overexposure Unknown

Medical Conditions Generally Aggravated by Exposure Unknown

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes  No  I.A.R.C. Monographs Yes  No  OSHA Yes  No

OSHA Permissible Exposure Limit See Section 2 ACGIH Threshold Limit Value See Section 2 Other Exposure Limit Used

Emergency and First Aid Procedures Also see "First Aid in Poisoning" page sent with MSDS.

1. Inhalation Unlikely to occur. No data.

2. Eyes Flush copiously with water. Call physician.

Skin Wash with water.

4. Ingestion Do not induce vomiting. Call a physician.

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type) None

Ventilation Normal room Local Exhaust Mechanical (General) Special Other

Protective Gloves Rubber Eye Protection Chemical workers goggles.

Other Protective Clothing or Equipment Rubber apron

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage Store in a cool, dry area

Other Precautions None

Steps to be Taken in Case Material is Released or Spilled Dike and contain with absorbent.

Waste Disposal Methods Approved waste management facility.

IMPORTANT Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

GARRATT-CALLAHAN FORMULA 36 is a dry organic chlorine donor designed to aid in the control of algae and bacterial slimes found in recirculating cooling tower waters. It is chemically designed to allow the slow release of chlorine and to stabilize the chlorine and retard its escape from the water.

**DANGER - KEEP OUT OF REACH OF CHILDREN**

**POISON -** Strong oxidizing agent - May be fatal or harmful if swallowed. May produce severe chemical burns. Do not allow contact with eyes, skin, mucous membranes, or clothing. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes; for eyes, obtain prompt medical attention.

**ANTIDOTE -** If swallowed, drink raw egg white, milk or cooked cereal. Follow with emetic (tablespoon of mustard in a glass of warm water or cooking oil). Call a physician.

Mix only with water. Do not mix with any other chemicals or concentrated chemical solutions. Contact with oxidizable material such as paper, rags, paint products, vinegar, kerosene, cleaners, soap products, etc., or with acids or alkalis or combustible materials may cause fire or decomposition which in turn can release toxic gases. In case of fire, douse liberally with water.

Keep in cool, dry place. Open container only where adequate ventilation is available. Do not breathe in or inhale container vapors. After each use, re-close container to protect remaining material. Keep away from fire, heat or open flame.

**GARRATT-CALLAHAN FORMULA 36**

**WATER TREATMENT MICROBIOCIDES**

Oxidizing Microbiocide for Building and Industrial Cooling Towers  
EPA Reg. No. 9540-14

Active Ingredients:  
Sodium dichloro-S-triazinetriene 25%

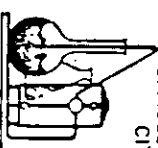
Inert Ingredients: 75%

Contains approximately 16% by weight available chlorine.

**GARRATT-CALLAHAN CO.**

WATER TREATMENT PRODUCTS SINCE 1904

OFFICES IN PRINCIPAL CITIES AND STRATEGIC INDUSTRIAL AREAS



HOME OFFICE  
111 ROLLINS RD.  
MILLBRAE  
CALIFORNIA 94030

**DANGER**

KEEP OUT OF REACH OF CHILDREN.  
SEE LEFT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**USE DIRECTIONS**

To control algae and bacterial slimes, use GARRATT-CALLAHAN FORMULA 36 as directed. For best results slug feed. The frequency of addition of microbiocide needed depends on many factors. To optimize your use of GARRATT-CALLAHAN FORMULA 36, follow this procedure:

FORMULA 36 should be added to the system water until a residual of approximately 1 ppm of chlorine is in the water. When no chlorine demand is present, the addition of 1 oz. by weight per 1,000 gallons of water will result in 1.2 ppm of chlorine. In actual use the amount needed will be greater due to the necessity of overcoming the initial chlorine demand. It is suggested that an initial slug dose of 8 oz. per 1,000 gallons be slug fed into the basin or distributor of the tower. Repeat the dose every seven days or less until satisfactory results are obtained.

When this treatment is successful use slug-fed doses of 4 oz. per 1,000 gallons repeated weekly as needed. Should slime develop, increase dosage to 8 oz. per 1,000 gallons.

Should tower be heavily fouled a pre-cleaning is required.

For maximum effectiveness it is recommended that this product be alternated with a Garratt-Callahan non-oxidizing microbiocide. Let chlorine residual drop below 0.5 ppm before adding alternate microbiocide. At other times repeat maintenance dose to maintain residual of 1.0 ppm chlorine as determined by frequent use of a chlorine test kit.

This product is toxic to fish. Treated effluent should not be discharged where it will drain into lakes, streams, ponds or public water. Apply only as specified on this label.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

**STORAGE**

Keep container tightly closed when not in use, and store in a cool, dry, well ventilated area away from heat and sunlight. Keep liquid products from freezing. Keep solid or powdered products dry and away from open flames or organic chemicals. Do not contaminate liquid or dry products with other substances. Open container carefully and wear protective clothing to avoid contact with material. Contain any leaking liquids with inert absorbent. Sweep up spilled solid or powdered product but do not return to drum or discard in contact with flammable or oxidizable materials.

**PESTICIDE DISPOSAL**

Pesticide wastes are toxic. Inproper disposal of excess pesticide, spray mixture, or residue is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL**

Do not re-use empty container.

**For Metal Containers:**  
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**For Plastic Containers:**  
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**For Fiber Drums With Lids:**  
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Completely empty lined by slaking and stripping sides and bottom to base.

# 006

M, 1, 9



The Clorox Company  
 7200 Johnson Drive  
 Pleasanton, California 94566  
 Tel. (415) 847-6100

# Material Safety Data Sheet

<b>I Chemical Identification</b>		
NAME: PYROLYSIS OIL		CAS no. 8030-97-4
DESCRIPTION: DARK BROWN TARTY OIL, PUNGENT ODOR		RTECS no. N/A
<b>Other Designations</b>		<b>Manufacturer</b>
<b>Emergency Procedure</b>		
Pyrolytic Acid Pyrolysis Fuel Oil Condensed Distillate from Pyrolysis of Wood	The Clorox Company 1221 Broadway Oakland, CA 94612	Notify your Supervisor Call: (303) 573-1014 Rocky Mountain Poison Center 645 Bannock Street Denver, CO 80202-4507
<b>II Health Hazard Data</b>		<b>III Hazardous Ingredients</b>
<p><b>CORROSIVE.</b> May cause burns. Irritating to the eyes, skin, and respiratory tract. Contains trace quantities of known or suspected lung and skin carcinogens. <b>FIRST AID: EYE CONTACT:</b> immediately flush eyes with water for at least 15 minutes. See a doctor. <b>SKIN CONTACT:</b> immediately remove contaminated clothing and wash exposed area with soap and water. If irritation persists, see a doctor. <b>INHALATION:</b> remove from exposure. If breathing problems develop, see a doctor. <b>Ingestion: DO NOT</b> induce vomiting. Drink 2 to 3 glasses of water and see a doctor immediately.</p>		<p>Pyrolysis oil is a complex mixture of organic acids (acetic, formic), phenolics (phenol, guaiacol), aromatics (3,4-benzopyrene, 2-cresol), tars, alcohols and many other organic compounds. The type of organic compound and the amount depends on the type of wood used for feedstock, and the process and collection conditions.</p> <p>Some compounds found in trace quantities in pyrolysis oil are either suspect or confirmed human carcinogens or mutagens.</p>
<b>IV Fire and Explosion Data</b>		<b>V Special Protection Information</b>
<p><b>COMBUSTIBLE (DOT).</b> Use foam, dry chemical, carbon dioxide or water spray as extinguishing material. Cool exposed containers with water spray. Avoid breathing vapors or fumes. When fighting a fire wear an approved respirator, fire resistant clothing and eye protection.</p>		<p>Avoid skin and eye contact. Ventilation is recommended to minimize worker exposure. The following special protection equipment may be required depending upon your specific exposure and working conditions: hat, chemical splash goggles with side shields or face shield, apron or coveralls, gloves, closed shoes and an approved respirator. See your supervisor or corporate safety for specific information.</p>
<b>VI Spill or Leak Procedures</b>		<b>VII Reactivity Data</b>
<p>When cleaning a spill or leak wear an approved respirator and suitable protective clothing and eye protection to prevent skin and eye contact. Cover with an inert absorbent material. Dispose of in accordance with local state and federal regulations.</p>		<p>Corrosive. Reacts with strong oxidizers (peroxides, perborate, perchlorate) to form toxic gases.</p>
<b>VIII Special Precautions</b>		<b>IX Physical Data</b>
<p>Avoid heat or open flames. Avoid skin and eye contact.</p>		<p>This information is for health and safety use only.</p> <p>Water content: 10-15%          Flashpoint: approx. 232-250°F          pH: 7.5-8.5</p>

#008

M, 4, 6, 9



The Clorox Company  
7200 Johnson Drive  
Pleasanton, California 94566  
Tel. (415) 847-6100

# Material Safety Data Sheet

<b>I Chemical Identification</b>											
<b>NAME:</b> PETROLEUM HYDROCARBON SOLVENTS		<b>CAS no.</b> See Section 100									
<b>DESCRIPTION:</b> CLEAR TO LIGHT COLORED, LOW ODOR SOLVENT		<b>RTECS no.</b> N/A									
<b>Other Designations</b>	<b>Manufacturer</b>	<b>Emergency Procedure</b>									
Ashland L08E, 140, FMIF-DRI Unior 140, OMS; Shell 72, 71, Chevron 450	Several suppliers	Notify your Supervisor Call your local poison control center OR Rocky Mountain Poison Center (303) 573-1014									
<b>II Health Hazard Data</b>		<b>III Hazardous Ingredients</b>									
<p>Eye skin and respiratory tract irritant. Inhalation of high vapor concentrations may result in dizziness, unconsciousness, and convulsions. Ingestion may result in central nervous system depression, coma, convulsions and pulmonary edema. See Section VIII for additional information. <b>FIRST AID: EYE CONTACT:</b> If wearing contact lenses remove. Immediately flush eyes with water for 15 minutes, lifting the lower and upper lids occasionally. If pain or irritation persists, see a doctor. <b>SKIN CONTACT:</b> Remove contaminated clothing and wash exposed area with water. If irritation develops and persists, see a doctor. Launder clothing before reuse. <b>INGESTION: DO NOT</b> induce vomiting. Call a physician immediately. <b>INHALATION:</b> Remove from exposure. If breathing problems develop, transport to hospital.</p>		<table border="1"> <thead> <tr> <th>Ingredients</th> <th>Concentration</th> <th>Worker Exposure Limit</th> </tr> </thead> <tbody> <tr> <td>Mineral Spirits</td> <td>100%</td> <td>50 ppm TWA</td> </tr> <tr> <td colspan="3">CAS No's. 64741-65-7, 64742-47-8, 64742-96-7, 64742-88-7.</td> </tr> </tbody> </table> <p>These hydrocarbon solvents are not on the IARC, NTP or OSHA carcinogen lists.</p> <p>TWA= Time Weighted Average. Do not exceed this exposure level when averaged over a normal 8-hour workday and 40-hour workweek.</p> <p>The Worker Exposure Limit shown is recommended by The Clorox Company based on review of toxicological data, 1985.</p>	Ingredients	Concentration	Worker Exposure Limit	Mineral Spirits	100%	50 ppm TWA	CAS No's. 64741-65-7, 64742-47-8, 64742-96-7, 64742-88-7.		
Ingredients	Concentration	Worker Exposure Limit									
Mineral Spirits	100%	50 ppm TWA									
CAS No's. 64741-65-7, 64742-47-8, 64742-96-7, 64742-88-7.											
<b>IV Fire and Explosion Data</b>		<b>V Special Protection Information</b>									
<p>Combustible. Use foam, dry chemical, carbon dioxide, water spray or fog as extinguishing media. Cool exposed containers with water spray. When fighting a fire wear an approved respirator, fire resistant clothing and eye protection.</p> <p>Flammable or Explosive Limits-----Upper = 7 (4 Volume in Air) Lower = 0.5</p> <p>Auto ignition temperature approximately 400°F. Vapors heavier than air. Stop source of fuel before attempting to extinguish.</p>		<p>Local exhaust ventilation is recommended when working with this material. The following protective equipment may be required depending upon your specific exposure and working conditions: hat, chemical splash goggles, safety glasses with shields or face shield, apron or coveralls, gloves, closed shoes, and an approved respirator. See your Supervisor or Corporate Health, Safety and Environment for specific information.</p>									
<b>VI Spill or Leak Procedures</b>		<b>VII Reactivity Data</b>									
<p>When cleaning a spill or leak wear an approved respirator and suitable protective clothing and eye protection to prevent skin and eye contact. <u>Serious fire and explosion hazard when spilled in heated area, where open fires, flames or hot processes are underway, or in sewers.</u> Extinguish all fire and flame. Evacuate personnel. Shut off flow of hydrocarbons. Ventilate fully with nonsparking equipment. Absorb spills with oil mat or inert absorbent material. Scoop up with nonsparking shovels. Dispose of in accordance with local, state and federal regulations. Incinerate, or use as fuel, in approved facilities. Do not flush to ground water.</p>		<p>Stable. Incompatible with strong oxidants such as liquid chlorine, concentrated oxygen, sodium or calcium hypochlorite.</p>									
<b>VIII Special Precautions</b>		<b>IX Physical Data</b>									
<p>Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. No smoking. No open flames. To clean tanks, vats, or closed containers: use buddy system, life belt and lifelines. Close and block all feed lines, purge tank with fresh air, test atmosphere with combustible gas meter before entering tank. Illuminate with reflected light only. First aid must be immediately available.</p>		<p>Boiling Point-----340-50n°y Flash Point-----minimum 105°F Specific Gravity (H<sub>2</sub>O)-----&gt;1 Solubility in Water-----negligible</p>									

**APPENDIX A-VII**

**LUFT TABLE 2.1**

Table 2-1  
~~Leaching Potential Analysis for Gasoline and Diesel~~  
 Using Total Petroleum Hydrocarbons (TPH)  
 and Benzene, Toluene, Xylene and Ethylbenzene (BTX&E)

The following table was designed to permit estimating the concentrations of TPH and BTX&E that can be left in place without threatening ground water. Three levels of TPH and BTX&E concentrations were derived (from modeling) for sites which fall into categories of low, medium or high leaching potential. To use the table, find the appropriate description for each of the features. Score each feature using the weighting system shown at the top of each column. Sum the points for each column and total them. Match the total points to the allowable BTX&E and TPH levels.

SITE FEATURE	S C O R E	SCORE 10 PTS IF CON- DITION IS MET	S C O R E	SCORE 9 PTS IF CON- DITION IS MET	S C O R E	SCORE 5 PTS IF CON- DITION IS MET
	Minimum Depth to Ground Water from the Soil Sample (feet)		>100		51-100	
Fractures in subsurface (applies to foothills or mountain areas)		None		Unknown		Present
Average Annual Precipitation (inches)		<10		10-25		26-40\2
Man-made conduits which increase vertical migration of leachate		None		Unknown		Present
Unique site features: recharge area, coarse soil, nearby wells, etc		None		At least one		More than one
COLUMN TOTALS→TOTAL PTS		+		+		=
RANGE OF TOTAL POINTS	49pts or more		41 - 48 pts		40pts or less	
MAXIMUM ALLOWABLE B/T/X/E LEVELS (PPM)	1/50/50/50		.3/.3/1/1		NA\3	
MAXIMUM ALLOWABLE TPH LEVELS (PPM)	GASOLINE	1000		100		10
	DIESEL	10000		1000		100

- \1 If depth is greater than 5 ft. and less than 25 ft., score 0 points.  
If depth is 5 ft. or less, this table should not be used.
- \2 If precipitation is over 40 inches, score 0 points.
- \3 Levels for BTX&E are not applicable at a TPH concentration of 10ppm (gasoline) or 100ppm (diesel)

ORGANIC CONSTITUENTS  
HAZARDOUS CRITERIA AND DESIGNATED LEVEL EXAMPLES FOR WASTES AND SOILS

ORGANIC CONSTITUENT	Hazardous Waste Threshold Limit Concentration (DHS) (mg/L)	Factor Used to Calculate Designated Level	EXAMPLES OF DESIGNATED LEVELS FOR A HYPOTHETICAL AVERAGE SITE			
			in Protect Ground Water		in Protect Surface Water	
		Examples - Leachability	Soluble (Extractable) from a Solid (mg/l extract)	Total (mg/l)	Soluble (Extractable) from a Solid (mg/l extract)	Total (mg/l)
Chloroform	100	10	0.2 (57)	20	0.19 (57)	0.19 (57)
Chloroethane	100	10	0.19 (57)	0.19	0.19 (57)	0.19 (57)
2-Chlorophenol	100	10	0.001	0.1	0.01	0.01 (87)
3-Chlorophenol	100	10	0.001	0.1	0.01	0.01 (87)
Chlorobenzene	100	10	0.015	1.2	0.15	0.1 (87)
Chloroethane	100	10	3.5	350	35	
Chrysene	100	10	0.00028 (41)	0.028 (41)	0.00028 (41)	0.000086
2,4-D	100	10	0.09	9	0.8	
Dechloral	100	10	0.7	70	7	
Dalapon	100	10	0.00008	0.008	0.0008	0.00008
DBCP	100	10	2	200	20	
DDD	0.10 (9.11)	100	0.000024 (13)	0.0024 (13)	0.00024 (13)	0.00001 (50)
DDE	0.10 (9.11)	1000	0.00028 (41)	0.028 (41)	0.00028 (41)	0.0001 (50)
DDT	0.10 (9.11)	1000	0.23	23	2.3	0.0001 (50)
Diazinon	100	10	0.0053	0.53	0.053	
Dibenz(a,h)anthracene	100	10	0.00028 (41)	0.028 (41)	0.00028 (41)	
Dibenzofuran	100	10	0.23	23	2.3	
Dibenzothiophene	100	10	0.57	57	5.7	
Dibenz(p,h)anthracene	100	10	0.09	9	0.9	
Dichloroacetic acid	100	10	1.75	175	17.5	
1,2-Dichlorobenzene	100	10	0.033	3.3	0.33	
1,3-Dichlorobenzene	100	10	0.033	3.3	0.33	
1,4-Dichlorobenzene	100	10	0.033	3.3	0.33	
3,3'-Dichlorobenzidine	100	10	0.010 (82)	0.10 (82)	0.010 (82)	
Dichlorodifluoromethane	100	10	0.19	19	1.9	
1,1-Dichloroethane	100	10	0.57	57	5.7	
1,1-Dichloroethylene	100	10	0.57	57	5.7	
1,2-Dichloroethylene	100	10	0.57	57	5.7	
trans-1,2-Dichloroethylene	100	10	0.57	57	5.7	
cis-1,2-Dichloroethylene	100	10	0.57	57	5.7	
Dichlorofluoromethane	100	10	16	1600	16 (104)	
Dichloromethane	100	10	16	1600	16 (104)	
2,3-Dichlorophenol	100	10	0.0004	0.04	0.004	
2,4-Dichlorophenol	100	10	0.003	0.3	0.03	
2,5-Dichlorophenol	100	10	0.003	0.3	0.03	
2,6-Dichlorophenol	100	10	0.002	0.2	0.02	
3,4-Dichlorophenol	100	10	0.003	0.3	0.03	
1,3-Dichloropropane	100	10	0.57	57	5.7	
1,3-Dichloropropane	100	10	0.57	57	5.7	
Dieldrin	0.8 (9.11)	100	0.00000271	0.000271	0.00000271	0.00002
Dieldrin	0.8 (9.11)	100	0.00000271	0.000271	0.00000271	0.00002
Di-2-ethylhexyl phthalate	100	10	0.024	2.4	0.24	
Diallyl phthalate	100	10	350	35000	35000	
Dimethylphthalate	100	10	1.4	140	14	
Dimethylphthalate	100	10	21	2100	210	
2,4-Dimethylphenol	100	10	40	400	40	

**CLOSURE SUMMARY FOR 10,000 WATERMAN ROAD  
FORMER KINGSFORD CHARCOAL BRIQUET PLANT**

Kingsford operated a charcoal manufacturing plant on 37.7 acres in Elk Grove. Raw material (almond shells, walnut shells, peach pits) was processed into char in a pyrolysis unit. The char was mixed with other constituents to form charcoal briquets. Some briquets were subsequently impregnated with "Matchlite", a petroleum hydrocarbon in the range of C9-C15. A full description of the industrial processes employed at the plant is attached. A site plan (Plate 3) is attached which indicates the major areas of environmental concern. The numbered areas of environmental concern discussed below correspond to those areas identified on Plate 3.

1. 1,000-GALLON DIESEL TANK

Tank was removed on May 9, 1993 by RAMCON. Two samples were collected below the tank. BTEX, TPHg was ND in both samples; TPHd detected at 120 ppm in one sample, ND in the other.

2. 400-GALLON OIL STORAGE SUMP

The sump was removed. Soil was excavated to a depth of 18 feet below the sump. Lab analyses performed included 8240, TPH as mineral spirits, and TOG. All samples ND.

3,4. 20,000-GALLON MINERAL SPIRITS (MATCHLITE) USTS

5. 2 MINERAL SPIRITS STORAGE SUMPS (S), 5,000-GALLON MINERAL SPIRITS AST

The UST's, sumps, and AST were removed from the same area at the SW corner of the site. Soil contamination by TPH was detected following tank removal. About 1,200-1,300 cubic yards was excavated. The excavation reached a depth of about 40 feet at the center. All confirmation samples were ND for TPH as matchlite EXCEPT: one sidewall sample contained 200 ppm; bottom sample at 40 feet contained 17 ppm; one bottom sample at 36 feet contained 36 ppm. This area was closed by SCEMD in February 1991 (see attached letter). Soils

6. 1000-GALLON GASOLINE TANK

One sample collected below tank. Sample results: TPHg - ND; BTEX - 0.016/0.010/nd/0.002.

7. 1000-GALLON DIESEL TANK

Tank removed on 11/7/86. Two samples collected below tank by Woodward-Clyde Consultants. TPHd was ND for both samples. No other analyses were performed.



8. MAINTENANCE SHOP SUMP

Sump was removed; soil excavated to 5 feet. Sample below sump was analyzed for TPHg, TPHd, TPHo, TOG, and total lead. Total lead was 10.3 ppm; all other analyses ND.

9. WASTE PROCESS SUMP (ALSO CALLED PRE-TREATMENT SUMP)

Extensive soil contamination. Pretreatment building was demolished. Soil borings were drilled prior to excavation to define vertical extent. Soil excavation measured approximately 80 x 40 x 35 (about 4,000 cubic yards). The results of drill samples and excavation confirmation sampling are shown on the attached Plates 11A and 11B.

10. ACI DRUM STORAGE AREA SUMP

Soil sample collected below sump and analyzed for phenols, full 8270, total recoverable petroleum hydrocarbons by 418.1. All results ND.

OTHER AREAS

MINERAL SPIRITS UNDERGROUND PIPELINE

5 samples collected below pipeline following removal. All ND for TPHmatchlite.

EVAPORATION PONDS

Ponds were clay lined. Closed by RWQCB on October 10, 1990.

ACI PYROLYSIS AREA

Soil borings SB-2, SB-3 were drilled in this area. Two samples from SB-2 were ND for TOG, phenols, and 8270 compounds. Samples from SB-3 had detections as shown on Plate 4. The boring log for SB-2 is attached.

## Elk Grove Plant Closure Case Closure Summary Regional Water Quality Control Board

### I. Agency Information

Agency name: Sacramento County Environmental Management Department

### II. Case Information

Site facility Name: The Kingsford Company, Elk Grove, CA

Site facility address: 10600 Waterman Road, Elk Grove, CA 95624

#### Responsible Parties:

Daniel D. Musgrove  
Brent Andersen

5063 S Merrimac Avenue, Chicago, IL 60638  
3315 Marcola Road, Springfield, OR 97478

(708) 458-0600  
(503) 746-9601

Tank No.	Size in Gal.	Contents	Closed In-Place/Removed	Date
1	1,000	diesel	Removed	May, 1989
2	400 (sump)	used oil	Removed	August, 1990
3	20,000	mineral spirits	Removed	May, 1989
4	20,000	mineral spirits	Removed	May, 1989
5	300 (sump)	mineral spirits	Removed	May, 1989
6	1,000	gasoline	Removed	August, 1990
7	1,000	diesel	Removed	November, 1986
8	475 (sump)	mineral spirits/water	Removed	September, 1990
9	(sump)	storm water	Removed	August, 1990

### III. Release and Site Characterization Information

#### Tank 1 - 1,000 gal Diesel Tank - No releases

- One soil sample was collected from each end of the diesel tank. Each sample was analyzed for TPH - gasoline, TPH - diesel and BTEX. TPH - gasoline and BTEX were not detected in either sample. TPH - diesel was not detected at the east end of the tank and was measured at 120 mg/kg at the west end of the tank. The approved removal report indicates that contaminated soils from the west end of the tank were removed prior to closing the excavation. No post-excavation samples were collected.
- The approved report is on file at Sacramento County Environmental Management Department. Underground Storage Tank Closure Documentation - Woodward Clyde Consultants - Sept. 11, 1990
- Treatment and Disposal of Affected Material
  - Tank - Disposed at Triangle Inc., of Sacramento - 5/19/89
  - Soil - The excavated soil is presumed to have been aerated along with approximately 1200 cy of soil from an adjacent excavation.

**Tank 2 - Used Oil Sump - Released Motor Oil**

- Cause and type of release - Sump was manufactured of concrete. Cracks in the side walls resulted in the release of used oil into the soil.
- Site characterization is complete.
- No monitoring wells were installed. Groundwater is assumed to be < 100 feet below ground surface.
- The report titled Final Kingsford Charcoal Briquet Plant Closure Report dated May 2, 1991 is filed with Sacramento County Environmental Management Department.
- Treatment and Disposal of Affected Material
  - Concrete from the sump was triple rinsed and disposed at a Class III landfill.
  - Soil from the sump excavation was disposed at Ogden Environmental, Stockton, CA.
  - Product was removed from the sump by Beaver Oil.

Maximum Documented Contaminant Concentrations - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)	NA	<5			Xylene	ND			
TPH (diesel)	NA	<10			Ethylbenzene	ND			
Benzene	ND				Oil & Grease	<40	<40		
Toluene	0.002				Heavy Metals	NA	NA		
TPH (motor oil)	4,510	<25			Other (VOC-8240)	NA	ND		

Comments: The soil in the area of the sump was removed to a depth of 18 feet.

**Tank 3 - Mineral Spirits Storage - Release from adjacent sump**

- There was no release of mineral spirits from the tank or its associated piping. There was mineral spirits in the soil in the area of the tank excavation, but the origin of the mineral spirits was a release from the sump in the secondary containment (Tank 5). The remediation will be discussed in the section on Tank 5.
- Site characterization is complete. Approved by Sacramento County Environmental Management Department on February 22, 1991.
- No monitoring wells installed, groundwater is expected to be <100 feet from ground surface.
- The report titled Underground Storage Tank Closure Documentation dated September 11, 1990 is filed with Sacramento County Environmental Management Department.
- Treatment and Disposal of Affected Material
  - Tank - Disposed at Triangle Inc., of Sacramento - 5/19/89
  - Soil - Contaminated soil was aerated on-site and either returned to the excavation or spread in other locations on-site after remediation objectives were attained.

Maximum Documented Contaminant Concentrations - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)					Xylene	ND	NA		
TPH (diesel)					Ethylbenzene	ND	NA		
Benzene	ND	NA			Oil & Grease				
Toluene	ND	NA			Heavy Metals				
Mineral spirits - TPH	660	50			Other				

Comments: The maximum depth in this part of the tank excavation was 14 feet.

**Tank 4 - Mineral Spirits Storage - Release from adjacent sump**

- There was no release of mineral spirits from the tank or its associated piping. There was mineral spirits in the soil in the area of the tank excavation, but the origin of the mineral spirits was a release from the sump in the secondary containment (Tank 5). The remediation will be discussed in the section on Tank 5.
- Site characterization is complete. Approved by Sacramento County Environmental Management Department on February 22, 1991.
- No monitoring wells installed, groundwater is expected to be <100 feet from ground surface.
- The report titled Underground Storage Tank Closure Documentation dated September 11, 1990 is filed with Sacramento County Environmental Management Department.
- Treatment and Disposal of Affected Material
  - Tank - Disposed at Triangle Inc., of Sacramento - 5/19/89
  - Soil - Contaminated soil was aerated on-site and either returned to the excavation or spread in other locations on-site after remediation objectives were attained.

**Maximum Documented Contaminant Concentrations - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)					Xylene	ND	NA		
TPH (diesel)					Ethylbenzene	ND	NA		
Benzene	ND	NA			Oil & Grease				
Toluene	ND	NA			Heavy Metals				
Mineral spirits - TPH	390	16			Other				

Comments: The tank excavation depth ranged from 15 to 20 feet in this part of the tank excavation.

**Tank 5 - Mineral Spirits Sump - Mineral Spirits Release Occurred.**

- Cause and type of release - Mineral spirits was released into secondary containment by overfilling an above-ground storage tank within the containment. The mineral spirits was collected into a sump (tank 5) at the south end of the containment. Releases occurred through construction joints within the sump.
- Site characterization is complete. Approved by Sacramento County Environmental Management Department on February 22, 1991.
- No monitoring wells installed, groundwater is expected to be <100 feet from ground surface.
- The report titled Underground Storage Tank Closure Documentation dated September 11, 1990 is filed with Sacramento County Environmental Management Department
- Treatment and Disposal of Affected Material
  - Soil - Contaminated soil was aerated on-site and spread in other locations on-site after remediation objectives were attained. Soil boring cuttings were included with the aerated soil.
  - Sump - The concrete sump was triple-rinsed, the concrete broken and disposed at a Class III landfill.

**Maximum Documented Contaminant Concentrations - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)					Xylene	70	NA		
TPH (diesel)					Ethylbenzene	ND	NA		
Benzene	ND	NA			Oil & Grease				
Toluene	ND	NA			Heavy Metals				
Mineral spirits - TPH	4,600	200			Other				

Comments: The contaminated soil was removed to a depth of 40 feet. The approved closure report estimates that 35 to 50 cubic yards of soil with TPH - mineral spirits remained in-situ due to proximity to an active railroad spur line.

**Tank 6 - Gasoline - No Release**

- There were no releases from this gasoline tank.
- No monitoring wells were installed. Groundwater is expected to be <100 feet below ground surface.
- The report titled Final Kingsford Charcoal Briquet Plant Closure Report dated May 2, 1991 is filed with Sacramento County Environmental Management Department.
- Treatment and Disposal of Affected Material
  - Tank - Disposal location for tank is unknown - The report indicates that the tank was reclaimed as scrap metal - Plant Reclamation, Inc. of Richmond, CA was the dismantling contractor who recovered the other scrap metals from the facility. It is assumed that Plant Reclamation also recovered the gasoline tank.
  - Free Product - Product and water were recovered by Recycletron, Inc. of Patterson, CA.

Maximum Documented Contaminant Concentrations - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)	<5				Xylene	0.002			
TPH (diesel)	<10				Ethylbenzene	<0.001			
Benzene	0.016				Oil & Grease				
Toluene	0.01				Heavy Metals	1.33 (Pb)			
Other					Other				

**Tank 7 - Diesel - No Release**

- There were no releases from this diesel tank. This tank was emptied and inactivated in 1981
- No monitoring wells were installed. Groundwater is expected to be <100 feet below ground surface.
- The report titled Final Kingsford Charcoal Briquet Plant Closure Report dated May 2, 1991 is filed with Sacramento County Environmental Management Department.
- Treatment and Disposal of Affected Material
  - Tank - Exceltech, Inc., Fremont, CA

**Maximum Documented Contaminant Concentrations - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)					Xylene				
TPH (diesel)	<10				Ethylbenzene				
Benzene					Oil & Grease				
Toluene					Heavy Metals				
Other					Other				

Comments: Soil samples were collected from under the tank at two locations: under the fill pipe and under the pipe to the pump. Neither sample had detectable levels of diesel at 10 ppm detection limit.



**Tank 8 - Mineral Spirits/Water Sump - Released mineral spirits (PRE-TREATMENT SUMP)**

- Mineral spirits was released from this sump into the underlying soil through a construction defect in the concrete sump. The sump was in use from 1980 until its removal in 1990.
- No monitoring wells were installed. Groundwater is expected to be <100 feet below ground surface.
- The report titled Final Kingsford Charcoal Briquet Plant Closure Report dated May 2, 1991 is filed with Sacramento County Environmental Management Department.
- Treatment and Disposal of Affected Material
  - Soil - Contaminated soil was aerated on-site to within clean-up objectives and then spread on-site.
  - Sump - The concrete sump was triple-rinsed, the concrete broken and disposed at a Class III landfill.

**Maximum Documented Contaminant Concentrations - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)					Xylene	NA	<0.001		
TPH (diesel)					Ethylbenzene	NA	<0.001		
Benzene	NA	<0.001			Oil & Grease				
Toluene	NA	<0.001			Heavy Metals				
Mineral Spirits - TPH	NA	<5			Other				

Comments: Samples of the mineral spirits contamination levels were not measured for TPH - mineral spirits or for BTEX prior to excavation. Excavation was accomplished based on visual and on-site analysis. The Excavation measured approximately 42 feet by 72 feet and was a maximum of 35 feet deep.

**Tank 9 - Drum Storage Pad Sump - No Releases**

- Drums containing pyrolysis oil and wood were stored prior to use within the manufacturing process or disposal. The drums were stored on a concrete pad which was curbed and sloped to provide secondary containment for the maximum number of drums to be stored within the containment. In order to store the contents of the drums and expected rainfall and to facilitate removal of stormwater and/or material spillage, a concrete sump was constructed below grade outside the containment structure. The concrete sump was lined with a steel inner liner. There were no releases from the secondary containment system to the environment.
- No monitoring wells were installed. Groundwater is expected to be <100 feet below ground surface.
- The report titled Final Kingsford Charcoal Briquet Plant Closure Report dated May 2, 1991 is filed with Sacramento County Environmental Management Department.

**Maximum Documented Contaminant Concentrations - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After		Before	After	Before	After
TPH (gas)					Xylene				
TPH (diesel)					Ethylbenzene				
Benzene					Oil & Grease	<4			
Toluene					Heavy Metals				
bis-(2-ethyl hexyl) phthalate (EPA 8270)	1.09				Phenois (EPA 8040)	ND			

Comments: The sump was removed and disposed at a Class III landfill. Two soil samples were collected. One sample collected at 0.5 feet below ground surface contained only 1090 ppb of bis-(2-ethylhexyl) phthalate (the detection limit for bis-(2-ethylhexyl) phthalate is 1000 ppb). The soil sample collected from 6 feet below ground surface did not contain any of the analyzed parameters at levels above the detection limit.

**IV. Closure**

- Monitoring Well Number 1, installed to determine if a neighboring facility had contaminated the Kingsford Company property or the groundwater, was decommissioned on September 28, 1993. The report of the closure was submitted to Sacramento County Environmental Management Department, Hazardous Materials Division on November 8, 1993.
- No enforcement actions have been taken at the Kingsford Company related to the site closure.

**V. Local Agency Representative Data**

**VI. RWQCB Notification**

**VII. Additional Comments, Data, etc.**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

3443 Roubier Road, Suite A  
Sacramento, CA 95827-3098  
PHONE: (916) 255-3000  
FAX: (916) 255-3015



17 January 1996

Mr. Daniel Musgrove  
The Clorox Company  
5063 S. Merrimac Avenue  
Chicago, IL 60638

***CONCURRENCE WITH REQUEST FOR CLOSURE, FORMER KINGSFORD CHARCOAL  
BRIQUET PLANT, 10,000 WATERMAN ROAD, ELK GROVE, SACRAMENTO COUNTY***


This letter confirms the completion of site investigation and remedial action for the former underground storage tanks at 10,000 Waterman Road, Elk Grove, Sacramento County. Enclosed is the case closure summary for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency is accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e).

If you have any questions, please call Brian Newman at (916) 255-3134.

**WILLIAM H. CROOKS**  
Executive Officer

<b>APPROVED</b>	
author	
senior	_____

Enclosure

cc: Mr. Barry Marcus, Sacramento County Public Health Department, Sacramento

**FILE**

## **APPENDIX J**

**PHASE I ESA – WATERMAN ROAD PROPERTY (LOT B)**

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
**ASTM Standard E 1527-13**



**WATERMAN ROAD PROPERTY**  
**APN 134-0181-041**  
**Waterman Road**  
**Elk Grove, Sacramento County, California**

*Brusca Project No. 202-008*

Prepared for: **Buzz Oates**

October 23, 2019



## Table of Contents

EXECUTIVE SUMMARY .....ii

1.0 INTRODUCTION.....1

    1.1 PURPOSE AND KEY DEFINITIONS.....1

    1.2 PROPERTY INFORMATION AND LOCATION.....2

    1.3 SCOPE OF WORK.....2

    1.4 EXCEPTIONS AND LIMITATIONS .....3

    1.5 USER RELIANCE AND CONFIDENTIALITY .....3

2.0 PHYSICAL SETTING.....4

    2.1 PHYSICAL SETTING SOURCES.....4

    2.2 TOPOGRAPHY .....4

    2.3 GEOLOGY AND SOILS.....4

    2.4 SURFACE WATER AND GROUNDWATER.....4

3.0 SITE RECONNAISSANCE.....5

    3.1 SITE DESCRIPTION.....5

    3.2 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS.....5

    3.3 UTILITIES.....5

    3.4 COMMON SITE-SPECIFIC ENVIRONMENTAL CONCERNS .....5

    3.5 RESULTS OF SITE RECONNAISSANCE .....6

4.0 ADJOINING SITE CONDITIONS AND USE.....6

5.0 INTERVIEWS AND USER QUESTIONNAIRE .....6

    5.1 INTERVIEWS .....6

    5.2 USER QUESTIONNAIRE.....7

6.0 PREVIOUS ENVIRONMENTAL INVESTIGATION.....7

7.0 HISTORICAL RESEARCH.....7

    7.1 HISTORICAL INFORMATION SOURCES .....7

    7.2 SUMMARY OF PAST SITE CONDITIONS AND USAGE .....9

    7.3 PAST ADJOINING SITE USAGE .....9

8.0 AGENCY RECORDS REVIEW .....10

    8.1 INFORMATION SOURCES .....10

    8.2 SUBJECT PROPERTY LISTINGS/RECORDS.....11

    8.3 NEARBY SITES LISTINGS/RECORDS.....11

9.0 SIGNIFICANT DATA GAPS.....14

10.0 FINDINGS, OPINIONS, AND CONCLUSIONS.....14

11.0 STATEMENT OF QUALIFICATIONS .....15

12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT .....15

13.0 CLOSING.....16

### ATTACHMENTS

Plate 1 - Vicinity Map

Plate 2 - Site Map

Appendix A – Photographs

Appendix B – User Questionnaire

Appendix C – Historical Information

Appendix D – Agency Listings Database Report (EDR)

Appendix E – Additional Information



## EXECUTIVE SUMMARY

Brusca Associates, Inc. has prepared this *Phase I Environmental Site Assessment* of the subject property in general accordance with ASTM Standard E 1527-13. Our assessment has been performed to determine if the potential exists for significant site contamination from either on- or off-site sources for the purpose of identifying any *recognized environmental conditions* in connection with the subject property. We understand that this report will be used for environmental due diligence purposes related to a commercial real estate transaction involving the subject property.

The approximate ten-acre subject site is located westerly of Waterman Road, approximately 150 feet northerly of Mosher Road, in a mostly vacant/undeveloped area of Elk Grove, Sacramento County, California. The subject property is identified by the Sacramento County Assessor's Office as parcel number (APN) 134-0181-041. The subject property currently is vacant/undeveloped and unused, and generally supports volunteer grasses and a few mature trees. At the time of our reconnaissance, gravel mixed in with surface soils was observed on the northerly portion of the site; we understand this may be a result of past grading on the property. Our reconnaissance identified no obvious evidence that current use or activities on the subject property have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

Our research indicates that the subject property historically supported a rural residence, associated outbuildings, and vacant farmland from at least the 1930s through the 1960s. By the 1970s, the former residence and outbuildings were razed, and the property was part of a larger area of land associated with a charcoal briquet manufacturing plant (Kingsford). The address assigned to the larger area of land during that time that included the Kingsford charcoal briquet manufacturing plant and the subject ten-acre property was "10000 Waterman Road". However, it is indicated that the charcoal manufacturing facility and operations/activities were situated northwesterly of the subject parcel and the subject site was generally unused during that time with exception for a "picnic area" associated with the plant on the northerly portion of the subject site. The Kingsford plant northwesterly of the subject site was razed around the early-1990s, and the onsite picnic area was removed at that time. It is indicated that the subject property has since remained entirely vacant/undeveloped and unused. It is indicated that past site activities have not included the use or storage of significant quantities of hazardous substances or petroleum products.

Our historical research has not revealed the likelihood that past on-site activities would have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

Neither our research of government agency information nor our observations of adjoining areas revealed evidence of nearby contamination conditions of sufficient magnitude or proximity to be considered a threat to the environment on the subject property.

This Phase I Environmental Site Assessment has not revealed evidence of *recognized environmental conditions* in connection with the subject property. In our opinion, the findings of this Phase I study do not warrant further due diligence environmental investigation of the subject property at this time.





In consideration of the environmental condition of the property, please refer to the information contained in the remainder of this report.



October 23, 2019

Buzz Oates  
Attention: Cybil Bryant  
555 Capitol Mall, Suite 900  
Sacramento, CA 95814

**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
WATERMAN ROAD PROPERTY  
APN 134-0181-041**  
Waterman Road  
Elk Grove, Sacramento County, California  
*Brusca Project No. 202-008*

## 1.0 INTRODUCTION

Brusca Associates, Inc. has completed this *Phase I Environmental Site Assessment* of the subject property at the request of Buzz Oates. The approximate ten-acre subject property is situated westerly of Waterman Road, approximately 150 feet northerly of Mosher Road, in Elk Grove, Sacramento County, California. The subject property is identified by the Sacramento County Assessor's Office as parcel number (APN) 134-0181-041. The subject site currently is vacant/undeveloped, unused, and supports volunteer grasses.

We understand that this report will be used for environmental due diligence purposes related to a commercial real estate transaction involving the subject property. This *Phase I Environmental Site Assessment* has been performed in general accord with the scope and limitations of the 2013 American Society for Testing and Materials (ASTM) *Standard Practice for Phase I Environmental Site Assessments Process* (E 1527-13).

### 1.1 PURPOSE AND KEY DEFINITIONS

The purpose of our assessment has been to identify any *recognized environmental conditions* in connection with the subject property to determine if the potential exists for significant site contamination from either on- or off-site sources. A *recognized environmental condition* is defined in the referenced standard as:

*“the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.” A de minimis condition is defined as “a condition that generally does not present a threat to human health or the environment and that*



*generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions”.*

We have also considered whether any *historical recognized environmental conditions* or *controlled recognized environmental conditions* are associated with the property. A *historical recognized environmental condition* is defined as:

*“a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)”.*

A *controlled recognized environmental condition* is defined as:

*“a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)”.*

## 1.2 PROPERTY INFORMATION AND LOCATION

General Property Information/Location				
Property Name:	Waterman Road Property	Address:	Waterman Road, Elk Grove, California	
APN:	134-0181-041	County:	Sacramento	
		Owner:	PW Fund B LP	
Location:	See Vicinity Map, Plate 1		Size:	Approx. ten acres
Latitude/Longitude:	38.3931760, -121.3539910	Current Use:	Vacant/undeveloped and unused	
Considered Future Use:	Commercial/warehouse development			

## 1.3 SCOPE OF WORK

### Protocol and ASTM Scope Items

This *Phase I Environmental Site Assessment* has been performed in general accord with the scope and limitations of the 2013 *ASTM Standard Practice for Phase I Environmental Site Assessments Process* (E 1527-13). A *Phase I Environmental Site Assessment* is the primary component of an “*All Appropriate Inquiry*” designed to evaluate the environmental integrity of a property as part of the due diligence required to qualify for Landowner Liability Protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The regulatory requirements and standards for



Phase I environmental site assessment were established by the Federal Environmental Protection Agency and are outlined in 40 CFR Part 312, “*The Final Rule for Standards and Practices for All Appropriate Inquiries (AAI)*”.

The scope of this investigation included:

- Review of physical setting information sources
- Historical research, including review of any available, relevant environmental reports
- Site reconnaissance and observations of adjacent and nearby properties
- Interviews of individuals knowledgeable of the property and agency representatives
- Review of regulatory agency listings and records, including an agency database report
- Evaluation of the collected information, and preparation of this report

### **Non-ASTM Scope Items**

The scope of work associated with this *Phase I Environmental Site Assessment* has not included soil, soil gas, or groundwater sampling/testing, a chain-of-title document search, an evaluation of business environmental risk, an environmental compliance audit, research regarding use limitations (deed restrictions), or a property lien search. Our study also has not included evaluation of the following non-ASTM scope items: asbestos-containing building materials or naturally-occurring asbestos; lead-based paint; indoor air quality; industrial hygiene or safety; cultural or historic resources; ecological resources or endangered species; wetlands; biological agents; or, mold. We could develop a scope and cost estimate for performance of non-ASTM scope items upon request.

### **1.4 EXCEPTIONS AND LIMITATIONS**

No significant exceptions to or deviations from the ASTM standard (E 1527-13) were made during the course of our work. The ASTM Standard E 1527-13 is designed to establish good commercial and customary practices to be implemented by the Environmental Professional in performing Phase I assessment of a property in a manner that satisfies CERCLA requirements. Our services are performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings and conclusions presented herein are based on the cited reference materials, conversations, reconnaissance, and other information obtained from a variety of sources deemed to be reliable. No warranty regarding the accuracy of our opinions or conclusions is expressed or implied. It should be understood that the scope of investigation described herein is not exhaustive, and performance of a *Phase I Environmental Site Assessment* cannot completely eliminate uncertainties regarding the potential for environmental impairment of a property.

### **1.5 USER RELIANCE AND CONFIDENTIALITY**

Buzz Oates may read and rely upon the information, findings, conclusions, and recommendations contained herein. Without prior written consent of the client, Brusca Associates, Inc. will keep confidential and not disclose to any person or entity, any data or information provided by the client or generated in conjunction with the performance of this study. Provisions of confidentiality shall not apply to data or information obtained from the public domain or acquired from third parties not under obligation to the client to maintain confidentiality.



## **2.0 PHYSICAL SETTING**

### **2.1 PHYSICAL SETTING SOURCES**

Sources used to determine the regional setting during this study have included the following:

- 1977 CGS Geologic Map of California (1:750,000)
- 1981 CGS Geologic Map of the Sacramento Quadrangle (1:250,000)
- 1985 USGS Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley (1:62,500)
- USGS Elk Grove Quadrangle (1:24,000)

### **2.2 TOPOGRAPHY**

As shown on the USGS Elk Grove Quadrangle (see Plate 1), the subject property is situated at an elevation on the order of 45 feet above sea level. The site is relatively flat, and surface gradients in the vicinity slope gently toward the west.

### **2.3 GEOLOGY AND SOILS**

The subject property is situated within the Sacramento Valley in the Great Valley geomorphic province of California. The valley was formed by tilting of the Sierran Block with the western side dropping to form the valley and the eastern side uplifting to form the Sierra Nevada. The valley is characterized by a thick sequence of sediments derived from erosion of the adjacent Sierra Nevada to the east and the Coast Ranges to the west. These sedimentary rocks are mainly Cretaceous in age. The depth of the sediments varies from a thin veneer at the edges of the valley to depths in excess of 50,000 feet near the western edge of the valley.

According to U.S. Geological Survey mapping prepared by Helley and Harwood (1985) the surface deposits in the vicinity of the subject site are recognized as Riverbank Formation Lower Member. This unit is comprised of semiconsolidated alluvial fan deposits of silt, sand, and gravel. In the Sacramento area these deposits are arkosic and derived from the western slopes of the Sierra Nevada and deposited by the American River.

Soil mapping by the the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) indicates that onsite soils on the northerly portion of the site are identified as San Joaquin silt loam; the remainder of the onsite soils are identified as Galt clay. These soil units are indicated to moderately well drained.

### **2.4 SURFACE WATER AND GROUNDWATER**

There are no surface water bodies on or adjacent to the subject property. The nearest prominent surface water feature, Elk Grove Creek, is situated approximately 1,000 feet northerly of the subject site, at its closest point. Storm water generated on the subject property would appear to be directed towards adjoining properties and/or Waterman Road. We observed no evidence of suspicious run-off to, or from the subject property during our recent site visit.



Groundwater conditions within the general area of the subject property have been considered utilizing information obtained from the California Department of Water Resources, Sacramento County, and the California Regional Water Quality Control Board. These sources indicate that groundwater generally occurs at depths on the order of 70 to 80 feet in the general site vicinity; the regional groundwater flow direction is indicated to be toward the west.

### 3.0 SITE RECONNAISSANCE

Site Reconnaissance		
Date: October 9, 2019	Brusca Associates, Inc. Representative: Rachel Robles	Weather: Sunny
Site Layout: See Plate 2, <i>Site Map</i>	Site Photographs: See Appendix A	Limiting Conditions: None

### 3.1 SITE DESCRIPTION

The approximate ten-acre subject property is located westerly of Waterman Road, approximately 150 feet northerly of Mosher Road, in Elk Grove, Sacramento County, California. The subject property currently is vacant/undeveloped and unused, and generally supports volunteer grasses and a few mature trees. At the time of our reconnaissance, gravel mixed in with surface soils was observed on the northerly portion of the site; we understand this may be a result of past grading on the property.

### 3.2 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

No hazardous substances or petroleum products are used/stored on the subject site.

### 3.3 UTILITIES

Electricity is provided to the subject vicinity by the Sacramento Metropolitan Utility District (SMUD) and natural gas is provided by the Pacific Gas and Electric Company (PG&E). Municipal drinking water is provided to the area by the City of Elk Grove Water District.

### 3.4 COMMON SITE-SPECIFIC ENVIRONMENTAL CONCERNS

Potential Environmental Concern	Observations/Comments
Storage Tanks, Vent/Fill Pipes	None revealed by our reconnaissance or research
Petroleum Pipelines or Oil & Gas Wells	None revealed by our reconnaissance or research
Drums	None revealed by our reconnaissance or research
Unidentified Substance Containers	None revealed by our reconnaissance or research
Sumps	None revealed by our reconnaissance or research
Floor Drains	None revealed by our reconnaissance or research
Stains	None revealed by our reconnaissance or research
Septic Systems	None revealed by our reconnaissance or research
Stressed Vegetation	None revealed by our reconnaissance or research
Solid Waste Disposal/Fill Placement	None revealed by our reconnaissance or research



Potential Environmental Concern	Observations/Comments
Pools of Liquid/Standing Water	None revealed by our reconnaissance or research
Unusual Odors	None revealed by our reconnaissance or research
Polychlorinated Biphenyls (PCBs)	None revealed by our reconnaissance or research
Pits, Ponds, or Lagoons; Wastewater Treatment	None revealed by our reconnaissance or research
Wells	None revealed by our reconnaissance or research

### 3.5 RESULTS OF SITE RECONNAISSANCE

We observed no obvious evidence of contamination conditions, improper hazardous substance/petroleum products use or storage, environmentally suspicious dumping or discharge, or significant staining. Our reconnaissance identified no obvious evidence that current use or activities on the subject property have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property.

### 4.0 ADJOINING SITE CONDITIONS AND USE

The approximate ten-acre subject site is located within a mostly vacant/undeveloped area of Elk Grove, Sacramento County. The subject site is generally bounded by vacant/undeveloped land to the north and west, and by Waterman Road to the east. A driveway associated with an asphalt plant (Andeavor Elk Grove Asphalt Plant situated southerly of the subject site) bounds the site to the south. Information regarding adjoining and nearby site use is presented below.

Direction	Description
Northerly	Vacant/undeveloped land
Southerly	Andeavor Elk Grove Asphalt Plant (10090 Waterman Road)
Easterly (across Waterman Road)	Single-family residence and vacant/undeveloped land
Westerly	Vacant/undeveloped land

Our research and visual observations of adjoining and nearby properties did not identify current conditions or activities considered likely to have resulted in a significant release of hazardous substances or petroleum products affecting the environment on the subject property. Information obtained during our review of agency listings and records for adjoining and nearby sites, including the southerly adjoining asphalt plant, is discussed in *Section 8.3* of this report.

### 5.0 INTERVIEWS AND USER QUESTIONNAIRE

#### 5.1 INTERVIEWS

The following individuals were contacted in person, by phone, or by written communication to obtain information relevant to the environmental status and condition of the subject property.





Relationship to Property	Name/Affiliation	Comments
User Representative/ Owner Representative/ Key Site Manager	Cybil Bryant, Buzz Oates/PW Fund B LP	See below and <i>Section 5.2</i>
Agency Official	Peggy Silva, Sacramento County Environmental Management Department	See <i>Section 8.3</i>

As a part of our research, we conducted an interview with a current owner representative, Cybil Bryant of Buzz Oates/PW Fund B LP. Ms. Bryant indicated that she has been familiar with the site for about the past six months. Ms. Bryant indicated that the site historically supported a picnic area in association with an off-site charcoal manufacturing plant (Kingsford) situated to the northwest of the property until the early-1990s and has since generally remained vacant/undeveloped. Ms. Bryant indicated that there are no environmental liens or environmentally-related activity and use limitations associated with the subject property. Ms. Bryant also indicated that there are no known past hazardous substances/petroleum hydrocarbons releases or known contamination conditions on the property, and that there are no activities or features of potential environmental concern (including past or present underground storage tanks, above-ground storage tanks, on-site waste disposal, pits, sumps, oil-water separators, or septic systems) associated with the site.

Additional information obtained from interviews is presented in the relevant sections of this report.

## 5.2 USER QUESTIONNAIRE

In order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user of this report must provide specific information (if available) to the environmental professional. A user representative (Cybil Bryant of Buzz Oates) completed a *User Questionnaire* for the subject property; a copy of the completed *User Questionnaire* is presented in Appendix B. The responses presented on the *User Questionnaire* did not reveal any evidence of recognized environmental conditions in connection with the subject property.

## 6.0 PREVIOUS ENVIRONMENTAL INVESTIGATION

Our research did not reveal any previous environmental investigations of the subject property.

## 7.0 HISTORICAL RESEARCH

### 7.1 HISTORICAL INFORMATION SOURCES

#### General

As a part of this *Phase I Environmental Site Assessment*, historical research was performed to determine the past usage of the subject property and to evaluate the potential that past site usage resulted in recognized environmental conditions on the property. In accordance with ASTM Standard E 1527-13, our research has included evaluation of obvious uses of the property back to initial site development, or the 1940s, whichever is earlier. A number of different historical resources have been considered;





the historical information sources considered are discussed below. Selected historical information (including aerial photographs, topographical maps, and city directories) is presented in Appendix C.

### **Aerial Photographs**

We reviewed historical aerial photographs dated 1937, 1947, 1957, 1964, 1966, 1972, 1984, 1993, 1998, 2006, 2009, 2012, 2016, and 2018. The aerial photographs dated 1937 through 1966 show the property supporting an apparent rural residence and associated outbuildings on the easterly portion of the site; the remainder of the site appears to be farmed with row and/or dry crops during that time. On the 1972 aerial photograph, the former residence and related outbuildings appear to have been razed and a driveway leading to a charcoal brisket plant (“Kingsford Charcoal Briquet Plant” situated northerly of the subject site) is shown trending across the northerly portion of the site, northerly of the former onsite rural residence; information obtained from environmental reports pertaining to the Kingsford Charcoal Briquet Plant indicates the northerly portion of the subject site was used as a “picnic area” associated with the charcoal briquet plant during that time. No significant changes are apparent on the 1984 aerial photograph. On the 1993 and later aerial photographs, the site appears entirely vacant/undeveloped and unused.

### **USGS Topographic Maps**

We reviewed U.S. Geological Survey topographic quadrangle maps (Elk Grove Quadrangle) dated 1909, 1952, 1968, 2012, 2015, and 2018. The 1909 quadrangle map depicts the subject property as vacant/undeveloped. On the 1952 quadrangle map, the subject site is shown supporting three small structures (apparent rural residence and associated outbuildings) on the northeasterly portion of the site. On the 1968 quadrangle map, only one small structure is shown on the northeasterly portion of the site. The 2012, 2015, and 2018 quadrangle maps do not depict any onsite structures or environmentally relevant features.

### **Sanborn Fire Insurance Maps**

Our research indicates that the area of the subject property is not covered by available Sanborn Fire Insurance Maps.

### **Local Street Directories**

Our historical research included review of city directories (Haines Criss-Cross Directory and EDR Digital Archive) in about five-year increments between the years 1972 and 2014 to establish past occupants of the property. The subject property is not currently assigned an address by the Sacramento County Assessors Office. However, the subject site was previously part of a larger area of land associated with the Kingsford Charcoal Briquet Manufacturing Plant addressed “10000 Waterman Road”; Kingsford appears on a city directory listing in 1992. Our research indicates that the subject property does not appear on any other available city directories.

### **Oil and Gas Well Maps**

Our review of California Department of Conservation Division of Oil and Gas records indicates no evidence of past or present oil or gas wells on the subject property.



## EDR Proprietary Listings

Environmental Data Resources (EDR) maintains proprietary databases of historic potential high-risk sites, including dry cleaners, gasoline stations, automotive stations, and manufactured gas plants. The proprietary databases were developed largely from historic business directories. As shown in the database report presented in Appendix D, the subject property does not appear in any of these databases.

## Interviews

Interview information is presented in *Section 5.1* of this report.

## 7.2 SUMMARY OF PAST SITE CONDITIONS AND USAGE

The historical information obtained from the sources described above indicate that the subject property historically supported a rural residence, associated outbuildings, and vacant farmland from at least the 1930s through the 1960s. By the 1970s, the former residence and outbuildings were razed, and the property was part of a larger area of land that included a charcoal briquet manufacturing plant (Kingsford). The address assigned to the larger area of land during that time that included the Kingsford charcoal briquet manufacturing plant and the subject 10-acre property was “10000 Waterman Road”; however, it is indicated that the subject 10-acre property was not subject to charcoal manufacturing operations/activities and was generally unused with exception for a “picnic area” on the northerly portion of the subject site. It is indicated that the subject property was remained entirely vacant/undeveloped and unused since the 1990s. It is indicated that past site activities have not included the use or storage of significant quantities of hazardous substances or petroleum products.

Our research and reconnaissance have not revealed evidence indicating the likelihood that past on-site activities would have resulted in a significant release of hazardous substances or petroleum products to the environment on the subject property. In our experience, older rural residential properties can sometimes include the use of underground storage tanks for fuel storage; however, our research has not revealed any evidence of past underground fuel tank usage at the subject site.

The property was farmed with row and/or dry crops from at least the 1930s through the 1960s. In our experience, previous agricultural chemical applications to farmland typically do not seriously impair the soil chemistry. Pesticide contamination is most commonly attributable to the rinsing of equipment after field application, when rinsing occurs in one place over a period of time.

## 7.3 PAST ADJOINING SITE USAGE

Information obtained from historical sources cited in *Section 7.1* indicates that adjoining and nearby properties historically supported vacant farmland and a few rural residences. The easterly adjoining roadway (Waterman Road) has been in place since at least the late 1930s. The northeasterly adjoining property has supported a rural residence and vacant farmland since at least the 1950s. Around the late-1960s, the northwesterly adjoining property was developed with a charcoal manufacturing plant (Kingsford); a driveway leading to the plant extended across the northerly portion of the subject site at that time. The charcoal plant was later dismantled and razed around the early-1990s and has since remained vacant/undeveloped and unused.



The southerly adjoining property supported a rural residence from around the 1930s through the 1970s; this property is currently vacant/undeveloped. Around the mid-1980s, the southwesterly adjoining property was developed with the existing asphalt plant.

Our research has not identified past adjoining or nearby site usage considered likely to have resulted in a release of hazardous substances or petroleum products that would have affected the environment on the subject property.

## 8.0 AGENCY RECORDS REVIEW

### 8.1 INFORMATION SOURCES

As a part of this *Phase I Environmental Site Assessment*, agency listings and records were reviewed and considered to evaluate the environmental status and condition of the subject property. Agency research has included obtaining an agency listings database report through a third-party provider; the database records search (including search radii) meets and exceeds the agency listings search provisions of ASTM Standard E 1527-13. The database report was obtained from Environmental Data Resources (EDR) and is presented in Appendix D. In addition to review of the agency database report, supplemental research was performed via online environmental databases (including Geotracker<sup>1</sup> and Envirostor<sup>2</sup>), and through direct communications and file review (as warranted) with various agencies (including local agencies not included in the database report).

#### Federal, State, and Tribal Listings/Records

A partial summary of federal, state, and tribal agency records and listings reviewed/researched, including the *Standard Environmental Record Sources* required by ASTM E 1527-13, is presented below. A significant number of additional lists were reviewed; for a comprehensive listing of the agency sources researched and descriptions of the agency listings, refer to the appended database report.

Federal Databases	Search Radius	Comments
NPL Site List	1 mile	No relevant listings/records identified
Proposed NPL Site List	1 mile	No relevant listings/records identified
NPL Liens List	Subject Property	No relevant listings/records identified
Delisted NPL Site List	1 mile	No relevant listings/records identified
CERCLIS List	0.5 mile	No relevant listings/records identified
CERCLIS Federal Facility List	0.5 mile	No relevant listings/records identified
CERCLIS NFRAP Site List	0.5 mile	No relevant listings/records identified
RCRA CORRACTS Facilities List	1 mile	No relevant listings/records identified
RCRA Non-CORRACTS TSD Facilities List	0.5 mile	No relevant listings/records identified
RCRA Generators List	0.25 mile	Paramount Petroleum/Elk Grove Asphalt Terminal appears on this list; see <i>Section 8.3</i>

<sup>1</sup> Geotracker ([www.geotracker.waterboards.ca.gov](http://www.geotracker.waterboards.ca.gov)); environmental database of regulated facilities in California maintained by the State Water Resources Control Board.

<sup>2</sup> Envirostor ([www.envirostor.dtsc.ca.gov](http://www.envirostor.dtsc.ca.gov)); online database of contaminated sites, environmental cleanups, and permitted facilities in California maintained by the Department of Toxic Substances Control.



Federal Databases	Search Radius	Comments
US Engineering Controls Registry	0.5 mile	No relevant listings/records identified
US Institutional Controls Registry	0.5 mile	No relevant listings/records identified
LUCIS	0.5 mile	No relevant listings/records identified
ERNS List	Subject Property	No relevant listings/records identified

State/Tribal Databases	Search Radius	Comments
CA RESPONSE (equiv. NPL)	1 mile	No relevant listings/records identified
CA ENVIROSTOR (equiv. CERCLIS)	1 mile	No relevant listings/records identified
RWQCB SLIC List	0.5 mile	No relevant listings/records identified
Landfill/Solid Waste Disposal Site Lists	0.5 mile	No relevant listings/records identified
Leaking Storage Tank Lists	0.5 mile	Kingsford Products, World Asphalt, and CONOCO appear on this list; see <i>Section 8.3</i>
Registered Storage Tank Lists	0.25 mile	Kingsford Products, Paramount Petroleum/Elk Grove Asphalt Terminal/CONOCO, and World Asphalt appear on this list; see <i>Section 8.3</i>
Voluntary Cleanup Sites Lists	0.5 mile	No relevant listings/records identified
Brownfield Sites	0.5 mile	No relevant listings/records identified

### Local Agency Listings/Records

The Sacramento County Environmental Management Department (SCEMD) is the local *Certified Unified Program Agency (CUPA)* responsible for sites located within Sacramento County. As the local CUPA, the SCEMD is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and, California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements. Our research indicates no environmentally-relevant listings or records specifically pertaining to the subject property are maintained by the SCEMD. Additionally, our research does not indicate that other local agencies maintain any environmentally-relevant records or files pertaining to the subject property.

### 8.2 SUBJECT PROPERTY LISTINGS/RECORDS

Our research has not revealed that the subject property appears on the federal or state listings reviewed. Additionally, our research with local agencies, including the CUPA, indicates that none of these agencies maintains environmentally-relevant records or files pertaining to the subject property.

### 8.3 NEARBY SITES LISTINGS/RECORDS

Our research of agency listings and records indicates that several nearby sites appear on agency listings within the search radii considered (up to one mile from the subject property). We researched and reviewed agency information regarding nearby listed sites to evaluate whether readily available



information would suggest the potential for environmental impairment of the subject property from off-site areas. Our research and review of agency information regarding the nearby listed sites included consideration of the following:

- the nature/type of each listing
- the proximity of these sites to the subject site
- the nature of any nearby hazardous materials violations
- the magnitude and character of nearby known contamination conditions (including details regarding contaminant type, contamination extent, affected media, and agency status).

The agency information reviewed does not indicate that any of the nearby listed sites poses a significant threat to the environmental integrity of the subject property. Notable nearby listed sites are discussed below.

### **Kingsford Charcoal Briquet Plant, 10000 Waterman Road, Elk Grove**

A former charcoal briquet manufacturing plant (Kingsford) historically operated approximately 300 feet northwesterly of the subject property; our research indicates the subject property historically was associated with the plant and supported a “picnic area” on the northerly portion of the subject site. The plant was accessed via a driveway that traversed the northerly portion of the subject property. It is indicated that the C.B. Hobbes Company began manufacturing charcoal briquets at the northeasterly plant during the mid-1960s, and Kingsford purchased the plant in 1977 and continued plant operations until the plant was closed in 1989. The former facility included a packaging and manufacturing building, a maintenance shop, a stores building, and a number of support buildings and trailers; additionally, several underground storage tanks (USTs), sumps, drainage ditches, and evaporation ponds were used in plant operations. Plant operations at the Kingsford site generally included the processing of raw materials (walnut shells, almond hulls, peach pits, etc.) into char in a pyrolysis unit; the char was mixed with other raw materials to form charcoal briquets. Some of the briquets were reportedly subsequently impregnated with “Matchlite”, a petroleum hydrocarbon in the range of C9-C15.

Our review of the appended agency listing database report indicates the Kingsford site appears on the *Leaking Underground Storage Tank (LUST)* database. Our research indicates the plant closure occurred in two phases: preliminary site sampling and analysis, and post-closure clearance sampling and subsequent re-analysis of areas of potential environmental concern. During the closure of plant operations, key areas of potential environmental concern at the Kingsford site were reportedly identified and subsequently reportedly addressed, including areas that contained USTs, aboveground storage tanks (ASTs), and sumps. Between 1989 and 1990, five USTs (including two 1,000-gallon diesel USTs, one 1,000-gallon gasoline UST, and two 20,000-gallon USTs), and four sumps (including a used oil sump, two mineral spirits sumps, and one storm water sump) were removed from the Kingsford site. Soil samples were reportedly collected from the UST and sump excavation areas at the time of the removals, and further excavation of impacted soils was performed in areas that revealed elevated concentrations of constituents of concern followed by confirmation soil sampling to verify that impacted soil had sufficiently been removed.

In addition to evaluation of the former tank and sump area, site investigations were performed in former drainage ditches, a settling pond, evaporation ponds, an equipment storage yard, and hazardous materials storage areas.



Approximately 22-acres of vacant land south of the Kingsford plant (“South Vacant Lot”) was reportedly historically used for agricultural purposes; the subject ten-acre property was situated on the northeasterly portion of the 22-acre area. Information contained in the records for the Kingsford site indicates the northeast corner of the 22-acre South Vacant Lot (which includes the subject site) was formerly used as a “picnic area” and prior to that supported a “ranch house and barn”. During a site investigation to determine if operations at the southerly adjoining CONOCO asphalt plant had impacted the Kingsford site, two exploratory borings were advanced within the 22-acre “South Vacant Lot”, approximately 300 feet and 600 feet from the subject ten-acre site. None of the soil samples or groundwater sample obtained from the borings contained elevated concentrations of any of the tested constituents of concern.

The SCEMD issued a “No Further Action” letter regarding the LUST case at the Kingsford site in 1994, and the Central Valley Regional Water Quality Control Board (CVRWQCB) issued a concurrence letter in 1996. Based on the available information, the distance from the subject site, and agency closure status, the former Kingsford site does not appear to present a significant environmental concern to the subject property.

#### **CONOCO/Elk Grove Asphalt Terminal, 10090 Waterman Road, Elk Grove**

A bulk supplier of roadway liquid asphalt products (currently operated by Andeavor/Elk Grove Asphalt Terminal) is located directly southeasterly of the subject property; past business names of the asphalt plant have included CONOCO and Paramount Petroleum. The Elk Grove Terminal facility generally consists of warehouse and shop buildings, large bulk above-ground storage tanks (ASTs), rail car unloading spurs, truck loading racks, pumps, piping, steam boilers, emulsion plant, an asphalt pond, and a fire water pond. The closest AST within the Andeavor/Elk Grove Asphalt Terminal is over 400 feet southwesterly of the subject site.

Our review of the appended agency listing database report indicates that CONOCO/Elk Grove Asphalt Terminal appears on a number of listings including the *Historical UST* database, the *Sacramento Contaminated Site* database, the *Spills, Leaks, Investigations, and Cleanup (CPS-SLIC)* database, and the *LUST* database. Our research indicates that in 1991, a site investigation performed adjacent to a pipeline westerly of the CONOCO site which transfers “gas oil” from railroad tanker cars to the large above-ground storage (ASTs) stored on the CONOCO site; analytical results reportedly revealed elevated concentrations of petroleum hydrocarbons in soil. Subsequent environmental work at the CONOCO site included additional site investigations, and excavations of impacted soil; groundwater reportedly was determined to not be impacted. In 1995, based on the available data provided by site investigations, the SCEMD reportedly determined that significant contamination at the CONOCO site was likely vertically limited to less than 35 feet, and potentially less than 10 feet in depth; however, the SCEMD deferred further assessment/remediation until the surface encumbrances (storage tanks and piping) are removed from the site, at which time further assessment and/or remediation will be required. The LUST case at the CONOCO site is currently “open”, however, apparently no work will be required until the ASTs and related equipment is removed.

The CONOCO site also appears on the *California Hazardous Materials Incident Reporting System (CHMIRS)* database due to a number of incidents that involved the release or potential release of hazardous materials. It is indicated that all of the incidents were cleaned up to the satisfaction of the SCEMD and no further action was required.





The Paramount Petroleum/Elk Grove Terminal facilities appear on the *HAZNET* database and the *Resource Conservation Recovery Act Small Quantity Generator (RCRA-SQG)* database for the generation of between 100 kilograms and 1,000 kilograms of hazardous waste per month. The available information included in the database listing report indicates these listings are related to the past generation and disposal of ignitable waste, cadmium, lead, benzene, methyl ethyl ketone, tetrachloroethylene, trichloroethylene, waste oil, and mixed oil, unspecified oil-containing waste, latex waste, and corrosive waste. Limited information included in the listing indicates “no violations”. The Paramount Petroleum/Elk Grove Terminal site also appears on the *ECHO* and *FINDS* databases; these databases contain facility information and references to listings described above.

Based on the available information, including review of records maintained for the by the SCEMD, the CONOCO/Paramount Petroleum/Elk Grove Terminal site does not appear to present a significant environmental concern to the subject property.

### **World Asphalt Company, 10144 Waterman Road, Elk Grove**

The World Asphalt Company site is addressed 10144 Waterman Road and is located about 800 feet southwesterly of the subject property. Our review of appended agency listing database business indicates this site appears on a number of listings for hazardous materials storage and waste generation as well as the *LUST* database and the *Sacramento Contaminated Site* database. Our research indicates that in June 1999, three mineral spirits USTs (ranging in capacity from one 5,000- to 12,000-gallon) were removed from the World Asphalt site. Laboratory analytical testing of soil samples collected beneath each of the USTs revealed on sample with an elevated concentration of total petroleum hydrocarbons as Stoddard solvent (TPH-SS) at 660 milligrams per kilogram (mg/kg). Further investigation of the identified impacted area included the advancement of exploratory borings and laboratory analysis of deeper soil samples; no concentrations of petroleum hydrocarbons or benzene, toluene, ethylbenzene, and xylenes (BTEX) was reportedly detected above the laboratory reporting limits in any of the collected soil samples. The release from the USTs was determined to be minimal and the SCEMD issued a “No Further Action” letter from the case in 2002. Based on the available information, the World Asphalt Company site does not appear to present a significant environmental concern to the subject property.

## **9.0 SIGNIFICANT DATA GAPS**

Environmental assessment data gaps may affect the ability to identify recognized environmental conditions. Data gaps may include the inability to access relevant on-site structures or to communicate with individuals knowledgeable of the subject property or nearby contamination conditions. Lack of adequate historical information sources can also result in data gaps. In general, minor data gaps do not hinder an environmental professional’s ability to render an opinion regarding potential environmental conditions associated with the subject property. There were no significant data gaps identified for this study.

## **10.0 FINDINGS, OPINIONS, AND CONCLUSIONS**

Brusca Associates, Inc. has performed *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Standard E 1527-13 of the Waterman Road Property identified by



the Sacramento County Assessor's Office as APN 134-0181-041. Any exceptions to, or deletions from, this practice are described in *Section 1.4* of this report. This assessment has revealed no evidence of existing, controlled, or historical recognized environmental conditions in connection with the property.

## 11.0 STATEMENT OF QUALIFICATIONS

Brusca Associates, Inc. is a multi-disciplinary geoscience consulting firm serving private and public-sector clients throughout Central and Northern California, and beyond. The firm specializes in environmental assessment and engineering geology consulting related to property acquisition, finance, due diligence, development, and regulatory compliance. Environmental services include: initial site assessment; soil, soil gas, and groundwater investigations; site characterization; groundwater monitoring; remedial feasibility studies; remedial design; and, clean-up oversight.

The Environmental Specialist for this study, Rachel Robles, holds a Bachelor of Science degree in Environmental Policy Analysis and Planning from the University of California at Davis, California. Ms. Robles is the Due Diligence Manager for Brusca Associates, Inc., and manages the firm's Phase I studies. Prior to joining Brusca Associates, Inc., Ms. Robles worked for AQUA Science conducting environmental and biologic testing and analyses. Prior to working with AQUA Science, Ms. Robles was employed with Area West Environmental and Arcadis performing environmental site assessment work. Ms. Robles' experience includes assistance with laboratory programs at the Crocker Nuclear Laboratory.

The firm's founder and President, Joe Brusca, directly oversees all firm operations. Mr. Brusca holds a Bachelor of Science degree in Geology from the University of California at Davis, California, is a Professional Geologist and Certified Engineering Geologist in the State of California, and has over 30 years of environmental and geological consulting experience spanning a broad range of geographic areas, project types, and client needs. Mr. Brusca and key staff are certified for Hazardous Waste Site Operations training in accord with 29 CFR 1910.120.

## 12.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in §312.10 of 40 CFR 312. An *Environmental Professional* is "a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20(e) and (f) of 40 CFR 312."





### 13.0 CLOSING

If you have any questions or require additional information, please contact the undersigned at (916) 677-1470.

Sincerely,

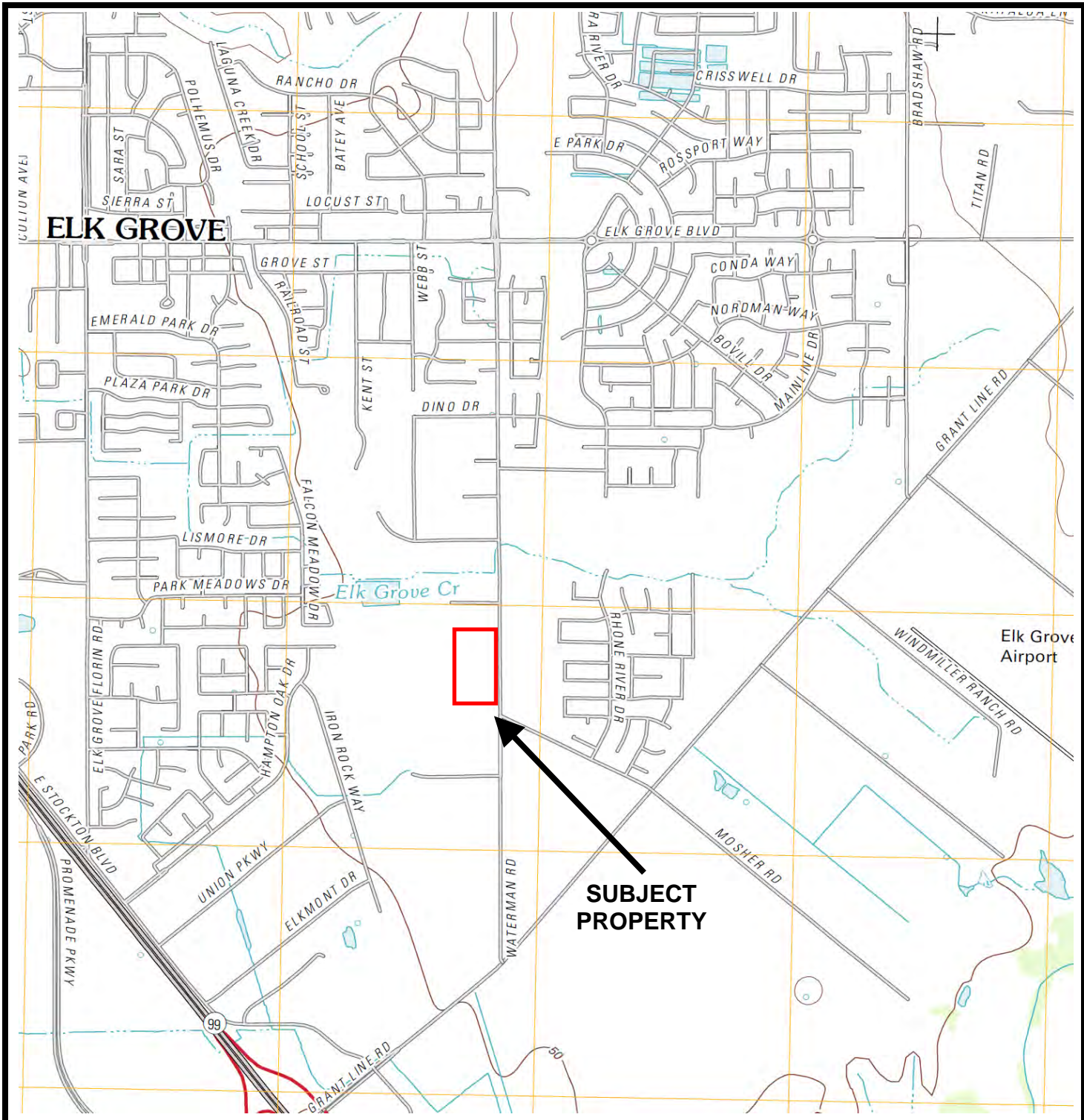
**BRUSCA ASSOCIATES, INC.**

Rachel Robles  
Environmental Specialist  
Due Diligence Manager



Joe Brusca  
Principal Engineering Geologist  
Certified Engineering Geologist No. 1948

RR:JB:rr



SOURCE: U.S.G.S. 7.5-minute Elk Grove Quadrangle, California, 2012  
 Scale 1:24,000

Boundaries are approximate



**PLATE 1 - VICINITY MAP**

**Waterman Road Property  
 Waterman Road  
 Elk Grove, California**

**PREPARED FOR:** Buzz Oates

**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/11/19

**PROJ. #:** 202-008





--- Approximate boundary of subject property



All features and locations are approximate only



**PLATE 2 - SITE MAP**  
**Waterman Road Property**  
**Waterman Road**  
**Elk Grove, California**

**PREPARED FOR:** Buzz Oates

**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/11/19

**PROJ. #:** 202-008

## **APPENDIX A – Photographs**

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Southerly view from northeast corner of site



Westerly view from northeast corner of site



Southwesterly view from northeast corner of site



Southerly view from northwest corner of site



Southeasterly view from northwest corner of site



Easterly view from westerly portion of site





Northerly view from southeast corner of site



Westerly view from southeast corner of site



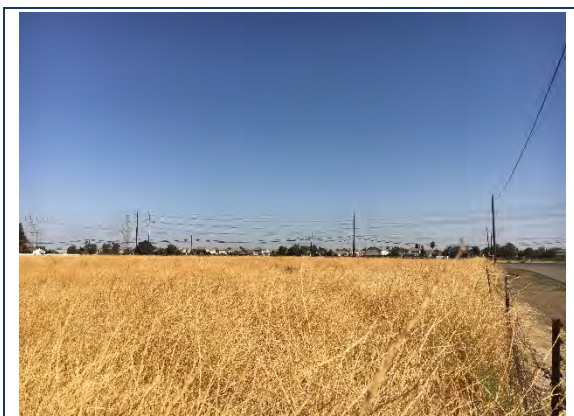
Northerly view from southerly portion of site



Northerly view from southwest corner of site



Northeasterly view from southwest corner of site



Easterly view from southwest corner of site

## **APPENDIX B – User Questionnaire**

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# USER QUESTIONNAIRE

This *User Questionnaire* is part of the *Phase I Environmental Site Assessment (ESA)*. To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments") the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Attach additional sheets if necessary for further explanation.

<b>User Representative Name:</b> <u>Cybil Bryant</u>	<b>Signature:</b> _____	<b>Date:</b> <u>9/23/19</u>
<b>Property Address:</b> <u>10000 Waterman Road</u>	<b>Parcel Number(s):</b> <u>134-0181-041</u>	

<p><b>1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>2. Are you aware of any activity and use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>3. Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>5a. Do you know the past uses of the property?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>5b. Do you know of specific chemicals that are present or once were present at the property?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>5c. Do you know of spills or other chemical releases that have taken place at the property?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>5d. Do you know of any environmental cleanups that have taken place at the property?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>
<p><b>6. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?</b></p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, Explain:</p>





**ADDITIONAL INFORMATION**

Certain information should be collected, if available, and provided to the environmental professional selected to conduct the Phase I ESA. This information is intended to assist the environmental professional but is not necessarily required to qualify for one of the LLPs.

<p><i>Why is the Phase I ESA required?</i> Standard due diligence</p>
<p><i>What is the nature of the property transaction (sale, purchase, exchange, bank loan, etc.)?</i> Property will be developed from vacant land into a 183k sf warehouse</p>
<p><i>What is the planned use of the property?</i> See above</p>
<p><i>Is there any scope of services desired or required beyond ASTM 1527 Phase I ESA 1527?</i> No</p>
<p><i>Identify all parties who will rely on the Phase I ESA report.</i> Buzz Oates</p>
<p><i>Are there any special terms or agreements which must be agreed upon by the environmental professional?</i> No</p>
<p><i>Is there any other knowledge or experience with the property (for example, copies of prior environmental reports or documents relative to the environmental conditions of the property)?</i> n/a</p>
<p><i>Identify the current owner of the property and how the owner can be reached.</i> PW Fund B LP - Contact Cybil Bryant 916-379-3834</p>
<p><i>Identify the site contact and how the contact can be reached.</i> Property manager is Lorri Schulte D: 916.379.3851Emergency Line: 800-229-9793</p>

## **APPENDIX C – Historical Information**

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- Aerial Photographs
- Topographical Quadrangle Maps
- Sanborn Fire Insurance Map Report
- Historical City Directories



**AERIAL PHOTOGRAPH - 2016  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624**

**PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC**

**DATE: 9/24/2019  
PROJ. #: 202-008**





Boundaries are approximate



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

**AERIAL PHOTOGRAPH - 2012  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624**

**PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC**

**DATE: 9/24/2019  
PROJ. #: 202-008**





Boundaries are approximate



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

**AERIAL PHOTOGRAPH - 2009  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624**

**PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC**

**DATE: 9/24/2019  
PROJ. #: 202-008**





**AERIAL PHOTOGRAPH - 2006  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624**

**PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC**

**DATE: 9/24/2019  
PROJ. #: 202-008**



Boundaries are approximate

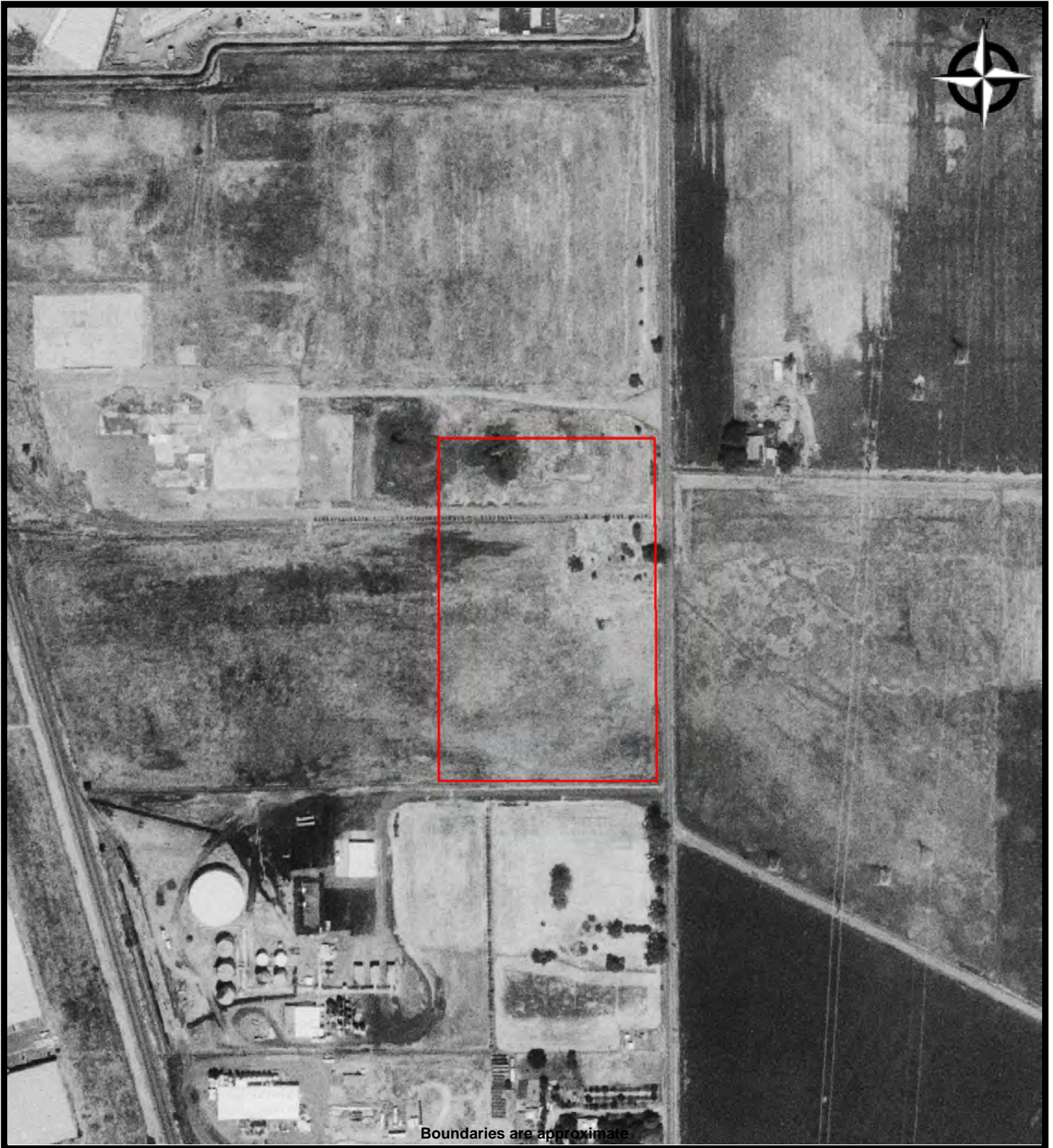


AERIAL PHOTOGRAPH - 1998  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008





AERIAL PHOTOGRAPH - 1993  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008





Boundaries are approximate



AERIAL PHOTOGRAPH - 1984  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008





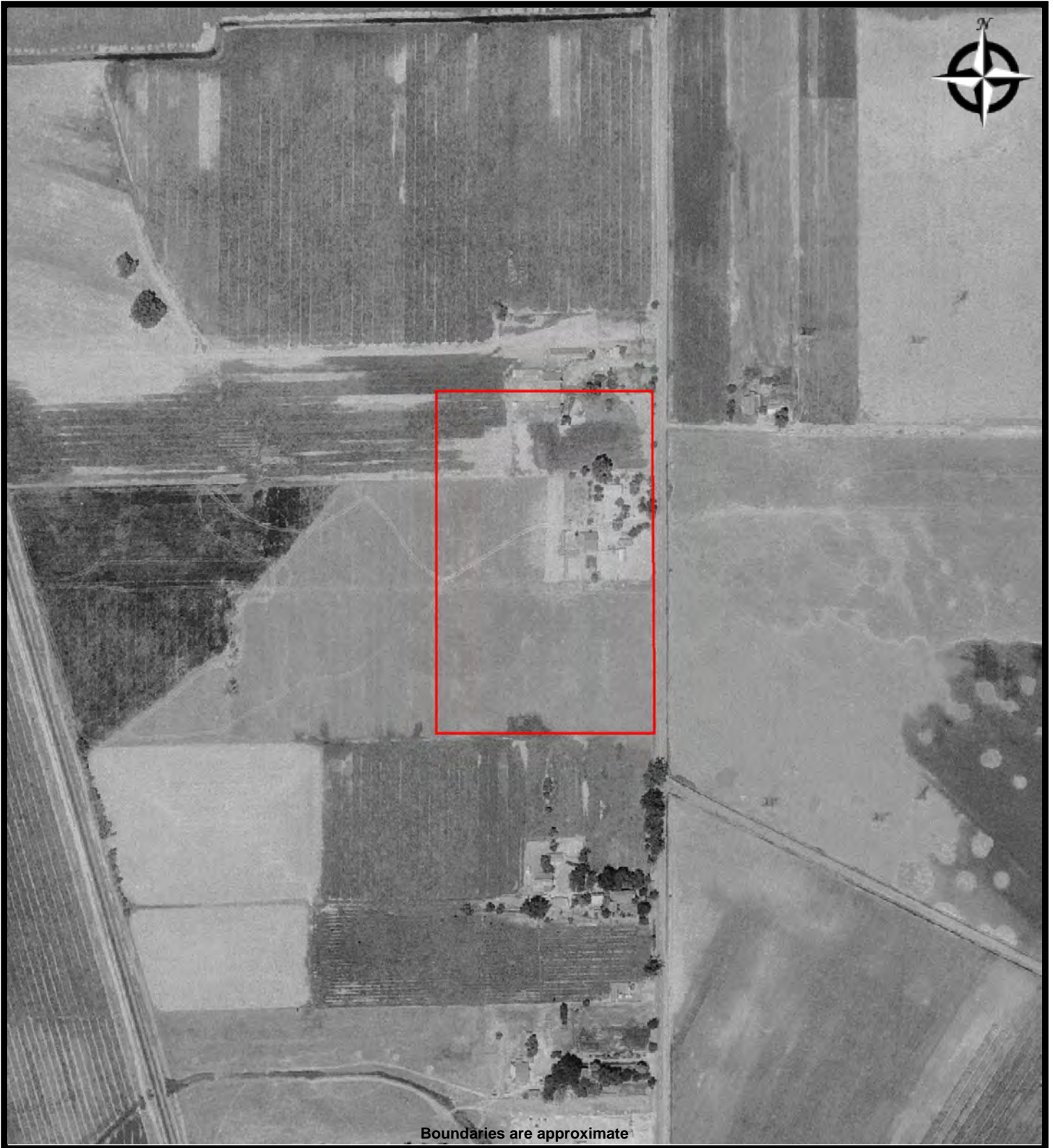
Boundaries are approximate



AERIAL PHOTOGRAPH - 1972  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008



Boundaries are approximate



AERIAL PHOTOGRAPH - 1966  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008





Boundaries are approximate



AERIAL PHOTOGRAPH - 1964  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008



Boundaries are approximate



AERIAL PHOTOGRAPH - 1957  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008





Boundaries are approximate

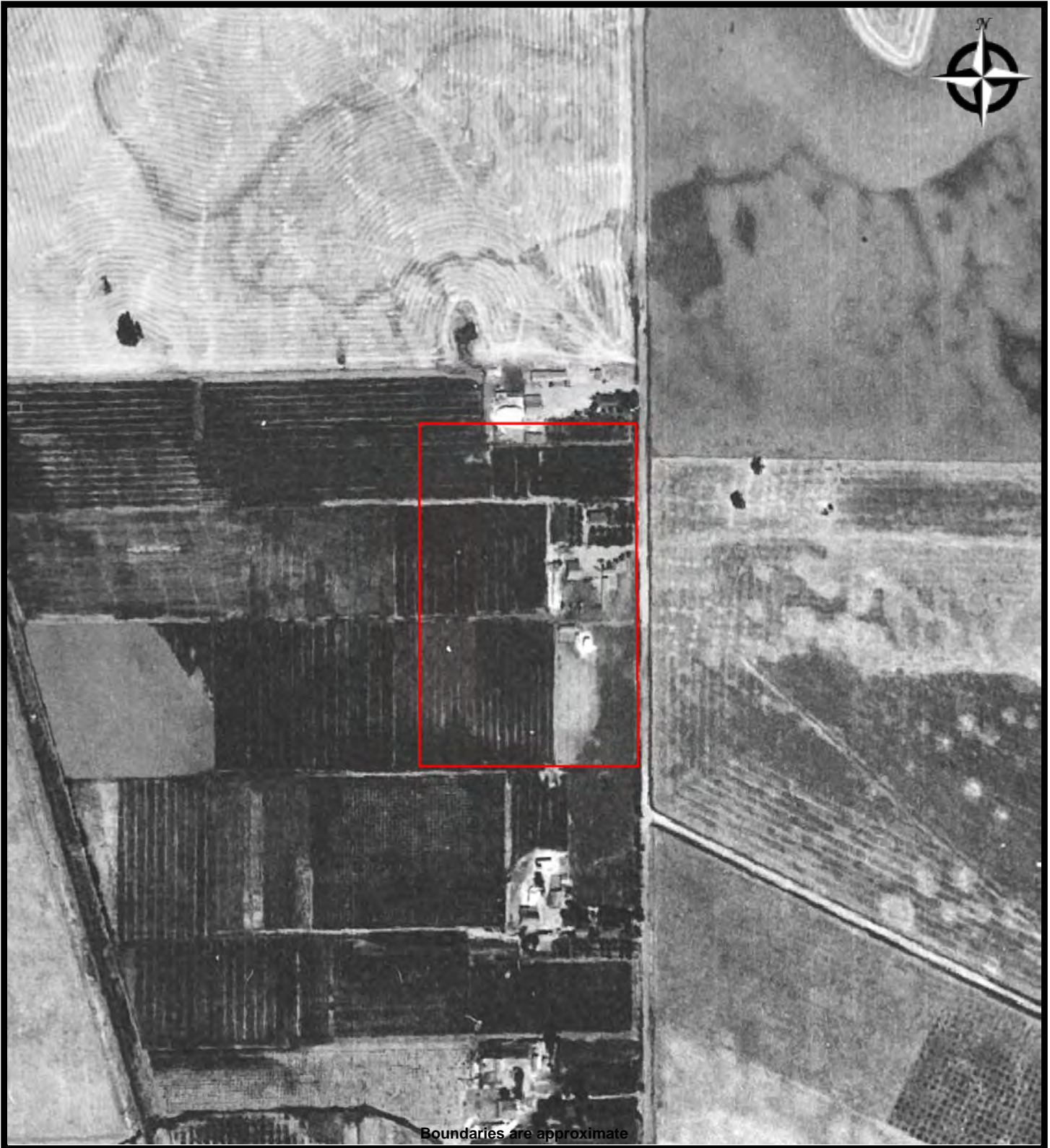


AERIAL PHOTOGRAPH - 1947  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008





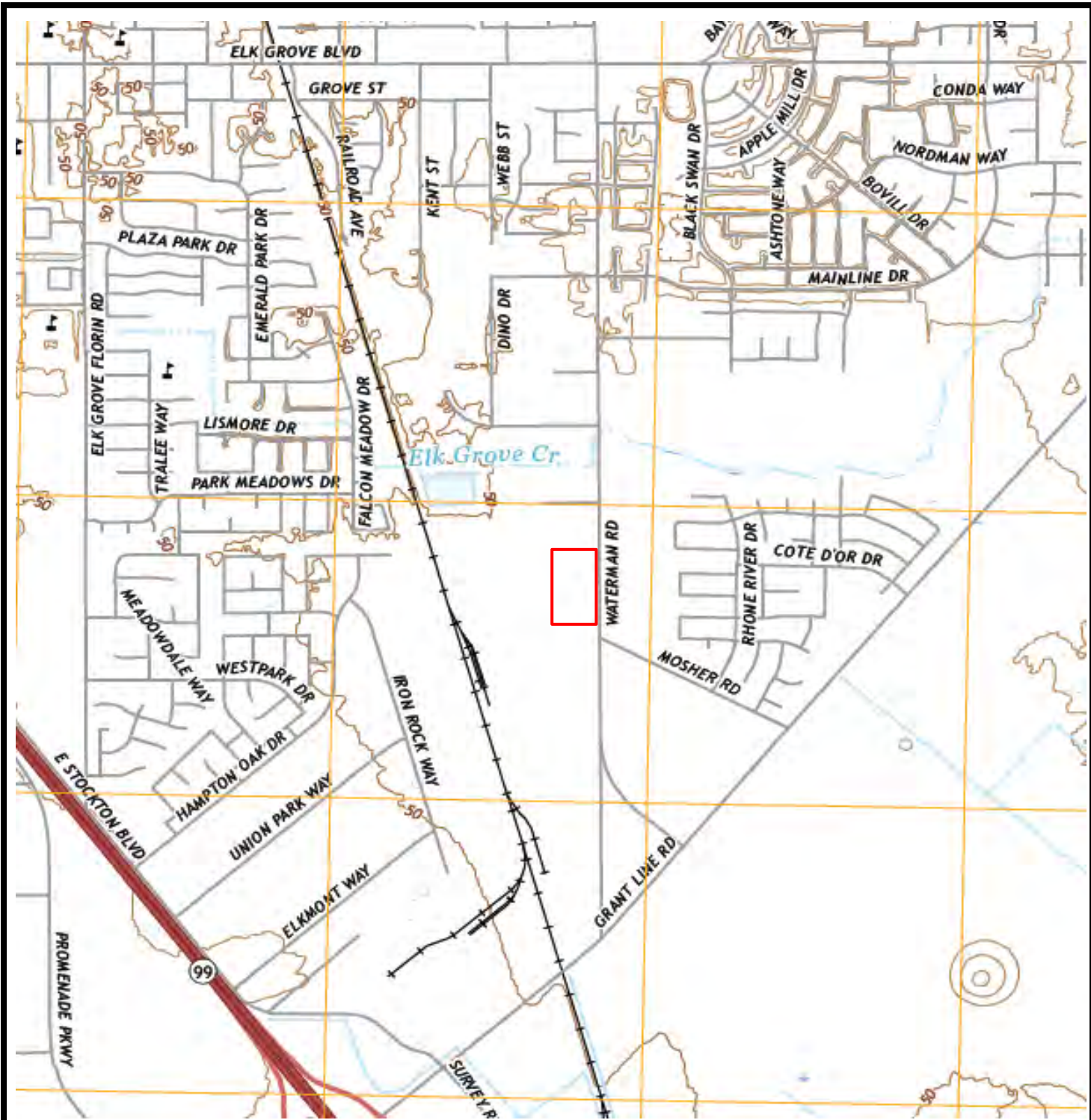
Boundaries are approximate



AERIAL PHOTOGRAPH - 1937  
WATERMAN ROAD PROPERTY  
Waterman Road  
Elk Grove, California 95624

PREPARED FOR: Buzz Oates  
PROJ. MGR: Rachel Robles  
DRAWN BY: AC

DATE: 9/24/2019  
PROJ. #: 202-008



Boundaries are approximate

Elk Grove Quadrangle, California



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

TOPO MAP - 2018  
WATERMAN ROAD PROPERTY  
WATERMAN ROAD  
ELK GROVE, CALIFORNIA

PREPARED FOR: Buzz Oates

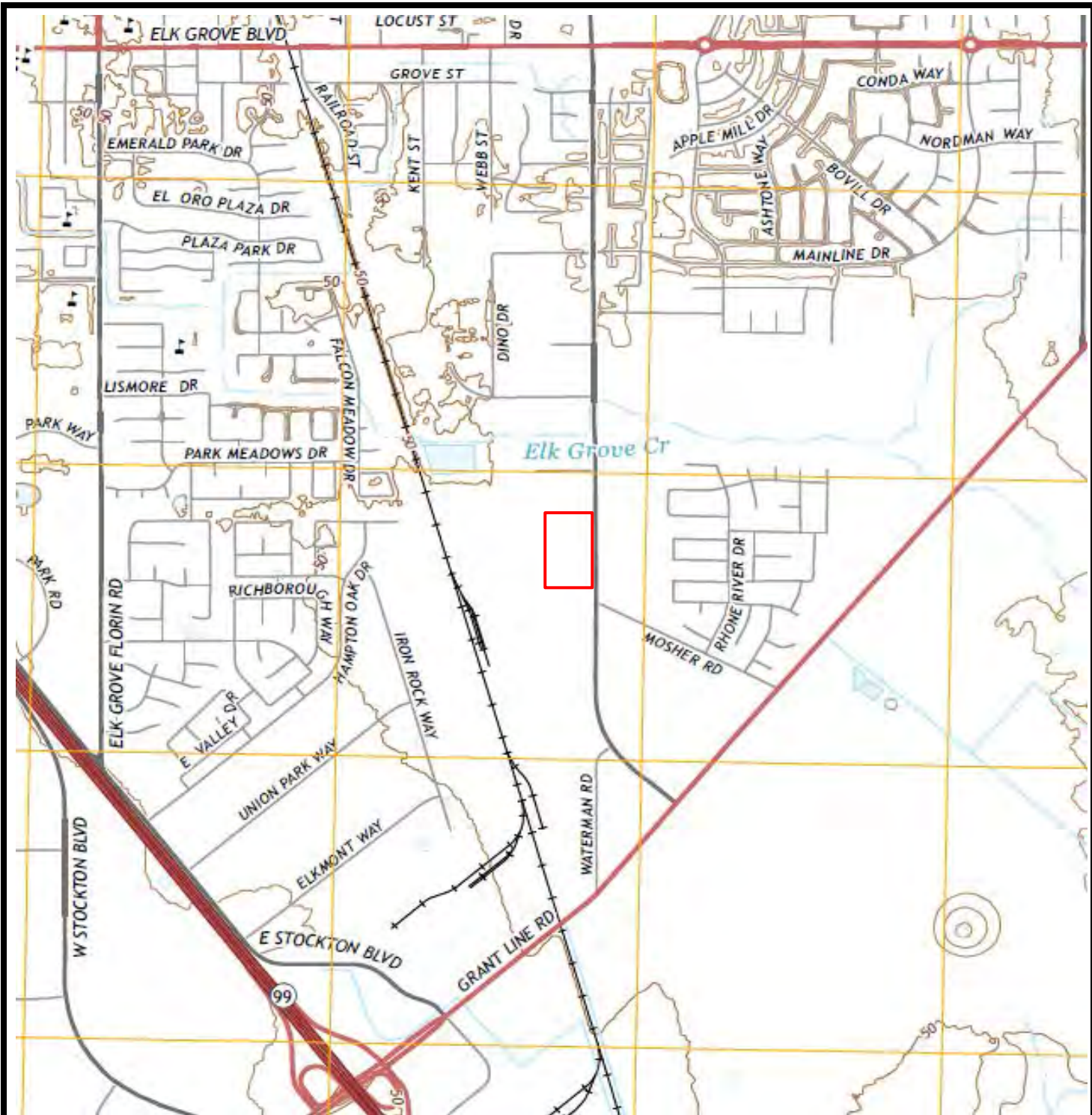
PROJ. MGR: Rachel Robles

DRAWN BY: AC

DATE: 9/25/19

PROJ. #: 202-008





Boundaries are approximate

Elk Grove Quadrangle, California



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

**TOPO MAP - 2015**  
**WATERMAN ROAD PROPERTY**  
**WATERMAN ROAD**  
**ELK GROVE, CALIFORNIA**

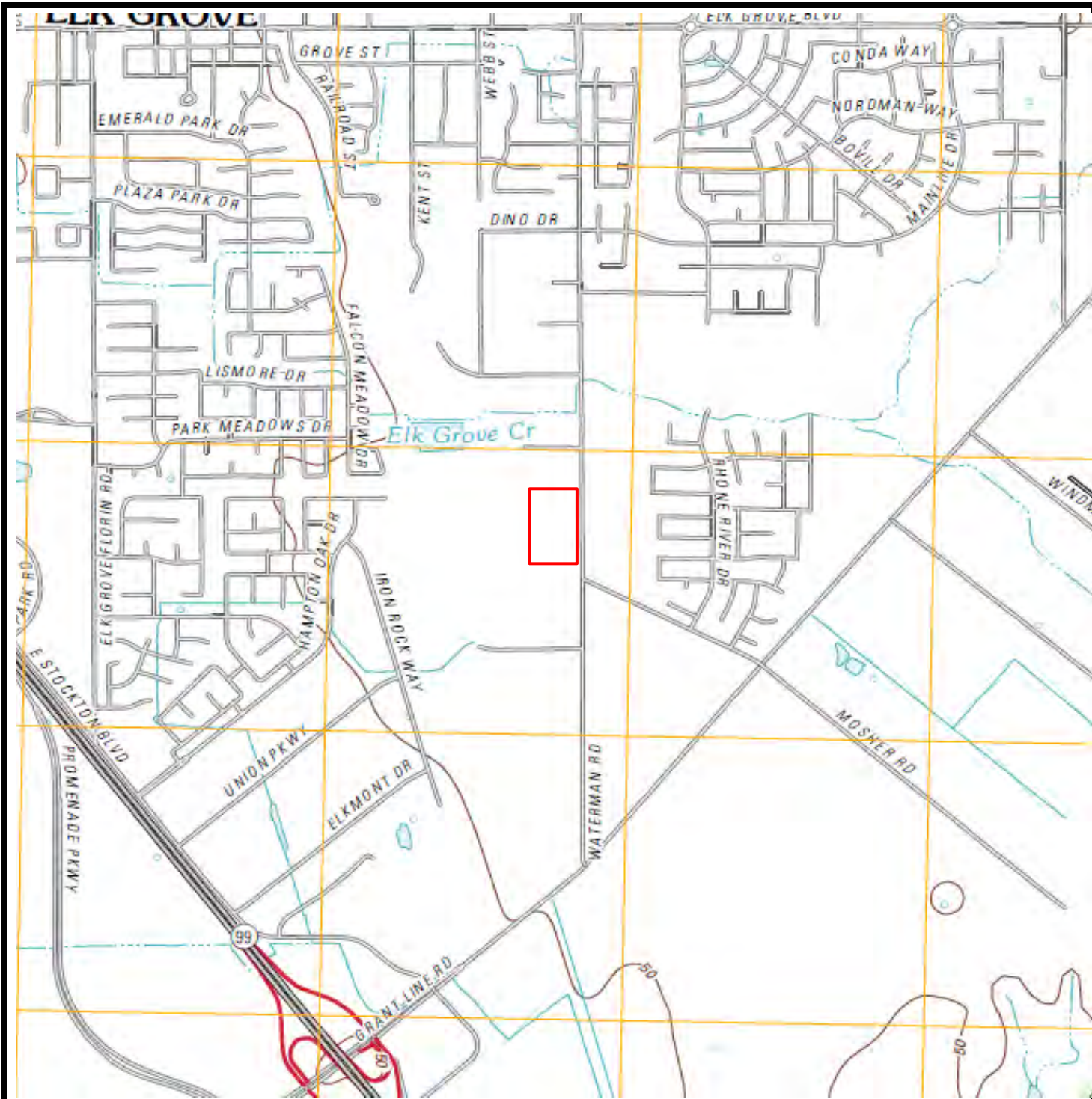
**PREPARED FOR:** Buzz Oates

**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/25/19

**PROJ. #:** 202-008



Boundaries are approximate

Elk Grove Quadrangle, California



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

**TOPO MAP - 2012**  
**WATERMAN ROAD PROPERTY**  
**WATERMAN ROAD**  
**ELK GROVE, CALIFORNIA**

**PREPARED FOR:** Buzz Oates

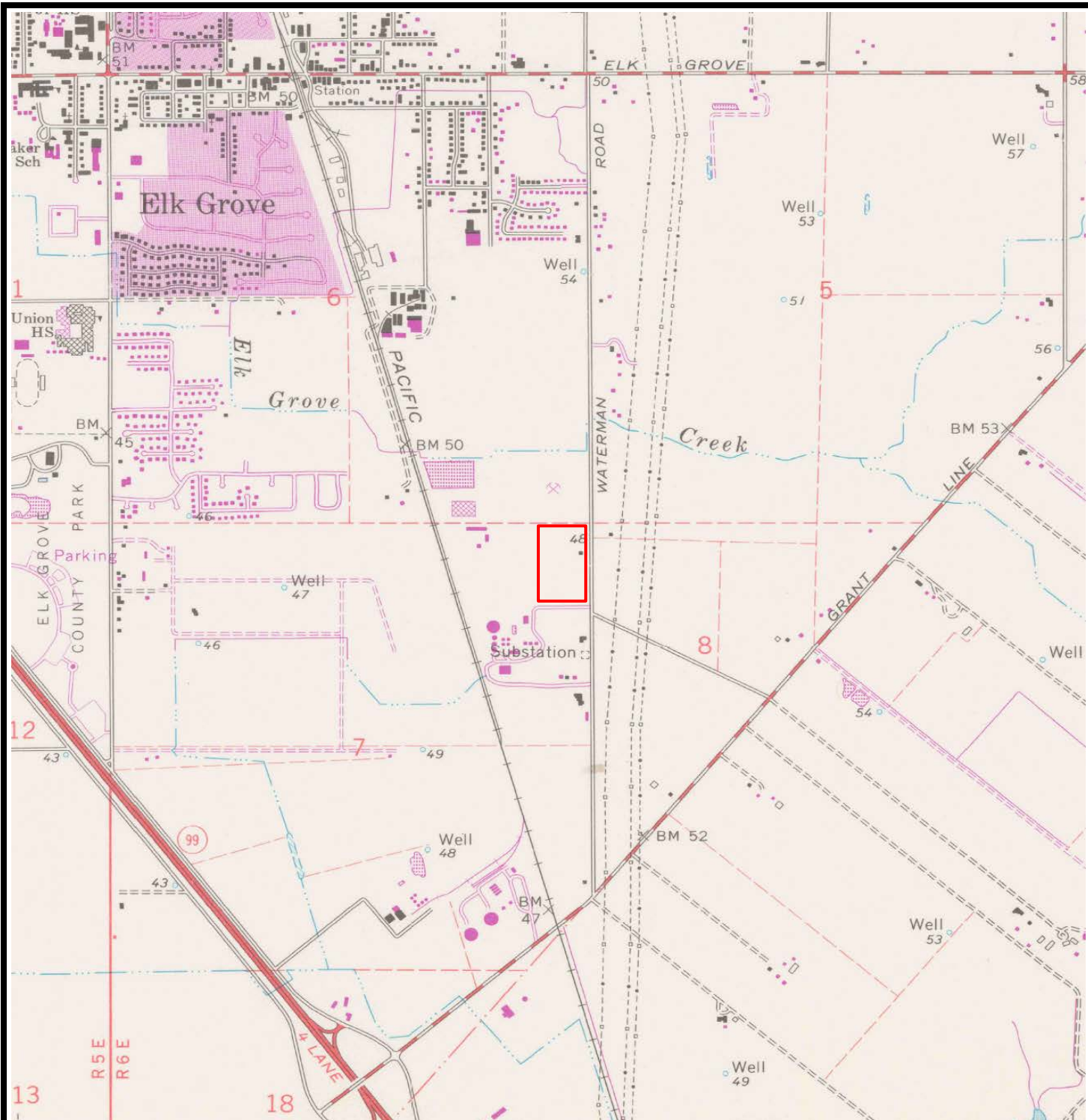
**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/25/19

**PROJ. #:** 202-008





Boundaries are approximate

Elk Grove Quadrangle, California



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

**TOPO MAP - 1968**  
**WATERMAN ROAD PROPERTY**  
**WATERMAN ROAD**  
**ELK GROVE, CALIFORNIA**

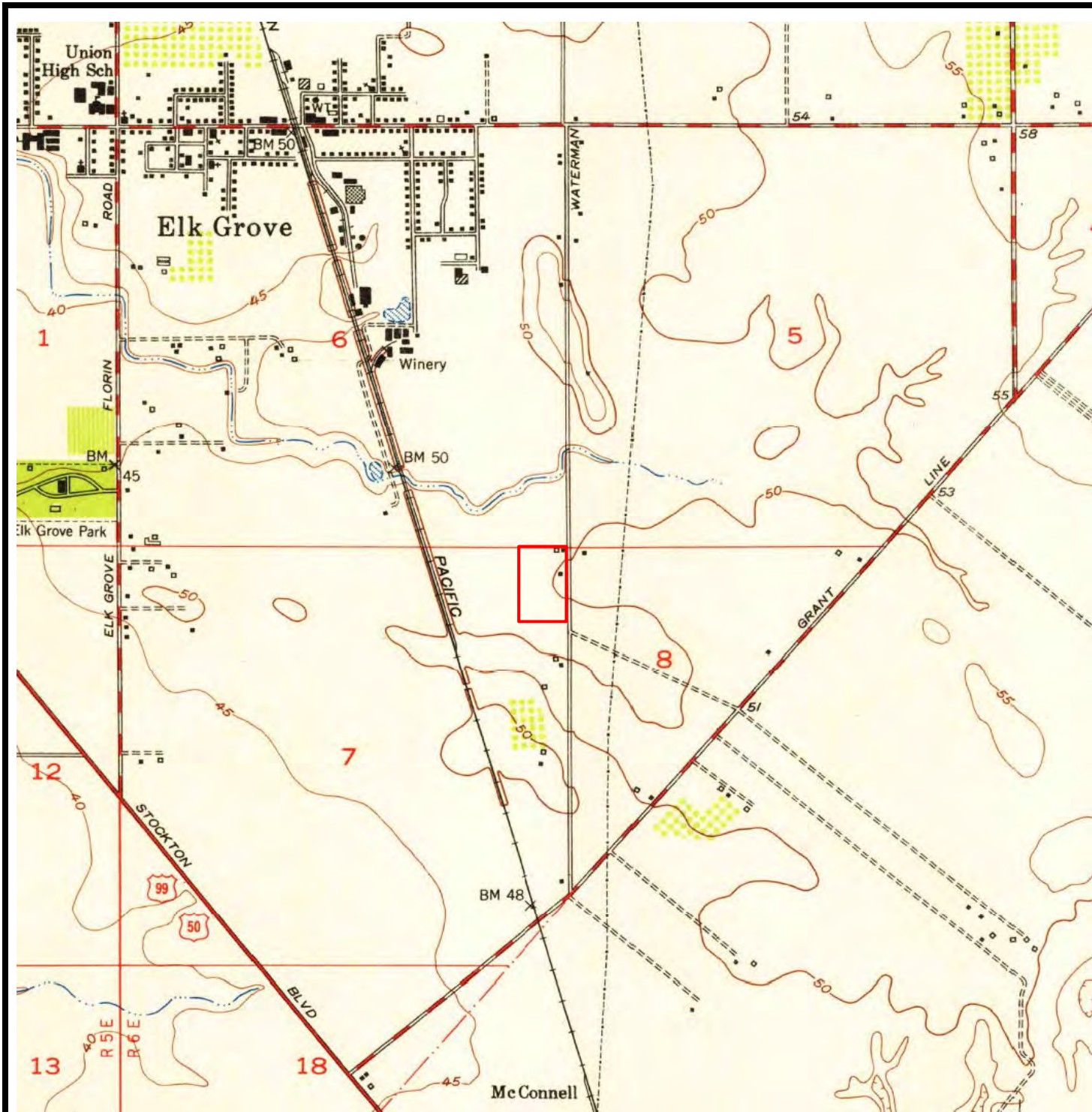
**PREPARED FOR:** Buzz Oates

**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/25/19

**PROJ. #:** 202-008



Boundaries are approximate

Elk Grove Quadrangle, California



**Brusca**  
Associates, Inc.  
Environmental Engineering Geology

**TOPO MAP - 1952**  
**WATERMAN ROAD PROPERTY**  
**WATERMAN ROAD**  
**ELK GROVE, CALIFORNIA**

**PREPARED FOR:** Buzz Oates

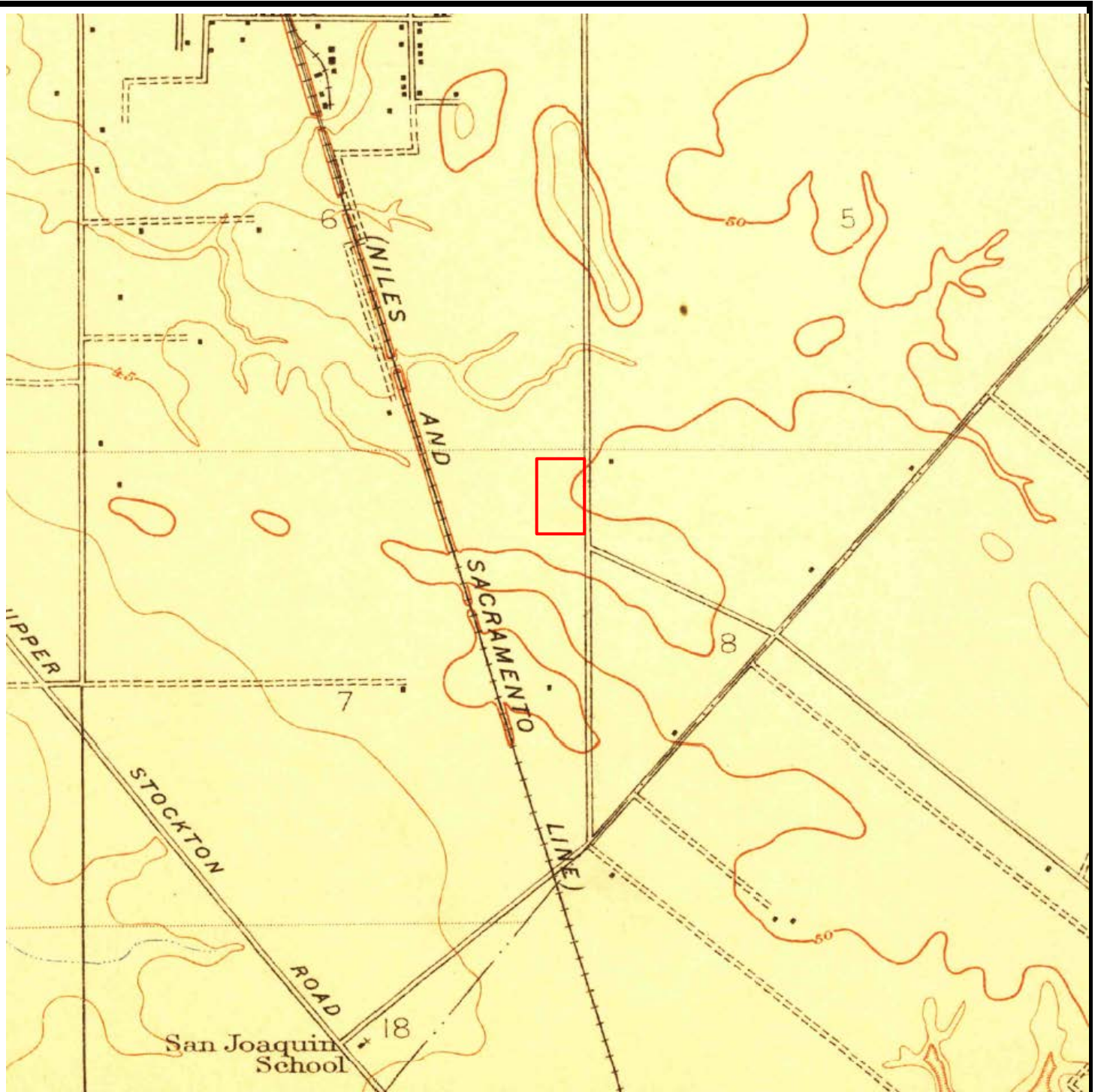
**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/25/19

**PROJ. #:** 202-008





Boundaries are approximate

Elk Grove Quadrangle, California



**Brusca**  
 Associates, Inc.  
 Environmental Engineering Geology

**TOPO MAP - 1909**  
**WATERMAN ROAD PROPERTY**  
**WATERMAN ROAD**  
**ELK GROVE, CALIFORNIA**

**PREPARED FOR:** Buzz Oates

**PROJ. MGR:** Rachel Robles

**DRAWN BY:** AC

**DATE:** 9/25/19

**PROJ. #:** 202-008



Waterman Road Property

10000 Waterman Road

Elk Grove, CA 95624

Inquiry Number: 5800264.3

September 23, 2019

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

09/23/19

**Site Name:**

Waterman Road Property  
10000 Waterman Road  
Elk Grove, CA 95624  
EDR Inquiry # 5800264.3

**Client Name:**

Brusca Associates, Inc.  
PO Box 332  
Roseville, CA 95661  
Contact: Rachel Robles



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Brusca Associates, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

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## Certified Sanborn Results:

**Certification #** 4A93-4DF3-919B  
**PO #** NA  
**Project** Waterman Rd Property

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 4A93-4DF3-919B

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- Library of Congress
- University Publications of America
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**Waterman Road Property**

Waterman Road  
Elk Grove, CA 95624

Inquiry Number: 5803477.1  
September 30, 2019

# The EDR-City Directory Image Report



## TABLE OF CONTENTS

### SECTION

Executive Summary

Findings

City Directory Images

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

*infoUSA*<sup>®</sup>

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### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1987	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1982	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1977	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory
1972	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Haines Criss-Cross Directory

## FINDINGS

### TARGET PROPERTY STREET

Waterman Road  
Elk Grove, CA 95624

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### WEBB ST

2014	pg A2	EDR Digital Archive
2010	pg A5	EDR Digital Archive
2005	pg A8	EDR Digital Archive
2000	pg A10	EDR Digital Archive
1995	pg A12	EDR Digital Archive
1992	pg A14	EDR Digital Archive
1987	pg A16	Haines Criss-Cross Directory
1987	pg A17	Haines Criss-Cross Directory
1982	pg A19	Haines Criss-Cross Directory
1977	pg A21	Haines Criss-Cross Directory
1972	pg A23	Haines Criss-Cross Directory

## FINDINGS

### CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### WATERMAN RD

2014	pg. A1	EDR Digital Archive
2010	pg. A4	EDR Digital Archive
2005	pg. A7	EDR Digital Archive
2000	pg. A9	EDR Digital Archive
1995	pg. A11	EDR Digital Archive
1992	pg. A13	EDR Digital Archive
1987	pg. A15	Haines Criss-Cross Directory
1982	pg. A18	Haines Criss-Cross Directory
1977	pg. A20	Haines Criss-Cross Directory
1972	pg. A22	Haines Criss-Cross Directory

## **City Directory Images**

**WATERMAN RD 2014**

10090 PARAMOUNT PETROLEUM CORP  
10144 ACADEMY PRODUCTS  
HCO HOLDING I CORPORATION  
SUPER WASTE RECYCLING CENTER

## WEBB ST 2014

9612	OCCUPANT UNKNOWN,
9616	MARINO, SHAYNE N
9621	ABED, LUTFI G
	ALGOZO, KATRINA
	BALLESTEROS, FLORENCIO
	BARGSTADT, ANDREA
	BARRERAS, JENNIFER
	BAUER, JESSICA
	BROWN, SHIELA
	CARRILLO, RAUL J
	CLAWSON, SAMANTHA B
	COUGHLAN, JARED J
	DUFF, JEANETTE C
	FITNESS TEMPLE
	GIBSON, SHYANNA
	GIDEON, RENEE D
	GUTIERREZ, ALECIA C
	HANEY, KEVIN L
	HOBART, JEFFREY V
	ITANI, KHALED
	JOHNSON, PETE
	KONSHAK, TERESA M
	LINTNER, BILL A
	MARTIN, ATHENA
	MCKINSTRY, SCOTT D
	MONK, ONTRIEL
	MORENO, ALMEIDA J
	MYERS, JAMES F
	ONEIL, JENNIFER N
	PHILLIPS, DEXTER S
	SMITH, MATHEW R
	SMOOT, ALVA
	THOME, REGINA L
	TRIMBLE, CYNTHIA D
	VALDEZ, B
	VERNER, LAVERNE E
9635	HANSJERGEN, JANE L
9643	AZEVEDO, GLEN F
9644	KAMMERER, DAVID
9647	WAGNER, YOUNG H
9650	HALTEH, GHASSAN S
9651	DAVIS, DANIEL E
9653	DOBBS, CONLEY
9656	ROBINSON, MICHAEL L
9664	WORMINGTON, KEITH
9666	BATESEL, E
9668	BERENS, BARBARA J
9670	FORDERER, LEO A
9677	FLOORING OPTIONS INC
	LAUER, JOHN E

**WEBB ST 2014 (Cont'd)**

9681 TRIFFO, BENJAMIN J  
9682 STENROOS, KEITH E  
9683 OCCUPANT UNKNOWN,  
9684 BAUDER, STEPHANY D  
BIG COUNTRY DESIGNS  
9686 FAIR HAVENS CONSULTING INC  
9687 PURTELL, JESSICA  
9690 LEMIRE, THOMAS D  
9691 CROCKETT, DENNIS M  
WELLBODY21  
9696 BERGEN, HELEN M  
9716 TYLER, J G  
9720 MARRIOTT, RON



### WATERMAN RD 2010

10060	WATERMAN SELF STORAGE
10090	CONOCOPHILLIPS COMPANY PARAMOUNT PETROLEUM CORP
10144	ACADEMY PRODUCTS

## WEBB ST 2010

9612 OCCUPANT UNKNOWN,  
 9618 AGUAYO-JR, RALPH  
 9620 ALVAREZ, THOMAS  
 9621 ARCHIBALD, MICHELLE  
 AREVALO, LEVI A  
 BARRY, LONNIE T  
 BRANDON, SHAWN D  
 COUGHLAN, JARED J  
 CROMWELL, DIANA  
 DIAZ, AMY  
 DUFF, JEANETTE C  
 FITNESS TEMPLE  
 GIDEON, DENISE  
 GOSLING, KEN J  
 HARKIRAT, SINGH  
 JOHNSON, PETE  
 LAND, JANET  
 MATIS, YOLANDA R  
 MCKINSTRY, SCOTT D  
 MENOR, PHILIP P  
 MYERS, JAMES F  
 RUSSELL, SUZANNE J  
 VANWARMERDAM, WIM L  
 WEATHERS, RICHARD L  
 9635 HERTZBERG, ALANSON L  
 9643 AZEVEDO, GLEN F  
 9644 SEYMOUR, JACKSON  
 9647 JONES, ANNETTE L  
 9650 OCCUPANT UNKNOWN,  
 9651 POCAN, LUCINDA C  
 9653 DOBBS, CONLEY  
 9656 ROBINSON MIKE CONSTRUCTION  
 ROBINSON, MICHAEL L  
 9657 WOLDHAGEN, KENNY G  
 9666 BATESEL, E  
 9668 BERENS, BARBARA J  
 9670 FORDERER, LEO R  
 9674 HUTCHINSON, HOWARD N  
 9677 885 HALIDON LLC  
 FLOORING OPTIONS INC  
 LAUER, JOHN E  
 TAZCO ENTERPRISES INC  
 9681 QUINN, KELLY A  
 9682 STENROOS, KEITH E  
 9683 OCCUPANT UNKNOWN,  
 9684 OCCUPANT UNKNOWN,  
 9686 OCCUPANT UNKNOWN,  
 9687 OCCUPANT UNKNOWN,  
 9690 LEMIRE, THOMAS D  
 9691 CROCKETT, REBECCA

**WEBB ST      2010      (Cont'd)**

9691    WELLBODY21  
9696    BERGEN, HELEN M  
9699    CROCKETT, DENNIS M  
9716    COMERFORD, MISHELLE M  
9720    CP DRILLING  
         OCCUPANT UNKNOWN,

**WATERMAN RD 2005**

10000 D & S SELF STORAGE  
10060 WATERMAN SELF STORAGE  
10090 PARAMOUNT PETROLEUM CORP  
10144 ACADEMY PRODUCTS  
HENRY COMPANY



-

**WEBB ST 2005**

9612 RAHEEN, MOHAMMAD  
 9620 YENOWINE, LARRY  
 9621 ANDERSON, CRYSTAL L  
 ARMSTRONG, DAVID C  
 BARGSTADT, ANDREA  
 BARRY, LONNIE T  
 BRICCA, SERGIO  
 DUFF, FLOYD  
 HANSJERGEN, NAOMI H  
 HEBERT, CHANEL F  
 HOBBS, LYLE R  
 HOLLENSHEAD, AMANDA C  
 HUNTER, RYAN S  
 MORIARTY, ROBERT J  
 MYERS, JAMES F  
 SKIPPLE, STEVE M  
 SMOOT, ALVA  
 VANWARMERDAM, WIM L  
 WALTON, SUE  
 WER, ALEXIS  
 9635 COMPLETE COMPUTER SOLUTIONS  
 HERTZBERG, ALANSON L  
 9643 AZEVEDO, GLEN F  
 9644 SEYMOUR, JACK R  
 9647 WAGNER, YOUNG H  
 9650 A HUNT PAINTSTANDS  
 WEST, ERIC  
 9653 WHITE, CURTIS J  
 9656 ROBINSON, MICHAEL L  
 9657 WOLDHAGEN, KENNY  
 9664 OCCUPANT UNKNOWN,  
 9668 BERENS, BARBARA J  
 9670 FORDERER, LEO A  
 9674 HUTCHISON, NEAL  
 9677 LAUER, JOHN E  
 9681 MCGARVEY, EILEEN  
 9682 STENROOS, KEITH E  
 9686 MCCANN, FRANK  
 9687 STEWART, JAMES D  
 9690 LEMIRE, THOMAS D  
 9691 SCHULZE, GERALDINE E  
 9696 BERGEN, HELEN M  
 9699 COMTECH ALL ABOUT COMPUTI  
 CROCKETT, DENNIS M  
 9716 COMERFORD, MISHELLE M  
 9720 ELK GRV BPOE LODGE 2577  
 OCCUPANT UNKNOWN,

**WATERMAN RD 2000**

10090 PARAMOUNT PETROLEUM CORP  
10144 HENRY COMPANY

**WEBB ST 2000**

9616 SPOTTS, DAVID  
9618 CASTLE, ERNEST  
9621 ABBOTT, DUANE  
BERKE, ERIN  
CARLSON, MARY E  
CASTON, ANTHONY  
CHERRINGTON, LON F  
COOPER, LINDA  
DRENNAN, JILL  
FURCINITTI, LAURA A  
GRIM, MICHAEL L  
HUFF, WILLIAM V  
HURST, J K  
MAXWELL, DONITA  
MURILLO, MARIA  
PARKS, KARYN K  
PILKINGTON & PARTNERS  
STRACK, BILLIE J  
YOON, ALICE M  
9635 HERTZBERG, LANNY  
9643 AZVEDO, GLENN F  
9644 WHITE, LOTTIE  
9647 HEGGI, DANIEL L  
9650 HUNT, ALAN R  
9651 DAVIS, DANIEL E  
9653 SILVA, GLENN M  
9656 ROBINSON, MICHAEL  
9668 BERENS, LLOYD B  
9670 FORDERER, LEO  
9677 LAUER, JOHN E  
9681 MCGRATH, PHILIP  
9682 STENROOS, KEITH E  
9683 STOUT, CELEXY R  
9684 MCCANN, FRANK J  
9686 OCCUPANT UNKNOWN,  
9687 STEWART, JAMES D  
9690 LOWERY, ERNEST  
9691 SCHULZE, G E  
9699 COMTECH ALL ABOUT COMPUTI  
CORCKETT, RANDY  
9716 OCCUPANT UNKNOWN,  
9720 MARRIOTT, RON

**WATERMAN RD 1995**

10090 CONOCO INC  
10144 ACADEMY PRODUCTS  
WORLD ASPHALT COMPANY



**WEBB ST 1995**

9618	CASTLE, ERNEST
9621	BARBER, MONIQUE
	DERR, GERALD
	HUNTER, JAMES
	KELLY, JUDY
	MAZZUCHI, GEORGE
	MUNIER, CONNIE M
	PILKINGTON & PARTNERS
	RICHARDSON, EARL
	SHOOK, J
	SILVA, MARY L
	VALLAS, PAUL
	WEST, JUDY
9635	HERTZBERG, LANNY
9643	AZVEDO, GLENN F
9644	SUMMERS, RICK B
9647	OCCUPANT UNKNOWNN
9648	SNYDER, ERIC P
9650	HUNT, ALAN R
9651	OCCUPANT UNKNOWNN
9653	OCCUPANT UNKNOWNN
9656	ROBINSON, MICHAEL
9657	OCCUPANT UNKNOWNN
9664	OCCUPANT UNKNOWNN
9666	OCCUPANT UNKNOWNN
9668	BERENS, LLOYD B
9677	HADAWAY, JEFFERY
9681	OCCUPANT UNKNOWNN
9682	STENROOS, KEITH E
9683	OCCUPANT UNKNOWNN
9684	MIKELSON, ROBERT C
9687	STEWART, JAMES D
9690	OCCUPANT UNKNOWNN
9691	SCHULZE, G E
	SEILER DOUGLAS
9696	POMEROY, MARY
	VASSAUR, FRED
9699	OCCUPANT UNKNOWNN
9716	TAYLOR, STUART
9720	MARRIOTT, RON

**WATERMAN RD 1992**

10000 KINGSFORD PRODUCTS CO THE  
10090 CONOCO INC  
10144 ACADEMY PRODUCTS  
WORLD ASPHALT COMPANY

**WEBB ST 1992**

9618 CASTLE, ERNEST  
9621 GREGORY, DAVE  
OAK GROVE APTS  
SHOOK, J  
SNYDER, S  
9635 HERTZBERG, LANNY  
9643 AZVEDO, GLENN F  
9644 SUMMERS, RICK B  
9647 WAGNER, JOHN  
9653 KAMMERER, JACK  
9656 ROBINSON, MICHAEL  
9677 J&E RACING  
9687 STEWART, JAMES D  
9690 LOWERY, ERNEST G  
9691 SCHULZE, G E  
9696 VASSAUR, FRED  
96962 POMEROY, MARY

## WATERMAN RD 1987

9766	★ COUNTRY CERAMICS	685-1337	+7
	★ J&L TIRE	685-1156	+7
	★ NEALS PLANT EXCHNG	686-5188	+7
	★ WEITNAUER POOL	685-7544	+7
9846	XXXX	00	
9879	XXXX	00	
9891	XXXX	00	
10001	HUDSON ROBERT J	685-9681	2
10090	★ CONOCO INC	685-9253	4
10144	★ ACADEMY PRODUCTS	685-2270	9
	★ WORLD ASPHALT CO	685-2000	
10200	★ ELK GRV SC PURCHSNG	686-7773	5
	★ ELK GRV SC WRHS	686-7779	6
	★ LINDCRAFT	685-5022	4
	★ MILES PLASTICS	686-6625	+7
	★ VICE GEORGE&SONS	685-5349	5
	B★ 10 TO 7 AUTO REPAIR	685-8777	4
10250	★ ELK GRV AUTO DSMTLR	685-2583	6
10260	★ ELK GRV READY MIX	685-5900	1
10286	★ PAC READY MIX INC	685-7650	1
10326	★ DECO DESIGN	685-1599	5
NO #	IANNI ARMONDO	685-3253	
NO #	★ KINGSFORD COMPANY	685-3925	8
NO #	KOETITZ ROBERT A	682-8651	6
	★ 20 BUS 36 RES 10 NEW		



-

WEBB ST 1987

WEAVER WAY 95667  
PLACERVILLE

619	TAPPAN MARVIN E	622-3248	4
623	FREEMAN MARK	626-9694	5
627	XXXX	00	
629	XXXX	00	
631	XXXX	00	
633	XXXX	00	
641	ROBERTS ROBT E JDGE	622-3737	
★	0 BUS	7 RES	0 NEW

WEBB 95624 ELK GROVE

9616	CROCKER MICHAEL P	685-8761	+7
9620	XXXX	00	
9621	XXXX	00	
9635	XXXX	00	
9643	AZVEDO GLENN F	685-5323	3
9644	SUMMERS RICK B	685-4216	
9647	WAGNER JOHN	685-4379	8

WEBB ST 1987

..WEBB		95624 CONT..	
9651	XXXX	00	
9653	KAMMERER JACK	685-4502	
9656	ROBINSON MICHAEL	686-6208	+7
9666	HOUSH FRED R	685-3149	
9668	XXXX	00	
9670	FORDERER LEO	685-4265	0
9677	JOHNSON BERLAND	685-3486	
9682	HEITZMANN FRED	685-7171	0
9684	XXXX	00	
9686	XXXX	00	
9690	LOWERY ERNEST G	685-3329	
9691	SCHULZE GERALDINE E	685-3354	0
	SEILER DAVID	685-5619	6
9696	XXXX	00	
9699	XXXX	00	
9720	★ELK GRV BPOE 2577	686-9978	6
NO #	★CATTLE PALACE AUCTN	685-9503	4
NO #	MARRIOTT RON	685-9503	
	★ 2 BUS	23 RES	2 NEW

## WATERMAN RD 1982

9557	XXXX	00	
9625	XXXX	00	
9716	XXXX	00	
9717	BOREM SCOTT R	685-2609	8
9727	RUMPH TERRY C	685-2263	+2
9755	XXXX	00	
9846	MURPHEY C E	685-3285	0
9879	MELAVIC ANTHONY A	685-3397	+2
9891	XXXX	00	
10001	HUDSON ROBERT J	685-9681	+2
10090	DOUGLAS OIL CO	685-9253	4
10144	ACADEMY PRODUCTS	685-2270	9
	WORLD ASPHALT CO	685-2000	7
10200	SUNSET TERRAZO CO	685-9571	0
10250	XXXX	00	
10260	ELK GROVE READY MIX	685-5900	1
10286	PACIFIC READY MIX	685-7650	1
NO #	BRASHEAR LEO	685-3079	4
NO #	DAVE RAULIEN DSTRBT	685-4287	8
NO #	IANNI ARMONDO	685-3253	
NO #	KINGSFORD COMPANY	685-3925	8
NO #	RAULIEN DAVE	685-4287	
★	10 BUS	27 RES	4 NEW

## WEBB ST 1982

WEBB 95624 ELK GROVE			
9616	EDGAR RON	685-5999	0
9620	XXXX	00	
9621	ROGGERO LEONARD W	685-3211	
9635	XXXX	00	
9644	SUMMERS RICK B	685-4216	5
9647	WAGNER JOHN	685-4379	8
9651	FROST R	685-4279	3
9653	KAMMERER JACK	685-4502	
9656	SULLIVAN DARYL	685-6243	9
9666	HOUSH FRED R	685-3149	
9668	XXXX	00	
9670	FORDERER LEO	685-4265	0
9677	JOHNSON BERLAND	685-3486	4
9682	HEITZMANN FRED	685-7171	0
9684	XXXX	00	
9686	ALDERSON CLIFFORD	685-7047	+2
9690	LOWERY ERNEST G	685-3329	
9691	SCHULZE G E	685-3354	0
9696	BRIGGS L M	685-4269	
9699	XXXX	00	
9720	ELK GROVE BPOE 2577	685-9978	9
NO #	MARRIOTT RON	685-9503	
NO #	SAXON ETHEL M	685-4788	
★	1 BUS	22 RES	1 NEW



## WATERMAN RD 1977

## WATERMAN RD 95624 ELK GROVE

2030	SORK TERRY	685-4698	6
8615	XXXX	00	
8732	TOCCO LEO	682-3870	+7
9107	KRAUSE LAURENCE E	685-5478	+7
9150	GROSZ WILBUR	685-3844	1
9160	DINWIDDIE THOMAS G	685-5069	+7
9180	COOK JAMES	685-2853	+7
9545	KINKADE JACK O	685-4701	+7
9557	MURPHEY C E	685-3285	+7
9625	TERRY RON	685-5548	+7
9716	HALL MICHAEL K	685-9022	+7
9891	XXXX	00	
10090*	DOUGLAS OIL CO	685-9253	4
10144*	ACADEMY PRODUCTS	685-2270	+7
	*WORLD ASPHALT CO	685-2000	+7
10250*	TOKAY AUTO WRECKERS	685-4203	5
NO #	BRASHEAR LEO	685-3079	4
NO #	*GULF OIL DISTRIBUTOR	685-4287	
NO #	*HOBBS C B CORP	685-3925	
NO #	HUDSON ROBERT J	685-9681	
NO #	IANNI ARMONDO	685-3253	
NO #	*LIEBELT REALTY	685-9571	6
NO #	MALLEN FRED A	685-9668	1
NO #	MCFARLAND C	685-2475	+7
NO #	*RAULIEN DAVE	685-4287	
NO #	*SUNSET TERRAZZO CO	685-9572	
NO #	YARBOROUGH CLOIS	685-3395	4
*	9 BUS	18 RES	11 NEW

## WEBB ST 1977

WEBB 95624 ELK GROVE

9616	CHARRON LINDA	685-4451	6
9621	ROGGERO LEONARD W	685-3211	
9635	HOLERY M	685-4129	+7
9644	SUMMERS RICK B	685-4216	5
9650	CURTSINGER W H	685-3388	2
9651	FROST R	685-4279	3
9653	KAMMERER JACK	685-4502	
9656	KAHLER MERLYN	685-2390	+7
9666	HOUSH FRED R	685-3149	
9668	SPILLERS PAUL	685-3023	+7
9677	JOHNSON BERLAND	685-3448	6
9682	HEITZMANN FRED	685-9992	7
9684	XXXX	00	
9686	BOWERS FLORENCE	685-3325	7
9690	LOWERY ERNEST G	685-3332	9
9696	BRIGGS ROBERT E	685-4269	
9699	CROCKETT DENNIS	685-4548	
9716	BLUM THOMAS G	685-4540	4
9720*	TOMS FEED&SUPPLY	685-9098	6
NO #	*CATTLE PALACE AUCTION	685-9503	
NO #	FLATT H G	685-4808	
NO #	FORDERER LEO	685-4265	
NO #	MARRIOTT RON	685-9503	1
NO #	MORI BILL	685-9503	+7
NO #	SAXON ETHEL M	685-4786	
NO #	WAGNER JOHN	685-4379	
*	2 BUS	24 RES	4 NEW

## WATERMAN RD 1972

WATERMAN RD 95624 ELK GROVE		
9150	GROSZ WILBUR	685-3844 1
9180	EVERETT FRANK	685-9310+2
NO #	COONS POLLY	685-9626 1
NO #	GREENWOOD LEE J DR	685-3611 1
NO #*	GULF OIL DISTRIBUTOR	685-4287
NO #	HALL MICHAEL K	685-9022+2
NO #*	HOBBS C B CORP	685-3925
NO #	HUDSON ROBERT J	685-9681
NO #	IANNI ARMONDO	685-3253
NO #	KENNEY NORMAN K	685-4037
NO #	MALLEN FRED A	685-9668 1
NO #	MOHR DAVID	685-4192
NO #	PENNINGTON ROGER A	685-9137+2
NO #*	RAULIEN DAVE	685-4287
NO #*	SUNSET TERRAZZO CO	685-9572
NO #*	TOKAY AUTO WRECKERS	685-4203
NO #	VANDYKE RAY	685-9663
NO #	WORCESTER WM W	685-4934
NO #	YARBOROUGH CLORIS	685-3395
*	5 BUS 14 RES	3 NEW

## WEBB ST 1972

WEBB 95624 ELK GROVE		
9621	ROGGERO LEONARD W	685-3211
9635	WOLERY GLENN	685-4129
9650½	CURTSINGER W H	685-3388+2
9651	FROST RUTH	685-4279
9656	JOHNSON HELENE H	685-3054
9666	HOUSH FRED R	685-3149
9682	HEITZMANN FRED	685-9927 1
9686	STONE DEBBIE	685-9070+2
9690	LOWERY ERNEST G	685-3329
9696	BRIGGS ROBERT E	685-4269
9699	CROCKETT DENNIS	685-4548
NO #	*CATTLE PALACE AUCTN	685-9503
NO #	FLATT H G	685-4808
NO #	FORDERER LEO	685-4265
NO #	FRANK CHARLES	685-9503 1
NO #	*GENES UPHOLSTERY	685-4808 1
NO #	KAMMERER JACK	685-4502
NO #	MARRIOTT RON	685-9503 1
NO #	PERRY WILLIAM	685-4489
NO #	SAXON ETHEL M	685-4786
NO #	WAGNER JOHN	685-4379
NO #	WAGNER WILLIAM	685-4147
*	2 BUS 20 RES	2 NEW

## **APPENDIX D – Agency Listings Database Report**

**Waterman Road Property**

10000 Waterman Road  
Elk Grove, CA 95624

Inquiry Number: 5800264.2s  
September 23, 2019

**The EDR Radius Map™ Report with GeoCheck®**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



# TABLE OF CONTENTS

<b>SECTION</b>	<b>PAGE</b>
Executive Summary .....	ES1
Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	8
Orphan Summary .....	110
Government Records Searched/Data Currency Tracking .....	GR-1
<b><u>GEOCHECK ADDENDUM</u></b>	
Physical Setting Source Addendum .....	A-1
Physical Setting Source Summary .....	A-2
Physical Setting SSURGO Soil Map .....	A-5
Physical Setting Source Map .....	A-12
Physical Setting Source Map Findings .....	A-14
Physical Setting Source Records Searched .....	PSGR-1

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

10000 WATERMAN ROAD  
ELK GROVE, CA 95624

#### COORDINATES

Latitude (North): 38.3931760 - 38° 23' 35.43"  
Longitude (West): 121.3539910 - 121° 21' 14.36"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 643748.4  
UTM Y (Meters): 4250516.0  
Elevation: 51 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5629052 ELK GROVE, CA  
Version Date: 2012  
  
Northwest Map: 5619710 FLORIN, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140621  
Source: USDA



MAPPED SITES SUMMARY

Target Property Address:  
10000 WATERMAN ROAD  
ELK GROVE, CA 95624

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	KINGSFORD PROD CO	10000 WATERMAN RD	RGA LUST		TP
A2	KINGSFORD PROD CO (C	10000 WATERMAN RD	RGA LUST		TP
A3	KINGSFORD PROD CO	10000 WATERMAN RD	FINDS		TP
A4	RAIL TO ROAD COMPANY	10000 WATERMAN RD	HAZNET		TP
A5	KINGSFORD PROD CO	10000 WATERMAN	LUST, EMI, HIST CORTESE, Sacramento Co. ML, CERS		TP
A6	KINGSFORD PRODUCTS C	10000 WATERMAN ROAD	RGA LUST		TP
B7	ELK GROVE ASPHALT TE	10090 WATERMAN ROAD	RCRA-SQG	Higher	258, 0.049, SSE
B8	PARAMOUNT PETROLEUM	10090 WATERMAN RD	RCRA-SQG, CHMIRS, TRIS, FINDS, ECHO, HAZNET	Higher	258, 0.049, SSE
B9	ELK GROVE TERMINAL	10090 WATERMAN ROAD	HIST UST, NPDES, CERS	Higher	258, 0.049, SSE
B10	CONOCO BULK PLANT	10090 WATERMAN ROAD	HIST UST, CHMIRS	Higher	258, 0.049, SSE
B11	CONOCO ASPHALT TERMI	10090 WATERMAN RD	LUST, CPS-SLIC, Sacramento Co. CS, CHMIRS,...	Higher	258, 0.049, SSE
B12	PARAMOUNT PETROLEUM	10090 WATERMAN RD	AST	Higher	258, 0.049, SSE
B13	CONOCOPHILLIPS COMPA	10090 WATERMAN RD	EDR Hist Auto	Higher	258, 0.049, SSE
B14	ASPHALT TERMINALS LL	10090 WATERMAN RD	CERS HAZ WASTE, CERS TANKS, Sacramento Co. ML,...	Higher	258, 0.049, SSE
B15	THE KINGSFORD COMPAN	10100 WATERMAN RD	SWEEPS UST, CA FID UST	Higher	315, 0.060, SSE
B16	THE KINGSFORD COMPAN	10100 WATERMAN ROAD	HIST UST	Higher	315, 0.060, SSE
17	MSA: EAST ELK GROVE	9960 WATERMAN RD	Sacramento Co. ML	Higher	609, 0.115, NNE
C18	WORLD ASPHALT COMPAN	10144 WATERMAN RD	LUST, Sacramento Co. CS, CERS HAZ WASTE, SWEEPS...	Higher	861, 0.163, SSW
C19		10144 WATERMAN RD.	RCRA-LQG	Higher	861, 0.163, SSW
C20	HENRY COMPANY	10144 WATERMAN ROAD	RCRA-LQG	Higher	861, 0.163, SSW
D21	VINEYARD AUTOMOTIVE	10200 WATERMAN RD ST	CERS HAZ WASTE, Sacramento Co. ML, CERS	Higher	1078, 0.204, South
D22	COMPLETE AUTO REPAIR	10200 WATERMAN RD, #	Sacramento Co. ML	Higher	1078, 0.204, South
D23	PHOENIX CORES & RECY	10200 WATERMAN ROAD	HAZNET, Sacramento Co. ML, NPDES, CIWQS	Higher	1078, 0.204, South
E24	MI RANCHO	10115 IRON ROCK WAY	Sacramento Co. ML	Higher	1276, 0.242, WSW
E25	BIMBO BAKERIES USA	10115 IRON ROCK WAY	CERS HAZ WASTE, CERS	Higher	1276, 0.242, WSW
E26	GATX LOGISTICS	10115 IRON ROCK WAY,	Sacramento Co. ML	Higher	1276, 0.242, WSW
27	VALDEZ RECYCLING	9833 KENT ST	SWRCY, Sacramento Co. ML, NPDES, CIWQS, CERS	Higher	1771, 0.335, NNW
28	RESIDENCE	9800 WATERMAN	LUST, Sacramento Co. CS, Notify 65, CERS	Higher	3046, 0.577, North
29	HIGH SCHOOL/MIDDLE S	CALVINE ROAD/AUBERRY	ENVIROSTOR, SCH	Lower	4297, 0.814, NW
30	GEORGIA PAC RESINS	10399 E STOCKTON BLV	ENVIROSTOR, VCP, CHMIRS, Sacramento Co. ML, WDS,...	Lower	4858, 0.920, SSW

## EXECUTIVE SUMMARY

### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
KINGSFORD PROD CO 10000 WATERMAN RD ELK GROVE, CA	RGA LUST	N/A
KINGSFORD PROD CO (C 10000 WATERMAN RD ELK GROVE, CA	RGA LUST	N/A
KINGSFORD PROD CO 10000 WATERMAN RD ELK GROVE, CA 95624	FINDS Registry ID:: 110065652136	N/A
RAIL TO ROAD COMPANY 10000 WATERMAN RD ELK GROVE, CA 95624	HAZNET GEPaid: CAC002628700	N/A
KINGSFORD PROD CO 10000 WATERMAN ELK GROVE, CA 95624	LUST Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 06/10/2019 Status: Completed - Case Closed Status: Case Closed Global Id: T0606700284  EMI Facility Id: 7  HIST CORTESE Reg Id: 340352  Sacramento Co. ML Facility Status: Inactive. Included on a listing no longer updated. Facility Id: G0105786  CERS	N/A
KINGSFORD PRODUCTS C 10000 WATERMAN ROAD ELK GROVE, CA	RGA LUST	N/A

## EXECUTIVE SUMMARY

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

#### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

#### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

#### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

#### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

#### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

#### ***Federal RCRA generators list***

RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

#### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls

#### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

#### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

# EXECUTIVE SUMMARY

## **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF..... Solid Waste Information System

## **State and tribal leaking storage tank lists**

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

## **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

## **State and tribal voluntary cleanup sites**

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

## **State and tribal Brownfields sites**

BROWNFIELDS..... Considered Brownfields Sites Listing

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

### **Local Lists of Landfill / Solid Waste Disposal Sites**

WMUDS/SWAT..... Waste Management Unit Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites..... Historical Calsites Database

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs

Toxic Pits..... Toxic Pits Cleanup Act Sites

US CDL..... National Clandestine Laboratory Register

PFAS..... PFAS Contamination Site Location Listing

### **Local Land Records**

LIENS..... Environmental Liens Listing

LIENS 2..... CERCLA Lien Information

DEED..... Deed Restriction Listing

## EXECUTIVE SUMMARY

### **Records of Emergency Release Reports**

HMIRS.....	Hazardous Materials Information Reporting System
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
SPILLS 90.....	SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing

## EXECUTIVE SUMMARY

HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
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### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal RCRA generators list***

## EXECUTIVE SUMMARY

**RCRA-LQG:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/25/2019 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported EPA ID:: CAP000161471	10144 WATERMAN RD.	SSW 1/8 - 1/4 (0.163 mi.)	C19	61
HENRY COMPANY EPA ID:: CAR000181735	10144 WATERMAN ROAD	SSW 1/8 - 1/4 (0.163 mi.)	C20	62

**RCRA-SQG:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/25/2019 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ELK GROVE ASPHALT TE EPA ID:: CAR000285312	10090 WATERMAN ROAD	SSE 0 - 1/8 (0.049 mi.)	B7	15
<b>PARAMOUNT PETROLEUM</b> EPA ID:: CAR000044552	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B8</b>	<b>17</b>

### **State- and tribal - equivalent CERCLIS**

**ENVIROSTOR:** The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 04/29/2019 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>HIGH SCHOOL/MIDDLE S</b>	<b>CALVINE ROAD/AUBERRY</b>	<b>NW 1/2 - 1 (0.814 mi.)</b>	<b>29</b>	<b>95</b>

## EXECUTIVE SUMMARY

Facility Id: 34010015  
Status: No Action Required

<b>GEORGIA PAC RESINS</b> Facility Id: 60001558 Status: No Further Action	<b>10399 E STOCKTON BLV</b>	<b>SSW 1/2 - 1 (0.920 mi.)</b>	<b>30</b>	<b>98</b>
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### State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO ASPHALT TERMI</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 06/10/2019 Status: Open - Assessment & Interim Remedial Action Status: Case Closed Global Id: T0606700036	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B11</b>	<b>28</b>
<b>WORLD ASPHALT COMPAN</b> Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 06/10/2019 Status: Completed - Case Closed Status: No Action Global Id: T0606701093	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO ASPHALT TERMI</b> Database: SLIC REG 5, Date of Government Version: 04/01/2005	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B11</b>	<b>28</b>

Sacramento Co. CS: List of sites where unauthorized releases of potentially hazardous materials have occurred.

A review of the Sacramento Co. CS list, as provided by EDR, and dated 05/06/2019 has revealed that there are 2 Sacramento Co. CS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO ASPHALT TERMI</b>	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B11</b>	<b>28</b>



## EXECUTIVE SUMMARY

Facility Id: RO0001142

**WORLD ASPHALT COMPAN**

**10144 WATERMAN RD**

**SSW 1/8 - 1/4 (0.163 mi.) C18**

**52**

Facility Id: RO0001330

### ***State and tribal registered storage tank lists***

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PARAMOUNT PETROLEUM Database: AST, Date of Government Version: 07/06/2016	10090 WATERMAN RD	SSE 0 - 1/8 (0.049 mi.)	B12	36

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 06/11/2019 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VALDEZ RECYCLING</b> Cert Id: RC271948.001	<b>9833 KENT ST</b>	<b>NNW 1/4 - 1/2 (0.335 mi.)</b>	<b>27</b>	<b>83</b>

#### ***Local Lists of Hazardous waste / Contaminated Sites***

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 08/14/2019 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>ASPHALT TERMINALS LL</b>	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B14</b>	<b>37</b>
<b>WORLD ASPHALT COMPAN</b>	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>
<b>VINEYARD AUTOMOTIVE</b>	<b>10200 WATERMAN RD ST</b>	<b>S 1/8 - 1/4 (0.204 mi.)</b>	<b>D21</b>	<b>64</b>
<b>BIMBO BAKERIES USA</b>	<b>10115 IRON ROCK WAY</b>	<b>WSW 1/8 - 1/4 (0.242 mi.)</b>	<b>E25</b>	<b>81</b>

## EXECUTIVE SUMMARY

### **Local Lists of Registered Storage Tanks**

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>THE KINGSFORD COMPAN</b> Status: A Tank Status: A Comp Number: 3284	<b>10100 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.060 mi.)</b>	<b>B15</b>	<b>48</b>
<b>WORLD ASPHALT COMPAN</b> Status: A Tank Status: A Comp Number: 14310	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 4 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>ELK GROVE TERMINAL</b> Facility Id: 00000002928	<b>10090 WATERMAN ROAD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B9</b>	<b>23</b>
<b>CONOCO BULK PLANT</b> THE KINGSFORD COMPAN Facility Id: 00000003284	<b>10090 WATERMAN ROAD</b> <b>10100 WATERMAN ROAD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b> <b>SSE 0 - 1/8 (0.060 mi.)</b>	<b>B10</b> <b>B16</b>	<b>26</b> <b>50</b>
<b>WORLD ASPHALT COMPAN</b> Facility Id: 00000014310	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 08/14/2019 has revealed that there are 2 CERS TANKS sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>ASPHALT TERMINALS LL</b>	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B14</b>	<b>37</b>
<b>WORLD ASPHALT COMPAN</b>	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>

## EXECUTIVE SUMMARY

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 2 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>THE KINGSFORD COMPAN</b> Facility Id: 34006771 Status: A	<b>10100 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.060 mi.)</b>	<b>B15</b>	<b>48</b>
<b>WORLD ASPHALT COMPAN</b> Facility Id: 34006904 Status: A	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>

### **Other Ascertainable Records**

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/24/2019 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO ASPHALT TERMI</b> Cleanup Status: OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B11</b>	<b>28</b>

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO ASPHALT TERMI</b> Reg Id: 340054	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B11</b>	<b>28</b>
<b>WORLD ASPHALT COMPAN</b> Reg Id: 341269	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 05/06/2019 has revealed that there are 9 Sacramento Co. ML sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CONOCO ASPHALT TERMI</b>	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B11</b>	<b>28</b>

## EXECUTIVE SUMMARY

Facility Status: Inactive. Included on a listing no longer updated.

<b>ASPHALT TERMINALS LL</b>	<b>10090 WATERMAN RD</b>	<b>SSE 0 - 1/8 (0.049 mi.)</b>	<b>B14</b>	<b>37</b>
MSA: EAST ELK GROVE	9960 WATERMAN RD	NNE 0 - 1/8 (0.115 mi.)	17	51
<b>WORLD ASPHALT COMPAN</b>	<b>10144 WATERMAN RD</b>	<b>SSW 1/8 - 1/4 (0.163 mi.)</b>	<b>C18</b>	<b>52</b>
<b>VINEYARD AUTOMOTIVE</b>	<b>10200 WATERMAN RD ST</b>	<b>S 1/8 - 1/4 (0.204 mi.)</b>	<b>D21</b>	<b>64</b>
COMPLETE AUTO REPAIR	10200 WATERMAN RD, #	S 1/8 - 1/4 (0.204 mi.)	D22	77
<b>PHOENIX CORES &amp; RECY</b>	<b>10200 WATERMAN ROAD</b>	<b>S 1/8 - 1/4 (0.204 mi.)</b>	<b>D23</b>	<b>78</b>
MI RANCHO	10115 IRON ROCK WAY	WSW 1/8 - 1/4 (0.242 mi.)	E24	80
GATX LOGISTICS	10115 IRON ROCK WAY,	WSW 1/8 - 1/4 (0.242 mi.)	E26	83

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 06/17/2019 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RESIDENCE</b>	<b>9800 WATERMAN</b>	<b>N 1/2 - 1 (0.577 mi.)</b>	<b>28</b>	<b>93</b>

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CONOCOPHILLIPS COMPA	10090 WATERMAN RD	SSE 0 - 1/8 (0.049 mi.)	B13	36

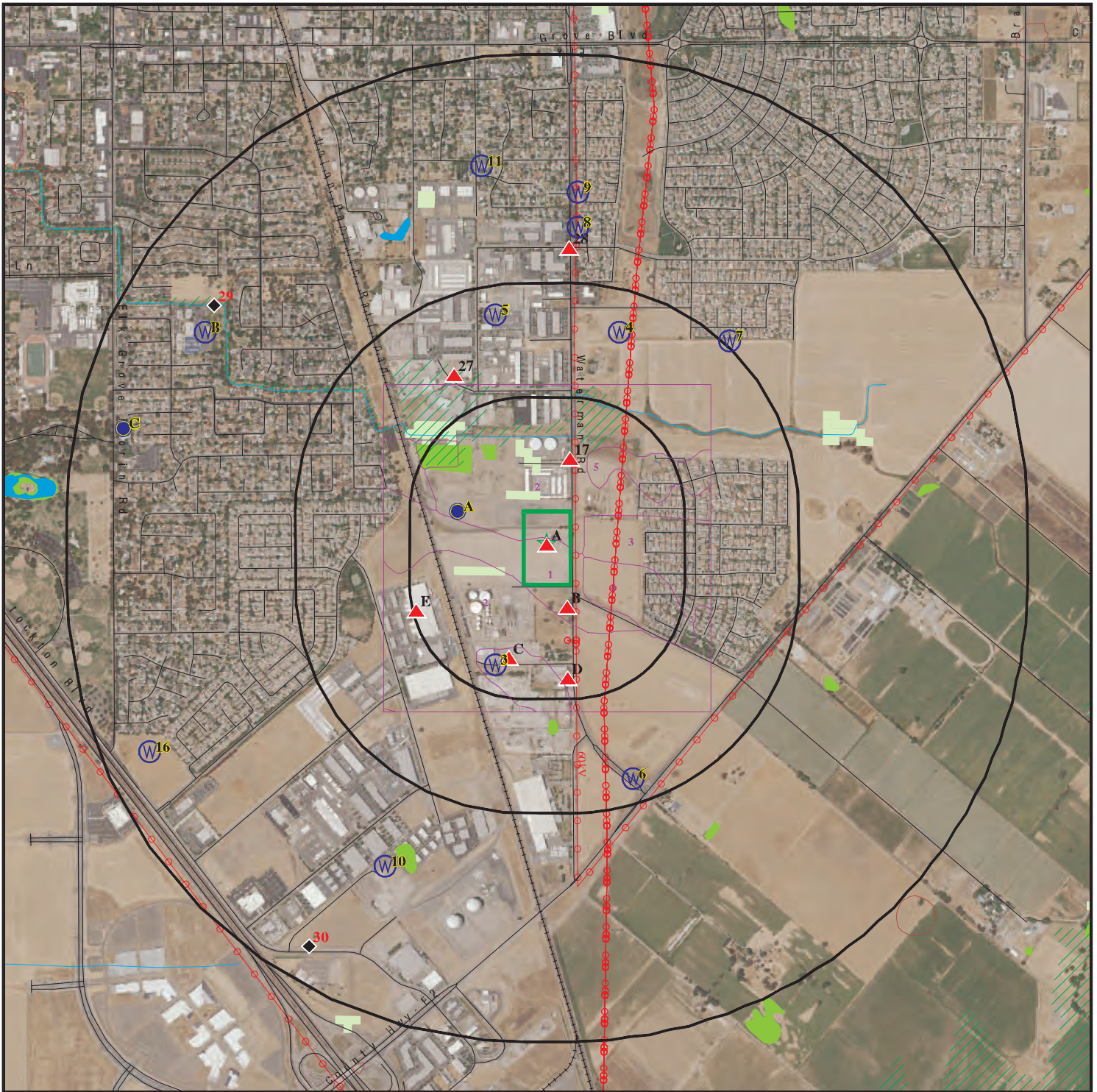
## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

<u>Site Name</u>	<u>Database(s)</u>
KINGSFORD CHARCOAL PLANT	Sacramento Co. CS
KINGSFORD CHARCOAL COMPANY	Sacramento Co. CS



# OVERVIEW MAP - 5800264.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites



Indian Reservations BIA

Areas of Concern

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands



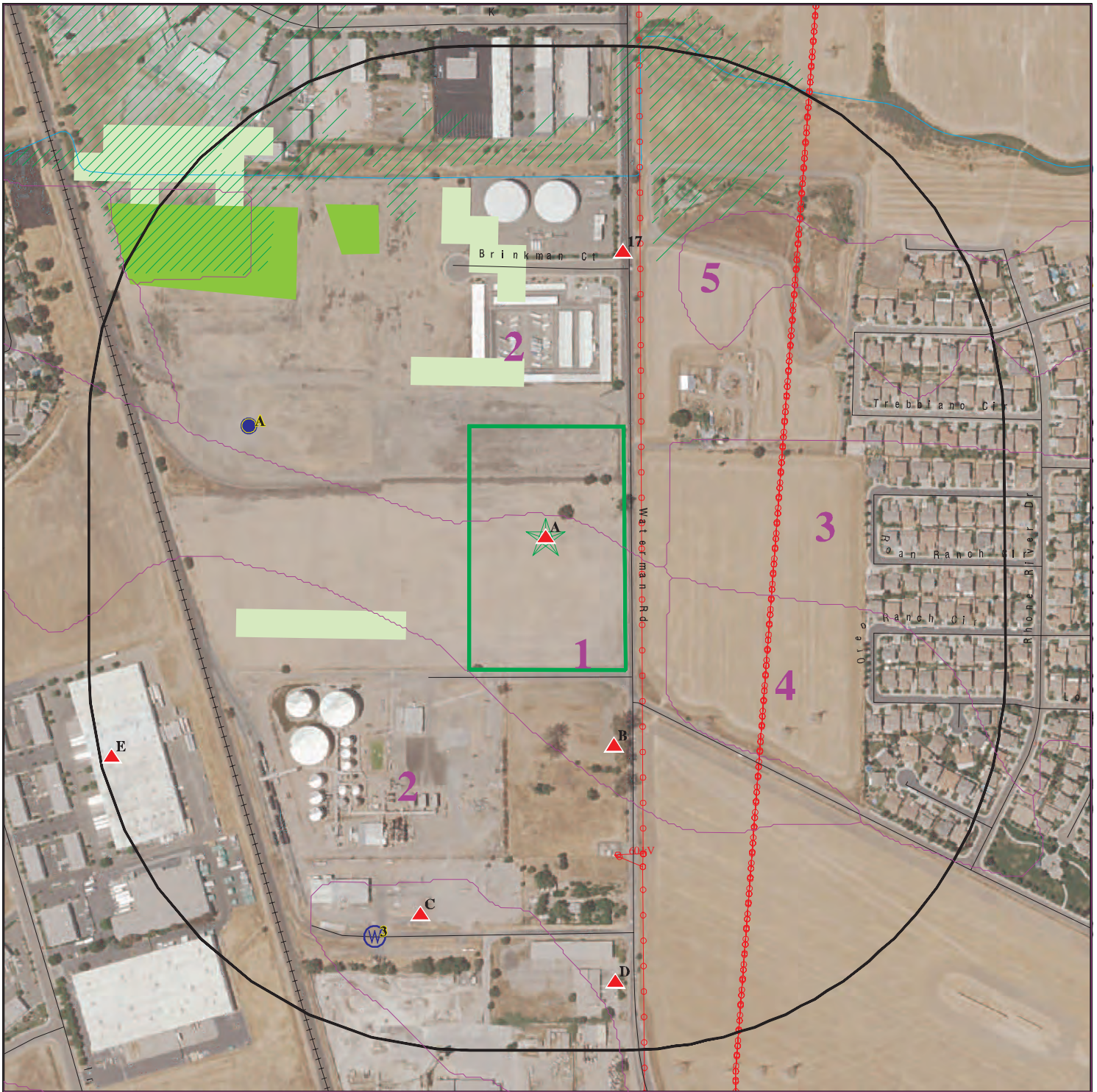
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.








SITE NAME: Waterman Road Property  
 ADDRESS: 10000 Waterman Road  
 Elk Grove CA 95624  
 LAT/LONG: 38.393176 / 121.353991

CLIENT: Brusca Associates, Inc.  
 CONTACT: Rachel Robles  
 INQUIRY #: 5800264.2s  
 DATE: September 23, 2019 7:00 pm










# DETAIL MAP - 5800264.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Waterman Road Property  
 ADDRESS: 10000 Waterman Road  
 Elk Grove CA 95624  
 LAT/LONG: 38.393176 / 121.353991

CLIENT: Brusca Associates, Inc.  
 CONTACT: Rachel Robles  
 INQUIRY #: 5800264.2s  
 DATE: September 23, 2019 7:05 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	2	NR	NR	NR	2
RCRA-SQG	0.250		2	0	NR	NR	NR	2
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL RESPONSE</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i></b>								
ENVIROSTOR	1.000		0	0	0	2	NR	2
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500	1	1	1	0	NR	NR	3



## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		1	0	0	NR	NR	1
Sacramento Co. CS	0.500		1	1	0	NR	NR	2
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		1	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	1	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		1	3	NR	NR	NR	4
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		3	1	NR	NR	NR	4
CERS TANKS	0.250		1	1	NR	NR	NR	2
CA FID UST	0.250		1	1	NR	NR	NR	2
<b>Local Land Records</b>								
LIENS	0.001		0	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		1	0	0	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

A1  
Target  
Property

KINGSFORD PROD CO  
10000 WATERMAN RD  
ELK GROVE, CA

RGA LUST S114640157  
N/A

Site 1 of 6 in cluster A

Actual:  
51 ft.

RGA LUST:

Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2012 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2011 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2010 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2009 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2008 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2007 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2006 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2005 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2003 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2002 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

**S114640157**

City: ELK GROVE  
State: ELK GROVE  
2001 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
2000 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
1998 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
1997 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
1996 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
1995 KINGSFORD PROD CO 10000 WATERMAN RD  
Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
1994 KINGSFORD PROD CO 10000 WATERMAN RD

**A2  
Target  
Property**

**KINGSFORD PROD CO (CLOSED-CO)  
10000 WATERMAN RD  
ELK GROVE, CA**

**RGA LUST S114640156  
N/A**

**Site 2 of 6 in cluster A**

**Actual:  
51 ft.**

RGA LUST:  
Name: KINGSFORD PROD CO (CLOSED-CO)  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
State: ELK GROVE  
1993 KINGSFORD PROD CO (CLOSED-CO) 10000 WATERMAN RD

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**A3**  
**Target**  
**Property**

**KINGSFORD PROD CO**  
**10000 WATERMAN RD**  
**ELK GROVE, CA 95624**

**FINDS**    **1023274990**  
**N/A**

**Site 3 of 6 in cluster A**

**Actual:**  
**51 ft.**

**FINDS:**  
  
Registry ID:                    110065652136  
  
Environmental Interest/Information System  
STATE MASTER

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**A4**  
**Target**  
**Property**

**RAIL TO ROAD COMPANY**  
**10000 WATERMAN RD**  
**ELK GROVE, CA 95624**

**HAZNET**    **S112969132**  
**N/A**

**Site 4 of 6 in cluster A**

**Actual:**  
**51 ft.**

**HAZNET:**  
Name:                            RAIL TO ROAD COMPANY  
Address:                        10000 WATERMAN RD  
City,State,Zip:                ELK GROVE, CA 95624  
Year:                             2008  
GEPaid:                        CAC002628700  
Contact:                        BEN PETTIT  
Telephone:                      9167533630  
Mailing Name:                 Not reported  
Mailing Address:              8997 DILLARD RD  
Mailing City,St,Zip:         WILTON, CA 956939683  
Gen County:                    Sacramento  
TSD EPA ID:                    CAD982446874  
TSD County:                    Yolo  
Tons:                             2.84394  
CA Waste Code:               223-Unspecified oil-containing waste  
Method:                        H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
                                      (H010-H129) Or (H131-H135)  
Facility County:               Sacramento

**A5**  
**Target**  
**Property**

**KINGSFORD PROD CO**  
**10000 WATERMAN**  
**ELK GROVE, CA 95624**

**LUST**    **1000591231**  
**EMI**     **N/A**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**CERS**

**Site 5 of 6 in cluster A**

**Actual:**  
**51 ft.**

**LUST:**  
Name:                            KINGSFORD PROD CO  
Address:                        10000 WATERMAN RD  
City,State,Zip:                ELK GROVE, CA 95624  
Lead Agency:                    SACRAMENTO COUNTY LOP  
Case Type:                      LUST Cleanup Site  
Geo Track:                      [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700284](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700284)  
Global Id:                        T0606700284  
Latitude:                        38.3977578

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

**1000591231**

Longitude: -121.3532017  
Status: Completed - Case Closed  
Status Date: 01/17/1996  
Case Worker: Not reported  
RB Case Number: 340352  
Local Agency: Not reported  
File Location: Not reported  
Local Case Number: 0508/71508  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Other Solvent or Non-Petroleum Hydrocarbon  
Site History: Not reported

LUST:

Global Id: T0606700284  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 08/26/1992  
Action: \* Historical Enforcement

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 08/26/1992  
Action: \* No Action

Global Id: T0606700284  
Action Type: Other  
Date: 02/07/1992  
Action: Leak Discovery

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/03/1994  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 09/11/1990  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 06/30/1994  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 09/30/1992  
Action: Monitoring Report - Quarterly

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

**1000591231**

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 01/12/1994  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/02/1991  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 01/22/1991  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 12/31/1993  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 03/22/1994  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 09/30/1993  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 03/31/1994  
Action: Monitoring Report - Quarterly

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/03/1994  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 12/09/1993  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 12/06/1990  
Action: Correspondence

Global Id: T0606700284  
Action Type: RESPONSE  
Date: 05/16/1989  
Action: Unauthorized Release Form

Global Id: T0606700284  
Action Type: RESPONSE



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

**1000591231**

Date: 08/28/1989  
Action: Other Report / Document

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 01/17/1996  
Action: Closure/No Further Action Letter

Global Id: T0606700284  
Action Type: Other  
Date: 02/07/1992  
Action: Leak Reported

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 08/26/1992  
Action: Notice of Reimbursement

Global Id: T0606700284  
Action Type: ENFORCEMENT  
Date: 09/02/1992  
Action: Notice of Reimbursement

**LUST:**

Global Id: T0606700284  
Status: Open - Case Begin Date  
Status Date: 05/01/1989

Global Id: T0606700284  
Status: Open - Remediation  
Status Date: 05/01/1989

Global Id: T0606700284  
Status: Open - Remediation  
Status Date: 07/17/1990

Global Id: T0606700284  
Status: Open - Site Assessment  
Status Date: 07/17/1990

Global Id: T0606700284  
Status: Open - Site Assessment  
Status Date: 02/07/1992

Global Id: T0606700284  
Status: Completed - Case Closed  
Status Date: 01/17/1996

**LUST REG 5:**

Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340352

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

1000591231

Case Type: Soil only  
Substance: HYDROCARBONS  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

EMI:

Name: KINGSFORD COMPANY  
Address: 10000 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Year: 1987  
County Code: 34  
Air Basin: SV  
Facility ID: 7  
Air District Name: SAC  
SIC Code: 2861  
Air District Name: SACRAMENTO METROPOLITAN AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 1  
NOX - Oxides of Nitrogen Tons/Yr: 5  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 7  
Part. Matter 10 Micrometers and Smllr Tons/Yr:7

HIST CORTESE:

edr\_fname: KINGSFORD PROD CO  
edr\_fadd1: 10000 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340352

Sacramento Co. ML:

Name: THE KINGSFORD COMPANY  
Address: 10000 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: G0105786  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: G  
Billing Codes BP: Out of Business  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 51  
Food Bill Code: 51  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: 06/01/1990  
HAZMAT Inspection Date: 07/19/1990  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: 11/10/1988  
UST Tank Test Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KINGSFORD PROD CO (Continued)**

**1000591231**

Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: 2499  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: KINGSFORD PROD CO  
Address: 10000 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 211987  
CERS ID: T0606700284  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**A6  
Target  
Property**

**KINGSFORD PRODUCTS COMPANY  
10000 WATERMAN ROAD  
ELK GROVE, CA**

**RGA LUST S114640160  
N/A**

**Site 6 of 6 in cluster A**

**Actual:  
51 ft.**

RGA LUST:  
Name: KINGSFORD PRODUCTS COMPANY  
Address: 10000 WATERMAN ROAD  
City: ELK GROVE  
State: ELK GROVE  
1992 KINGSFORD PRODUCTS COMPANY 10000 WATERMAN ROAD

**B7  
SSE  
< 1/8  
0.049 mi.  
258 ft.**

**ELK GROVE ASPHALT TERMINAL  
10090 WATERMAN ROAD  
ELK GROVE, CA 95624**

**RCRA-SQG 1024877024  
CAR000285312**

**Site 1 of 10 in cluster B**

**Relative:  
Higher**

RCRA-SQG:  
Date form received by agency: 07/02/2018  
Facility name: ELK GROVE ASPHALT TERMINAL  
Facility address: 10090 WATERMAN ROAD  
ELK GROVE, CA 95624  
EPA ID: CAR000285312  
Mailing address: WATERMAN ROAD  
ELK GROVE, CA 95624  
Contact: KURTIS VAN HOOF  
Contact address: WATERMAN ROAD

**Actual:  
52 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE ASPHALT TERMINAL (Continued)**

**1024877024**

Contact country: ELK GROVE, CA 95624  
US  
Contact telephone: 928-583-3314  
Contact email: KURTIS.VANHOOF@ANDEAVOR.COM  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: ASPHALT TERMINALS LLC  
Owner/operator address: CENTERPOINTE DRIVE SUITE 500  
LA PALMA, CA 90623  
Owner/operator country: US  
Owner/operator telephone: 505-801-5616  
Owner/operator email: KELLY.ROBINSON@ANDEAVOR.COM  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 05/21/2018  
Owner/Op end date: Not reported

Owner/operator name: ASPHALT TERMINALS LLC  
Owner/operator address: CENTERPOINTE DRIVE SUITE 500  
LA PALMA, CA 90623  
Owner/operator country: US  
Owner/operator telephone: 505-801-5616  
Owner/operator email: KELLY.ROBINSON@ANDEAVOR.COM  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 05/21/2018  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: Yes  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE ASPHALT TERMINAL (Continued)**

**1024877024**

Hazardous Waste Summary:

- . Waste code: 221
  - . Waste name: Waste oil and mixed oil
  
  - . Waste code: 223
  - . Waste name: Unspecified oil-containing waste
  
  - . Waste code: 291
  - . Waste name: Latex waste
  
  - . Waste code: 331
  - . Waste name: Off-specification, aged, or surplus organics
  
  - . Waste code: D002
  - . Waste name: CORROSIVE WASTE
- Violation Status: No violations found

**B8**  
**SSE**  
**< 1/8**  
**0.049 mi.**  
**258 ft.**

**PARAMOUNT PETROLEUM CORP**  
**10090 WATERMAN RD**  
**ELK GROVE, CA 95624**  
  
**Site 2 of 10 in cluster B**

**RCRA-SQG 1001231392**  
**CHMIRS 95624PRMNT19WAT**  
**TRIS**  
**FINDS**  
**ECHO**  
**HAZNET**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

RCRA-SQG:  
Date form received by agency: 09/22/1998  
Facility name: PARAMOUNT PETROLEUM CORP  
Facility address: 10090 WATERMAN RD  
ELK GROVE, CA 95624  
EPA ID: CAR000044552  
Contact: KATHRYN GLEESON  
Contact address: 14700 DOWNEY AVE  
PARAMOUNT, CA 90723  
Contact country: US  
Contact telephone: 562-531-2060  
Contact email: Not reported  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:  
Owner/operator name: PARAMOUNT PETROLEUM CORP  
Owner/operator address: 14700 DOWNEY AVE  
PARAMOUNT, CA 90723  
Owner/operator country: Not reported  
Owner/operator telephone: 562-531-2060  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PARAMOUNT PETROLEUM CORP (Continued)**

**1001231392**

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D000  
. Waste name: Not Defined

. Waste code: D001  
. Waste name: IGNITABLE WASTE

. Waste code: D006  
. Waste name: CADMIUM

. Waste code: D008  
. Waste name: LEAD

. Waste code: D018  
. Waste name: BENZENE

. Waste code: D035  
. Waste name: METHYL ETHYL KETONE

. Waste code: D039  
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040  
. Waste name: TRICHLOROETHYLENE

. Waste code: F003  
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PARAMOUNT PETROLEUM CORP (Continued)**

**1001231392**

. Waste code: F005  
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

**CHMIRS:**

Name: Not reported  
Address: 10090 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
OES Incident Number: 08-5477  
OES notification: 07/27/2008  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agncy Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported  
Others Number Of Decontaminated: Not reported  
Others Number Of Injuries: Not reported  
Others Number Of Fatalities: Not reported  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA DOT PUC/ICC Number: Not reported  
Company Name: Not reported  
Reporting Officer Name/ID: Not reported  
Report Date: Not reported  
Facility Telephone: Not reported  
Waterway Involved: No  
Waterway: Not reported  
Spill Site: Other  
Cleanup By: Reporting Party  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Gal(s)  
Other: Not reported  
Date/Time: 1900  
Year: 2008  
Agency: Paramount Petroleum Corporation  
Incident Date: 7/27/2008  
Admin Agency: Sacramento County Environmental Management Secondary Agency

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PARAMOUNT PETROLEUM CORP (Continued)**

**1001231392**

Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Hydrochloric Acid
Quantity Released:	50
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	A tank failed causing the spill.

TRIS:

[Click this hyperlink](#) while viewing on your computer to access 2 additional US\_TRIS: record(s) in the EDR Site Report.

FINDS:

Registry ID: 110002924649

Environmental Interest/Information System  
TSCA SUBMITTER

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

OSHA ESTABLISHMENT

HAZARDOUS AIR POLLUTANT MAJOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PARAMOUNT PETROLEUM CORP (Continued)**

**1001231392**

STATE MASTER

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**ECHO:**

Envid: 1001231392  
Registry ID: 110002924649  
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110002924649>

**HAZNET:**

Name: PARAMOUNT PETROLEUM CORP  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 956240000  
Year: 2017  
GEPaid: CAR000044552  
Contact: KATHRYN GLEESON  
Telephone: 5627484613  
Mailing Name: Not reported  
Mailing Address: 14700 DOWNEY AVE  
Mailing City,St,Zip: PARAMOUNT, CA 907230000  
Gen County: Sacramento  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Tons: 22.155  
CA Waste Code: 134-Aqueous solution with total organic residues less than 10 percent  
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Facility County: Sacramento

Name: PARAMOUNT PETROLEUM CORP  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 956240000  
Year: 2016  
GEPaid: CAR000044552  
Contact: KATHRYN GLEESON  
Telephone: 5627484613  
Mailing Name: Not reported  
Mailing Address: 14700 DOWNEY AVE  
Mailing City,St,Zip: PARAMOUNT, CA 907234526  
Gen County: Sacramento  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Tons: 36.9372  
CA Waste Code: 134-Aqueous solution with total organic residues less than 10 percent  
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Facility County: Sacramento

Name: PARAMOUNT PETROLEUM CORP  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 956240000  
Year: 2016  
GEPaid: CAR000044552  
Contact: KATHRYN GLEESON

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PARAMOUNT PETROLEUM CORP (Continued)**

**1001231392**

Telephone: 5627484613  
Mailing Name: Not reported  
Mailing Address: 14700 DOWNEY AVE  
Mailing City,St,Zip: PARAMOUNT, CA 907234526  
Gen County: Sacramento  
TSD EPA ID: UTD981552177  
TSD County: 99  
Tons: 0.05  
CA Waste Code: 331-Off-specification, aged or surplus organics  
Method: H040-Incineration--Thermal Destruction Other Than Use As A Fuel  
Facility County: Sacramento

Name: PARAMOUNT PETROLEUM CORP  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 956240000  
Year: 2016  
GEPaid: CAR000044552  
Contact: KATHRYN GLEESON  
Telephone: 5627484613  
Mailing Name: Not reported  
Mailing Address: 14700 DOWNEY AVE  
Mailing City,St,Zip: PARAMOUNT, CA 907234526  
Gen County: Sacramento  
TSD EPA ID: CAD044429835  
TSD County: Los Angeles  
Tons: 0.2  
CA Waste Code: 221-Waste oil and mixed oil  
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Facility County: Sacramento

Name: PARAMOUNT PETROLEUM CORP  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 956240000  
Year: 2016  
GEPaid: CAR000044552  
Contact: KATHRYN GLEESON  
Telephone: 5627484613  
Mailing Name: Not reported  
Mailing Address: 14700 DOWNEY AVE  
Mailing City,St,Zip: PARAMOUNT, CA 907234526  
Gen County: Sacramento  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Tons: 0.0375  
CA Waste Code: 214-Unspecified solvent mixture  
Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Facility County: Sacramento

[Click this hyperlink](#) while viewing on your computer to access 60 additional CA\_HAZNET: record(s) in the EDR Site Report.

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

**B9**  
**SSE**  
 < 1/8  
 0.049 mi.  
 258 ft.

**ELK GROVE TERMINAL**  
**10090 WATERMAN ROAD**  
**ELK, CA 95624**

**Site 3 of 10 in cluster B**

**HIST UST**    **U001612763**  
**NPDES**        **N/A**  
**CERS**

**Relative:**  
**Higher**

**Actual:**  
**52 ft.**

**HIST UST:**

Name: CONOCO BULK PLANT  
 Address: 10090 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 95624  
 File Number: Not reported  
 URL: Not reported  
 Region: STATE  
 Facility ID: 00000002928  
 Facility Type: Other  
 Other Type: TAR PLANT  
 Contact Name: GENE H. CHURCH  
 Telephone: 9166859253  
 Owner Name: CONOCO INC.  
 Owner Address: 10090 WATERMAN ROAD  
 Owner City,St,Zip: ELK GROVE, CA 95624  
 Total Tanks: 0004

Tank Num: 001  
 Container Num: TANK #1  
 Year Installed: 1974  
 Tank Capacity: 00004000  
 Tank Used for: WASTE  
 Type of Fuel: Not reported  
 Container Construction Thickness: .25  
 Leak Detection: Stock Inventor

Tank Num: 002  
 Container Num: OIL #1  
 Year Installed: 1972  
 Tank Capacity: 00001800  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 003  
 Container Num: DIESEL #1  
 Year Installed: 1972  
 Tank Capacity: 00010000  
 Tank Used for: PRODUCT  
 Type of Fuel: DIESEL  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 004  
 Container Num: POND #1  
 Year Installed: 1972  
 Tank Capacity: 00172351  
 Tank Used for: WASTE  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Visual

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE TERMINAL (Continued)**

**U001612763**

NPDES:

Name: ELK GROVE TERMINAL  
Address: 10090 WATERMAN ROAD  
City,State,Zip: ELK, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S341027984  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Active  
Status Date: 12/11/2018  
Operator Name: Asphalt Terminals LLC  
Operator Address: 6 Centerpointe Drive  
Operator City: La Palma  
Operator State: California  
Operator Zip: 90623

Name: ELK GROVE TERMINAL  
Address: 10090 WATERMAN ROAD  
City,State,Zip: ELK, CA 95624  
Facility Status: Active  
NPDES Number: CAS000001  
Region: 5S  
Agency Number: 0  
Regulatory Measure ID: 497954  
Place ID: Not reported  
Order Number: 97-03-DWQ  
WDID: 5S341027984  
Regulatory Measure Type: Enrollee  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 12/11/2018  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: 6 Centerpointe Drive  
Discharge Name: Asphalt Terminals LLC  
Discharge City: La Palma  
Discharge State: California  
Discharge Zip: 90623  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ELK GROVE TERMINAL (Continued)**

**U001612763**

Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported

**CERS:**

Name: PARAMOUNT PETROLEUM CORP ELK GROVE TERMINAL  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 486098  
CERS ID: 110002924649  
CERS Description: US EPA Air Emission Inventory System (EIS)

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: KATHRYN GLEESON  
Entity Title: Not reported  
Affiliation Address: 14700 DOWNEY AVE  
Affiliation City: PARAMOUNT  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Public Contact  
Entity Name: D MARK WELLS  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Mark Wells  
Entity Title: Not reported  
Affiliation Address: 10090 WATERMAN ROAD  
Affiliation City: ELKGROVE  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Public Contact  
Entity Name: Mark Wells  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: ELK GROVE TERMINAL  
Address: 10090 WATERMAN ROAD  
City,State,Zip: ELK, CA 95624

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ELK GROVE TERMINAL (Continued)**

**U001612763**

Site ID: 531319  
 CERS ID: 864330  
 CERS Description: Industrial Facility Storm Water

Affiliation:  
 Affiliation Type Desc: Owner/Operator  
 Entity Name: Asphalt Terminals LLC  
 Entity Title: Operator  
 Affiliation Address: 6 Centerpointe Drive Suite 500  
 Affiliation City: La Palma  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 90623  
 Affiliation Phone: Not reported

**B10  
 SSE  
 < 1/8  
 0.049 mi.  
 258 ft.**

**CONOCO BULK PLANT  
 10090 WATERMAN ROAD  
 ELK GROVE, CA 95624**

**HIST UST S107448220  
 CHMIRS N/A**

**Site 4 of 10 in cluster B**

**Relative:  
 Higher  
 Actual:  
 52 ft.**

HIST UST:  
 Name: CONOCO BULK PLANT  
 Address: 10090 WATERMAN ROAD  
 City, State, Zip: ELK GROVE, CA 95624  
 File Number: 0001FCDE  
 URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FCDE.pdf>  
 Region: Not reported  
 Facility ID: Not reported  
 Facility Type: Not reported  
 Other Type: Not reported  
 Contact Name: Not reported  
 Telephone: Not reported  
 Owner Name: Not reported  
 Owner Address: Not reported  
 Owner City, St, Zip: Not reported  
 Total Tanks: Not reported

Tank Num: Not reported  
 Container Num: Not reported  
 Year Installed: Not reported  
 Tank Capacity: Not reported  
 Tank Used for: Not reported  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Not reported

Click here for Geo Tracker PDF:

CHMIRS:  
 Name: Not reported  
 Address: 10090 WATERMAN RD  
 City, State, Zip: ELK GROVE, CA  
 OES Incident Number: 4-3545  
 OES notification: 07/07/2004  
 OES Date: Not reported  
 OES Time: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S107448220**

<b>Date Completed:</b>	<b>Not reported</b>
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agency Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Not reported
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Unknown
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2004
Agency:	Paramount Petro
Incident Date:	7/7/2004 12:00:00 AM
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Unknown
Site Type:	Rail Road
E Date:	Not reported
Substance:	Phenol
Gallons:	0.000000
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**CONOCO BULK PLANT (Continued)**

**S107448220**

Evacs: Injuries: Fatales: Comments: Description:	Not reported Not reported Not reported Not reported POTENTIAL SPILL. A tank car came into the Paramount Petro facility by mistake. Upon inspection, it appears that the car has drip marks from the dome. Unknown if any product has actually been released. The product belongs to Georgia Pacific.
--	--

**B11**  
**SSE**  
 < 1/8  
 0.049 mi.  
 258 ft.  
 Relative:  
 Higher  
 Actual:  
 52 ft.

**CONOCO ASPHALT TERMINAL**  
**10090 WATERMAN RD**  
**ELK GROVE, CA 95624**  
 Site 5 of 10 in cluster B

**LUST** **S102428276**  
**CPS-SLIC** **N/A**  
**Sacramento Co. CS**  
**CHMIRS**  
**Cortese**  
**HIST CORTESE**  
**Sacramento Co. ML**  
**WDS**  
**CERS**

LUST:

Name: Address: City,State,Zip: Lead Agency: Case Type: Geo Track: Global Id: Latitude: Longitude: Status: Status Date: Case Worker: RB Case Number: Local Agency: File Location: Local Case Number: Potential Media Affect: Potential Contaminants of Concern: Site History:	CONOCO ASPHALT TERMINAL 10090 WATERMAN RD ELK GROVE, CA 95624 SACRAMENTO COUNTY LOP LUST Cleanup Site <a href="http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700036">http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700036</a> T0606700036 38.390996 -121.355214 Open - Assessment & Interim Remedial Action 07/16/2018 Not reported 340054 Not reported Local Agency B548/RO 1142 Soil Diesel Not reported
--	--

LUST:

Global Id: Contact Type: Contact Name: Organization Name: Address: City: Email: Phone Number:	T0606700036 Regional Board Caseworker VERA FISCHER CENTRAL VALLEY RWQCB (REGION 5S) 11020 SUN CENTER DRIVE #200 RANCHO CORDOVA vera.fischer@waterboards.ca.gov Not reported
--	--

LUST:

Global Id: Action Type: Date: Action:	T0606700036 ENFORCEMENT 06/15/1986 Other Report - #6/15/1986
--	---



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO ASPHALT TERMINAL (Continued)**

**S102428276**

Global Id: T0606700036  
Action Type: RESPONSE  
Date: 09/11/1995  
Action: Site Assessment Report

Global Id: T0606700036  
Action Type: RESPONSE  
Date: 08/20/1993  
Action: Site Assessment Report

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 07/17/2018  
Action: File review

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 09/23/1993  
Action: Notice of Reimbursement

Global Id: T0606700036  
Action Type: Other  
Date: 11/03/1986  
Action: Leak Reported

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 07/14/1994  
Action: Staff Letter - #7/14/1994

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 08/30/1993  
Action: Letter - Notice - #8/30/1993

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 09/21/1995  
Action: Staff Letter

Global Id: T0606700036  
Action Type: ENFORCEMENT  
Date: 11/12/1986  
Action: Other Report - #11/12/1986

**LUST:**

Global Id: T0606700036  
Status: Open - Case Begin Date  
Status Date: 11/03/1986

Global Id: T0606700036  
Status: Completed - Case Closed  
Status Date: 11/12/1986

Global Id: T0606700036  
Status: Open - Assessment & Interim Remedial Action  
Status Date: 07/16/2018

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO ASPHALT TERMINAL (Continued)**

**S102428276**

Global Id: T0606700036  
Status: Open - Reopen Case  
Status Date: 07/16/2018

**LUST REG 5:**

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 340054  
Case Type: Soil only  
Substance: DIESEL  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**SLIC REG 5:**

Name: Conoco Asphalt Terminal  
Address: 10090 Waterman Rd  
City: Elk Grove  
Region: 5  
Facility Status: Closed by County  
Unit: Facility is a Spill or site  
Pollutant: TPH  
Lead Agency: Not reported  
Date Filed: 09/21/95  
Report Date: / /  
Date Added: Not reported  
Date Closed: Not reported

**Sacramento Co. CS:**

Name: CONOCO INC-ASPHALT PLANT  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
State Site Number: A270  
Lead Staff: Booth, D.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Asphalt  
Date Reported: 08/30/1993  
Facility Id: RO0001142  
Case Type: Soil only  
Case Closed: Not reported  
**Date Closed: Not reported**  
**Case Type: Soil only affected**  
**Substance: Asphalt**

**CHMIRS:**

Name: Not reported  
Address: 10090 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
OES Incident Number: 10-3974

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONOCO ASPHALT TERMINAL (Continued)

S102428276

OES notification:	06/30/2010
OES Date:	Not reported
OES Time:	Not reported
<b>Date Completed:</b>	<b>Not reported</b>
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agency Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Industrial Plant
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	1310
Year:	2010
Agency:	Paramount Petroleum Corp
Incident Date:	6/30/2010
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Yes
Site Type:	Not reported
E Date:	Not reported
Substance:	Asphalt
Quantity Released:	75
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

CONOCO ASPHALT TERMINAL (Continued)

S102428276

#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller states that a pipeline that leads a pump near storage tank burst due to unknown causes.
Name:	Not reported
Address:	10090 WATERMAN RD
City,State,Zip:	ELK GROVE, CA 95624
OES Incident Number:	1-3161
OES notification:	05/24/2011
OES Date:	Not reported
OES Time:	Not reported
<b>Date Completed:</b>	<b>Not reported</b>
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Merchant/Business
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	900
Year:	2011
Agency:	Paramount Petroleum Corp
Incident Date:	5/24/2011
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO ASPHALT TERMINAL (Continued)**

**S102428276**

Contained: Yes  
Site Type: Not reported  
E Date: Not reported  
Substance: Polly Phosphoric Acid  
Quantity Released: 10  
Unknown: Not reported  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: Not reported  
Number of Injuries: Not reported  
Number of Fatalities: Not reported  
#1 Pipeline: Not reported  
#2 Pipeline: Not reported  
#3 Pipeline: Not reported  
#1 Vessel >= 300 Tons: Not reported  
#2 Vessel >= 300 Tons: Not reported  
#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
FATALS: Not reported  
Comments: Not reported  
Description: Caller states substance weeped through drums due to drum age. Caller states substance released in a storage area.

**CORTESE:**

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0606700036  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: OPEN - ASSESSMENT & INTERIM REMEDIAL ACTION  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**HIST CORTESE:**

edr\_fname: CONOCO ASPHALT TERMINAL  
edr\_fadd1: 10090 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO ASPHALT TERMINAL (Continued)**

**S102428276**

Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340054

Sacramento Co. ML:

Name: CONOCO BULK PLANT  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: G  
Billing Codes BP: Out of Business  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 51  
Food Bill Code: 51  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: 06/01/1991  
HAZMAT Inspection Date: 02/04/1991  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: 2951  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

WDS:

Name: ELK GROVE TERMINAL  
Address: 10090 Waterman Rd  
City: ELK GROVE  
Facility ID: 5S 34I012420  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 0  
Facility Telephone: 8009569253  
Facility Contact: RON EDINGFIELD  
Agency Name: PARAMOUNT PETROLEUM CORP  
Agency Address: 14700 Downey Ave  
Agency City,St,Zip: Paramount 907234526  
Agency Contact: DOUGLAS THOMPSON  
Agency Telephone: 5625312060  
Agency Type: Private  
SIC Code: 2951  
SIC Code 2: 4213

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONOCO ASPHALT TERMINAL (Continued)**

**S102428276**

Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).

Primary Waste: STORMS  
Waste Type2: Not reported  
Waste2: Stormwater Runoff

Primary Waste Type: Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).

Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: No reclamation requirements associated with this facility.  
POTW: The facility is not a POTW.  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

**CERS:**

Name: CONOCO ASPHALT TERMINAL  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 235734  
CERS ID: T0606700036  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**B12**  
**SSE**  
**< 1/8**  
**0.049 mi.**  
**258 ft.**

**PARAMOUNT PETROLEUM CORPORATION**  
**10090 WATERMAN RD**  
**ELK GROVE, CA 95624**  
  
**Site 6 of 10 in cluster B**

**AST** **A100423159**  
**N/A**

**Relative:**  
**Higher**  
  
**Actual:**  
**52 ft.**

**AST:**  
Name: PARAMOUNT PETROLEUM CORPORATION  
Address: 10090 WATERMAN RD  
City/Zip: ELK GROVE,95624  
Certified Unified Program Agencies: Not reported  
Owner: PARAMOUNT PETROLEUM CORP  
Total Gallons: Not reported  
CERSID: 10221115  
Facility ID: Not reported  
Business Name: PARAMOUNT PETROLEUM CORPORATION  
Phone: 9166859253  
Fax: Not reported  
Mailing Address: 10090 WATERMAN RD  
Mailing Address City: ELK GROVE  
Mailing Address State: CA  
Mailing Address Zip Code: 95624  
Operator Name: Paramount Petroleum Corp  
Operator Phone: 5625312060  
Owner Phone: 9166859253  
Owner Mail Address: 14700 DOWNEY AVE  
Owner State: CA  
Owner Zip Code: 90723  
Owner Country: United States  
Property Owner Name: Not reported  
Property Owner Phone: Not reported  
Property Owner Mailing Address: Not reported  
Property Owner City: Not reported  
Property Owner Stat : Not reported  
Property Owner Zip Code: Not reported  
Property Owner Country: Not reported  
EPAID: CAR000044552

**B13**  
**SSE**  
**< 1/8**  
**0.049 mi.**  
**258 ft.**

**CONOCOPHILLIPS COMPANY**  
**10090 WATERMAN RD**  
**ELK GROVE, CA 95624**  
  
**Site 7 of 10 in cluster B**

**EDR Hist Auto** **1020680417**  
**N/A**

**Relative:**  
**Higher**  
  
**Actual:**  
**52 ft.**

**EDR Hist Auto**

Year:	Name:	Type:
1982	CONOCO INC	Petroleum Refining
1983	CONOCO INC	Petroleum Refining
1985	CONOCO INC	Petroleum Refining
1986	CONOCO INC	Petroleum Refining
2008	CONOCOPHILLIPS COMPANY	Gasoline Service Stations, NEC
2009	CONOCOPHILLIPS COMPANY	Gasoline Service Stations, NEC
2010	CONOCOPHILLIPS COMPANY	Gasoline Service Stations, NEC
2011	CONOCOPHILLIPS COMPANY	Gasoline Service Stations, NEC



MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**B14**  
**SSE**  
**< 1/8**  
**0.049 mi.**  
**258 ft.**

**ASPHALT TERMINALS LLC**  
**10090 WATERMAN RD**  
**ELK GROVE, CA 95624**  
  
**Site 8 of 10 in cluster B**

**CERS HAZ WASTE**  
**CERS TANKS**  
**Sacramento Co. ML**  
**CERS**

**S123097736**  
**N/A**

**Relative:**  
**Higher**  
  
**Actual:**  
**52 ft.**

**CERS HAZ WASTE:**  
Name: ASPHALT TERMINALS LLC  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 141652  
CERS ID: 10221115  
CERS Description: Hazardous Waste Generator

**CERS TANKS:**  
Name: ASPHALT TERMINALS LLC  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 141652  
CERS ID: 10221115  
CERS Description: Aboveground Petroleum Storage

**Sacramento Co. ML:**  
Name: ASPHALT TERMINALS LLC  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**  
Name: ASPHALT TERMINALS LLC  
Address: 10090 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 141652  
CERS ID: 10221115  
CERS Description: Chemical Storage Facilities

**Violations:**  
Site ID: 141652

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)  
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.  
Violation Notes: Returned to compliance on 09/25/2015. OBSERVATION: Initial and annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to this department demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.67 25270.6(a)(2) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.6(a)(2)  
Violation Description: Failure to submit a Tank Facility Statement or Business Plan.  
Violation Notes: Returned to compliance on 09/25/2015.  
Violation Division: Sacramento County Env Management Department  
Violation Program: APSA  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment..  
Violation Notes: Returned to compliance on 09/16/2015. OBSERVATION: White, liquid, caustic (pH approximately 12) waste from the boiler was observed spilled outside the containment area and spilled onto the surrounding soil near the evaporation pond. CORRECTIVE ACTION: Determine if the white liquid is hazardous (pH 12.5 or higher). If determined to be hazardous, submit photos/documentation to this department demonstrating the spill has been properly removed and managed. OBSERVATION: Oil-saturated absorbent located in the boiler area was observed beneath pumps/equipment. Puddles of oil were observed in the emulsion mill beneath two tanks, pipes and other equipment. Calcium chloride powder was observed spilled on a pallet in the mill warehouse. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills described above have been properly removed and managed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 141652

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.95 25508.1(a)-(e) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(e)  
Violation Description: Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name.  
Violation Notes: Returned to compliance on 09/25/2015. OBSERVATION: The HMBP has not been updated and submitted to this department within 30 days of personnel changes. David Tibbet was listed as the Terminal Manager on the HMBP until August 27, 2015; however, John Adams has been the terminal manager for several months. CORRECTIVE ACTION: Review, revise, and certify the HMBP electronically in this department's e-Reporting Portal or in the California Environmental Reporting System. CORRECTED PRIOR TO INSPECTION  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: 22 CCR 12 66262.40(c) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(c)  
Violation Description: Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.  
Violation Notes: Returned to compliance on 09/30/2015. OBSERVATION: The latex waste, calcium chloride waste, and PC 1688 asphalt emulsifier waste located in the Henry's warehouse was observed being accumulated in 55 gallon drums with the word "waste" stenciled on the drum and facility representatives John Adams and John Dumas were unsure if those waste streams were hazardous waste. CORRECTIVE ACTION: Prior to disposal of the waste streams listed above submit documentation to this department demonstrating that the latex, calcium chloride, and PC 1688 asphalt emulsifier waste have been properly characterized to determine if they are hazardous wastes. If determined to be hazardous submit a manifest/receipt documenting proper disposal and a statement demonstrating how you will manage it in the future. Keep the test results, waste analyses, or other determinations at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2  
Violation Description: Failure to meet any of the following consolidated manifest requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt for at least three years.

Violation Notes: Returned to compliance on 09/30/2015. OBSERVATION: Consolidated Manifests for parts washer waste were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all 2013, 2014 and 2015 Consolidated Manifest receipts for parts washer waste and submit a copy to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 09-06-2018  
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.11

Violation Description: Failure to determine if wastes generated are hazardous waste by using generator knowledge or applying testing method.

Violation Notes: Returned to compliance on 12/07/2018. OBSERVATION: (2) appx. 110 gallon metal containers of used carbon located in Henry's Warehouse were observed being stored and a proper waste determination has not been made. There were also (2) 55 gallon containers of diesel with asphalt, (2) 55 gallon containers of spent soda ash, (2) 55 gallon containers of spent caustic, a 275 gallon container of MQK residual, a 55 gallon container of water and flex bad, a 300 gallon container of bad latex, (4) 55 gallon containers of Innovault H400, (2) 5 gallon containers of Copper Sulfate and (2) 55 gallon containers of used Redicote which were all labeled as non-hazardous waste. Several containers of carbon are still in place for the old vapor recovery system which will be out of service in the future. A Regenerative Thermal Oxidizer has a container used to collect condensate waste which is in process. The steam generator has a knock out tank that overflows into a 55 gallon container which is in process. CORRECTIVE ACTION: Submit [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: 22 CCR 15 66265.16 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.16

Violation Description: Failure to provide employees within the first six months after the date of their employment, or assignment to the facility, or to work unsupervised, or to a new position at a facility with hazardous waste training to ensure employees are competent in the following areas: hazardous waste management procedures (including contingency plan

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ASPHALT TERMINALS LLC (Continued)

S123097736

implementation) relevant to the positions in which they are employed, emergency response and emergency equipment, and procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment. In addition, the owner/operator shall ensure facility personnel take part in an annual review of the initial training and training records training records on current personnel shall be kept until closure of the facility. Training records on former employees shall be kept for at least three years from the date the employee last worked at the facility. The records shall include the following: the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; a written job description for each position, duties of facility personnel assigned to each position, and a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.

Violation Notes: Returned to compliance on 09/25/2015. OBSERVATION: As demonstrated by the number and type of hazardous waste violations observed at the time of inspection, personnel are not adequately trained to perform their duties in a way that ensures the facility's compliance with the requirements of this chapter and documented training of personnel provided during the inspection shows that employees have not received training for a few years (e.g. John Dumas received hazcom in 2010 and four other employees haven't received the training in the past year; hazwoper 1, 2 and 3 is expired for 4 employees and John Dumas never received the hazwoper series training.) CORRECTIVE ACTION: Conduct training with applicable personnel and document it according to the requirements of 22 CCR 15 66265.16(d). Submit a copy of the documentation to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violation Notes: Returned to compliance on 09/25/2015. OBSERVATION: The hazardous materials inventory submitted through the California Environmental Reporting System does not match site conditions (e.g. Morelife 5000 is listed at the Under Loading Racks 3 & 4, but the tank at the loading racks is empty and Morelife 5000 is stored in reportable quantity in the Henry's warehouse; carbon black is listed at the Storage Area, but carbon black is no longer stored at this facility; polyfon H is listed at the Emulsion Warehouse, but is actually stored in Henry's warehouse; the chemical locations as listed on the inventory forms are not the chemical location descriptions the on site personnel use (i.e. Emulsion Plant is listed as a chemical location, but Tank Farm is used by on site personnel); etc.). Additionally, the facility has not submitted the Hazardous Materials Inventory Chemical Description page for the following hazardous materials to this department: Heat transfer oil (3,205 gallon tank and eight 55 gallon drums) - [Truncated]

Violation Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Violation Program: HMRRP  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 09-06-2018  
Citation: HSC 6.5 25201 - California Health and Safety Code, Chapter 6.5, Section(s) 25201

Violation Description: Failure to obtain a permit or grant of interim status after generator has accumulated hazardous waste on-site for longer than 90 days.

Violation Notes: Returned to compliance on 12/07/2018. OBSERVATION: (2) 55-gallon containers of used oil located in Henry's Warehouse were observed without an accumulation start date and a manifest/receipt demonstrating disposal within the past 90 days was not available. CORRECTIVE ACTION: Dispose of the used oil and submit a copy of the manifest/receipt to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 12/01/2015. OBSERVATION: The following containers of hazardous waste were observed without hazardous waste labels: Five 250 gallon vapor recovery condensation totes Approximately twenty 55 gallon vapor recovery condensation drums located in the tank area, loading rack, and Henry's warehouse One 55 gallon drum of used oil in Henry's warehouse Seven 55 gallon drums of calcium chloride in Henry's warehouse (see Violation Q259) Four 55 gallon drums of latex in Henry's warehouse (see Violation Q259) Five 55 gallon drums of PC 1688 asphalt emulsifier in Henry's warehouse (violation Q259) CORRECTIVE ACTION: Submit a photo to this department demonstrating that the containers listed above have been properly labeled. OBSERVATION: A 55 gallon drum of acetone waste located outside the lab was observed without the physical state and hazardous properties on the label. One 15 gallon drum of distillation bottoms located in the maintenance shop was observed without an accumulation [Truncated]

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: 22 CCR 15 66265.31 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Violation Notes: to the air, soil, or surface water which could threaten human health or the environment.  
Returned to compliance on 09/16/2015. OBSERVATION: White, liquid, caustic (pH approximately 12) waste from the boiler was observed spilled outside the containment area and spilled onto the surrounding soil near the evaporation pond. CORRECTIVE ACTION: Determine if the white liquid is hazardous (pH 12.5 or higher). If determined to be hazardous, submit photos/documentation to this department demonstrating the spill has been properly removed and managed. OBSERVATION: Oil-saturated absorbent located in the boiler area was observed beneath pumps/equipment. Puddles of oil were observed in the emulsion mill beneath two tanks, pipes and other equipment. Calcium chloride powder was observed spilled on a pallet in the mill warehouse. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spills described above have been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all required content.

Violation Notes: Returned to compliance on 09/25/2015. OBSERVATION: The annotated site map submitted to this department does not identify all hazardous materials/waste handling and storage areas (e.g. the hydrochloric acid tanks, the transfer oil tank and drums, the hazardous materials in the warehouse and maintenance shop, the vapor recovery condensate tanks and drums, etc. are not identified.) Additionally, none of the hazardous materials and hazardous wastes located in the Henry's warehouse are identified. CORRECTIVE ACTION: Revise the annotated Site Map to include all required content and submit electronically in this department's e-Reporting Portal or in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Violation Date: 08-28-2015  
Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11, Section(s) 25404.1

Violation Description: Failure to maintain a valid permit.  
Violation Notes: Returned to compliance on 09/25/2015.  
Violation Division: Sacramento County Env Management Department  
Violation Program: APSA  
Violation Source: CERS

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-28-2015  
Violations Found: Yes

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ASPHALT TERMINALS LLC (Continued)

S123097736

Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-28-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 08-28-2015  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: AT00 ? OBSERVATION: The facility does not have a current permit for aboveground petroleum storage. The facility recently reached the 1,320 gallon threshold for the Aboveground Petroleum Storage Act (APSA), but did not notify this department of the facility change to acquire a permit. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed aboveground petroleum storage permit and maintain that permit as active as long as the facility is in operation. AT01 ? OBSERVATION: Failure to submit an up-to-date Tank Facility Statement. The facility recently added a 3,205 gallon heat transfer oil-filled operating equipment tank, five 250 gallon vapor recovery condensate tanks, two drums of red diesel, and approximately eight 55 gallon drums of heat transfer oil. CORRECTIVE ACTION: Within 30 days, submit an up-to-date Tank Facility Statement to this department.  
Eval Division: Sacramento County Env Management Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-06-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations were noted at the time of the inspection. Notes: An updated CERS submittal for 10900 Waterman Rd. was made today by June Coover with ERM. This included adding materials that were observed during the inspection, removing materials that were below the reportable quantity, and updating the ER/Contingency Plan. This facility also stores reportable quantities of hazardous materials at the neighboring facility at 10144 Waterman Rd. and as such should submit a separate CERS submittal for that location. Both facilities inventory were reported in CERS using this facility's ID number. The facility is currently leasing the property and has plans to acquire and integrate it with this parcel in the future. Please provide a written statement of the businesses' intentions in regards to the property at 10144 Waterman Rd. and that emergency response coordination has been made with the local fire department for both facilities. The facility and CERS ID for 10144 Waterman [Truncated]  
Eval Division: Sacramento County Env Management Department



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ASPHALT TERMINALS LLC (Continued)

S123097736

Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-06-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations were noted at the time of the inspection. Notes: Offload areas for cationic and anionic emulsions were not provided with general containment located on the south side and the north east corner of the emulsion tank farm. An offload area for asphalt near the synthetic rubber hopper is not provided with general containment. Warning signs for overhead piping were not in place for traffic entering into the loading rack area. The loading rack has a berm that transects a traffic lane and causes trucks to travel diagonally over the berm located at the western most part of the loading rack. An emulsion tank located under the cat walk for the loading rack will be removed during a retrofit. This facility has recently installed a Regenerative Thermal Oxidizer which is replacing the current vapor recovery system. Once the loading rack retrofit has begun, a technical amendment must be completed for the SPCC plan. Ensure that our department is notified of any changes are [Truncated]

Eval Division: Sacramento County Env Management Department  
Eval Program: APSA  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 09-06-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Submit a completed Return to Compliance Statement along with a corrective actions statement for each violation listed in the inspection report to our department by October 8, 2018. Notes: In the Steam Generator area there are chemicals being stored for water treatment and an eyewash station was not observed on site. Two air compressors located to the south of the Steam Generator area do not have oil water separator filters on the condensate lines. Two aerosol can puncturing units acquired by the previous business owner have not had the proper notifications made to the CUPA per the CA Health and Safety Code Section 25201.16(j): (j) (1) A universal waste handler that processes universal waste aerosol cans shall, no later than the date on which the handler first initiates this activity, submit a notification, in person or by certified mail, with return receipt requested, to either of the following: (A) The CUPA, if the facility is under the jurisdiction of a [Truncated]

Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:  
Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Site Address: 10090 WATERMAN RD  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-28-2015  
Enf Action Type: Notice of Violation (Unified Program)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: APSA  
Enf Action Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Site Address: 10090 WATERMAN RD  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-28-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 141652  
Site Name: Asphalt Terminals LLC  
Site Address: 10090 WATERMAN RD  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-28-2015  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Coordinates:  
Site ID: 141652  
Facility Name: Asphalt Terminals LLC  
Env Int Type Code: HWG  
Program ID: 10221115  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.391040  
Longitude: -121.355100

Affiliation:  
Affiliation Type Desc: Environmental Contact  
Entity Name: Justin Ivy  
Entity Title: Not reported  
Affiliation Address: 6 Centerpointe Drive, Suite 500  
Affiliation City: La Palma  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 90623  
Affiliation Phone: Not reported  
  
Affiliation Type Desc: Legal Owner  
Entity Name: Asphalt Terminals LLC  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Affiliation Address: 6 Centerpointe Drive Suite 500  
Affiliation City: La Palma  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 90623  
Affiliation Phone: (714) 880-1600

Affiliation Type Desc: Operator  
Entity Name: Asphalt Terminals LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (562) 531-2060

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Identification Signer  
Entity Name: Justin Ivy  
Entity Title: Senior Environmental Specialist  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer  
Entity Name: Daneh Manouchehri  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 10090 WATERMAN RD  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ASPHALT TERMINALS LLC (Continued)**

**S123097736**

Affiliation Type Desc: Parent Corporation  
Entity Name: Asphalt Terminals LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**B15**  
**SSE**  
**< 1/8**  
**0.060 mi.**  
**315 ft.**

**THE KINGSFORD COMPANY**  
**10100 WATERMAN RD**  
**ELK GROVE, CA 95624**  
**Site 9 of 10 in cluster B**

**SWEEPS UST** **S101627803**  
**CA FID UST** **N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**SWEEPS UST:**  
Name: THE KINGSFORD COMPANY  
Address: 10100 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 3284  
Number: 9  
Board Of Equalization: 44-018723  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 34-000-003284-000001  
Tank Status: A  
Capacity: 500  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 5

Name: THE KINGSFORD COMPANY  
Address: 10100 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 3284  
Number: 9  
Board Of Equalization: 44-018723  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 34-000-003284-000002  
Tank Status: A  
Capacity: 2100  
Active Date: 07-01-85  
Tank Use: UNKNOWN  
STG: P  
Content: Not reported  
Number Of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**S101627803**

Name: THE KINGSFORD COMPANY  
Address: 10100 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 3284  
Number: 9  
Board Of Equalization: 44-018723  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 34-000-003284-000003  
Tank Status: A  
Capacity: 2100  
Active Date: 07-01-85  
Tank Use: UNKNOWN  
STG: P  
Content: Not reported  
Number Of Tanks: Not reported

Name: THE KINGSFORD COMPANY  
Address: 10100 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 3284  
Number: 9  
Board Of Equalization: 44-018723  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 4  
SWRCB Tank Id: 34-000-003284-000004  
Tank Status: A  
Capacity: 10000  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Name: THE KINGSFORD COMPANY  
Address: 10100 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 3284  
Number: 9  
Board Of Equalization: 44-018723  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 5  
SWRCB Tank Id: 34-000-003284-000005  
Tank Status: A  
Capacity: 1000  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**S101627803**

Content: LEADED  
 Number Of Tanks: Not reported

CA FID UST:

Facility ID: 34006771  
 Regulated By: UTNKA  
 Regulated ID: 00003284  
 Cortese Code: Not reported  
 SIC Code: Not reported  
 Facility Phone: 9166853925  
 Mail To: Not reported  
 Mailing Address: P O BOX  
 Mailing Address 2: Not reported  
 Mailing City,St,Zip: ELK GROVE 95624  
 Contact: Not reported  
 Contact Phone: Not reported  
 DUNs Number: Not reported  
 NPDES Number: Not reported  
 EPA ID: Not reported  
 Comments: Not reported  
 Status: Active

**B16**  
**SSE**  
 < 1/8  
 0.060 mi.  
 315 ft.

**THE KINGSFORD COMPANY**  
**10100 WATERMAN ROAD**  
**ELK GROVE, CA 95624**

**HIST UST**    **U001612819**  
 N/A

**Site 10 of 10 in cluster B**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

HIST UST:  
 Name: THE KINGSFORD COMPANY  
 Address: 10100 WATERMAN ROAD  
 City,State,Zip: ELK GROVE, CA 95624  
 File Number: 00029482  
 URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00029482.pdf>  
 Region: STATE  
 Facility ID: 00000003284  
 Facility Type: Other  
 Other Type: MANUFACTURING  
 Contact Name: F.D. KUKLA  
 Telephone: 9166853925  
 Owner Name: THE KINGSFORD COMPANY  
 Owner Address: 1221 BROADWAY  
 Owner City,St,Zip: OAKLAND, CA 94612  
 Total Tanks: 0005

Tank Num: 001  
 Container Num: 1  
 Year Installed: 1968  
 Tank Capacity: 00000500  
 Tank Used for: PRODUCT  
 Type of Fuel: DIESEL  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 002  
 Container Num: 2  
 Year Installed: 1979

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**THE KINGSFORD COMPANY (Continued)**

**U001612819**

Tank Capacity: 00002100  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Not reported

Tank Num: 003  
 Container Num: 3  
 Year Installed: 1979  
 Tank Capacity: 00002100  
 Tank Used for: PRODUCT  
 Type of Fuel: Not reported  
 Container Construction Thickness: Not reported  
 Leak Detection: Not reported

Tank Num: 004  
 Container Num: 4  
 Year Installed: 1982  
 Tank Capacity: 00010000  
 Tank Used for: PRODUCT  
 Type of Fuel: REGULAR  
 Container Construction Thickness: Not reported  
 Leak Detection: Stock Inventor

Tank Num: 005  
 Container Num: 5  
 Year Installed: Not reported  
 Tank Capacity: 00001000  
 Tank Used for: PRODUCT  
 Type of Fuel: REGULAR  
 Container Construction Thickness: Not reported  
 Leak Detection: None

[Click here for Geo Tracker PDF:](#)

17  
 NNE  
 < 1/8  
 0.115 mi.  
 609 ft.

**MSA: EAST ELK GROVE WTP (WT05)**  
**9960 WATERMAN RD**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S106388212**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

Sacramento Co. ML:  
 Name: MSA: EAST ELK GROVE WTP (WT05)  
 Address: 9960 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: A  
 Billing Codes UST: Not reported  
 WG Bill Code: Not reported  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported  
 HAZMAT Inspection Date: Not reported  
 Hazmat Date BP Received: Not reported  
 UST Permit Dt: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MSA: EAST ELK GROVE WTP (WT05) (Continued)

S106388212

UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

C18 WORLD ASPHALT COMPANY  
SSW 10144 WATERMAN RD  
1/8-1/4 ELK GROVE, CA 95624  
0.163 mi.  
861 ft. Site 1 of 3 in cluster C

Relative:  
Higher

Actual:  
52 ft.

LUST 1000591153  
Sacramento Co. CS N/A  
CERS HAZ WASTE  
SWEEPS UST  
HIST UST  
CA FID UST  
CERS TANKS  
CHMIRS  
HIST CORTESE  
Sacramento Co. ML  
WDS  
CIWQS  
CERS

LUST:

Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606701093](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606701093)  
Global Id: T0606701093  
Latitude: 38.389574  
Longitude: -121.355077  
Status: Completed - Case Closed  
Status Date: 09/09/1999  
Case Worker: DWB  
RB Case Number: 341269  
Local Agency: SACRAMENTO COUNTY LOP  
File Location: Not reported  
Local Case Number: D591/RO 1330  
Potential Media Affect: Under Investigation  
Potential Contaminants of Concern: Stoddard solvent / Mineral Spruits / Distillates  
Site History: Case is closed

LUST:

Global Id: T0606701093  
Contact Type: Local Agency Caseworker  
Contact Name: DANA BOOTH  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 8475 JACKSON ROAD, SUITE 240  
City: SACRAMENTO  
Email: boothd@saccounty.net  
Phone Number: Not reported  
  
Global Id: T0606701093  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 11/07/2001  
Action: Closure/No Further Action Letter - #11/7/2001

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 04/05/2002  
Action: Closure/No Further Action Letter

Global Id: T0606701093  
Action Type: Other  
Date: 09/09/1999  
Action: Leak Discovery

Global Id: T0606701093  
Action Type: RESPONSE  
Date: 02/26/2002  
Action: Site Assessment Report

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 09/09/1999  
Action: Closure/No Further Action Letter

Global Id: T0606701093  
Action Type: Other  
Date: 01/02/1965  
Action: Leak Reported

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 09/21/1999  
Action: Other Report - #9/21/1999

Global Id: T0606701093  
Action Type: ENFORCEMENT  
Date: 11/13/2001  
Action: Staff Letter - #6/9/1999

LUST:

Global Id: T0606701093  
Status: Completed - Case Closed  
Status Date: 09/09/1999

Global Id: T0606701093  
Status: Open - Case Begin Date  
Status Date: 09/09/1999

Global Id: T0606701093

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Status: Open - Reopen Case  
Status Date: 09/09/1999

LUST REG 5:

Name: WORLD AHPHALT  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Region: 5  
Status: No Action  
Case Number: 341269  
Case Type: Undefined  
Substance: STODDARD SOLVNT  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

Sacramento Co. CS:

Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
State Site Number: D591  
Lead Staff: Booth, D.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Mineral Spirits  
Date Reported: 06/09/1999  
Facility Id: RO0001330  
Case Type: Soil only  
Case Closed: Y  
**Date Closed: Not reported**  
**Case Type: Soil only affected**  
**Substance: Mineral Spirits**

CERS HAZ WASTE:

Name: HENRY'S PROPERTY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 517749  
CERS ID: 10772005  
CERS Description: Hazardous Waste Generator

SWEEPS UST:

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 14310  
Number: 9  
Board Of Equalization: 44-019005  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

SWRCB Tank Id: 34-000-014310-000001  
Tank Status: A  
Capacity: 12000  
Active Date: 09-12-88  
Tank Use: UNKNOWN  
STG: P  
Content: Not reported  
Number Of Tanks: 3

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 14310  
Number: 9  
Board Of Equalization: 44-019005  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 34-000-014310-000002  
Tank Status: A  
Capacity: 5000  
Active Date: 09-12-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN  
Number Of Tanks: Not reported

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN RD  
City: ELK GROVE  
Status: Active  
Comp Number: 14310  
Number: 9  
Board Of Equalization: 44-019005  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 34-000-014310-000003  
Tank Status: A  
Capacity: 7500  
Active Date: 09-12-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN  
Number Of Tanks: Not reported

**HIST UST:**

Name: WORLD ASPHALT COMPANY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
File Number: 00029641  
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00029641.pdf>  
Region: STATE  
Facility ID: 00000014310

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Facility Type: Other  
Other Type: MANUFACTURING PLANT  
Contact Name: NORMAN PUGH  
Telephone: 9166852000  
Owner Name: WORLD ASPHALT COMPANY  
Owner Address: 10144 WATERMAN ROAD  
Owner City,St,Zip: ELK GROVE, CA 95624  
Total Tanks: 0003

Tank Num: 001  
Container Num: 1  
Year Installed: 1976  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Container Construction Thickness: 3/16  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 2  
Year Installed: 1976  
Tank Capacity: 00005000  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Container Construction Thickness: 3/16  
Leak Detection: None

Tank Num: 003  
Container Num: 3  
Year Installed: 1976  
Tank Capacity: 00007500  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Container Construction Thickness: 3/16  
Leak Detection: None

[Click here for Geo Tracker PDF:](#)

**CA FID UST:**

Facility ID: 34006904  
Regulated By: UTNKA  
Regulated ID: 00014310  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 9166852000  
Mail To: Not reported  
Mailing Address: 10144 WATERMAN RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: ELK GROVE 95624  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

**CERS TANKS:**

Name: HENRY'S PROPERTY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 517749  
CERS ID: 10772005  
CERS Description: Aboveground Petroleum Storage

**CHMIRS:**

Name: Not reported  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
OES Incident Number: 9-0670  
OES notification: 02/12/1999  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agncy Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported  
Others Number Of Decontaminated: Not reported  
Others Number Of Injuries: Not reported  
Others Number Of Fatalities: Not reported  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA DOT PUC/ICC Number: Not reported  
Company Name: Not reported  
Reporting Officer Name/ID: Not reported  
Report Date: Not reported  
Facility Telephone: Not reported  
Waterway Involved: No  
Waterway: Not reported  
Spill Site: Not reported  
Cleanup By: Co. HazMat  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Not reported  
Other: Not reported  
Date/Time: Not reported  
Year: 1999  
Agency: Sacramento FD  
Incident Date: 2/11/1999 12:00:00 AM  
Admin Agency: Sacramento County Environmental Management Secondary Agency  
Amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Contained: Yes  
Site Type: Merchant/Business  
E Date: Not reported  
Substance: Burning Ashland mineral spirits 7.5  
Gallons: 300  
Unknown: 0  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: 0  
Number of Injuries: 0  
Number of Fatalities: 0  
#1 Pipeline: Not reported  
#2 Pipeline: Not reported  
#3 Pipeline: Not reported  
#1 Vessel >= 300 Tons: Not reported  
#2 Vessel >= 300 Tons: Not reported  
#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
FataIs: Not reported  
Comments: Not reported  
Description: Only contamination was air contamination, no ground contamination, foamed with standard foam creating vapor barrier, tank inspected for leakage, none found.

**HIST CORTESE:**

edr\_fname: world asphalt  
edr\_fadd1: 10144 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 341269

**Sacramento Co. ML:**

Name: RIVER CITY WASTE RECYCLERS  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: I  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**WDS:**

Name: HENRY COMPANYWORLD ASPHALT DI  
Address: 10144 WATERMAN ROAD  
City: ELK GROVE  
Facility ID: 5S 34I006482  
Facility Type: Not reported  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 0  
Facility Telephone: Not reported  
Facility Contact: Not reported  
Agency Name: HENRY COMPANY  
Agency Address: Not reported  
Agency City,St,Zip: 0  
Agency Contact: Not reported  
Agency Telephone: Not reported  
Agency Type: Not reported  
SIC Code: 0  
SIC Code 2: Not reported  
Primary Waste Type: Not reported  
Primary Waste: Not reported  
Waste Type2: Not reported  
Waste2: Not reported  
Primary Waste Type: Not reported  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: Not reported  
POTW: Not reported  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

**CIWQS:**

Name: RIVER CITY WASTE RECYCLERS  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Agency: River City Waste Recyclers LLC  
Agency Address: 8940 Elder Creek Rd, Sacramento, CA 95829

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

Place/Project Type: Industrial - Metals Service Centers and Offices  
SIC/NAICS: 5051  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Terminated  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34I023684  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 06/20/2012  
Termination Date: 10/08/2013  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: Not reported  
Longitude: Not reported

**CERS:**

Name: WORLD ASPHALT  
Address: 10144 WATERMAN RD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 224331  
CERS ID: T0606701093  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: DANA BOOTH - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 8475 JACKSON ROAD, SUITE 240  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Name: HENRY'S PROPERTY  
Address: 10144 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 517749  
CERS ID: 10772005



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**WORLD ASPHALT COMPANY (Continued)**

**1000591153**

CERS Description: Chemical Storage Facilities

Affiliation:

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: June Coover  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: June Coover  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: Asphalt Terminals LLC  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**C19**  
**SSW**  
**1/8-1/4**  
**0.163 mi.**  
**861 ft.**

**10144 WATERMAN RD.**  
**ELK GROVE, CA 95624**  
**Site 2 of 3 in cluster C**

**RCRA-LQG 1010313399**  
**CAP000161471**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

RCRA-LQG:  
Date form received by agency: 02/17/2006  
Facility name: Not reported  
Facility address: 10144 WATERMAN RD.  
ELK GROVE, CA 95624  
EPA ID: CAP000161471  
Mailing address: 10144 WATERMAN RD  
ELK GROVE, CA 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

(Continued)

1010313399

Contact: YSIDRO ROBLES  
Contact address: Not reported  
Not reported  
Contact country: US  
Contact telephone: 916-685-2000  
Contact email: YROBLES@HENRY.COM  
EPA Region: Not reported  
Classification: Large Quantity Generator  
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

C20  
SSW  
1/8-1/4  
0.163 mi.  
861 ft.

HENRY COMPANY  
10144 WATERMAN ROAD  
ELK GROVE, CA 95624

RCRA-LQG 1010314079  
CAR000181735

Site 3 of 3 in cluster C

Relative:  
Higher  
Actual:  
52 ft.

RCRA-LQG:  
Date form received by agency: 04/12/2010  
Facility name: HENRY COMPANY  
Facility address: 10144 WATERMAN ROAD  
ELK GROVE, CA 95624  
EPA ID: CAR000181735  
Mailing address: COLD STREAM ROAD  
KIMBERTON, PA 19442  
Contact: JOHN K KINAST  
Contact address: COLD STREAM ROAD  
KIMBERTON, PA 19442  
Contact country: US

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HENRY COMPANY (Continued)**

**1010314079**

Contact telephone: 484-923-2269  
Contact email: JKINAST@HENRY.COM  
EPA Region: 09  
Classification: Large Quantity Generator  
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

**Owner/Operator Summary:**

Owner/operator name: HENRY COMPANY  
Owner/operator address: N. SEPULVEDA BLVD  
EL SEGUNDO, CA 90245

Owner/operator country: Not reported  
Owner/operator telephone: 310-955-9200  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1994  
Owner/Op end date: Not reported

Owner/operator name: NORMAN PUGH  
Owner/operator address: 9687 DILLARD RD  
WILTON, CA 95693

Owner/operator country: US  
Owner/operator telephone: Not reported  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/19/1976  
Owner/Op end date: Not reported

Owner/operator name: HENRY COMPANY  
Owner/operator address: Not reported  
Not reported

Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1994  
Owner/Op end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HENRY COMPANY (Continued)**

**1010314079**

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Historical Generators:

Date form received by agency: 02/16/2007  
Site name: HENRY COMPANY  
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: 151  
. Waste name: Asbestos-containing waste  
  
. Waste code: 223  
. Waste name: Unspecified oil-containing waste  
  
. Waste code: 281  
. Waste name: Adhesives  
  
. Waste code: 331  
. Waste name: Off-specification, aged, or surplus organics  
  
. Waste code: 352  
. Waste name: Other organic solids  
  
. Waste code: D001  
. Waste name: IGNITABLE WASTE  
  
Violation Status: No violations found

D21  
South  
1/8-1/4  
0.204 mi.  
1078 ft.

**VINEYARD AUTOMOTIVE**  
**10200 WATERMAN RD STE B**  
**ELK GROVE, CA 95624**  
**Site 1 of 3 in cluster D**

**CERS HAZ WASTE S109035006**  
**Sacramento Co. ML N/A**  
**CERS**

**Relative:**  
**Higher**

**Actual:**  
**52 ft.**

CERS HAZ WASTE:  
Name: VINEYARD AUTOMOTIVE  
Address: 10200 WATERMAN RD STE B  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 83522  
CERS ID: 10222369  
CERS Description: Hazardous Waste Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Sacramento Co. ML:

Name: VINEYARD AUTOMOTIVE  
Address: 10200 WATERMAN RD STE B  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

CERS:

Name: VINEYARD AUTOMOTIVE  
Address: 10200 WATERMAN RD STE B  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 83522  
CERS ID: 10222369  
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12  
Violation Description: Failure to obtain and/or maintain an Active EPA ID.  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: The generator does not have an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control (DTSC) to reactivate your EPA ID#. Send me a statement that this was done.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.95 25504(b) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(b)

Violation Description: Failure to include adequate emergency response procedures in the business plan for a release or threatened release.  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: An Emergency Response Plan and procedures has not been completed and submitted to this department. CORRECTIVE ACTION: See corrective action for violation code Q343.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.  
Violation Notes: OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: 19 CCR 4 2729.2(a)(1) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(1)

Violation Description: Owner/Operator failed to complete and/or submit the Business Activities Page and/or Business Owner Operator Identification Page.  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: The Business Activities and Owner/Operator ID pages have not been submitted to this department. CORRECTIVE ACTION: See corrective action for violation code Q343.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-15-2017  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple  
Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: OBSERVATION: One 55 gallon drum of waste coolant and one 55 gallon drum of used oil located in the shop were observed without accurate accumulation start dates and a manifest/receipt demonstrating disposal within the 180 days was not available. CORRECTIVE ACTION: Dispose of waste coolant and used oil and submit a copy of the manifest/receipt to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2  
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.  
Violation Notes: OBSERVATION: The facility has not reviewed and electronically certified by the annual due date of September 8, 2017 that the HMBP is complete and accurate. CORRECTIVE ACTION: Review, revise, and certify the HMBP electronically in the California Environmental Reporting System.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-15-2017  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VINEYARD AUTOMOTIVE (Continued)**

**S109035006**

Violation Notes: OBSERVATION: The facility does not have a current permit for hazardous materials storage/handling. CORRECTIVE ACTION: Immediately pay all permit fees to this department to obtain a new or renewed hazardous materials storage permit and maintain that permit as active as long as the facility is in operation and continues to store/handle hazardous materials.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2

Violation Description: Failure to meet any of the following consolidated manifest requirements: 1) Legible receipts for each quantity of hazardous waste that is received from a generator, 2) The generator's information (name, address, identification number, contact person, telephone number of the generator, the signature of the generator or the generator's representative), 3) Date of the shipment, 4) The manifest number, 5) The volume or quantity of each waste stream received, 6) The name, address, and identification number of the authorized facility to which the hazardous waste will be transported, 7) The transporter's information (name, address, and identification number, the driver's signature), 8) A statement, signed by the generator, certifying that the generator has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree economically practicable. 9) The generator shall retain each receipt for at least three years.

Violation Notes: OBSERVATION: Consolidated Manifests for used oil, used coolant and used oil filters were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Consolidated Manifest receipts for the last 2 years and submit a copy(s) to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2

Violation Description: Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.

Violation Notes: OBSERVATION: Consolidated Manifests for waste coolant were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all Consolidated Manifest receipts for waste coolant and submit a copy to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VINEYARD AUTOMOTIVE (Continued)**

**S109035006**

Violation Date: 06-15-2017  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22  
Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.  
Violation Notes: OBSERVATION: One 55 gallon drum of used oil and fuel filters located in the shop was observed with an accumulation start date of 3/20/2012 and bills of lading for used oil and fuel filters were not kept for the past three years. Drained used oil filters must be disposed of annually. CORRECTIVE ACTION: Submit a bill of lading to this department demonstrating proper disposal.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: 40 CFR 1 265.33 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.33  
Violation Description: Failure to test and maintain as necessary all facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment to assure its proper operation in time of emergency.  
Violation Notes: OBSERVATION: Fire extinguishers have not been tested and maintained to assure its proper operation in time of emergency (last service date is June 2012). CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating fire extinguishers have been properly tested or maintained.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-15-2017  
Citation: Un-Specified  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance  
Violation Notes: OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)  
Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: A Hazardous

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Materials Plan (HMP) has not been received by this department. The facility was previously sent a notice/request from this department for the submittal of a HMP. CORRECTIVE ACTION: Submit the HMP electronically in this department's e-Reporting Portal.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: Un-Specified  
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance  
Violation Notes: OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a new or renewed hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple  
Violation Description: Business Plan Program - Administration/Documentation - General  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: The HMP is not accessible. CORRECTIVE ACTION: See corrective action for violation code Q343.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: 19 CCR 4 2729.2(a)(3) - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(3)  
Violation Description: Failure to complete and/or submit an annotated site map if required by CUPA.  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: The annotated site map has not been submitted to this department. CORRECTIVE ACTION: See corrective action for violation code Q343.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: HSC 6.95 25505.1 - California Health and Safety Code, Chapter 6.95, Section(s) 25505.1  
Violation Description: Failure to notify property owner in writing that the business is subject to the business plan program and has complied with its

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Violation Notes: provisions.  
OBSERVATION: The HMBP was not available on site to business personnel.  
CORRECTIVE ACTION: Obtain a copy of your current HMBP and maintain a copy on site.

Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-15-2017  
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12

Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.

Violation Notes: OBSERVATION: The generator has not obtained an active EPA ID number to manage hazardous waste. Two inactive EPA ID numbers are listed for this address (CAL000334098 and CAL000144521). A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number.  
CORRECTIVE ACTION: Submit an application to the California Department of Toxic Substances Control to obtain an EPA ID number. Submit a copy of the completed application to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance with the requirements.

Violation Notes: OBSERVATION: A 55 gallon drum of used oil and fuel filters located in the shop was observed with an accumulation start date of 2012 and bills of lading for used oil and fuel filters were not available for the past three years. CORRECTIVE ACTION: Submit a bill of lading to this department demonstrating proper disposal.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violation Notes: OBSERVATION: A 55 gallon drum of used oil, a 55 gallon drum of waste coolant, and a 15 gallon drum of used oil located in the shop was observed with incomplete hazardous waste labels (missing generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

information, accumulation start dates, contents, physical state and hazards). CORRECTIVE ACTION: Submit a photo to this department demonstrating that the container listed above has been properly labeled.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31

Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Violation Notes: OBSERVATION: Used oil was observed inside the hazardous waste containment trough in the shop. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple

Violation Description: Haz Waste Generator Program - Administration/Documentation - General  
Violation Notes: OBSERVATION: The generator has not obtained a hazardous waste generator permit from this department. CORRECTIVE ACTION: Immediately pay all permit fees to obtain a hazardous waste generator permit and maintain that permit as active as long as the facility is in operation and continues to generate hazardous waste.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 04-12-2018  
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple

Violation Description: Hazardous Waste Generator Program - Operations/Maintenance - General  
Violation Notes: OBSERVATION: A 55 gallon drum of waste coolant located in the shop was observed without an accumulation start date and a manifest/receipt demonstrating disposal within the 180 days was not available. CORRECTIVE ACTION: Dispose of waste coolant and submit a copy of the manifest/receipt to this department.

Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

Site ID: 83522

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Site Name: VINEYARD AUTOMOTIVE  
Violation Date: 06-25-2014  
Citation: HSC 6.95 25504(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)  
Violation Description: Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.  
Violation Notes: Returned to compliance on 08/18/2015. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for used oil and used coolant to this department. CORRECTIVE ACTION: See corrective action for violation code Q343.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HMRRP  
Violation Source: CERS

Evaluation:

Eval General Type: Other/Unknown  
Eval Date: 04-12-2018  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Other/Unknown  
Eval Date: 04-12-2018  
Violations Found: Yes  
Eval Type: Other, not routine, done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-15-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-15-2017  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-25-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-25-2014  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Not reported  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Enforcement Action:

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 06-25-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 06-25-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: facility did not respond to AEO. Sent to CC for a CJ on 11/16/14.  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Enf Action Date: 08-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: facility did not respond to AEO. Sent to CC for a CJ on 11/16/14.  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Facility failed to respond to AEO. Sent to County Counsel for a Clerks  
Judgment on 11/14/14. CJ issued 2/20/15 for \$59,532.50.  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 08-27-2014  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Facility failed to respond to AEO. Sent to County Counsel for a Clerks  
Judgment on 11/14/14. CJ issued 2/20/15 for \$59,532.50.  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HW  
Enf Action Source: CERS

Site ID: 83522  
Site Name: VINEYARD AUTOMOTIVE  
Site Address: 10200 WATERMAN RD STE B  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-21-2017  
Enf Action Type: Notice of Violation (Unified Program)  
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection  
Enf Action Notes: Not reported  
Enf Action Division: Sacramento County Env Management Department  
Enf Action Program: HMRRP  
Enf Action Source: CERS

Affiliation:  
Affiliation Type Desc: Operator  
Entity Name: jerry sexton  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VINEYARD AUTOMOTIVE (Continued)

S109035006

Affiliation Zip: Not reported  
Affiliation Phone: (916) 686-8166

Affiliation Type Desc: Parent Corporation  
Entity Name: VINEYARD AUTOMOTIVE  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: jerry sexton  
Entity Title: owner  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: jerry sexton  
Entity Title: Not reported  
Affiliation Address: 8704 seckel ct  
Affiliation City: elk grove  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: jerry sexton  
Entity Title: Not reported  
Affiliation Address: 10200 WATERMAN RD STE B  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 686-8166

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: jerry sexton  
Entity Title: Not reported  
Affiliation Address: Not reported



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**VINEYARD AUTOMOTIVE (Continued)**

**S109035006**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	10200 WATERMAN RD STE B
Affiliation City:	ELK GROVE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95624
Affiliation Phone:	Not reported

**D22**  
**South**  
**1/8-1/4**  
**0.204 mi.**  
**1078 ft.**

**COMPLETE AUTO REPAIR**  
**10200 WATERMAN RD, #K**  
**ELK GROVE, CA 95624**  
**Site 2 of 3 in cluster D**

**Sacramento Co. ML S102320933**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

Sacramento Co. ML:	
Name:	COMPLETE AUTO REPAIR
Address:	10200 WATERMAN RD, #K
City,State,Zip:	ELK GROVE, CA 95624
Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	Not reported
Billing Codes UST:	Not reported
WG Bill Code:	I
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**D23**  
**South**  
**1/8-1/4**  
**0.204 mi.**  
**1078 ft.**

**PHOENIX CORES & RECYCLING**  
**10200 WATERMAN ROAD**  
**ELK GROVE, CA 95624**

**HAZNET**  
**Sacramento Co. ML**  
**NPDES**  
**CIWQS**

**S113079351**  
**N/A**

**Site 3 of 3 in cluster D**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

**HAZNET:**

Name: VINEYARD AUTOMOTIVE  
 Address: 10200 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 956240000  
 Year: 2009  
 GEPAID: CAL000144521  
 Contact: WALTER HILLEMAYER, PARTNER  
 Telephone: 9166868166  
 Mailing Name: Not reported  
 Mailing Address: 10200 WATERMAN RD  
 Mailing City,St,Zip: ELK GROVE, CA 956240000  
 Gen County: Sacramento  
 TSD EPA ID: CAD980887418  
 TSD County: Alameda  
 Tons: 0.15  
 CA Waste Code: 223-Unspecified oil-containing waste  
 Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
 Facility County: Sacramento

Name: VINEYARD AUTOMOTIVE  
 Address: 10200 WATERMAN RD  
 City,State,Zip: ELK GROVE, CA 956240000  
 Year: 2007  
 GEPAID: CAL000144521  
 Contact: WALTER HILLEMAYER, PARTNER  
 Telephone: 9166868166  
 Mailing Name: Not reported  
 Mailing Address: 10200 WATERMAN RD  
 Mailing City,St,Zip: ELK GROVE, CA 956240000  
 Gen County: Sacramento  
 TSD EPA ID: NVD980895338  
 TSD County: 99  
 Tons: 0.125  
 CA Waste Code: 223-Unspecified oil-containing waste  
 Method: H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
 Facility County: Sacramento

**Sacramento Co. ML:**

Name: AUTO BODY SPECIALIST  
 Address: 10200 WATERMAN RD STE C  
 City,State,Zip: ELK GROVE, CA 95624  
 Facility Id: Not reported  
 Facility Status: Not reported  
 FD: Not reported  
 Billing Codes BP: Not reported  
 Billing Codes UST: Not reported  
 WG Bill Code: A  
 Target Property Bill Cod: Not reported  
 Food Bill Code: Not reported  
 CUPA Permit Date: Not reported  
 HAZMAT Permit Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PHOENIX CORES & RECYCLING (Continued)**

**S113079351**

HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**NPDES:**

Name: PHOENIX CORES & RECYCLING  
Address: 10200 WATERMAN ROAD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34IN601175  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Undetermined  
Status Date: 07/08/2011  
Operator Name: Phoenix Cores & Recycling  
Operator Address: 10200 Waterman Road  
Operator City: Elk Grove  
Operator State: California  
Operator Zip: 95624

**CIWQS:**

Name: PHOENIX CORES & RECYCLING  
Address: 10200 WATERMAN RD UNIT G  
City,State,Zip: ELK GROVE, CA 95624  
Agency: Carl Telton  
Agency Address: 10200 Waterman Rd Unit G, Elk Grove , CA 95624  
Place/Project Type: Industrial - Scrap and Waste Materials  
SIC/NAICS: 5093  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Terminated  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PHOENIX CORES & RECYCLING (Continued)**

**S113079351**

WDID: 5S34I023266  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 07/26/2011  
Termination Date: 10/12/2012  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: Not reported  
Longitude: Not reported

**E24**  
**WSW**  
**1/8-1/4**  
**0.242 mi.**  
**1276 ft.**

**MI RANCHO**  
**10115 IRON ROCK WAY**  
**ELK GROVE, CA 95624**

**Sacramento Co. ML S125093041**  
**N/A**

**Site 1 of 3 in cluster E**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

Sacramento Co. ML:  
Name: MI RANCHO  
Address: 10115 IRON ROCK WAY  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**E25**  
**WSW**  
**1/8-1/4**  
**0.242 mi.**  
**1276 ft.**

**BIMBO BAKERIES USA**  
**10115 IRON ROCK WAY STE A**  
**ELK GROVE, CA 95624**

**Site 2 of 3 in cluster E**

**CERS HAZ WASTE**  
**CERS**      **S124441844**  
                          **N/A**

**Relative:**  
**Higher**

**Actual:**  
**52 ft.**

**CERS HAZ WASTE:**  
 Name: BIMBO BAKERIES USA  
 Address: 10115 IRON ROCK WAY STE A  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 549814  
 CERS ID: 10223167  
 CERS Description: Hazardous Waste Generator

**CERS:**  
 Name: BIMBO BAKERIES USA  
 Address: 10115 IRON ROCK WAY STE A  
 City,State,Zip: ELK GROVE, CA 95624  
 Site ID: 549814  
 CERS ID: 10223167  
 CERS Description: Chemical Storage Facilities

**Affiliation:**  
 Affiliation Type Desc: CUPA District  
 Entity Name: Sacramento County Environmental Management Departm  
 Entity Title: Not reported  
 Affiliation Address: 10590 Armstrong Avenue, Suite A  
 Affiliation City: Sacramento  
 Affiliation State: CA  
 Affiliation Country: Not reported  
 Affiliation Zip: 95655  
 Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Operator  
 Entity Name: Bimbo Bakeries USA  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: (916) 688-7010

Affiliation Type Desc: Parent Corporation  
 Entity Name: BERBER FOOD MANUFACTURING INC  
 Entity Title: Not reported  
 Affiliation Address: Not reported  
 Affiliation City: Not reported  
 Affiliation State: Not reported  
 Affiliation Country: Not reported  
 Affiliation Zip: Not reported  
 Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
 Entity Name: FITE DEVELOPMENT  
 Entity Title: Not reported  
 Affiliation Address: 9857 HORN ROAD  
 Affiliation City: SACRAMENTO  
 Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BIMBO BAKERIES USA (Continued)**

**S124441844**

Affiliation Country: United States  
Affiliation Zip: 95827  
Affiliation Phone: (916) 366-5696

Affiliation Type Desc: Document Preparer  
Entity Name: TIM NGUYEN  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: JAVIER DOMINGUES  
Entity Title: PLANT MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: JAVIER DOMINGUES  
Entity Title: Not reported  
Affiliation Address: 10115 IRON ROCK WAY  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95624  
Affiliation Phone: (916) 688-7010

Affiliation Type Desc: Environmental Contact  
Entity Name: TIM NGUYEN  
Entity Title: Not reported  
Affiliation Address: 10115 IRON ROCK WAY  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 10115 IRON ROCK WAY  
Affiliation City: ELK GROVE  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95624  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**E26**  
**WSW**  
**1/8-1/4**  
**0.242 mi.**  
**1276 ft.**

**GATX LOGISTICS**  
**10115 IRON ROCK WAY, #4**  
**ELK GROVE, CA 95624**  
**Site 3 of 3 in cluster E**

**Sacramento Co. ML** **S103707583**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**52 ft.**

Sacramento Co. ML:  
Name: GATX LOGISTICS  
Address: 10115 IRON ROCK WAY, #4  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**27**  
**NNW**  
**1/4-1/2**  
**0.335 mi.**  
**1771 ft.**

**VALDEZ RECYCLING**  
**9833 KENT ST**  
**ELK GROVE, CA 95624**

**SWRCY** **S108195662**  
**Sacramento Co. ML** **N/A**  
**NPDES**  
**CIWQS**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**51 ft.**

SWRCY:  
Name: VALDEZ RECYCLING  
Address: 9833 KENT ST STE 101  
City,State,Zip: ELK GROVE, CA 95624  
Reg Id: Not reported  
Cert Id: RC271948.001  
Mailing Address: 9833 Kent St Ste 101  
Mailing City: Elk Grove  
Mailing State: CA  
Mailing Zip Code: 95624  
Website: Not reported  
Email: Not reported  
Phone Number: (916) 690-8833  
Rural: N  
Operation Begin Date: 09/25/2018  
Aluminium: Not reported  
Glass: Not reported  
Plastic: Not reported  
Bimetal: Not reported  
Hours of Operation: Mon - Thr 8:00 am - 4:30 pm; Fri - Sat 8:00 am - 4:00 pm; Sun Closed  
Organization ID: Not reported  
Organization Name: Valdez Recycling

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Sacramento Co. ML:

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

NPDES:

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Active  
NPDES Number: CAS000001  
Region: 5S  
Agency Number: 0  
Regulatory Measure ID: 451064  
Place ID: Not reported  
Order Number: 97-03-DWQ  
WDID: 5S34NEC001878  
Regulatory Measure Type: Enrollee  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 11/14/2014  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: 5657 Laurine Way  
Discharge Name: Cayetano Alberto Valdez  
Discharge City: Sacramento  
Discharge State: California  
Discharge Zip: 95824  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

NPDES as of 03/2018:

NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	451064
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/14/2014
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cayetano Alberto Valdez
Discharge Address:	5657 Laurine Way
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95824
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	451064
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	03/07/2016
Processed Date:	11/14/2014
Status:	Active
Status Date:	03/07/2016
Place Size:	9500
Place Size Unit:	SqFt
Contact:	Elva Valdez
Contact Title:	Contact
Contact Phone:	916-690-8833
Contact Phone Ext:	Not reported
Contact Email:	riveraangelina@sbcglobal.net
Operator Name:	Cayetano Alberto Valdez
Operator Address:	5657 Laurine Way
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95824
Operator Contact:	Elva Valdez
Operator Contact Title:	Contact

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Operator Contact Phone: 916-254-8212  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: RIVERAANGELINA@SBCGLOBAL.NET  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Laguna Creek  
Certifier: ALBERTO VALDEZ  
Certifier Title: OWNER  
Certification Date: 30-SEP-16  
Primary Sic: 5093-Scrap and Waste Materials  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 5S34NEC001878  
Regulatory Measure Type: Industrial  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	03/07/2016
Operator Name:	Cayetano Alberto Valdez
Operator Address:	5657 Laurine Way
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95824
NPDES as of 03/2018:	
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	451064
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/14/2014
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Cayetano Alberto Valdez
Discharge Address:	5657 Laurine Way
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95824
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commercial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported
NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	451064
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34NEC001878
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	03/07/2016
Processed Date:	11/14/2014
Status:	Active
Status Date:	03/07/2016
Place Size:	9500
Place Size Unit:	SqFt

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Contact: Elva Valdez  
Contact Title: Contact  
Contact Phone: 916-690-8833  
Contact Phone Ext: Not reported  
Contact Email: riveraangelina@sbcglobal.net  
Operator Name: Cayetano Alberto Valdez  
Operator Address: 5657 Laurine Way  
Operator City: Sacramento  
Operator State: California  
Operator Zip: 95824  
Operator Contact: Elva Valdez  
Operator Contact Title: Contact  
Operator Contact Phone: 916-254-8212  
Operator Contact Phone Ext: Not reported  
Operator Contact Email: RIVERAANGELINA@SBCGLOBAL.NET  
Operator Type: Private Business  
Developer: Not reported  
Developer Address: Not reported  
Developer City: Not reported  
Developer State: California  
Developer Zip: Not reported  
Developer Contact: Not reported  
Developer Contact Title: Not reported  
Constype Linear Utility Ind: Not reported  
Emergency Phone: Not reported  
Emergency Phone Ext: Not reported  
Constype Above Ground Ind: Not reported  
Constype Below Ground Ind: Not reported  
Constype Cable Line Ind: Not reported  
Constype Comm Line Ind: Not reported  
Constype Commercial Ind: Not reported  
Constype Electrical Line Ind: Not reported  
Constype Gas Line Ind: Not reported  
Constype Industrial Ind: Not reported  
Constype Other Description: Not reported  
Constype Other Ind: Not reported  
Constype Recons Ind: Not reported  
Constype Residential Ind: Not reported  
Constype Transport Ind: Not reported  
Constype Utility Description: Not reported  
Constype Utility Ind: Not reported  
Constype Water Sewer Ind: Not reported  
Dir Discharge Uswater Ind: N  
Receiving Water Name: Laguna Creek  
Certifier: ALBERTO VALDEZ  
Certifier Title: OWNER  
Certification Date: 30-SEP-16  
Primary Sic: 5093-Scrap and Waste Materials  
Secondary Sic: Not reported  
Tertiary Sic: Not reported

**CIWQS:**

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Agency: Cayetano Alberto Valdez

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Agency Address: 5657 Laurine Way, Sacramento, CA 95824  
Place/Project Type: Industrial - Scrap and Waste Materials  
SIC/NAICS: 5093  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Active  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34NEC001878  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 11/14/2014  
Termination Date: Not reported  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 2  
Violations within 5 years: 2  
Latitude: 38.3987  
Longitude: -121.35717

**CERS:**

Name: VALDEZ RECYCLING  
Address: 9833 KENT ST  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 545767  
CERS ID: 832625  
CERS Description: Industrial Facility Storm Water

**Violations:**

Site ID: 545767  
Site Name: Valdez Recycling  
Violation Date: 08-15-2015  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Late Report  
Violation Notes: Failure to submit 2014-2015 Annual Report by due date  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

Site ID: 545767  
Site Name: Valdez Recycling  
Violation Date: 10-02-2017  
Citation: 2014-0057-DWQ - Industrial General Permit  
Violation Description: SW - Failure to Obtain Permit  
Violation Notes: DISCHARGER FAILED TO RECERTIFY THE NEC BY OCTOBER 1, 2017  
Violation Division: Water Boards  
Violation Program: INDSTW  
Violation Source: SMARTS

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 04-05-2017  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Eval Notes: On 5 April 2017, Staff inspected the facility and determined that the facility complied with the NEC requirements.

Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-10-2017  
Violations Found: No  
Eval Type: Industrial Storm Water Compliance Evaluation  
Eval Notes: On 10 October 2017, Central Valley Regional Water Quality Control Board staff inspected the Valdez Recycling facility in Elk Grove. Staff determined that the facility had refilled for NEC coverage on 9 October 2017. Staff talked with the facility manager who contacted office staff and determined that they had just filed for coverage. The facility qualifies for an NEC.

Eval Division: Water Boards  
Eval Program: INDSTW  
Eval Source: SMARTS

Enforcement Action:

Site ID: 545767  
Site Name: Valdez Recycling  
Site Address: 9833 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 09-16-2015  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: Failure to submit 2014-2015 Annual Report by due date  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Site ID: 545767  
Site Name: Valdez Recycling  
Site Address: 9833 KENT ST  
Site City: ELK GROVE  
Site Zip: 95624  
Enf Action Date: 10-05-2017  
Enf Action Type: Industrial Storm Water Enforcement  
Enf Action Description: Industrial Storm Water Enforcement  
Enf Action Notes: DISCHARGER FAILED TO RECERTIFY THE NEC BY OCTOBER 1, 2017  
Enf Action Division: Water Boards  
Enf Action Program: INDSTW  
Enf Action Source: SMARTS

Affiliation:

Affiliation Type Desc: Owner/Operator  
Entity Name: Cayetano Alberto Valdez  
Entity Title: Operator  
Affiliation Address: 5657 Laurine Way  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95824



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VALDEZ RECYCLING (Continued)**

**S108195662**

Affiliation Phone: Not reported

**28**  
**North**  
**1/2-1**  
**0.577 mi.**  
**3046 ft.**

**RESIDENCE**  
**9800 WATERMAN**  
**ELK GROVE, CA 95624**

**LUST**  
**Sacramento Co. CS**  
**Notify 65**  
**CERS**

**S105174022**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**56 ft.**

**LUST:**  
Name: RESIDENCE  
Address: 9800 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606791922](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606791922)  
Global Id: T0606791922  
Latitude: 38.407002  
Longitude: -121.35323  
Status: Completed - Case Closed  
Status Date: 04/29/2003  
Case Worker: Not reported  
RB Case Number: 341354  
Local Agency: Not reported  
File Location: Local Agency  
Local Case Number: F589  
Potential Media Affect: Aquifer used for drinking water supply, Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**LUST:**  
Global Id: T0606791922  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**  
Global Id: T0606791922  
Action Type: Other  
Date: 06/22/2001  
Action: Leak Discovery  
  
Global Id: T0606791922  
Action Type: REMEDIATION  
Date: 02/28/2003  
Action: Excavation  
  
Global Id: T0606791922  
Action Type: ENFORCEMENT  
Date: 06/21/2001  
Action: Notification - Proposition 65  
  
Global Id: T0606791922  
Action Type: Other

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RESIDENCE (Continued)**

**S105174022**

Date: 01/02/1965  
Action: Leak Reported  
  
Global Id: T0606791922  
Action Type: ENFORCEMENT  
Date: 07/30/2001  
Action: Notice of Responsibility

**LUST:**

Global Id: T0606791922  
Status: Open - Case Begin Date  
Status Date: 06/21/2001  
  
Global Id: T0606791922  
Status: Completed - Case Closed  
Status Date: 04/29/2003

**LUST REG 5:**

Name: RESIDENCE  
Address: 9800 WATERMAN  
City: ELK GROVE  
Region: 5  
Status: Case Closed  
Case Number: 341354  
Case Type: A, S  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**Sacramento Co. CS:**

Name: RESIDENCE  
Address: 9800 WATERMAN RD  
City,State,Zip: ELK GROVE, CA  
State Site Number: F589  
Lead Staff: Leibold, R.  
Lead Agency: Not reported  
Remedial Action Taken: NO  
Substance: Not reported  
Date Reported: Not reported  
Facility Id: RO0001466  
Case Type: Soil only  
Case Closed: Y  
**Date Closed: 04/04/2004**  
**Case Type: Soil only affected**  
**Substance: Not reported**

**NOTIFY 65:**

Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RESIDENCE (Continued)**

**S105174022**

Issue Date: Not reported  
Incident Description: Not reported

**CERS:**

Name: RESIDENCE  
Address: 9800 WATERMAN  
City,State,Zip: ELK GROVE, CA 95624  
Site ID: 216195  
CERS ID: T0606791922  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**29  
NW  
1/2-1  
0.814 mi.  
4297 ft.**

**HIGH SCHOOL/MIDDLE SCHOOL NO. 7  
CALVINE ROAD/AUBERRY DRIVE  
ELK GROVE, CA 95624**

**ENVIROSTOR S118756773  
SCH N/A**

**Relative:  
Lower  
Actual:  
42 ft.**

**ENVIROSTOR:**

Name: HIGH SCHOOL/MIDDLE SCHOOL NO. 7  
Address: CALVINE ROAD/AUBERRY DRIVE  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 34010015  
Status: No Action Required  
Status Date: 08/11/2000  
Site Code: 104150  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 95  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Northern California Schools & Santa Susana  
Assembly: 09  
Senate: 06  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 38.40076  
Longitude: -121.3674  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED No Contaminants found  
Confirmed COC: NONE SPECIFIED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HIGH SCHOOL/MIDDLE SCHOOL NO. 7 (Continued)**

**S118756773**

Potential Description: NMA  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-MID/HIGH SCH #7  
Alias Type: Alternate Name  
Alias Name: HIGH SCHOOL/MIDDLE SCHOOL #7  
Alias Type: Alternate Name  
Alias Name: 104150  
Alias Type: Project Code (Site Code)  
Alias Name: 34010015  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 08/11/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 01/29/2002  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 08/10/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

SCH:

Name: HIGH SCHOOL/MIDDLE SCHOOL NO. 7  
Address: CALVINE ROAD/AUBERRY DRIVE  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 34010015  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 95  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Mark Malinowski

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HIGH SCHOOL/MIDDLE SCHOOL NO. 7 (Continued)**

**S118756773**

Division Branch: Northern California Schools & Santa Susana  
Site Code: 104150  
Assembly: 09  
Senate: 06  
Special Program Status: Not reported  
Status: No Action Required  
Status Date: 08/11/2000  
Restricted Use: NO  
Funding: School District  
Latitude: 38.40076  
Longitude: -121.3674  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED, No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: ELK GROVE USD  
Alias Type: Alternate Name  
Alias Name: ELK GROVE USD-MID/HIGH SCH #7  
Alias Type: Alternate Name  
Alias Name: HIGH SCHOOL/MIDDLE SCHOOL #7  
Alias Type: Alternate Name  
Alias Name: 104150  
Alias Type: Project Code (Site Code)  
Alias Name: 34010015  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 08/11/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 01/29/2002  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 08/10/2000  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

30  
SSW  
1/2-1  
0.920 mi.  
4858 ft.

**GEORGIA PAC RESINS**  
**10399 E STOCKTON BLVD**  
**ELK GROVE, CA 95624**

**ENVIROSTOR**  
**VCP**  
**CHMIRS**  
**Sacramento Co. ML**  
**WDS**  
**CIWQS**  
**CERS**

**S103708252**  
**N/A**

**Relative:**  
**Lower**

**Actual:**  
**46 ft.**

**ENVIROSTOR:**

Name: GEORGIA-PACIFIC CHEMICALS  
Address: 10399 E. STOCKTON BLVD.  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 60001558  
Status: No Further Action  
Status Date: 07/23/2013  
Site Code: 102151  
Site Type: Voluntary Cleanup  
Site Type Detailed: Voluntary Cleanup  
Acres: 26  
NPL: NO  
Regulatory Agencies: SMBRP, SACRAMENTO COUNTY  
Lead Agency: SMBRP  
Program Manager: Tami Trearse  
Supervisor: Fernando A. Amador  
Division Branch: Cleanup Sacramento  
Assembly: 09  
Senate: 06  
Special Program: Voluntary Cleanup Program  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Responsible Party  
Latitude: 38.38194  
Longitude: -121.3608  
APN: NONE SPECIFIED  
Past Use: ABOVE GROUND STORAGE TANKS, MANUFACTURING - CHEMICALS  
Potential COC: Lead TPH-diesel Azobenzene Phenol Xylenes  
Confirmed COC: Lead TPH-diesel Xylenes Phenol  
Potential Description: SOIL, SURFW  
Alias Name: 102151  
Alias Type: Project Code (Site Code)  
Alias Name: 60001558  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 12/20/2011  
Comments: NOE approved by program, sent to opea

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 10/06/2011  
Comments: Sent out fully executed VCA on 10-13-2011.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 01/17/2012

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Report  
Completed Date: 07/24/2012  
Comments: Memorandum accepted with recommendation for a Pb-based paint abatement with County.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 04/03/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Report  
Completed Date: 03/07/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 02/02/2017  
Comments: Refund letter sent

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Characterization Report  
Completed Date: 01/06/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Time Critical Removal Action Workplan  
Completed Date: 12/23/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Work Notice  
Completed Date: 01/04/2012  
Comments: Work Notice completed and hand delivered to neighboring businesses on 1/5/2012.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Characterization Workplan  
Completed Date: 12/29/2011  
Comments: DTSC letter acknowledging receipt

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 10/19/2012  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

VCP:

Name: GEORGIA-PACIFIC CHEMICALS  
Address: 10399 E. STOCKTON BLVD.  
City,State,Zip: ELK GROVE, CA 95624  
Facility ID: 60001558  
Site Type: Voluntary Cleanup  
Site Type Detail: Voluntary Cleanup  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 26  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP, SACRAMENTO COUNTY  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Tami Trearse  
Supervisor: Fernando A. Amador  
Division Branch: Cleanup Sacramento  
Site Code: 102151  
Assembly: 09  
Senate: 06  
Special Programs Code: Voluntary Cleanup Program  
Status: No Further Action  
Status Date: 07/23/2013  
Restricted Use: NO  
Funding: Responsible Party  
Lat/Long: 38.38194 / -121.3608  
APN: NONE SPECIFIED  
Past Use: ABOVE GROUND STORAGE TANKS, MANUFACTURING - CHEMICALS  
Potential COC: 30013, 30024, 30066, 30451, 30593  
Confirmed COC: 30013,30024,30593,30451  
Potential Description: SOIL, SURFW  
Alias Name: 102151  
Alias Type: Project Code (Site Code)  
Alias Name: 60001558  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 12/20/2011  
Comments: NOE approved by program, sent to opea

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 10/06/2011  
Comments: Sent out fully executed VCA on 10-13-2011.



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Inspections/Visit (Non LUR)  
Completed Date: 01/17/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Report  
Completed Date: 07/24/2012  
Comments: Memorandum accepted with recommendation for a Pb-based paint abatement with County.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 04/03/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Report  
Completed Date: 03/07/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Correspondence  
Completed Date: 02/02/2017  
Comments: Refund letter sent

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Characterization Report  
Completed Date: 01/06/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Time Critical Removal Action Workplan  
Completed Date: 12/23/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Work Notice  
Completed Date: 01/04/2012  
Comments: Work Notice completed and hand delivered to neighboring businesses on 1/5/2012.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Characterization Workplan  
Completed Date: 12/29/2011  
Comments: DTSC letter acknowledging receipt

Completed Area Name: PROJECT WIDE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 10/19/2012  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**CHMIRS:**

Name: Not reported  
Address: 10399 E STOCKTON BLVD  
City,State,Zip: ELK GROVE, CA 95624  
OES Incident Number: 368  
OES notification: Not reported  
OES Date: 7/29/1994  
OES Time: 11:05:44 AM  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agncy Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported  
Others Number Of Decontaminated: Not reported  
Others Number Of Injuries: Not reported  
Others Number Of Fatalities: Not reported  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA DOT PUC/ICC Number: Not reported  
Company Name: Not reported  
Reporting Officer Name/ID: Not reported  
Report Date: Not reported  
Facility Telephone: Not reported  
Waterway Involved: YES  
Waterway: Not reported  
Spill Site: Not reported  
Cleanup By: plant personnel  
Containment: Not reported  
What Happened: Not reported  
Type: CHEMICAL  
Measure: Not reported  
Other: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

GEORGIA PAC RESINS (Continued)

S103708252

Date/Time: Not reported  
Year: 1994  
Agency: georgia pacific  
Incident Date: 1500/28july94  
Admin Agency: Not reported  
Amount: approx 250lbs  
Contained: NO  
Site Type: OTHER  
E Date: Not reported  
Substance: aqueous distillate, 2% formaldehyde approx 5% phenol  
Unknown: Not reported  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: NO  
Number of Injuries: NO  
Number of Fatalities: NO  
#1 Pipeline: Not reported  
#2 Pipeline: Not reported  
#3 Pipeline: Not reported  
#1 Vessel >= 300 Tons: Not reported  
#2 Vessel >= 300 Tons: Not reported  
#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
Fatafs: Not reported  
Comments: Not reported  
Description: line flange opened and residual material spilled  
out to ground

Name: Not reported  
Address: 10399 E STOCKTON BLVD  
City,State,Zip: ELK GROVE, CA 95624  
OES Incident Number: 8-5175  
OES notification: 11/19/1998  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: Not reported**  
Property Use: Not reported  
Agency Id Number: Not reported  
Agency Incident Number: Not reported  
Time Notified: Not reported  
Time Completed: Not reported  
Surrounding Area: Not reported  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: Not reported  
Resp Agncy Personel # Of Decontaminated: Not reported  
Responding Agency Personel # Of Injuries: Not reported  
Responding Agency Personel # Of Fatalities: Not reported  
Others Number Of Decontaminated: Not reported  
Others Number Of Injuries: Not reported  
Others Number Of Fatalities: Not reported  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA DOT PUC/ICC Number: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	1998
Agency:	Georgia Pacific Resin
Incident Date:	11/19/199812:00:00 AM
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Yes
Site Type:	Industrial Plant
E Date:	Not reported
Substance:	Ethylene Glycol
Gallons:	0.000000
Pounds:	5
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Leaking valve in a chill line allowed substance to escape. Valve repair is taking place at this time, line has been isolated, spill is contained to drums.
Name:	Not reported
Address:	10399 E STOCKTON BLVD
City,State,Zip:	ELK GROVE, CA 95624
OES Incident Number:	0-0304
OES notification:	01/21/2000
OES Date:	Not reported
OES Time:	Not reported
<b>Date Completed:</b>	<b>Not reported</b>
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agency Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2000
Agency:	Georgia Pacific Resins
Incident Date:	1/21/200012:00:00 AM
Admin Agency:	Sacramento County Environmental Management Secondary Agency
Amount:	Not reported
Contained:	Yes
Site Type:	Merchant/Business
E Date:	Not reported
Substance:	Phenol
Gallons:	0.000000
Pounds:	1100
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Comments: Not reported  
Description: Overfilled the Phenol tank. They have containment area to contain it and it stayed within that concrete containment area.

**Sacramento Co. ML:**

Name: GEORGIA PACIFIC CHEMICALS LLC  
Address: 10399 E STOCKTON BLVD  
City,State,Zip: ELK GROVE, CA 95624  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: I  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: I

**WDS:**

Name: GEORGIA PAC RESINS  
Address: 10399 E Stockton Blvd  
City: ELK GROVE  
Facility ID: 5S 34I002043  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 0  
Facility Telephone: 9166853964  
Facility Contact: GREGORY THOMAS  
Agency Name: GEORGIA PACIFIC CORP  
Agency Address: 10399 E Stockton Blvd  
Agency City,St,Zip: Elk Grove 956249744  
Agency Contact: RON KELLOGG  
Agency Telephone: 9166853964  
Agency Type: Private  
SIC Code: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

SIC Code 2: Not reported  
Primary Waste Type: Not reported  
Primary Waste: Not reported  
Waste Type2: Not reported  
Waste2: Not reported  
Primary Waste Type: Not reported  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: Not reported  
POTW: Not reported  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

**CIWQS:**

Name: GEORGIA PAC RESINS  
Address: 10399 E STOCKTON BLVD  
City,State,Zip: ELK GROVE, CA 95624  
Agency: Georgia Pacific  
Agency Address: 10399 E Stockton Blvd, Elk Grove, CA 95624  
Place/Project Type: Industrial - Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers  
SIC/NAICS: 2821  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Terminated  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34I002043  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 03/30/1992  
Termination Date: 01/19/2007  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: 38.379991  
Longitude: -121.365144

Name: GEORGIA PACIFIC CHEMICALS LLC  
Address: 10399 E STOCKTON BLVD  
City,State,Zip: ELK GROVE, CA 95624

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Agency: Georgia Pacific Chemicals LLC  
Agency Address: 10399 E Stockton Blvd, Elk Grove, CA 95624  
Place/Project Type: Industrial - Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers  
SIC/NAICS: 2821  
Region: 5S  
Program: INDSTW  
Regulatory Measure Status: Terminated  
Regulatory Measure Type: Storm water industrial  
Order Number: 2014-0057-DWQ  
WDID: 5S34I020656  
NPDES Number: CAS000001  
Adoption Date: Not reported  
Effective Date: 01/29/2007  
Termination Date: 11/14/2012  
Expiration/Review Date: Not reported  
Design Flow: Not reported  
Major/Minor: Not reported  
Complexity: Not reported  
TTWQ: Not reported  
Enforcement Actions within 5 years: 0  
Violations within 5 years: 0  
Latitude: 38.38176  
Longitude: -121.3613

**CERS:**

Name: GEORGIA PACIFIC CORP  
Address: 10399 EAST STOCKTON BOULEVARD  
City,State,Zip: ELK GROVE, CA 95624-9744  
Site ID: 469934  
CERS ID: 110000485715  
CERS Description: US EPA Air Emission Inventory System (EIS)

**Affiliation:**

Affiliation Type Desc: Environmental Contact  
Entity Name: MOLLY MATHEWS  
Entity Title: PLANT MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: THOMAS R ADKINS  
Entity Title: ENVIRONMENTAL MANAGER  
Affiliation Address: 133 PEACHTREE STREET  
Affiliation City: ATLANTA  
Affiliation State: GA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Public Contact  
Entity Name: Ronald E. Rowland  
Entity Title: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GEORGIA PAC RESINS (Continued)**

**S103708252**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: MOLLY MATTHEWS  
Entity Title: PLANT MANAGER  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Count: 2 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
ELK GROVE	S106782303	KINGSFORD CHARCOAL PLANT	WATERMAN RD		Sacramento Co. CS
ELK GROVE	S106782302	KINGSFORD CHARCOAL COMPANY	WATERMAN RD		Sacramento Co. CS

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **STANDARD ENVIRONMENTAL RECORDS**

### ***Federal NPL site list***

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/19/2019	Source: EPA
Date Data Arrived at EDR: 07/30/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/05/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Quarterly

#### **NPL Site Boundaries**

##### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/19/2019	Source: EPA
Date Data Arrived at EDR: 07/30/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/05/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/19/2019  
Date Data Arrived at EDR: 07/30/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 35

Source: EPA  
Telephone: N/A  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019  
Date Data Arrived at EDR: 04/05/2019  
Date Made Active in Reports: 05/14/2019  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 07/03/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMs by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/19/2019  
Date Data Arrived at EDR: 07/30/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 35

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/19/2019	Source: EPA
Date Data Arrived at EDR: 07/30/2019	Telephone: 800-424-9346
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/05/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 10/28/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019	Source: EPA
Date Data Arrived at EDR: 03/27/2019	Telephone: 800-424-9346
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/13/2019	Source: Department of the Navy
Date Data Arrived at EDR: 08/20/2019	Telephone: 843-820-7326
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 08/07/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 11/25/2019
	Data Release Frequency: Varies

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/19/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/20/2019	Telephone: 703-603-0695
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 08/20/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 12/09/2019
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/19/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/20/2019	Telephone: 703-603-0695
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 08/20/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 12/09/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/25/2019

Date Data Arrived at EDR: 03/26/2019

Date Made Active in Reports: 05/01/2019

Number of Days to Update: 36

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 09/09/2019

Next Scheduled EDR Contact: 10/07/2019

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/29/2019

Date Data Arrived at EDR: 04/30/2019

Date Made Active in Reports: 06/27/2019

Number of Days to Update: 58

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/31/2019

Next Scheduled EDR Contact: 11/11/2019

Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/29/2019

Date Data Arrived at EDR: 04/30/2019

Date Made Active in Reports: 06/27/2019

Number of Days to Update: 58

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/31/2019

Next Scheduled EDR Contact: 11/11/2019

Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/13/2019

Date Data Arrived at EDR: 05/14/2019

Date Made Active in Reports: 07/17/2019

Number of Days to Update: 64

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 08/13/2019

Next Scheduled EDR Contact: 11/25/2019

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004  
Date Data Arrived at EDR: 02/26/2004  
Date Made Active in Reports: 03/24/2004  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)  
Telephone: 760-776-8943  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005  
Date Data Arrived at EDR: 02/15/2005  
Date Made Active in Reports: 03/28/2005  
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-4496  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001  
Date Data Arrived at EDR: 04/23/2001  
Date Made Active in Reports: 05/21/2001  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-637-5595  
Last EDR Contact: 09/26/2011  
Next Scheduled EDR Contact: 01/09/2012  
Data Release Frequency: No Update Planned

## LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 08/05/2019  
Number of Days to Update: 55

Source: State Water Resources Control Board  
Telephone: see region list  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Quarterly

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005  
Date Data Arrived at EDR: 06/07/2005  
Date Made Active in Reports: 06/29/2005  
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)  
Telephone: 760-241-7365  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/06/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: No Update Planned

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-570-3769  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003  
Date Data Arrived at EDR: 09/10/2003  
Date Made Active in Reports: 10/07/2003  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)  
Telephone: 530-542-5572  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/17/2018  
Date Data Arrived at EDR: 03/07/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 55

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 07/29/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/10/2018  
Date Data Arrived at EDR: 03/08/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 54

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 07/29/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/16/2018	Source: EPA Region 8
Date Data Arrived at EDR: 03/07/2019	Telephone: 303-312-6271
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/19/2019	Source: EPA Region 7
Date Data Arrived at EDR: 03/07/2019	Telephone: 913-551-7003
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/24/2018	Source: EPA Region 4
Date Data Arrived at EDR: 03/12/2019	Telephone: 404-562-8677
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/23/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/13/2018	Source: EPA Region 1
Date Data Arrived at EDR: 03/07/2019	Telephone: 617-918-1313
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018	Source: EPA, Region 5
Date Data Arrived at EDR: 03/07/2019	Telephone: 312-886-7439
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 03/07/2019	Telephone: 214-665-6597
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/10/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/11/2019	Telephone: 866-480-1028
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: No Update Planned

## SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: No Update Planned

## SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: No Update Planned

## SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
Next Scheduled EDR Contact: 11/14/2011  
Data Release Frequency: No Update Planned

## SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: No Update Planned

## **State and tribal registered storage tank lists**

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017  
Date Data Arrived at EDR: 05/30/2017  
Date Made Active in Reports: 10/13/2017  
Number of Days to Update: 136

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 08/26/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Varies

### MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 06/10/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/12/2019	Telephone: 916-327-7844
Date Made Active in Reports: 07/23/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 41	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

## UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/10/2019	Source: SWRCB
Date Data Arrived at EDR: 06/11/2019	Telephone: 916-341-5851
Date Made Active in Reports: 07/23/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Semi-Annually

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 09/12/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: Varies

## INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/07/2018	Source: EPA Region 7
Date Data Arrived at EDR: 03/07/2019	Telephone: 913-551-7003
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/16/2018	Source: EPA Region 8
Date Data Arrived at EDR: 03/07/2019	Telephone: 303-312-6137
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 08/05/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 03/07/2019	Telephone: 214-665-7591
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/12/2018	Source: EPA Region 5
Date Data Arrived at EDR: 03/07/2019	Telephone: 312-886-6136
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/05/2019
	Data Release Frequency: Varies

## INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/24/2018	Source: EPA Region 4
Date Data Arrived at EDR: 03/12/2019	Telephone: 404-562-9424
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/23/2019
Number of Days to Update: 50	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/17/2018	Source: EPA Region 10
Date Data Arrived at EDR: 03/07/2019	Telephone: 206-553-2857
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/10/2018	Source: EPA Region 9
Date Data Arrived at EDR: 03/08/2019	Telephone: 415-972-3368
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/03/2018	Source: EPA, Region 1
Date Data Arrived at EDR: 03/07/2019	Telephone: 617-918-1313
Date Made Active in Reports: 05/01/2019	Last EDR Contact: 07/29/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## **State and tribal voluntary cleanup sites**

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/19/2019
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Varies

## VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/30/2019	Telephone: 916-323-3400
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 07/31/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 11/11/2019
	Data Release Frequency: Quarterly

## **State and tribal Brownfields sites**

### BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/24/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/25/2019	Telephone: 916-323-7905
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### **Local Brownfield lists**

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/04/2019	Telephone: 202-566-2777
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 09/19/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: Semi-Annually

### **Local Lists of Landfill / Solid Waste Disposal Sites**

#### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 07/25/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/11/2019  
Date Data Arrived at EDR: 06/12/2019  
Date Made Active in Reports: 08/15/2019  
Number of Days to Update: 64

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019  
Date Data Arrived at EDR: 03/27/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 34

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 08/07/2019  
Next Scheduled EDR Contact: 11/25/2019  
Data Release Frequency: Varies

## INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 07/25/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Varies

## ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: No Update Planned

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 08/02/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/13/2019	Telephone: 202-307-1000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 08/21/2019
Number of Days to Update: 82	Next Scheduled EDR Contact: 12/09/2019
	Data Release Frequency: No Update Planned

### **HIST CAL-SITES: Calsites Database**

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

### **SCH: School Property Evaluation Program**

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/30/2019	Telephone: 916-323-3400
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 07/31/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 11/11/2019
	Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Labs**

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/12/2018	Telephone: 916-255-6504
Date Made Active in Reports: 08/06/2018	Last EDR Contact: 07/08/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Varies

### **CERS HAZ WASTE: CERS HAZ WASTE**

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 08/14/2019	Source: CalEPA
Date Data Arrived at EDR: 08/14/2019	Telephone: 916-323-2514
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 08/14/2019
Number of Days to Update: 7	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Quarterly

### **TOXIC PITS: Toxic Pits Cleanup Act Sites**

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

## US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019  
Date Data Arrived at EDR: 06/13/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Quarterly

## PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/28/2019  
Date Data Arrived at EDR: 06/28/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 26

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

## Local Lists of Registered Storage Tanks

### SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994  
Date Data Arrived at EDR: 07/07/2005  
Date Made Active in Reports: 08/11/2005  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/03/2005  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018  
Date Data Arrived at EDR: 12/06/2018  
Date Made Active in Reports: 12/14/2018  
Number of Days to Update: 8

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Annually

### HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990  
Date Data Arrived at EDR: 01/25/1991  
Date Made Active in Reports: 02/12/1991  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-341-5851  
Last EDR Contact: 07/26/2001  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SAN FRANCISCO AST: Aboveground Storage Tank Site Listing Aboveground storage tank sites

Date of Government Version: 09/11/2018	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 09/12/2018	Telephone: 415-252-3896
Date Made Active in Reports: 10/11/2018	Last EDR Contact: 07/31/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/18/2019
	Data Release Frequency: Varies

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 08/14/2019	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 08/14/2019	Telephone: 916-323-2514
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 08/14/2019
Number of Days to Update: 7	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Quarterly

## **Local Land Records**

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/05/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 06/06/2019	Telephone: 916-323-3400
Date Made Active in Reports: 08/09/2019	Last EDR Contact: 08/28/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/30/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/30/2019	Telephone: 202-564-6023
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 09/05/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Semi-Annually

### DEED: Deed Restriction Listing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/04/2019	Source: DTSC and SWRCB
Date Data Arrived at EDR: 06/04/2019	Telephone: 916-323-3400
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### **HMIRS: Hazardous Materials Information Reporting System**

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/25/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

### **CHMIRS: California Hazardous Material Incident Report System**

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/15/2019	Source: Office of Emergency Services
Date Data Arrived at EDR: 06/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 07/26/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Semi-Annually

### **LDS: Land Disposal Sites Listing (GEOTRACKER)**

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/10/2019	Source: State Water Quality Control Board
Date Data Arrived at EDR: 06/11/2019	Telephone: 866-480-1028
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 55	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

### **MCS: Military Cleanup Sites Listing (GEOTRACKER)**

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/10/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/11/2019	Telephone: 866-480-1028
Date Made Active in Reports: 07/24/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2019	Telephone: (415) 495-8895
Date Made Active in Reports: 04/17/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/15/2019	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 05/21/2019	Telephone: 202-528-4285
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 08/23/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 12/02/2019
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/09/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/10/2019
Number of Days to Update: 339	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017  
Date Data Arrived at EDR: 02/03/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 08/16/2019  
Next Scheduled EDR Contact: 11/25/2019  
Data Release Frequency: Varies

## US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019  
Date Data Arrived at EDR: 03/26/2019  
Date Made Active in Reports: 05/07/2019  
Number of Days to Update: 42

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 06/26/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Quarterly

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 08/05/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Quarterly

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017  
Date Data Arrived at EDR: 05/08/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 73

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 08/09/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Varies

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 06/21/2017  
Date Made Active in Reports: 01/05/2018  
Number of Days to Update: 198

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 09/19/2019  
Next Scheduled EDR Contact: 12/30/2019  
Data Release Frequency: Every 4 Years

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 01/10/2018  
Date Made Active in Reports: 01/12/2018  
Number of Days to Update: 2

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 08/23/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Annually

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 09/30/2018  
Date Data Arrived at EDR: 04/24/2019  
Date Made Active in Reports: 08/08/2019  
Number of Days to Update: 106

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 07/26/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Annually

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/19/2019  
Date Data Arrived at EDR: 07/30/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 35

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Annually

## RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 07/22/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019	Source: EPA
Date Data Arrived at EDR: 04/18/2019	Telephone: 202-564-6023
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 09/05/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 11/18/2019
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019	Source: EPA
Date Data Arrived at EDR: 04/10/2019	Telephone: 202-566-0500
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 07/12/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 07/03/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Quarterly

## FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

## FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/20/2019	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 06/20/2019	Telephone: 301-415-7169
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 09/06/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

## COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/03/2019
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 08/09/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/02/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/02/2019	Telephone: 202-343-9775
Date Made Active in Reports: 05/14/2019	Last EDR Contact: 07/01/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 04/01/2019  
Date Data Arrived at EDR: 04/30/2019  
Date Made Active in Reports: 08/08/2019  
Number of Days to Update: 100

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Quarterly

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 07/08/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 09/16/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Biennially

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 07/10/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017  
Date Data Arrived at EDR: 09/11/2018  
Date Made Active in Reports: 09/14/2018  
Number of Days to Update: 3

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 07/30/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Varies

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017  
Date Data Arrived at EDR: 10/11/2017  
Date Made Active in Reports: 11/03/2017  
Number of Days to Update: 23

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/19/2019  
Date Data Arrived at EDR: 07/30/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 35

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/03/2019  
Date Data Arrived at EDR: 05/29/2019  
Date Made Active in Reports: 08/08/2019  
Number of Days to Update: 71

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 08/27/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 08/30/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 08/30/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Varies

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019  
Date Data Arrived at EDR: 03/28/2019  
Date Made Active in Reports: 05/01/2019  
Number of Days to Update: 34

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 09/10/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/03/2019  
Date Data Arrived at EDR: 06/05/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 90

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 09/04/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018  
Date Data Arrived at EDR: 07/26/2018  
Date Made Active in Reports: 10/05/2018  
Number of Days to Update: 71

Source: Environmental Protection Agency  
Telephone: 202-564-0527  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Varies

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 01/17/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 74

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/07/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/09/2019	Telephone: 202-564-2280
Date Made Active in Reports: 05/23/2019	Last EDR Contact: 07/09/2019
Number of Days to Update: 44	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Quarterly

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/20/2019	Source: EPA
Date Data Arrived at EDR: 05/21/2019	Telephone: 800-385-6164
Date Made Active in Reports: 08/08/2019	Last EDR Contact: 08/20/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 12/02/2019
	Data Release Frequency: Quarterly

## CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/24/2019	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 06/25/2019	Telephone: 916-323-3400
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Quarterly

## CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 08/15/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 11/25/2019
	Data Release Frequency: Varies

## CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 04/18/2019	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 04/19/2019	Telephone: 415-252-3896
Date Made Active in Reports: 04/30/2019	Last EDR Contact: 07/31/2019
Number of Days to Update: 11	Next Scheduled EDR Contact: 11/18/2019
	Data Release Frequency: Varies

## DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/03/2019  
Date Data Arrived at EDR: 06/04/2019  
Date Made Active in Reports: 08/08/2019  
Number of Days to Update: 65

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Varies

**DRYCLEAN SOUTH COAST:** South Coast Air Quality Management District Drycleaner Listing  
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/19/2019  
Date Data Arrived at EDR: 03/22/2019  
Date Made Active in Reports: 04/09/2019  
Number of Days to Update: 18

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: Varies

**DRYCLEANERS:** Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/28/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 55

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Annually

**EMI:** Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/24/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 59

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 09/18/2019  
Next Scheduled EDR Contact: 12/30/2019  
Data Release Frequency: Varies

**ENF:** Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2018  
Date Data Arrived at EDR: 11/02/2018  
Date Made Active in Reports: 12/13/2018  
Number of Days to Update: 41

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 07/18/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

**Financial Assurance 1:** Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/22/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

**Financial Assurance 2:** Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/15/2019  
Date Data Arrived at EDR: 05/16/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 63

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 08/07/2019  
Next Scheduled EDR Contact: 11/25/2019  
Data Release Frequency: Varies

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 05/29/2019  
Date Made Active in Reports: 07/22/2019  
Number of Days to Update: 54

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 07/12/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Annually

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Department of Toxic Substances Control  
Telephone: 877-786-9427  
Last EDR Contact: 08/20/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 01/22/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/22/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/20/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Quarterly

## HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/08/2019  
Date Data Arrived at EDR: 07/09/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 73

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 07/09/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/10/2019	Source: Department of Conservation
Date Data Arrived at EDR: 06/11/2019	Telephone: 916-322-1080
Date Made Active in Reports: 08/15/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

## MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/17/2019	Source: Department of Public Health
Date Data Arrived at EDR: 06/04/2019	Telephone: 916-558-1784
Date Made Active in Reports: 08/09/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 66	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/13/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/14/2019	Telephone: 916-445-9379
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 08/13/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 11/25/2019
	Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/04/2019	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 06/04/2019	Telephone: 916-445-4038
Date Made Active in Reports: 08/09/2019	Last EDR Contact: 09/04/2019
Number of Days to Update: 66	Next Scheduled EDR Contact: 12/16/2019
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/11/2019	Source: Department of Conservation
Date Data Arrived at EDR: 06/12/2019	Telephone: 916-323-3836
Date Made Active in Reports: 08/15/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

## NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/17/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/18/2019	Telephone: 916-445-3846
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/16/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 12/30/2019
	Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018	Source: Department of Conservation
Date Data Arrived at EDR: 06/13/2018	Telephone: 916-445-2408
Date Made Active in Reports: 07/17/2018	Last EDR Contact: 08/20/2019
Number of Days to Update: 34	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 06/10/2019	Source: State Water Resource Control Board
Date Data Arrived at EDR: 06/11/2019	Telephone: 866-480-1028
Date Made Active in Reports: 07/24/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 07/11/2018	Telephone: 559-445-5577
Date Made Active in Reports: 09/13/2018	Last EDR Contact: 07/12/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 08/14/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 12/02/2019
	Data Release Frequency: No Update Planned

## WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 09/19/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: No Update Planned

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 06/10/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/11/2019	Telephone: 866-480-1028
Date Made Active in Reports: 07/24/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/11/2019  
Date Data Arrived at EDR: 06/12/2019  
Date Made Active in Reports: 08/15/2019  
Number of Days to Update: 64

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Quarterly

## CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/04/2019  
Date Made Active in Reports: 08/08/2019  
Number of Days to Update: 65

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 09/04/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Varies

## CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/14/2019  
Date Made Active in Reports: 08/21/2019  
Number of Days to Update: 7

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

## OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

## WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/10/2019  
Date Data Arrived at EDR: 06/11/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 43

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### *EDR Exclusive Records*

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

#### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/13/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 196	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 01/11/2019	Telephone: 510-567-6700
Date Made Active in Reports: 03/05/2019	Last EDR Contact: 07/08/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 10/21/2019
	Data Release Frequency: Semi-Annually

#### UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2019	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 04/11/2019	Telephone: 510-567-6700
Date Made Active in Reports: 06/20/2019	Last EDR Contact: 08/14/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/24/2047
	Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 06/27/2019  
Date Data Arrived at EDR: 06/28/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 26

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Varies

## BUTTE COUNTY:

### CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 07/08/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 05/01/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 27

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 06/24/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 05/17/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

### SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/22/2019  
Date Data Arrived at EDR: 05/23/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 56

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 07/26/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 02/20/2019  
Date Data Arrived at EDR: 05/01/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 29

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 07/25/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 06/05/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 07/23/2019  
Number of Days to Update: 47

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/11/2019  
Date Data Arrived at EDR: 07/11/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 71

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 06/26/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: No Update Planned

## HUMBOLDT COUNTY:

### CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 07/08/2019  
Date Data Arrived at EDR: 07/10/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 72

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 08/19/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 04/24/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/27/2019  
Number of Days to Update: 63

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 72

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

## KERN COUNTY:

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2019  
Date Data Arrived at EDR: 05/07/2019  
Date Made Active in Reports: 07/16/2019  
Number of Days to Update: 70

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/16/2019  
Date Data Arrived at EDR: 05/17/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 13

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 05/30/2019  
Date Data Arrived at EDR: 05/31/2019  
Date Made Active in Reports: 07/23/2019  
Number of Days to Update: 53

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

## LASSEN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 01/17/2019  
Date Data Arrived at EDR: 01/18/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 46

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: N/A  
Telephone: N/A  
Last EDR Contact: 09/12/2019  
Next Scheduled EDR Contact: 12/30/2019  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/09/2019  
Date Data Arrived at EDR: 07/11/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 71

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 07/08/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/15/2019  
Date Data Arrived at EDR: 04/16/2019  
Date Made Active in Reports: 06/21/2019  
Number of Days to Update: 66

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 07/17/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

### LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 01/15/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 51

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 07/12/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

### LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019  
Date Data Arrived at EDR: 06/25/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 58

Source: Los Angeles Fire Department  
Telephone: 213-978-3800  
Last EDR Contact: 06/25/2019  
Next Scheduled EDR Contact: 10/07/2019  
Data Release Frequency: Varies



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 07/19/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 10/28/2019
	Data Release Frequency: No Update Planned

## LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Varies

## LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 06/25/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 10/07/2019
	Data Release Frequency: Varies

## SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/15/2019	Source: Community Health Services
Date Data Arrived at EDR: 07/17/2019	Telephone: 323-890-7806
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 07/17/2019
Number of Days to Update: 19	Next Scheduled EDR Contact: 10/28/2019
	Data Release Frequency: Annually

## UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 07/12/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/28/2019
	Data Release Frequency: No Update Planned

## UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 07/19/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST TORRANCE: City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/04/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 310-618-2973
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 07/19/2019
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/28/2019	Source: Madera County Environmental Health
Date Data Arrived at EDR: 05/30/2019	Telephone: 559-675-7823
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 08/14/2019
Number of Days to Update: 67	Next Scheduled EDR Contact: 12/02/2019
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites  
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 06/26/2019
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 05/29/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 05/30/2019	Telephone: 209-381-1094
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 08/14/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 12/02/2019
	Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List  
CUPA Facility List

Date of Government Version: 05/23/2019	Source: Mono County Health Department
Date Data Arrived at EDR: 05/30/2019	Telephone: 760-932-5580
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 08/21/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 09/09/2019
	Data Release Frequency: Varies

MONTEREY COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019  
Date Data Arrived at EDR: 02/07/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 26

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 06/28/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: No Update Planned

### UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 02/21/2019  
Date Data Arrived at EDR: 02/22/2019  
Date Made Active in Reports: 03/08/2019  
Number of Days to Update: 14

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 9

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 07/25/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Varies

## ORANGE COUNTY:

### IND\_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2019  
Date Data Arrived at EDR: 05/09/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 21

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/05/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Annually

### LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2019  
Date Data Arrived at EDR: 05/09/2019  
Date Made Active in Reports: 05/30/2019  
Number of Days to Update: 21

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/05/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/02/2019  
Date Data Arrived at EDR: 05/07/2019  
Date Made Active in Reports: 07/16/2019  
Number of Days to Update: 70

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/05/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/03/2019  
Date Data Arrived at EDR: 06/04/2019  
Date Made Active in Reports: 08/12/2019  
Number of Days to Update: 69

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Semi-Annually

## PLUMAS COUNTY:

### CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## RIVERSIDE COUNTY:

### LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/10/2019  
Date Data Arrived at EDR: 07/11/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 71

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/16/2019  
Next Scheduled EDR Contact: 12/30/2019  
Data Release Frequency: Quarterly

### UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 04/11/2019  
Date Data Arrived at EDR: 04/12/2019  
Date Made Active in Reports: 06/20/2019  
Number of Days to Update: 69

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/16/2019  
Next Scheduled EDR Contact: 12/30/2019  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/06/2019  
Date Data Arrived at EDR: 06/28/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 55

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 06/28/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Quarterly

## ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/06/2019  
Date Data Arrived at EDR: 06/28/2019  
Date Made Active in Reports: 09/13/2019  
Number of Days to Update: 77

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 06/28/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 03/11/2019  
Date Data Arrived at EDR: 03/13/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 48

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 07/16/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/31/2019  
Date Data Arrived at EDR: 05/31/2019  
Date Made Active in Reports: 07/22/2019  
Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 08/05/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/04/2019  
Date Made Active in Reports: 08/08/2019  
Number of Days to Update: 65

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 09/04/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 56

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/24/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/27/2019  
Number of Days to Update: 63

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: No Update Planned

### UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2018  
Date Data Arrived at EDR: 11/06/2018  
Date Made Active in Reports: 12/14/2018  
Number of Days to Update: 38

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018  
Date Data Arrived at EDR: 06/26/2018  
Date Made Active in Reports: 07/11/2018  
Number of Days to Update: 15

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 09/11/2019  
Next Scheduled EDR Contact: 12/29/2019  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 08/06/2019  
Date Data Arrived at EDR: 08/14/2019  
Date Made Active in Reports: 08/15/2019  
Number of Days to Update: 1

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 09/09/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019  
Date Data Arrived at EDR: 03/29/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 09/05/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:

### CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 05/16/2019  
Date Data Arrived at EDR: 05/23/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 56

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

### HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 08/21/2019  
Next Scheduled EDR Contact: 12/09/2019  
Data Release Frequency: No Update Planned

## SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/19/2019  
Date Data Arrived at EDR: 05/23/2019  
Date Made Active in Reports: 07/22/2019  
Number of Days to Update: 60

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 08/14/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Varies

## SOLANO COUNTY:

### LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 08/13/2019  
Number of Days to Update: 68

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Quarterly

### UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 07/23/2019  
Number of Days to Update: 47

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Quarterly

## SONOMA COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 06/18/2019  
Date Data Arrived at EDR: 06/25/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 09/19/2019  
Next Scheduled EDR Contact: 01/06/2020  
Data Release Frequency: Varies

## LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/02/2019  
Date Data Arrived at EDR: 07/02/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 80

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 09/19/2019  
Next Scheduled EDR Contact: 01/06/2020  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 12/11/2018  
Date Data Arrived at EDR: 12/13/2018  
Date Made Active in Reports: 01/15/2019  
Number of Days to Update: 33

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Varies

## SUTTER COUNTY:

### UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 06/03/2019  
Date Data Arrived at EDR: 06/04/2019  
Date Made Active in Reports: 07/23/2019  
Number of Days to Update: 49

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 08/28/2019  
Next Scheduled EDR Contact: 12/16/2019  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List Cupa facility list

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/24/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/28/2019  
Number of Days to Update: 64

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 07/19/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 05/09/2019  
Date Data Arrived at EDR: 05/10/2019  
Date Made Active in Reports: 07/17/2019  
Number of Days to Update: 68

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 08/05/2019  
Next Scheduled EDR Contact: 11/18/2019  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 07/31/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Varies

## VENTURA COUNTY:

### BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/26/2019  
Date Data Arrived at EDR: 04/25/2019  
Date Made Active in Reports: 06/27/2019  
Number of Days to Update: 63

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 07/22/2019  
Next Scheduled EDR Contact: 11/04/2019  
Data Release Frequency: Quarterly

### LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 06/26/2019  
Next Scheduled EDR Contact: 10/14/2019  
Data Release Frequency: No Update Planned

### LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 08/07/2019  
Next Scheduled EDR Contact: 11/25/2019  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2019	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 04/25/2019	Telephone: 805-654-2813
Date Made Active in Reports: 05/30/2019	Last EDR Contact: 07/22/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 11/04/2019
	Data Release Frequency: Quarterly

## UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/10/2019	Source: Environmental Health Division
Date Data Arrived at EDR: 06/12/2019	Telephone: 805-654-2813
Date Made Active in Reports: 07/24/2019	Last EDR Contact: 09/09/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 12/23/2019
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 06/26/2019	Source: Yolo County Department of Health
Date Data Arrived at EDR: 06/28/2019	Telephone: 530-666-8646
Date Made Active in Reports: 07/31/2019	Last EDR Contact: 06/26/2019
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/14/2019
	Data Release Frequency: Annually

## YUBA COUNTY:

### CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/03/2019	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 05/07/2019	Telephone: 530-749-7523
Date Made Active in Reports: 07/16/2019	Last EDR Contact: 07/25/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 11/11/2019
	Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/14/2019	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 05/14/2019	Telephone: 860-424-3375
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 08/07/2019
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/25/2019
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 04/10/2019  
Date Made Active in Reports: 05/16/2019  
Number of Days to Update: 36

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 07/09/2019  
Next Scheduled EDR Contact: 10/21/2019  
Data Release Frequency: Annually

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 05/01/2019  
Date Made Active in Reports: 06/21/2019  
Number of Days to Update: 51

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 07/29/2019  
Next Scheduled EDR Contact: 11/11/2019  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018  
Date Data Arrived at EDR: 07/19/2019  
Date Made Active in Reports: 09/10/2019  
Number of Days to Update: 53

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 07/15/2019  
Next Scheduled EDR Contact: 10/28/2019  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 02/23/2018  
Date Made Active in Reports: 04/09/2018  
Number of Days to Update: 45

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 08/16/2019  
Next Scheduled EDR Contact: 12/02/2019  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018  
Date Data Arrived at EDR: 06/19/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 76

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 09/06/2019  
Next Scheduled EDR Contact: 12/23/2019  
Data Release Frequency: Annually

## Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

## Electric Power Transmission Line Data

Source: Endeavor Business Media

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

WATERMAN ROAD PROPERTY  
10000 WATERMAN ROAD  
ELK GROVE, CA 95624

### TARGET PROPERTY COORDINATES

Latitude (North): 38.393176 - 38° 23' 35.43"  
Longitude (West): 121.353991 - 121° 21' 14.37"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 643748.4  
UTM Y (Meters): 4250516.0  
Elevation: 51 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5629052 ELK GROVE, CA  
Version Date: 2012  
  
Northwest Map: 5619710 FLORIN, CA  
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

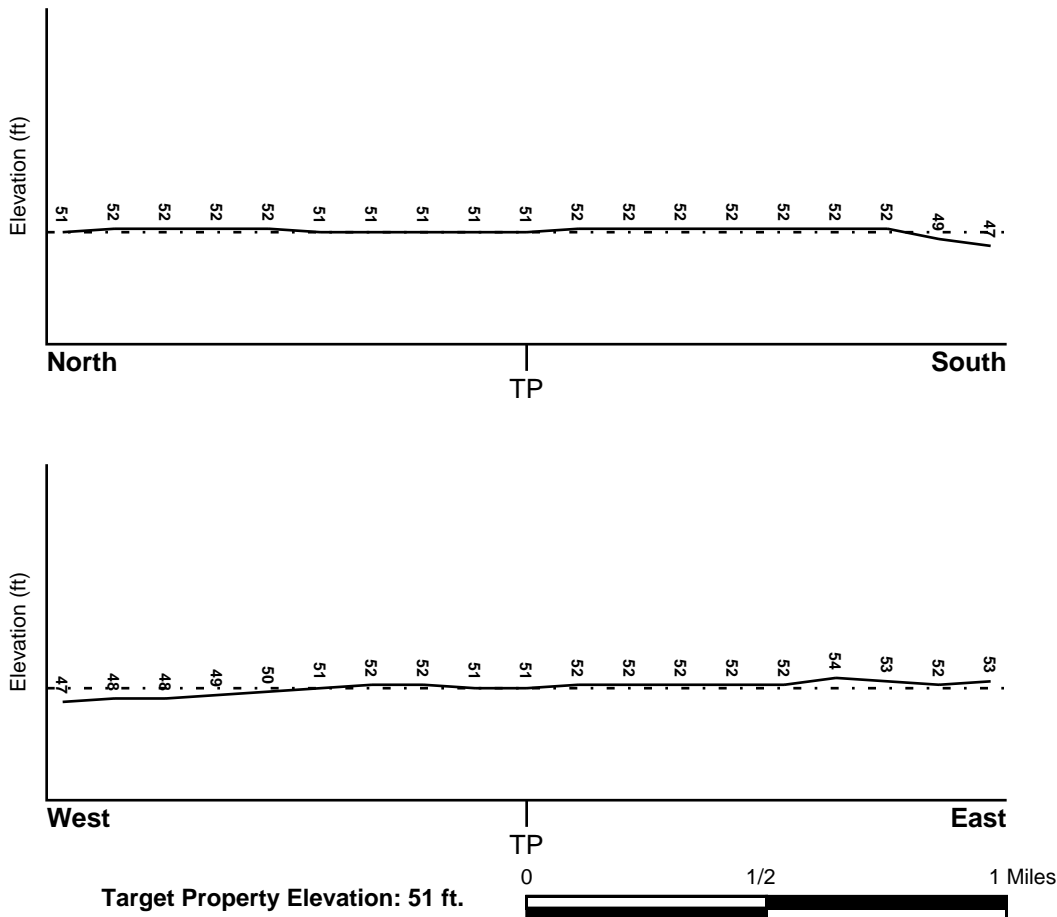
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06067C0338H	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06067C0336H	FEMA FIRM Flood data
06067C0339H	FEMA FIRM Flood data

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
ELK GROVE	YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### **Site-Specific Hydrogeological Data\*:**

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

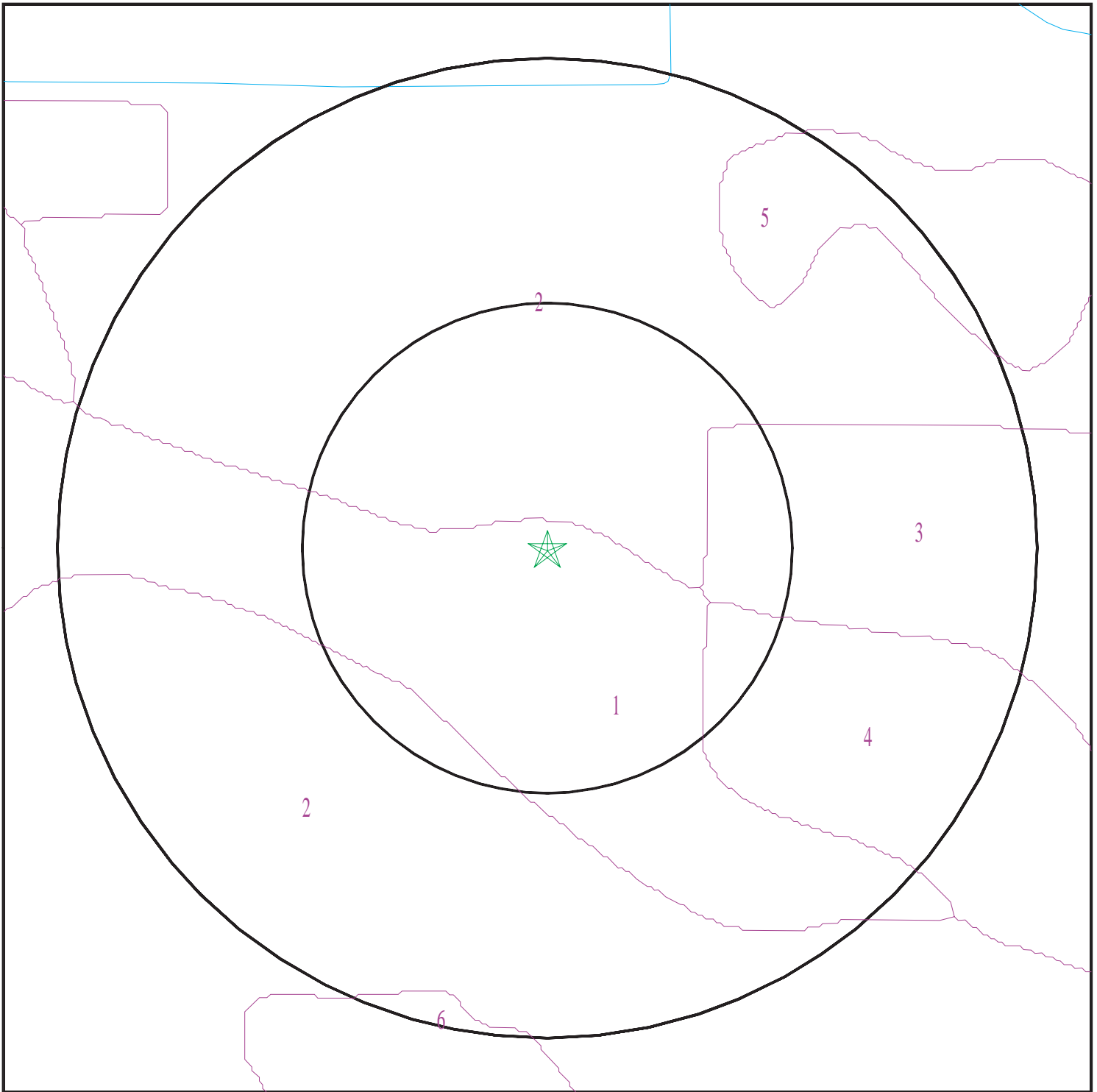
Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

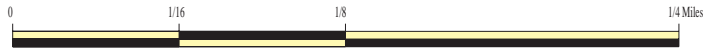
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 5800264.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Waterman Road Property  
ADDRESS: 10000 Waterman Road  
Elk Grove CA 95624  
LAT/LONG: 38.393176 / 121.353991

CLIENT: Brusca Associates, Inc.  
CONTACT: Rachel Robles  
INQUIRY #: 5800264.2s  
DATE: September 23, 2019 7:06 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: GALT

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	12 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	31 inches	59 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 2**

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	53 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 3**

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	22 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	22 inches	27 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	27 inches	53 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	53 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 4**

Soil Component Name: GALT

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	12 inches	31 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	31 inches	59 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

**Soil Map ID: 5**

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
2	14 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
3	20 inches	46 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1
4	46 inches	59 inches	stratified sandy loam to loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 1.4 Min: 0.42	Max: 7.8 Min: 6.1

**Soil Map ID: 6**

Soil Component Name: BRUELLA

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	18 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
2	18 inches	42 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
3	42 inches	61 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

### **FEDERAL USGS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
_____	_____	_____



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40000188086	1/8 - 1/4 Mile WNW
3	USGS40000188073	1/4 - 1/2 Mile SSW
6	USGS40000188068	1/2 - 1 Mile SSE
7	USGS40000188111	1/2 - 1 Mile NE
8	USGS40000188129	1/2 - 1 Mile North
9	USGS40000188134	1/2 - 1 Mile North
10	USGS40000188057	1/2 - 1 Mile SSW
11	USGS40000188140	1/2 - 1 Mile North
C14	USGS40000188099	1/2 - 1 Mile WNW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

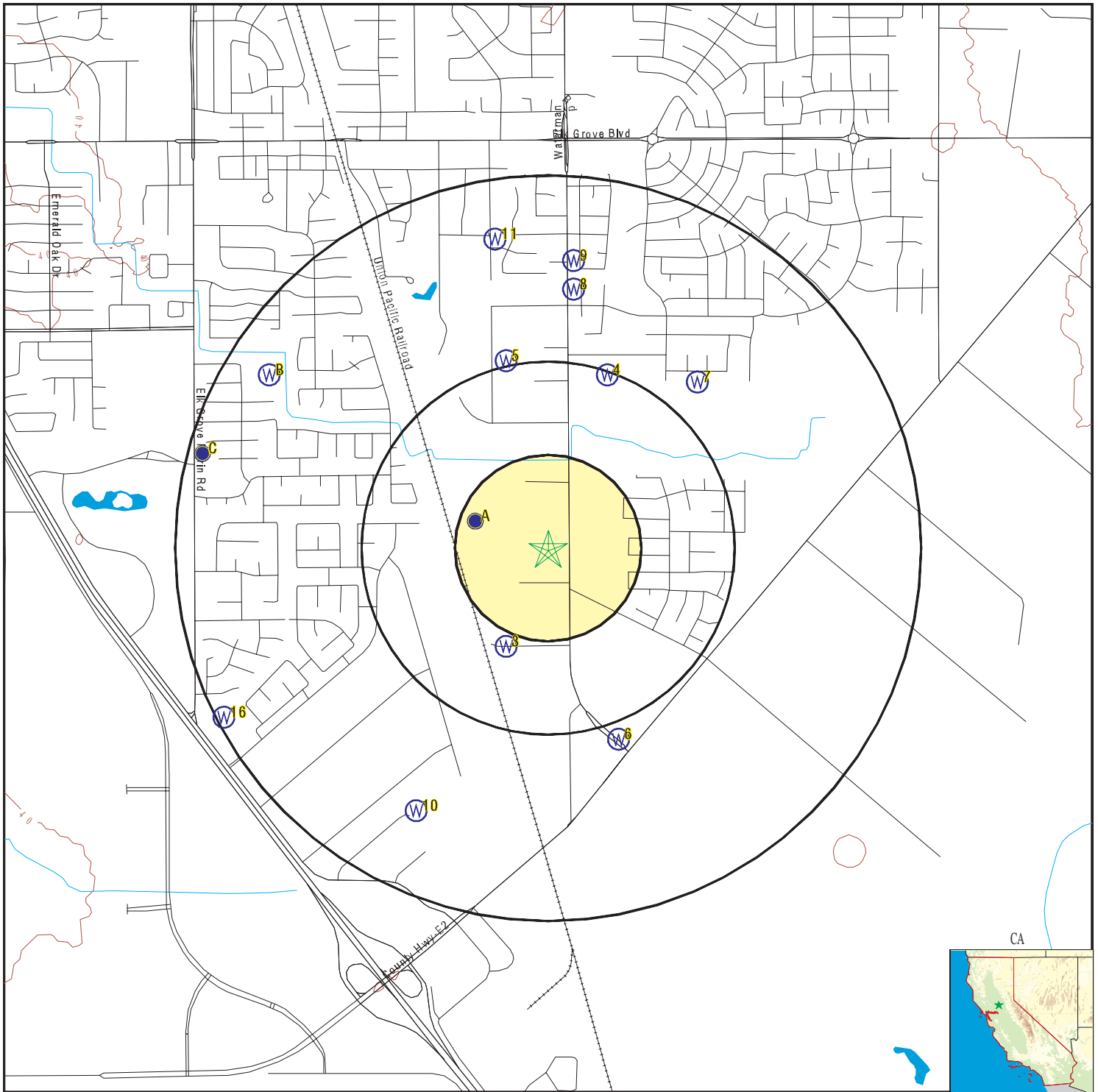
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	CADWR8000037858	1/8 - 1/4 Mile WNW
4	6557	1/4 - 1/2 Mile NNE
5	6558	1/2 - 1 Mile NNW
B12	6556	1/2 - 1 Mile WNW
B13	6555	1/2 - 1 Mile WNW
C15	6559	1/2 - 1 Mile WNW
16	CADWR8000037838	1/2 - 1 Mile WSW

# PHYSICAL SETTING SOURCE MAP - 5800264.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Waterman Road Property  
 ADDRESS: 10000 Waterman Road  
 Elk Grove CA 95624  
 LAT/LONG: 38.393176 / 121.353991

CLIENT: Brusca Associates, Inc.  
 CONTACT: Rachel Robles  
 INQUIRY #: 5800264.2s  
 DATE: September 23, 2019 7:06 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**  
**WNW**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS      USGS40000188086**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18020109
Monitor Location:	006N006E07A002M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	364
Aquifer:	Central Valley aquifer system	Well Hole Depth:	364
Formation Type:	Not Reported		
Construction Date:	19660101		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	10	Level reading date:	1982-07-07
Feet below surface:	108.88	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1977-10-04	Feet below surface:	118.0
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1974-10-04	Feet below surface:	104.4
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-10-03	Feet below surface:	105.5
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-03-08	Feet below surface:	94.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-03-05	Feet below surface:	95.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-10-11	Feet below surface:	93.8
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-03-09	Feet below surface:	92.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1972-02-18	Feet below surface:	93.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1966-01-01	Feet below surface:	97.00
Feet to sea level:	Not Reported	Note:	Not Reported

**A2**  
**WNW**  
**1/8 - 1/4 Mile**  
**Higher**

**CA WELLS      CADWR8000037858**

State Well #:	06N06E07A002M	Station ID:	5603
Well Name:	Not Reported	Well Use:	Residential
Well Type:	Unknown	Well Depth:	364
Basin Name:	South American	Well Completion Rpt #:	9651

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**3**

**SSW**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000188073**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E07H001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	376
Well Depth Units:	ft	Well Hole Depth:	383
Well Hole Depth Units:	ft		

**4**

**NNE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      6557**

Seq:	6557	Prim sta c:	06N/06E-06H01 M
Frds no:	3410008004	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 04 - WEBB STREET	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	382400.0	Longitude:	1212100.0
Precision:	8	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**5**

**NNW**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      6558**

Seq:	6558	Prim sta c:	06N/06E-06J01 M
Frds no:	3410008011	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 11 - DINO	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	382402.0	Longitude:	1212118.0
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**6**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188068**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E08M002M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19770101	Well Depth:	175
Well Depth Units:	ft	Well Hole Depth:	235
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1982-07-13
Feet below surface:	108.05	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1977-01-01	Feet below surface:	90.00
Feet to sea level:	Not Reported	Note:	Not Reported

**7**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188111**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E05L001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19751024	Well Depth:	188
Well Depth Units:	ft	Well Hole Depth:	315
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1975-10-24
Feet below surface:	103.00	Feet to sea level:	Not Reported
Note:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**8**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188129**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E05E002M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19760101	Well Depth:	165
Well Depth Units:	ft	Well Hole Depth:	250
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1976-01-01
Feet below surface:	106.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**9**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188134**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E05E001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19660101	Well Depth:	160
Well Depth Units:	ft	Well Hole Depth:	173
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1966-01-01
Feet below surface:	91.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**10**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000188057**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E07Q001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Laguna Formation	Aquifer Type:	Not Reported
Construction Date:	19661126	Well Depth:	232

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Depth Units:	ft	Well Hole Depth:	330
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements: 2		Level reading date:	1982-07-09
Feet below surface:	121.25	Feet to sea level:	Not Reported
Note:	The site was being pumped.		
Level reading date:	1966-11-26	Feet below surface:	102.50
Feet to sea level:	Not Reported	Note:	Not Reported

**11**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000188140**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E06H001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19580101	Well Depth:	296
Well Depth Units:	ft	Well Hole Depth:	330
Well Hole Depth Units:	ft		

**B12**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      6556**

Seq:	6556	Prim sta c:	06N/06E-06D02 M
Frds no:	3410008005	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 05 - EMERALD PARK	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	382400.0	Longitude:	1212200.0
Precision:	8	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**B13**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      6555**

Seq:	6555	Prim sta c:	06N/06E-06D01 M
Frds no:	3410008002	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 02 - ABANDONED	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	382400.0	Longitude:	1212200.0
Precision:	8	Status:	AB
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**C14**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000188099**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006N006E06N001M	Type:	Well
Description:	Not Reported	HUC:	18020109
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19780101	Well Depth:	264
Well Depth Units:	ft	Well Hole Depth:	407
Well Hole Depth Units:	ft		

**C15**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      6559**

Seq:	6559	Prim sta c:	06N/06E-06N01 M
Frds no:	3410008007	County:	34
District:	09	User id:	TEN
System no:	3410008	Water type:	G
Source nam:	WELL 07 - PARKSIDE	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	382349.0	Longitude:	1212212.0
Precision:	3	Status:	AU
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System no:	3410008	System nam:	Elk Grove Water Works
Hqname:	Not Reported	Address:	9257 Elk Grove Blvd.
City:	Elk Grove	State:	CA
Zip:	95624	Zip ext:	Not Reported
Pop serv:	23000	Connection:	6935
Area serve:	ELK GROVE		

**16**  
**WSW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS    CADWR8000037838**

State Well #:	06N06E07M001M	Station ID:	5604
Well Name:	Not Reported	Well Use:	Irrigation
Well Type:	Unknown	Well Depth:	210
Basin Name:	South American	Well Completion Rpt #:	Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95624	18	1

Federal EPA Radon Zone for SACRAMENTO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

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Federal Area Radon Information for Zip Code: 95624

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	3.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

#### California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### RADON

#### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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## **APPENDIX E – Additional Information**

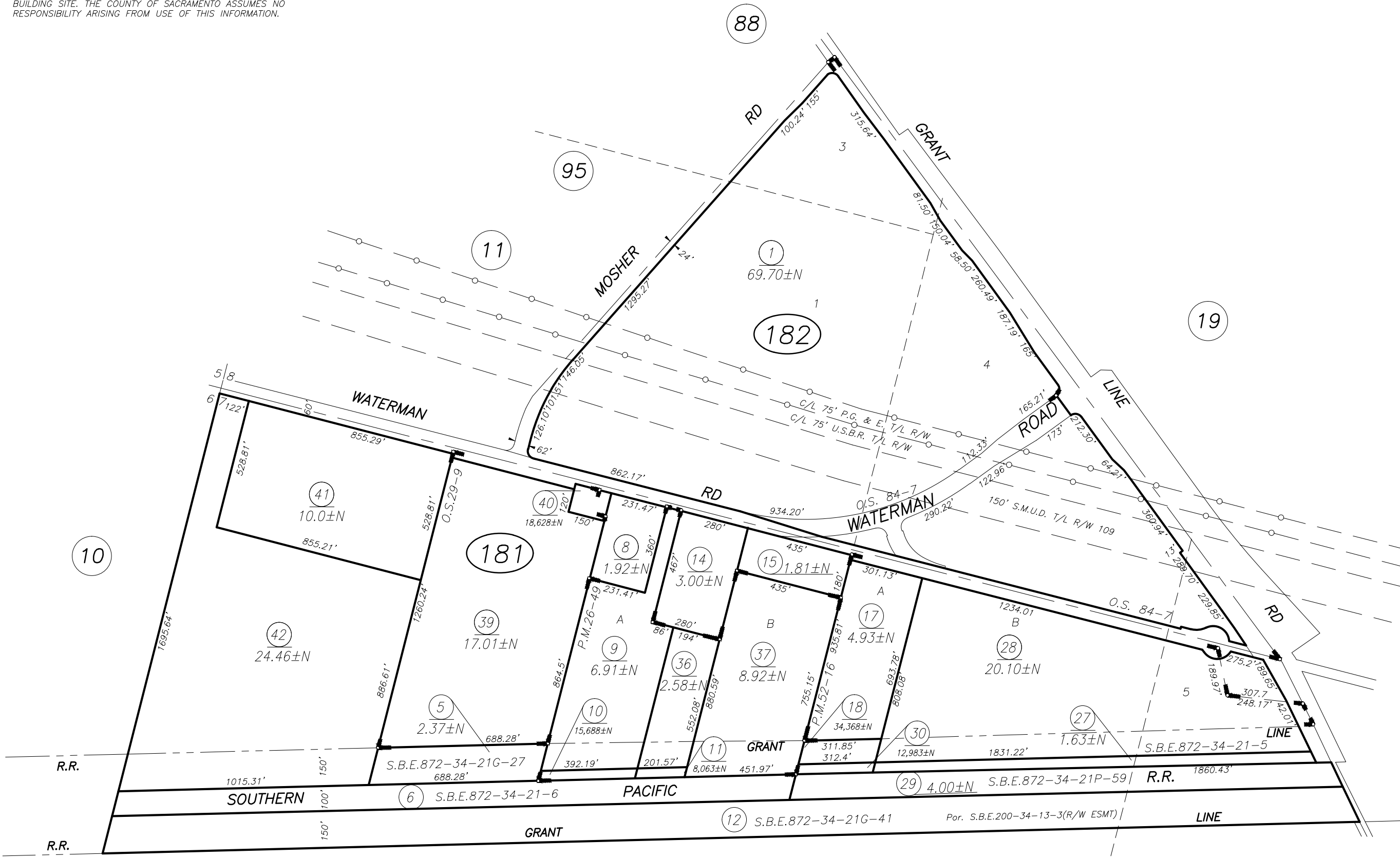
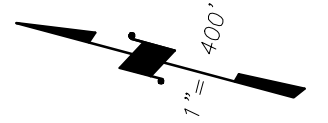
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- Assessor's Parcel Map

POR. SEC. 7 & 8, T.6N., R.6E., M.D.B. & M.

134-018

DISCLAIMER: ASSESSORS PARCELS ARE FOR TAX ASSESSMENT PURPOSES ONLY AND DO NOT INDICATE EITHER PARCEL LEGALITY OR A VALID BUILDING SITE. THE COUNTY OF SACRAMENTO ASSUMES NO RESPONSIBILITY ARISING FROM USE OF THIS INFORMATION.



Jan 31st, 2018

Official Survey, O.S. Bk.29, Pg.9(9-3-71)  
Official Survey, O.S. Bk.84, Pg.7(9-1-2012)

Assessor's Map Bk.134 Pg.018  
County of Sacramento, Calif.

# **APPENDIX K**

## **PRELIMINARY DRAINAGE REPORT**



Waterman and Brinkman Logistics Center  
**ON-SITE DRAINAGE REPORT**  
CITY OF ELK GROVE, SACRAMENTO COUNTY, CALIFORNIA

PREPARED BY:



MCR ENGINEERING, INC.  
1242 Dupont Court  
Manteca, California 95336  
(209) 239-6229

PREPARED FOR:

Buzz Oates Construction



PREPARED UNDER THE DIRECTION OF:



February 17<sup>th</sup>, 2021

# **Table of Contents**

<b>Executive Summary</b> .....	<b>4</b>
<b>Project Description &amp; Overview</b> .....	<b>5</b>
<b>Site Information</b> .....	<b>6</b>
General .....	6
Zoning and Planning.....	7
Topography & Soil Characteristics.....	7
Existing Storm Drainage Infrastructure .....	8
<b>On-Site Storm Drainage Overview &amp; Requirements</b> .....	<b>8</b>
General Requirements Overview .....	9
Storm Drain & Stormwater Treatment Infrastructure .....	10
<b>Storm Drainage Design &amp; Stormwater Compliance</b> .....	<b>13</b>
Software Tools .....	13
Project Storm Drainage Requirements.....	14
LID (Low Impact Development) .....	14
Stormwater Quality.....	14
Hydromodification .....	15
<b>LID &amp; Water Quality Calculations &amp; Methodology</b> .....	<b>15</b>
LID & Water Quality Calculations .....	15
Bioswales Design.....	15
Water Quality / LID Proprietary Device Mass Loading Design .....	16
Water Quality Volume & Drawdown Design .....	17
<b>Hydrology, Hydromodification, &amp; Hydraulic Analysis</b> .....	<b>18</b>
Pre-Project Hydrology .....	18
Pre-Project SacCalc Hydrology.....	18
Pre-Project SAHM Hydrology.....	19
Post-Project Hydrology .....	19
Post-Project SacCalc Hydrology .....	19
Post-Project Storm and Sanitary Analysis (SSA) .....	20
Hydromodification & Hydraulic Analysis .....	22
2-Year Event Analysis.....	22
10-Year Event Analysis.....	22
100-Year Event Analysis.....	24

## **List of Tables**

Table 1 - Waterman Bioswale Design Calculations.....	16
Table 2 - Water Quality Mass Loading Calculations .....	17
Table 3 - Water Quality Calculation .....	18
Table 4 - Preconstruction Peak Flows SacCalc.....	18
Table 5 - Preconstruction Peak Flows SAHM.....	19
Table 6 - Postconstruction SSA Results.....	21

Table 7 - Hydromodification Summary.....	22
Table 8 - 100-Year Event Flooding .....	24

## **List of Figures**

Figure 1 - Proposed Master Site Plan.....	6
Figure 2 - Vicinity Map .....	7
Figure 3 – Existing Conditions Standing Water.....	8
Figure 4 - Waterman Storm Drain Plan.....	11
Figure 5 - Brinkman Storm Drain Plan .....	12
Figure 6 - Detention System & Outfall Detail .....	13
Figure 7 - Waterman DMA Exhibit .....	19
Figure 8 - Brinkman DMA Exhibit.....	20
Figure 9 - On-site Detention Basin Volume Hydrographs.....	21
Figure 10 - On-site Compiled Discharge Hydrographs.....	21
Figure 11 - On-site 2-Year Hydrographs .....	22
Figure 12 - On-site 10-Year Hydrographs .....	23
Figure 13 - Brinkman Southern Docks Profile.....	23
Figure 14 - Waterman Western Docks Profile .....	24
Figure 15 - On-site 100-Year Hydrographs .....	25

## **List of Appendix**

### **Appendix A – Project Site Plans**

- Topographic Survey
- Proposed Grading & Drainage Plan

### **Appendix B – LID & Water Quality Calculations**

- Water Quality LID Mass Loading Calculations
- Swale Calculations
- Water Quality (WQV) Calculations
- Preliminary Storm Drain (Rational) Calculations

### **Appendix C – Hydrologic Analysis Results**

- SAHM Report
- SacCalc Results

### **Appendix D – SSA Model & Results**

- SSA Plan
- SSA Hydrographs
- SSA Profiles
- SSA Reports

### **Appendix E – Storm Drain Device Manufacturer Specifications**

- Contech Vault StormFilter 8'x14'
- Prinsco Hydrostor Chamber HS75

### **Appendix F – Geotechnical Report**

## **Executive Summary**

The project associated with this drainage study proposes to develop two light industrial warehouses on a 30-acre site in Elk Grove, California. The project's location is the southeast industrial area approximately 0.5 miles north of the Waterman Road & Grant Line Road intersection, in Elk Grove. The development will be split between two main areas—one Parcel directly fronting the west side of Waterman Road and the other Parcel located at the west end of Brinkman Court. With an individual building at each location. The parcels are being combined in their development to manage storm drainage and fire suppression for the area efficiently.

The topography and soil conditions for the site are unfavorable for storm drainage infrastructure. The site has significant clay concentrations and has been plagued with ponding and nuisance flooding, making infiltration methods infeasible for the site. Approximately 5-acres at the northwest corner of the site is considered a human-made wetland, identified in both the FEMA Special Hazard Area and the 100-year Flood Plain as determined by the City of Elk Grove's Storm Drain Master Plan. Those determinations require that any new development mitigate its impacts of placing the fill in the floodplain that will be necessary to raise the building above the Base Flood Elevation. The process of mitigating the floodplain is discussed in the second portion of this report titled "Waterman & Brinkman Elk Grove Creek Preliminary Drainage Study".

The purpose of the on-site drainage study is to describe what on-site measures have been taken to achieve Stormwater LID, Water Quality, and Hydromodification requirements. Due to the nature of the existing soils, as previously mentioned, infiltration methods are not feasible to meet LID requirements. The site has met LID and water treatment through use of an approved Sacramento Stormwater Quality Partnership proprietary device, specifically Contech StormFilters. This report will convey the reasoning for using a proprietary device as well as the methodology and calculations prepared by MCR Engineering. The combined site hydromodification has been met through the installation of an underground detention system, Prinsco HydroStor Chambers model HS75, located on the northern side of the Brinkman site. The combination of the underground detention system and Contech Stormfilters reduce the post construction runoff for the 2- & 10-year peak runoff, meeting hydromodification requirements.

## **Project Description & Overview**

The project proposes to develop two light industrial warehouses on a combined total 30-acre site in Elk Grove, California. Below is the developer and engineer contact information and general overview of the project.

### Contact Information

Description	Development Project Manager	Civil Engineer
Company:	Buzz Oates Construction	MCR Engineering
Contact:	Logan James	Dan Eavenson
Phone:	(916) 379-3800	(209) 239-6229
Email:	Logan.James@buzzoates.com	Dan@mcreng.com
Street Address	555 Capitol Mall, STE. 900	1242 Dupont Ct
City/State/Zip	Sacramento, CA 95814	Manteca, CA 95336

### Brinkman Projection Information

APN(s)	134-0100-084 & 134-0100-085
Street Address	9195 Brinkman Ct
City/State/Zip	Elk Grove, CA, 95624
Building Identification	Building A

### Waterman Projection Information

APN(s)	134-0181-041
Street Address	Waterman Rd
City/State/Zip	Elk Grove, CA, 95624
Building Identification	Building B



Figure 1 - Proposed Master Site Plan

The purpose of this report is to show that the proposed storm drain infrastructure and the flood control design is adequate to allow the development to function without adversely impacting the general public. Furthermore, this report shows that the development has adequately designed these infrastructure improvements to the applicable requirements from the City of Elk Grove, the lead agency on the project. This report has been prepared at the request of the owner, Buzz Oates Construction.

## **Site Information**

### **General**

This project includes approximately 30 acres of infill development in the southeast industrial area approximately 0.5 miles north of the Waterman Road & Grant Line Road intersection. The project is located in a portion of the NW ¼ of Section 7, Township 6 North, Range 6 East, Mount Diablo Base Meridian, City of Elk Grove, Sacramento County, California. The site is bounded by the Elk Grove Creek to the north, Industrial sites to the south and west, and Waterman Road to the east. A general vicinity map is shown as follows:



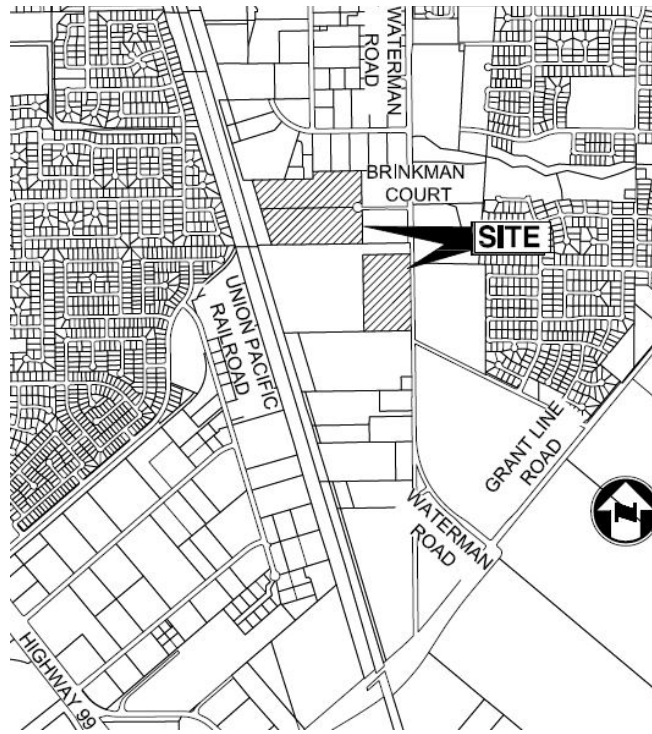


Figure 2 - Vicinity Map

### **Zoning and Planning**

The parcels included in this study are all zoned industrial. This report does not go into specifics about the site's specific planning and zoning requirements. For more information, see the Elk Grove General Plan and Zoning Ordinances.

### **Topography & Soil Characteristics**

The site's current topography is defined by a grading project that was conducted in 2016. The site is on very slow-draining soils, resulting in large amounts of standing water on-site. Sometimes reported as flooding. This grading project created drainage channels for this standing water, sending the majority of the water to the wetlands at the northwest corner of the Brinkman Site or to a swale at the eastern portion of the Brinkman Site that empties into the storm drainage stub that has been provided to the Brinkman site.

A topographic survey of the proposed projects is included in Appendix A. These topographic surveys include aerial photogrammetric surveys, which were used to supplement the existing HEC-RAS model, see the second portion of this report titled "Waterman & Brinkman Elk Grove Creek Preliminary Drainage Study" for more detail. The site itself general falls from southeast to northwest, and the slope varies from 0% to 2%. There is additionally a 5-acre depressed area at the northwest corner of the site. This area is currently considered in the floodplain and a wetland area. The area typically holds water throughout the wet season due to relatively flat slopes and a lack of outfall. Below is a satellite photo from 2016 showing the standing water during a rain event as well as the grading operation that occurred. The standing water can be seen in the large brown areas. The wetland can be seen undisturbed by the grading operation in the top left corner.



Figure 3 – Existing Conditions Standing Water

Generally, in regard to the underlying soils, the site can be characterized as consisting of clays and silts with relatively poor drainage characteristics. For all calculations, a USDA class D hydrologic soil group has been applied. A Geotechnical report with a soil investigation conducted by Raney Geotechnical is included in Appendix F.

### **Existing Storm Drainage Infrastructure**

Both the Waterman and the Brinkman site have been provided public storm drainage stubs from the "9984 Waterman Road & Brinkman Court" project. However, Brinkman's storm drainage stub was placed 6.5' below grade (to invert), and Waterman's drainage stub was placed 3.5' below grade (to invert). Both stubs are too low to allow for their respective developments to function without a pump and will not be utilized beyond a temporary phasing plan. Beyond the two stubs, there is no existing public or private storm drainage infrastructure on-site.

### **On-Site Storm Drainage Overview & Requirements**

The project on-site storm drainage requirements for the project are split into three main requirements:

- **LID (Low Impact Development)**
- **Stormwater Quality**
- **Hydromodification**



## **General Requirements Overview**

LID measures are implemented to reduce pollution, site runoff, habitat impairment. LID measures accomplish these goals by promoting infiltration, reducing the percentage of impervious surfaces, disconnecting impervious surfaces, and by promoting stormwater interception with trees, shrubs, and other vegetation. LID measures start with site layout designs that encourage stormwater to utilize the sites natural topography for drainage and implementing impervious surfaces on-site. The previous measures and general mindset help encourage developed sites to mimic the predevelopment runoff. The Sacramento Region Stormwater Quality Design Manual summarizes LID implementation by the following three development strategies: open space preservation, runoff reduction, runoff management.

Stormwater quality treatment control measures are implemented after LID to further reduce pollutants and runoff. Stormwater quality measures are determined based on the following factors: type of pollutants, quantity of stormwater runoff, soil conditions (infiltration), and other applicable site conditions NPDES permit requirements. Stormwater quality treatment control measures are designed to treat frequent storm events typically defined by the “first flush” storms & 85<sup>th</sup> percentile events. The Sacramento Region Stormwater Quality Design Manual defines the treatment requirements by either a water quality flow (WQF) or a water quality volume (WQV). This measures and standards are designed to reduce pollutants to the “maximum extent practicable”.

Hydromodification was developed to address the effects of Urbanization has on increasing runoff, erosion, and sedimentation. Development results in an increase in impervious surfaces and increased channelization of stormwater, which by results increase the volume, velocity, and peak flow of stormwater runoff. Hydromodification is typically met through infiltration and/or detention to ensure that post construction runoff does not exceed preconstruction. The Sacramento Stormwater Quality Partnership Hydromodification Management Plan requires that sites post construction runoff does not exceed the preconstruction runoff for either 0.25Q2 or 0.45Q2 to the Q10 event by more than 10%. Where 0.25Q2 means 25% of the preconstruction 2-year recurrence interval event and applies to projects that discharge into channels deemed low susceptibility. Where 0.45Q2 means 45% of the preconstruction 2-year recurrence interval event and applies to projects that discharge into channels deemed high susceptibility. Lastly Q10 refers to the 10-year recurrence interval event.

LID measures, Stormwater Quality requirements, hydromodification, and associated proposed improvements are dedicated to maintaining the projects compliance with the Sacramento Areawide NPDES Municipal Stormwater Phase I Permit. Typically, these requirements are met by installing BMPs, such as a bioretention facility, that utilizes infiltration as a low impact development measure that treats the stormwater. The site then runs a pre vs post construction runoff analysis to verify if the site meets hydromodification requirements. If the site does not meet hydromodification the BMP is upsized, or additional BMP’s are added, until hydromodification is met.

The following regulatory documents govern the design of the project's storm drainage:

- The City of Elk Grove Storm Drainage Master Plan (SDMP), West Yost, 2011
- The City of Elk Grove Capital Improvement Program (CIP), City of Elk Grove, June 2019
- The City of Elk Grove Improvement Standards Manual, City of Elk Grove, October 2018
- The City of Elk Grove Standard Drawings, City of Elk Grove, January 2020
- Volume 2 of the Sacramento City/County Drainage Manual, Sacramento County, 1996
- Elk Grove Municipal Code Chapter 15 & Sections 16.50 & 23.42.040
- Sacramento Region Stormwater Quality Design Manual, October 2019
- Sacramento Stormwater Quality Partnership Hydromodification Management Plan, Revised December 2017

### **Storm Drain & Stormwater Treatment Infrastructure**

The Waterman & Brinkman Logistics Center both utilize the same stormwater infrastructure and were analyzed as a single site for the stormwater design. Refer to the 3 figures below displaying the Waterman Storm Drain Plan, Brinkman Storm Drain Plan, and a detail of the underground detention system and outfall. Approximately half of the Waterman runoff is routed through bioswales located on the eastern side of the project. The bioswales remove the pollutants from the tributary areas, resulting in a reduced pollutant load on the downstream treatment system. All runoff from this point is then conveyed through a storm drain network where it discharges into an underground detention system located at the north side of the Brinkman site. The underground detention system is a Prinsco HydroStor Chambers model HS75. The on-site stormwater discharges into the Hydrostor HS75 sediment bay chamber, which is underlaid by two layers of an AASHTO M288 Class 1 Woven Geotextile Fabric between the chamber and foundation stone. The Prinsco sediment bay chamber will capture all debris, large pollutants, and trash. This accomplishes pretreatment and reduces the pollutant load on the downstream system. The Prinsco sediment bay chamber features an inspection port and a Prinsco inlet control structure. The sediment bay features allow for easy inspection of debris and sediment as well as easy access for cleaning the sediment chamber. Stormwater is then conveyed through the porous stone, filling all the detention chambers, to the Prinsco outlet structure. In cases of larger storm events the Prinsco inlet control structure features a raised overflow line that also connects to the Prinsco outlet structure. From the Prinsco outlet structure low flows are routed to interconnected Contech 8'x14' Vaults with 67 cartridges. Due to infiltration being infeasible on-site, the Contech proprietary devices are designed to meet LID and water quality requirements, refer to the methodology section for further details. Treated stormwater is discharged from the Contech Vaults to an outfall structure on the Elk Grove Creek. The outfall structure invert is designed to discharge above the Elk Grove Creek Ordinary High-Water Mark (OHWM). In cases of larger events the Prinsco outlet structure also includes an 18" overflow line that bypasses the Contech Treatment Vaults and discharges directly into Elk Grove Creek.

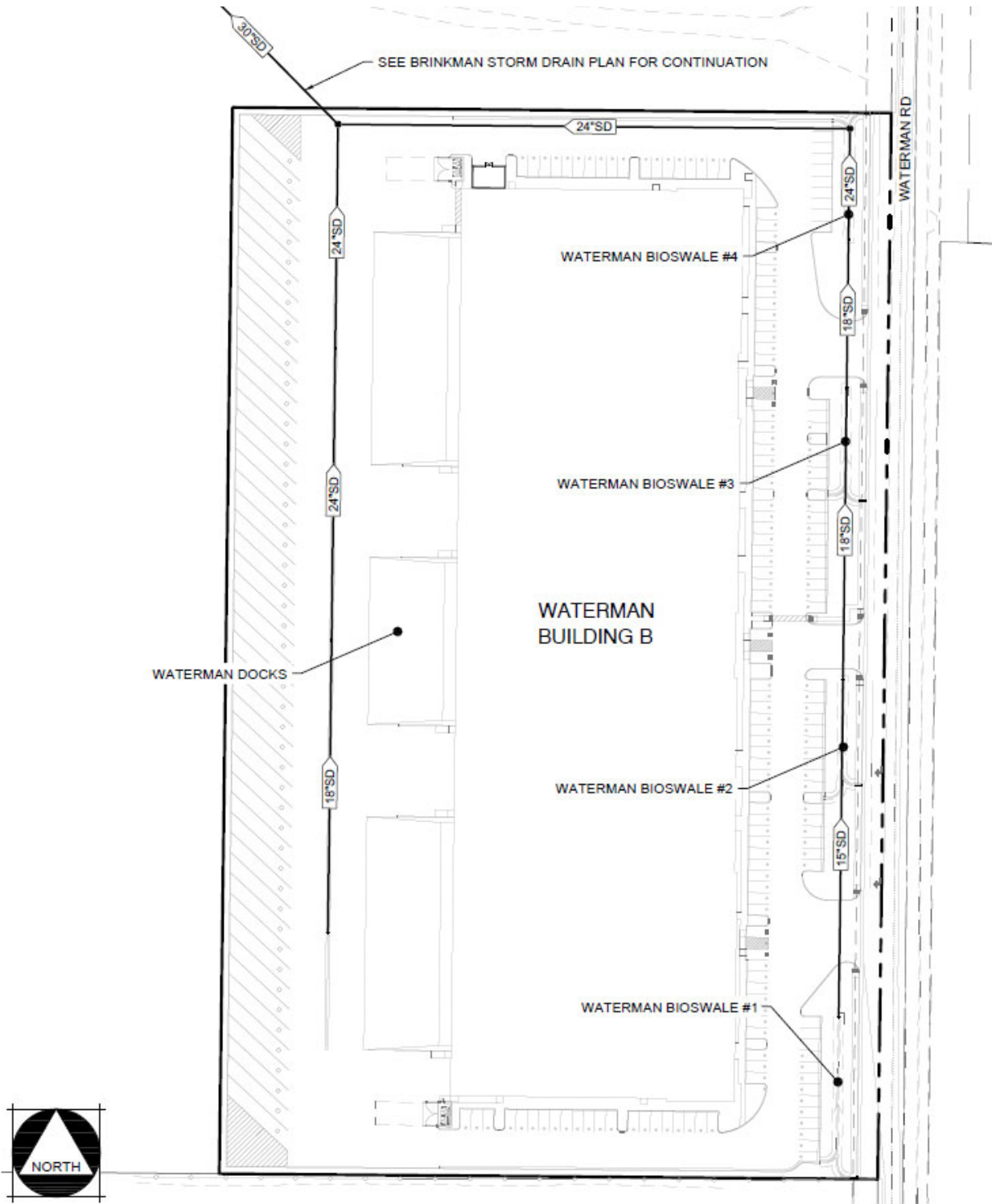


Figure 4 - Waterman Storm Drain Plan

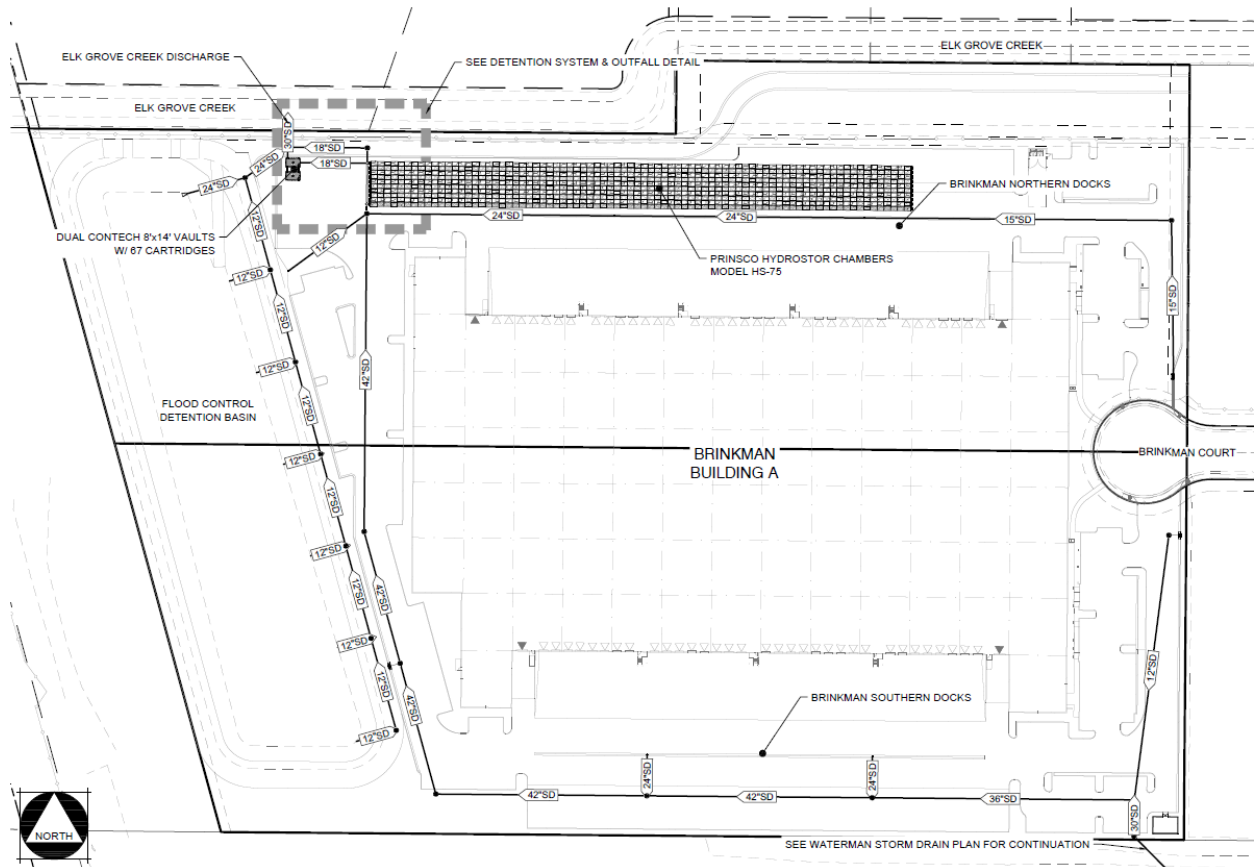


Figure 5 - Brinkman Storm Drain Plan

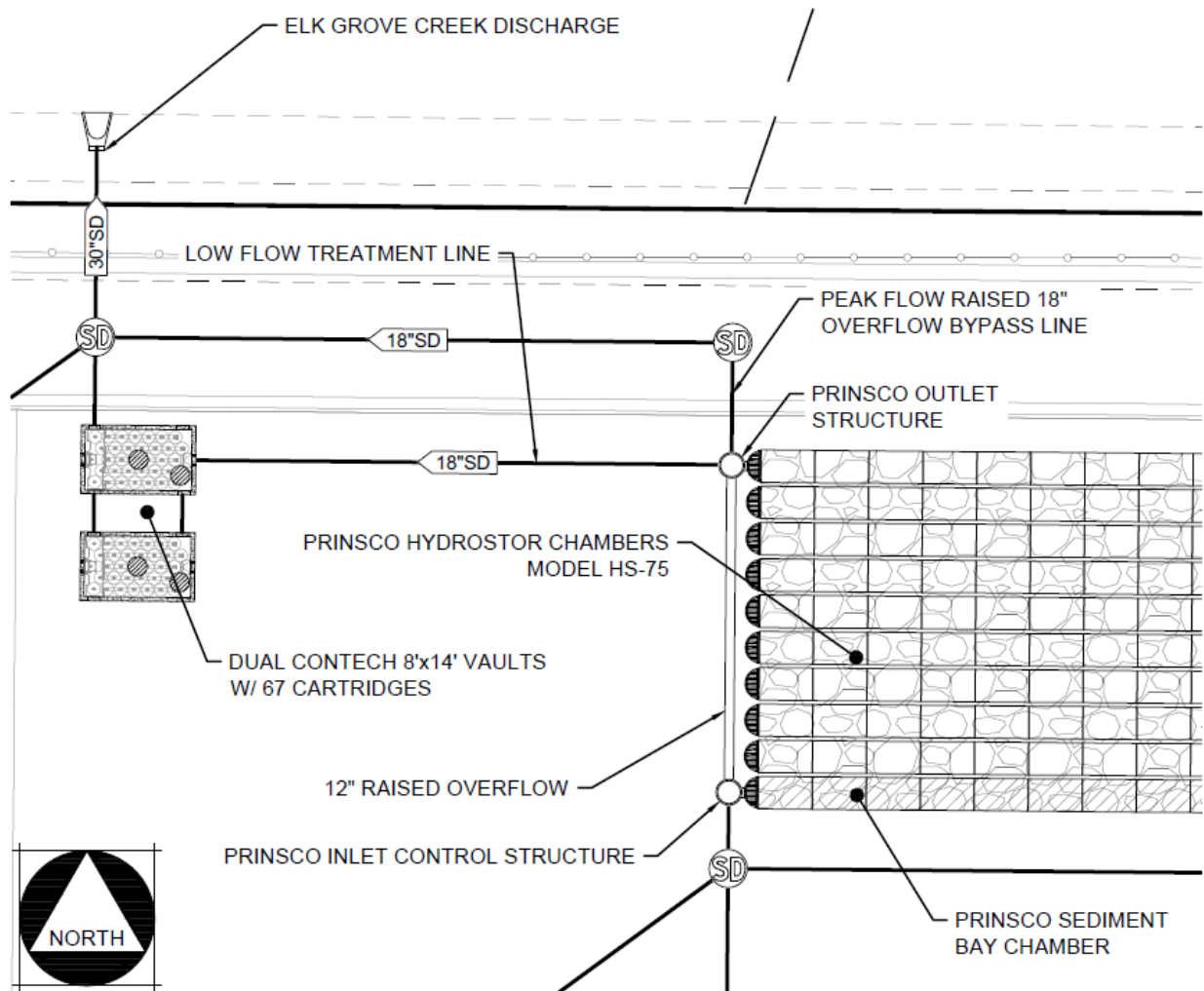


Figure 6 - Detention System & Outfall Detail

## **Storm Drainage Design & Stormwater Compliance**

This section provides the projects design descriptions, demonstrates stormwater criteria compliance, and software used to analyze/compute the stormwater requirements for the project. The methodology will cover how LID, stormwater quality, and hydromodification measures were calculated for the project.

### **Software Tools**

The following software is used in the projects on-site stormwater design:

- Microsoft Excel, Microsoft 365 Apps Version 2101
- SAHM, Sacramento Area Hydrology Model, Version Data 2020/4/6, Clear Creek Solutions
- SacCalc, Version 1.1.0.25, David Ford Consulting Engineers, 9/30/2011
- AutoCAD Civil3D, Autodesk, 2021
- SSA, Autodesk Storm and Sanitary Analysis, Autodesk, 2021

These software's were used to determine different portions of the project. Microsoft Excel was used to calculate LID requirements and the mass-loading for the total suspended solids (TSS) / pollutants. Excel was also used to design the water quality swales and the water quality proprietary system. Excel was used to design the storm drain network, calculate inverts, pipe volumes, and perform a preliminary hydraulic analysis.

SAHM was utilized to calculate the preconstruction site runoff events.

SacCalc was used for all hydrology. SacCalc results were then entered into Autodesk's Storm and Sanitary Analysis to determine hydraulic characteristics of and ensure that hydromodification was met for the proposed on-site storm drainage design. AutoCAD Civil3D was used to represent the proposed improvement's physical features so that they can be accurately modeled in the other software packages.

## **Project Storm Drainage Requirements**

### **LID (Low Impact Development)**

LID is typically implimented by the following practices: open space preservation, runoff reduction, runoff management. The development was designed to utilize the maximum pervious areas and utilize the existing drainage patterns from the south east corner of Waterman to the the north west corner of Brinkman. Interception trees have been placed throughout the site the intercept a portion of the stormwater. The only way to actually achieve runoff reduction is by infiltration; pervious surfaces, biorention ponds, intereption trees, all require infiltration to prevent the stormwater from discharging downstream. As seen in *Figure 3 – Existing Conditions Standing Water* the on-site soils promote little to no infiltration. To achieve runoff management and mimic the preconstruction hydology the site utilizes a underground detention system that discharges into dual Contech 8'x14' vaults with 67 cartridges. The cartridges in conjunction with a detention system create a prolonged constricted discharge that imitates the preconstruction hydrology. Per the Sacramento Region Stormwater Quality Design Manual Page 5-1 proprietary devices can be counted as LID. For meeting LID the StormFilter sytem was designed by a TSS mass loading calculation based on the mean annual rainfall depth. Further description can be found below in the stormwater quality section. By following the natural drainage patterns, reducing the pollutant load, and reducing the post construction discharge the site has successfully mimiced the preconstruction runoff as much as feasibly possible, making the project fully compliant with the LID requirements.

Refer to the project storm drainage calculations methodolgy for the procedures used to validate the design has been met.

### **Stormwater Quality**

For the proposed development stormwater quality has been met through the following:

1. Bioswales
  - a. Located on the east side of the Waterman Site
2. Prinsco Hydrostro HS75 Domes
  - a. Featuring a sediment bay chamber underlayed by two layers of an AASHTO M288 Class 1 Woven Geotextile Fabric
  - b. Located at the north side of the Brinkman Site.



3. Dual Contech 8'x14' Vaults
  - a. With 67 Contech StormFilters (27" cartridges)

The bioswales reduce the total pollutants load / total suspended solids (TSS) entering the storm drain system, by treating a portion of the stormwater per the Sacramento Region Stormwater Quality Design Manual. The Prinsco HS75 sediment bay chamber acts as a pretreatment device. The sediment bay chamber is underlaid by two layers of an AASHTO M288 Class 1 Woven Geotextile Fabric between the chamber and foundation stone. The geotextile fabric allows water to pass into the foundation stone, while trapping all trash, debris, and large pollutants in the sediment bay chamber. This ensures that the porous Prinsco Hydrostor media remains unclogged and reduces the pollutant load on the downstream system. From the detention system the entire water quality volume (WQV) is discharged in less than the required 48 hours through the StormFilter treatment system. The StormFilter treatment system was designed by a TSS mass loading calculation based on the mean annual rainfall depth. This is done to ensure that the cartridges are capable of handling the total pollutant mass load captured, since every storm below the 85<sup>th</sup> percentile WQV will be treated through the system.

Refer to the project storm drainage calculations methodology for the procedures used to validate the design has been met.

#### Hydromodification

The pre-project flows were calculated through the SAHM program. Since the project is designed with a hydraulically complex system the on-site hydrology was modeled by importing the catch basin hydrographs from SacCalc into Autodesk Storm and Sanitary Analysis (SSA). Site hydromodification has been met through the use of the underground detention system and the controlled StormFilter discharge. The low flow 2-year events fully discharge through the StormFilters, restricting the post construction flowrate to less than the preconstruction flowrate. In cases of the larger 10-year event the peak hydrograph is reduced through a combination of the constant low flow StormFilter discharge and the detention capacity of the Prinsco Hydrostor system, before discharging through the 18" overflow bypass line.

Refer to the project storm drainage calculations methodology for the procedures used to validate the design has been met.

## **LID & Water Quality Calculations & Methodology**

### **LID & Water Quality Calculations**

The installed LID & water quality devices include a bioswale & Contech StormFilters for treatment. In addition the water quality volume (WQV) and drawdown time was verified to meet the project requirements.

#### Bioswales Design

The bioswales were designed per the Sacramento Region Storm Water Quality Design Manual based on their tributary areas, an intensity of 0.18 inches per hour, and a required minimum hydraulic residence time of 7 minutes. In total the swales treat a total area of 4.69 acres based on the required standards.

Table 1 - Waterman Bioswale Design Calculations

Swale - Design Calculations																									
**References Per Sacramento Region Storm Water Quality Design Manual																									
Hydraulic Constants						Swale Geometric Parameters						Swale Hydraulic Parameters						Summary							
Site Soils Type =		D		Max. Bottom Width =		10 ft		Max Longitudinal Slope =		0.025 (ft/ft)		Total Treated Area =		4.69 acres											
Min. Req. Hydraulic Residence Time =		7 min		Min. Bottom Width =		2.00 ft		Min Longitudinal Slope =		0.005 (ft/ft)		Total Swale Length =		360 ft											
Design Rainfall Intensity =		0.18 in/hr		Max Side Slope (Run:Rise) =		3:1		Max. Design Depth =		0.42 ft															
Min. Design Depth =		0.25 ft																							
Land Use Descriptions:		A.C/P.C.C.	Disturbed Soil																						
CR3		0.95	0.25	Hydrology						Swale Geometry						Flow Characteristics						Treatment Calculations			
Node	Drainage Area (sf)	Composite "CR"	Use Area (sf) **See Above	Use Area (sf) **See Above	Use Area (sf) **See Above	Design Rainfall Intensity (in/hr)	Design Flow (cfs)	Bottom Width (ft)	Swale Total Depth (ft)	Side Slope (Run:Rise)	Swale Top Width	Longitudinal Slope (ft/ft)	Manning's Roughness Coefficient	Design Normal Depth (ft)	Flow Area (sf)	Wetted Flow Perimeter (cf)	Flow Velocity (ft/s)	Min. Req. Hydr. Residence Time (min)	Req. Length (ft)	Actual Length (ft)	Actual Hydr. Residence Time (min)				
I.D.	A	CR	a	a	a	i	Q	b	D	Z	CR	S	n	Y <sub>n</sub>	A	P <sub>w</sub>	V	T <sub>R</sub>	L <sub>R</sub>	L <sub>A</sub>	T <sub>A</sub>				
1	56,459	0.822	46,142	10,317		0.18	0.192	2	1	3:1	8	0.005	0.2	0.32	0.95	4.03	0.20	7.0	85	105	8.7				
2	46,046	0.848	39,353	6,693		0.18	0.161	2	1	3:1	8	0.005	0.2	0.29	0.84	3.85	0.19	7.0	80	85	7.4				
3	48,286	0.852	41,554	6,732		0.18	0.170	2	1	3:1	8	0.005	0.2	0.30	0.87	3.91	0.19	7.0	82	85	7.3				
4	53,258	0.817	45,367	10,191		0.18	0.181	2	1	3:1	8	0.005	0.2	0.31	0.91	3.97	0.20	7.0	83	85	7.2				

### Water Quality / LID Proprietary Device Mass Loading Design

To treat the remaining stormwater and meet LID, contech StormFilters were implimented for treatment. Per meeting with the City of Elk Grove for a propriety devices to count for LID the devices has to be desigend based on a WQV not a WQF and project specific calculations must be provided. The proprietary devices are designed to treat the entire WQV minus the percentage that is treated by the bioswales. Since the StormFilters will capture all total suspended solids (TSS) within the WQV, the filters must be designed based on a mass loading calculation. Meaning that each filter can only capture a fixed mass of solids, once this mass is reached the cartridges need to be replaced to function properly. The total mass loading is derrived from the mean annual rainfall depth which was determined to be 18 inches. The runoff producing rainfall depth that is required to be treated, is then calculated based on a runoff coefficient and the percent of the total rainfall that is required to be treated. This represents the annual WQV. The Sacramento Region Storm Water Quality Design Manual WQV is designed to treat small frequent storm events representing 80 percent of total average annual rainfall; therefore, a treatment percentage of 80 percent was used for design. The newly calculated depth is defined as the annual rainfall requiring treatment. This rainfall depth is applied to the total project area to determine the annual runoff volume requiring treatment. The total mass is calculated by multiplying this volume by the concentration of pollutants. To account for the pollutants removed by the swales, the total area treated by the swales was divided by the total project area to calculate the percentage of TSS removed. Per Sacramento Stormwater Quality Pathernship beriverfriendly, appoved proprietary devices must meet an 80% removal for max TSS loads of 100mg/L or greater. To be conservative an 80% required TSS removal was applied to the project. The remaining pollutant load required to be treated is then divided by the individual StormFilter maximum load to calculate the required number of cartridges. See below for the mass loading calculation.



Table 2 - Water Quality Mass Loading Calculations

**Water Quality LID Mass Loading - Design Calculations**

Volume Requirements:

P (Mean Annual Rainfall Depth) = 18 inches  
 %<sub>op</sub> (% of Annual Rainfall Requiring Treatment) = 80% *Per agency WQV requirements*  
 Soil Type = D

R<sub>v</sub> Calculation:

Land Use Type	A ( ac )	A (sf)	R <sub>v</sub> (sf)
Forest/Open space	0.00	0	0.05
Managed turf (disturbed soils)	3.82	166,532	0.25
Impervious cover	22.35	973,487	0.95
<b>Total / Composite:</b>	<b>26.17</b>	<b>1,140,019</b>	<b>0.85</b>

Annual Runoff Volume Calculation:

Composite R<sub>v</sub> (Runoff Coefficient) = 0.85  
 P<sub>T</sub> (Annual Rainfall Requiring Treatment) = 12.2 in  
 A (Total Area) = 26.17 acres  
 V<sub>T</sub> (Annual Runoff Volume Requiring Treatment) = 1,159,735 cf

TSS Calculation:

Land Use Type	A ( ac )	A (sf)	C <sub>TSS</sub> (mg/L)
Light Industrial	26.17	1,140,019	75
	0.00	0	0
<b>Totals:</b>	<b>26.17</b>	<b>1,140,019</b>	<b>75</b>

Mass Load Calculation:

V<sub>T</sub> (Annual Runoff Volume Requiring Treatment) = 1,159,735 cf  
 C<sub>TSS</sub> (Average Annual Pollutant TSS Concentration) = 75 mg/L  
 M<sub>total</sub> (Average Annual Pollutant Load on System) = 5,430 lbs

Mass Loading Treatment Requirements:

Area Treated by Swales = 4.69 acres  
 % TSS Removed By Pretreatment = 18%  
 Required TSS % Removal = 80% *Per agency requirements*  
 M<sub>treat</sub> (Remaining Pollutant Load Requiring Treatment) = 3,371 lbs

Mass Based Filter Design Calculations: Inputs per Contech Specifications

M<sub>treat</sub> (Pollutant Load Required to be Treated) = 3,371 lbs  
 Filter Size = 27"  
 Individual Mass Load = 54 lbs  
 Required Number of Cartridges = 63  
 Design Number of Cartridges = 67  
 Individual Cartridge Discharge = 22.5 gpm  
 Peak Flowrate = 3.36 cfs

**Water Quality Volume & Drawdown Design**

After the required number of cartridges was determined, the design was checked to see if the water quality volume & drawdown requirement was met. The CASQA rain gauge station "Sacramento 5 ESE" was used as a WQV was calculated, per the Sacramento Region Storm Water Quality Design Manual. The total on-site storage volume was checked to ensure that the design exceeds the required WQV. Secondly the discharge requirement was checked to ensure that a 48 hour maximum drawdown was met. See the table below for the water quality calculation.

Table 3 - Water Quality Calculation

### Water Quality - Design Calculations

Design Volume Per MS4 Requirements

Volume Requirements:

CASQA Rain Gauge Station = SACRAMENTO 5 ESE Per CASQA BMP Appendix D

$P_6$  (Mean 6 hr Rainfall Depth) = 0.55 inches

Required Drawdown Time = 48 Hours a (Regression Constant) = 1.963

Impervious Areas	A	A	Pervious Areas	A	A
	( ac )	(sf)		( ac )	(sf)
Pavement	10.10	439,848	Landscape	3.82	166,532
Concrete	2.67	116,236	Flood Control Basin	3.49	151,971
Building Roof	9.58	417,403			
Totals:	22.35	973,487	Totals:	7.31	318,503

Total Area = 29.66 ac      % Impervious = 75.3%       $C_{BMP}$  = 0.55  
 $P_0$  (Unit Stormwater Volume) = 0.59 in       $P_0 = (a \times C \times P_6)$   
 Required Volume of Storage = 1.46 ac-ft      63,645 cf  
 Required Design Volume of Storage = 1.46 ac-ft      63,645 cf

Proprietary Filter Design Calculations:

Required Design Volume of Storage = 1.46 ac-ft      63,645 cf  
 Provided Underground Domes Volume = 1.41 ac-ft      61,436 cf  
 Provided Storm Drain Pipe Volume = 0.49 ac-ft      21,274 cf  
 Total Provided Volume Storage = 1.90 ac-ft      82,710 cf  
 Check Design Volume = **Volume Requirements Met**  
 Required Discharge Flowrate = 0.37 cfs  
 Design Discharge Flowrate = 3.36 cfs See Mass-Loading Calculations  
 Check Design Volume = **Discharge Requirements Met**

## Hydrology, Hydromodification, & Hydraulic Analysis

### Pre-Project Hydrology

#### Pre-Project SacCalc Hydrology

The preconstruction runoff was calculated by using SacCalc and defining the existing site as an open space type D soil group. The SacCalc model analyzed a 24-hour duration for the following events: 2-year, 5-year, 10-year, 100-year. When analyzed these results seemed large for the preconstruction site, so for hydromodification the post construction project was compared to the SAHM results. Below are the calculated peak flow results.

Table 4 - Preconstruction Peak Flows SacCalc

Sac Calc Storm 24hr Event	Peak Flowrate (cfs)
2-YR	14.25
5-YR	21.97
10-YR	27.20
100-YR	46.18

## Pre-Project SAHM Hydrology

The preconstruction runoff was calculated by using SAHM and defining the existing site as a Land use Basin Type D soil, Flat (0-1%). The results from the SAHM model produced much smaller preconstruction peak flows than SacCalc, so for hydromodification the post construction project was compared to the SAHM results. Below are the calculated peak flow results.

Table 5 - Preconstruction Peak Flows SAHM

SAHM Return Period	Peak Flowrate (cfs)
2-YR	3.92
5-YR	6.43
10-YR	9.46
25-YR	14.99

## Post-Project Hydrology

### Post-Project SacCalc Hydrology

The postconstruction hydrology was calculated by using SacCalc. The site was broken down into individual drainage management areas (DMA's) for each inlet. See below for the Waterman & Brinkman project DMAs. The corresponding areas were added, and a soil group D rating was applied to industrial land use. The SacCalc model analyzed a 24-hour duration for the following events: 2-year, 5-year, 10-year, 100-year.

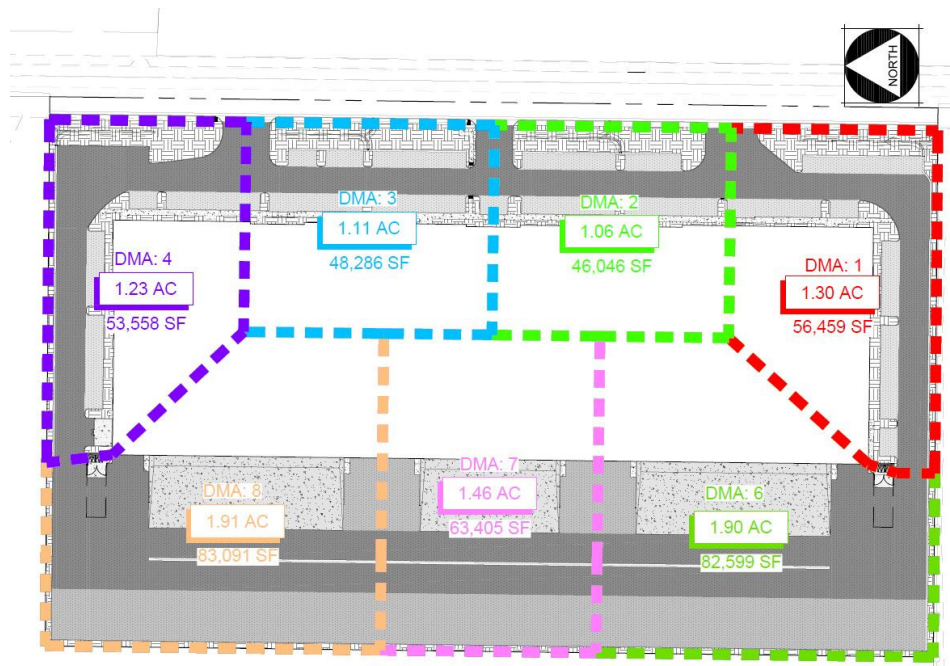


Figure 7 - Waterman DMA Exhibit

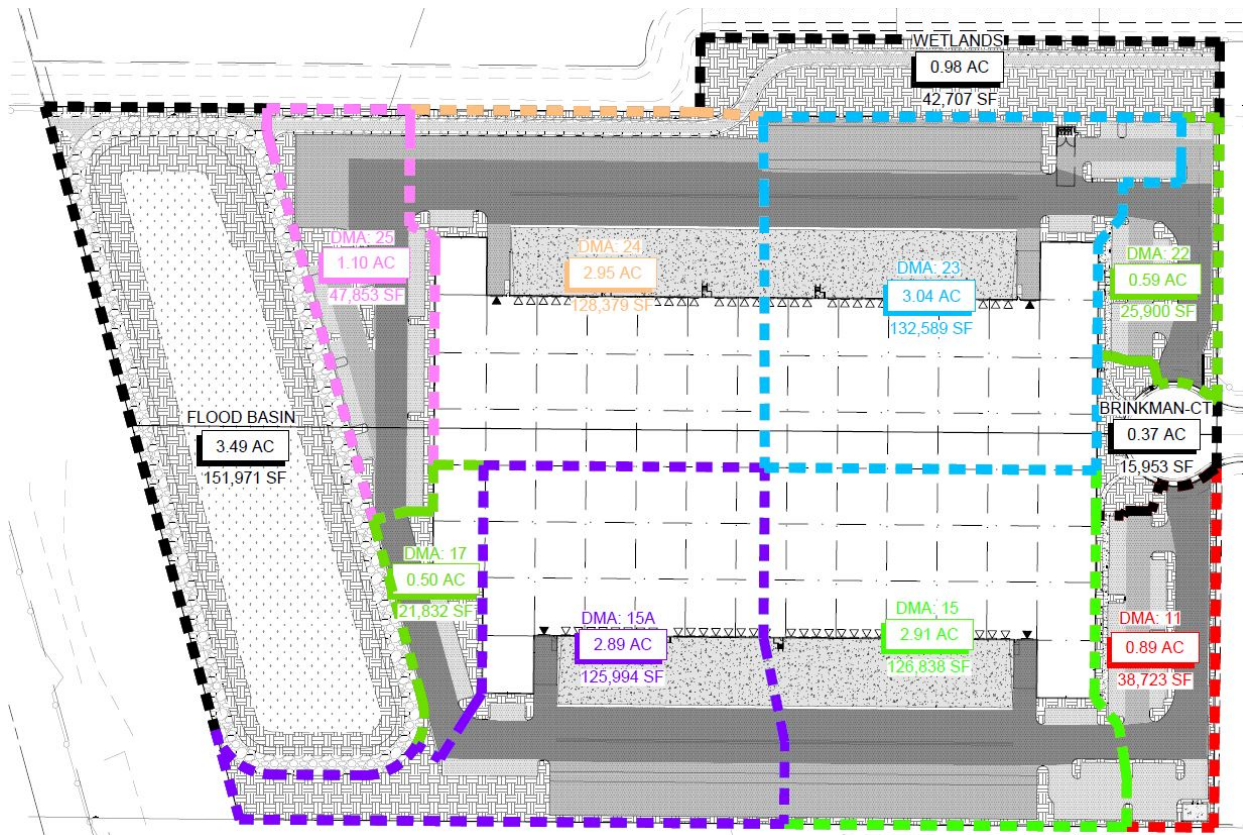


Figure 8 - Brinkman DMA Exhibit

### Post-Project Storm and Sanitary Analysis (SSA)

The on-site storm drain system was modeled in Autocad Civil 3D and then imported into SSA. The storm drain outfall discharge elevation was designed so that the outfall in Elk Grove Creek is above the Ordinary High-Water Mark determined by HELIX Environmental Planning. The hydrographs produce in SacCalc were individually added to each DMA for the 2-year, 10-year, and 100-year events. The discharge line from the Contech Stormfilters was constricted to only allow a peak flowrate of 3.36 cfs, which is the maximum discharge for 67 cartridges per Contech Specifications.

The calculation engine that was used in SSA for this project is a proprietary calculation engine called Hydrodynamic rather than a Kinematic Wave Analysis or a Steady State Analysis. SSA's Hydrodynamic Method solves the complete one-dimensional Saint Venant flow equations. Which are a depth integrations of the Navier Stokes equations for continuity and momentum and produce the most theoretically accurate results of the routing design. Hydrodynamic routing can account for channel storage, backwater, entrance losses, exit losses, flow reversal, and pressurized flow.

The peak discharge from the site occurs at the outlet on Elk Grove Creek. The following table and figures summarize the results of running the 2-year, 10-year, & 100-year event. The data has been broken out to show hydrographs for the StormFilter, Overflow, and Outfall in cubic feet per second. Additionally, the peak detention basin volume is shown for the previously mentioned events. For further analysis of the post construction hydrology see *Hydromodification & Hydraulic Analysis*.



Table 6 - Postconstruction SSA Results

Storm Event	2-Year	10-Year	100-Year
StormFilter Peak Flow (cfs)	3.36	3.36	3.36
Overflow Peak Flow (cfs)	0.06	5.24	6.37
Outfall Peak Flow (cfs)	3.42	8.60	9.73
Detention Basin Max Volume (cf)	39,132	59,220	60,999

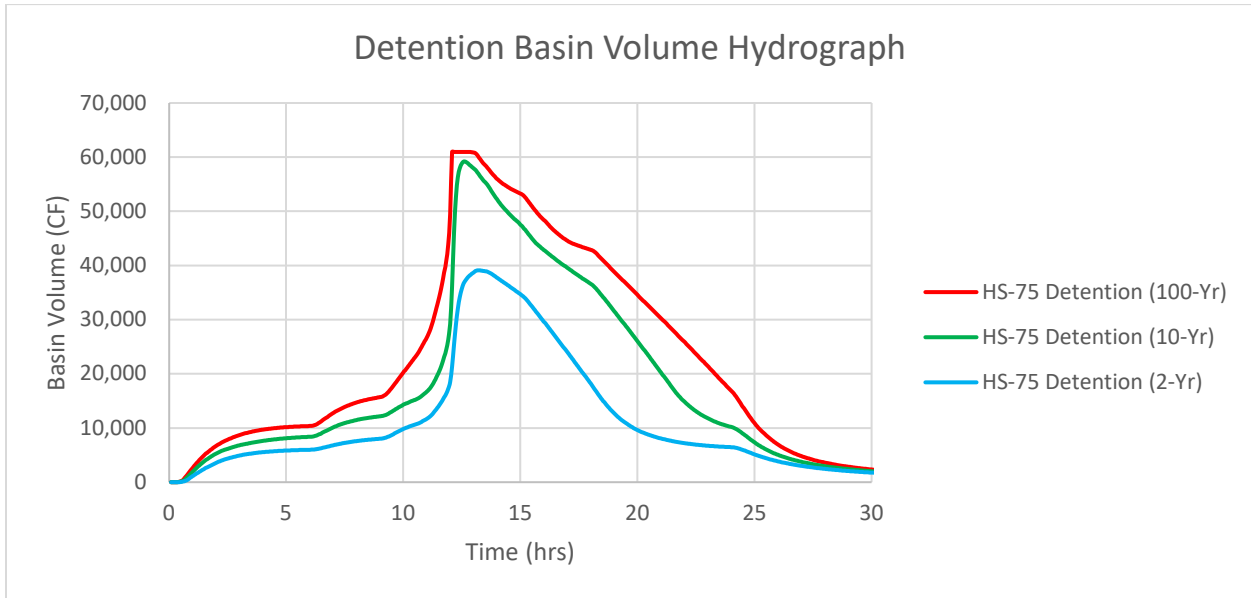


Figure 9 - On-site Detention Basin Volume Hydrographs

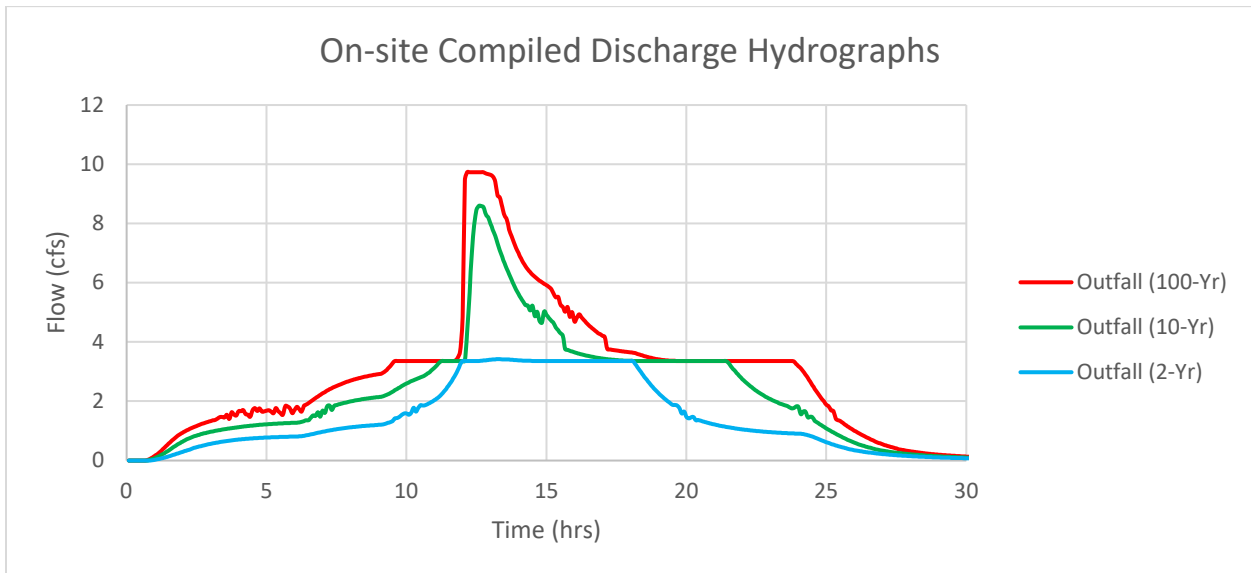


Figure 10 - On-site Compiled Discharge Hydrographs

## Hydromodification & Hydraulic Analysis

Comparing the pre-project vs post-project flowrates, the proposed development does not increase post-construction flowrates for the project. Refer to the table below for a hydromodification summary.

Table 7 - Hydromodification Summary

Return Period	Pre-Project SAHM Peak Flowrate (cfs)	Post-Project SSA Peak Flowrate (cfs)
2-YR	3.92	3.42
10-YR	9.46	8.60

### 2-Year Event Analysis

By utilizing the StormFilters to constrict the flowrate and the underground detention system to hold the peak storm, the 2-year event is mitigated. As seen on the figure below the overflow pipe discharges a negligible amount of stormwater, causing the peak discharge to be approximately equal to the StormFilter discharge.

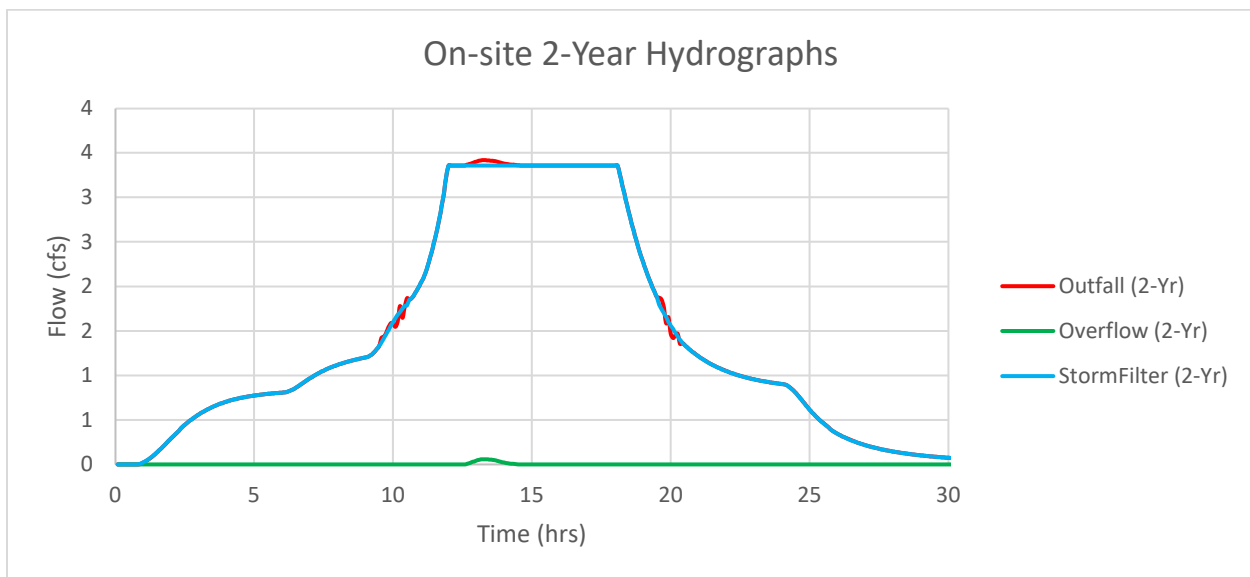


Figure 11 - On-site 2-Year Hydrographs

### 10-Year Event Analysis

The 10-Year event utilizes the StormFilters constant low flow discharge, the 18" overflow line, and the underground detention basin to mitigate the 10-Year Event. With the mitigation measures hydromodification is achieved and the underground detention basin utilizes 97% of its total capacity. Below is a compiled hydrograph of the 10-year event.

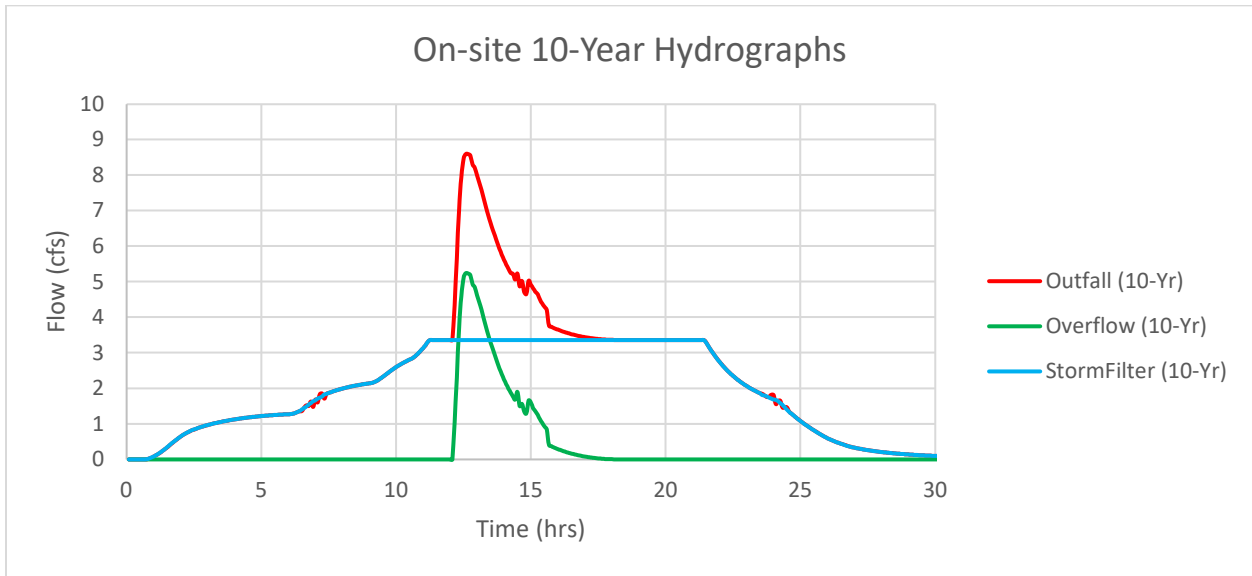


Figure 12 - On-site 10-Year Hydrographs

As previously stated, the site was designed to discharge above the Elk Grove Creek Ordinary High-Water Mark, elevation 40.00. This results in the underground detention facility to range from a bottom invert of 40.10 to a Max High-Water Elevation of 43.60. The lowest inlet on-site is located at the southern side of the Brinkman docks, elevation 44.93. During the 10-year storm event the basin uses approximately 97% of its capacity, resulting in a high-water elevation of 43.44 in the basin. The small separation between the dock elevation and the basin high-water elevation requires the storm drain lines to be upsized to reduce the head loss as much as possible. After upsizing the storm drain lines there is sufficient separation between the hydraulic grade line and inlet elevation. Below are the worst two profiles located at the Brinkman Southern Docks and the Waterman Western Docks. Both profiles start from the Elk Grove Creek Discharge location. The blue marks represent the highest HGL during the 10-year event. Full sized profiles can be found in the attached appendix.

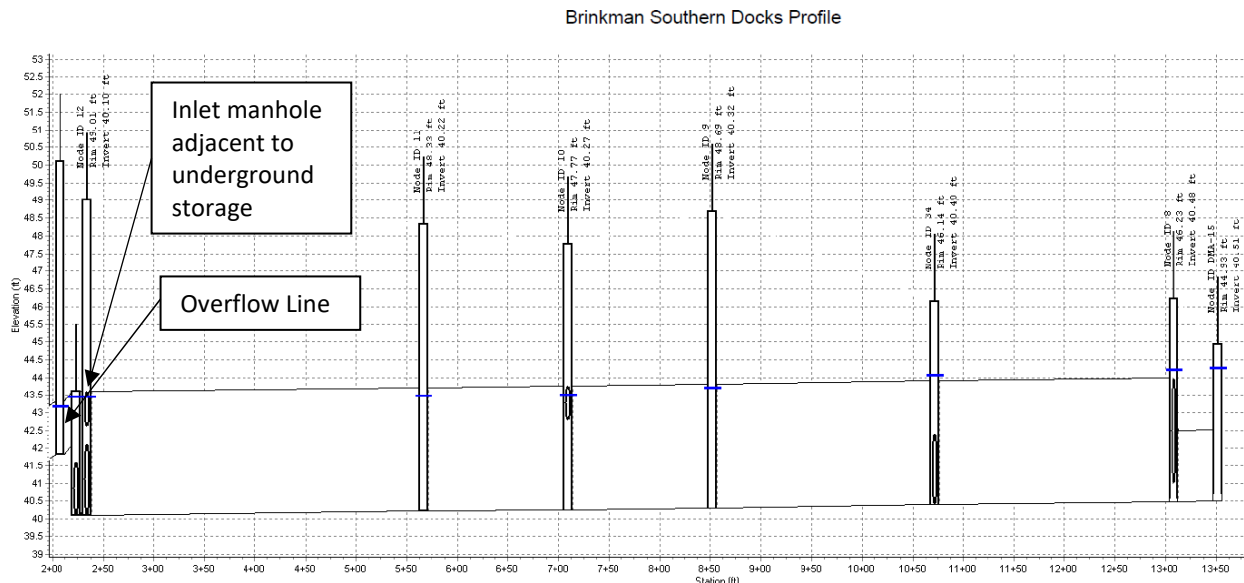


Figure 13 - Brinkman Southern Docks Profile

Waterman Western Docks Profile

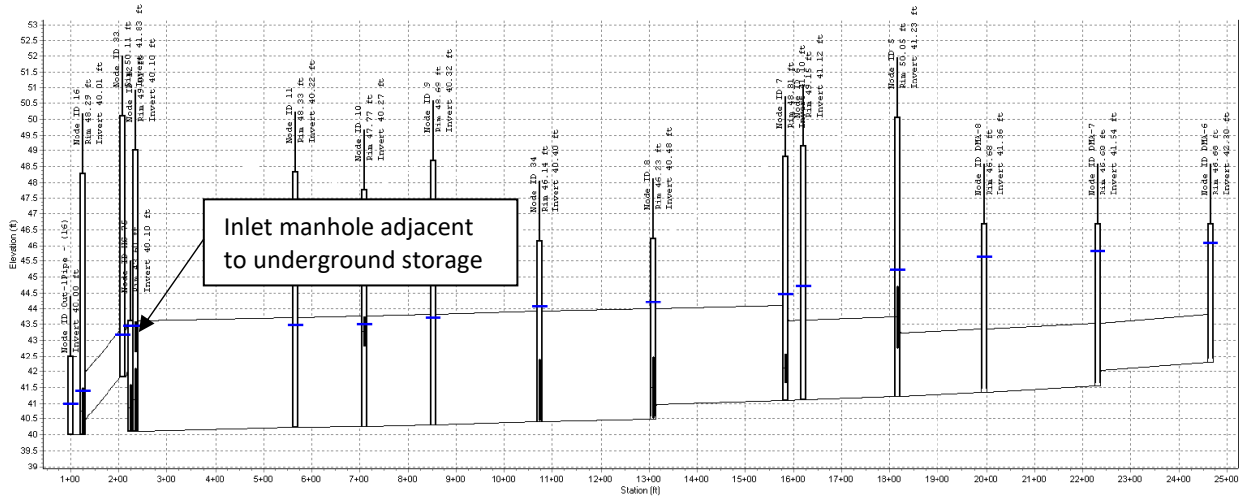


Figure 14 - Waterman Western Docks Profile

100-Year Event Analysis

The 100-Year event utilizes the StormFilters constant low flow discharge, the 18” overflow line, and the underground detention basin to mitigate the 100-Year Event. As seen in the hydrograph below the basin remains full during the event for approximately 45 minutes. During this period, the outfall is discharging at a peak flowrate of 7.73 cfs. This discharge is also much lower than the pre-project runoff condition. During this duration there is minor flooding in the Docks at both sites. As expected, all flood times are relatively the same duration and the volume is well below the finish floor of the proposed buildings. The dock flooding has been summarized in the table below, in addition to a compiled hydrograph of the 100-year event.

Table 8 - 100-Year Event Flooding

Location	Volume Flooded (Acre-in)	Total Time Flooded (min)
Brinkman Northern Docks	0.99	12
Brinkman Southern Docks	1.66	13
Waterman Docks	0.77	12



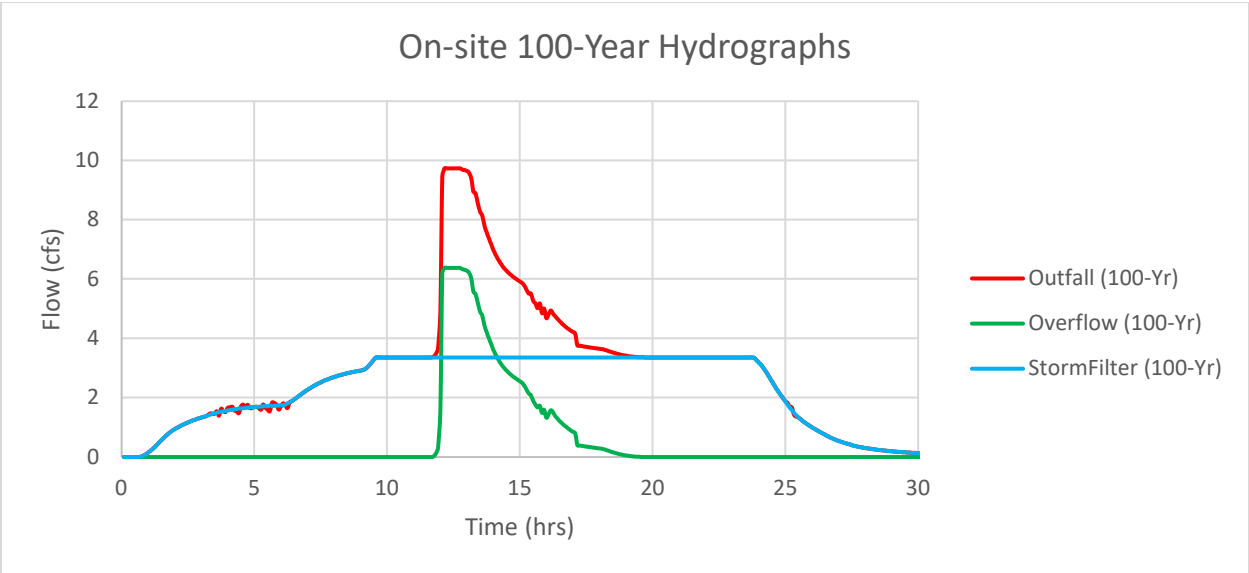


Figure 15 - On-site 100-Year Hydrographs

## **Appendix A – Project Site Plans**

## **Topographic Survey**



OWNER/DEVELOPER:



**BUZZ OATES**

555 CAPITOL MALL SUITE 900  
SACRAMENTO, CA 95814  
PHONE: 916.379.3800

PRELIMINARY DESIGN DOCUMENTS FOR:

**WATERMAN ROAD AT  
BRINKMAN COURT  
LOGISTICS CENTER**

CITY OF ELK GROVE, CALIFORNIA

approved for the owner by:

approved for the architect by:

issue : description : date :

A INITIAL PLANNING SUBMITAL 04-29-2020

CIVIL ENGINEER & LAND SURVEYOR:



1242 DUPONT COURT  
MANTECA, CA 95336  
PHONE: 209.239.6229

drawn by : DB plot date : 2/16/2021

checked by : SLS

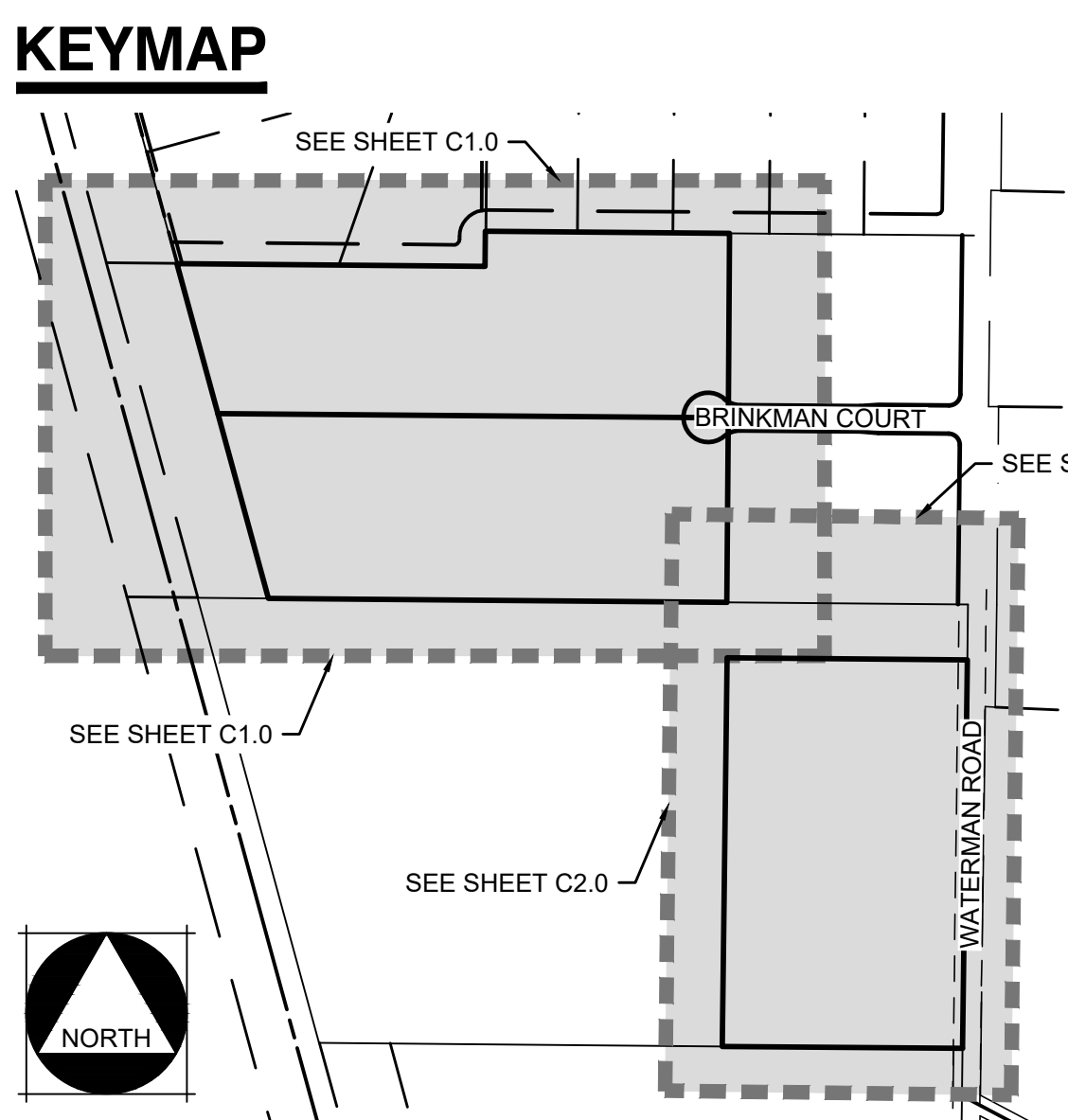
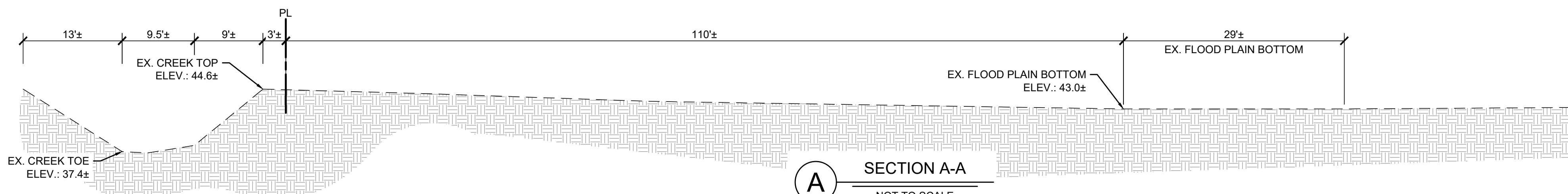
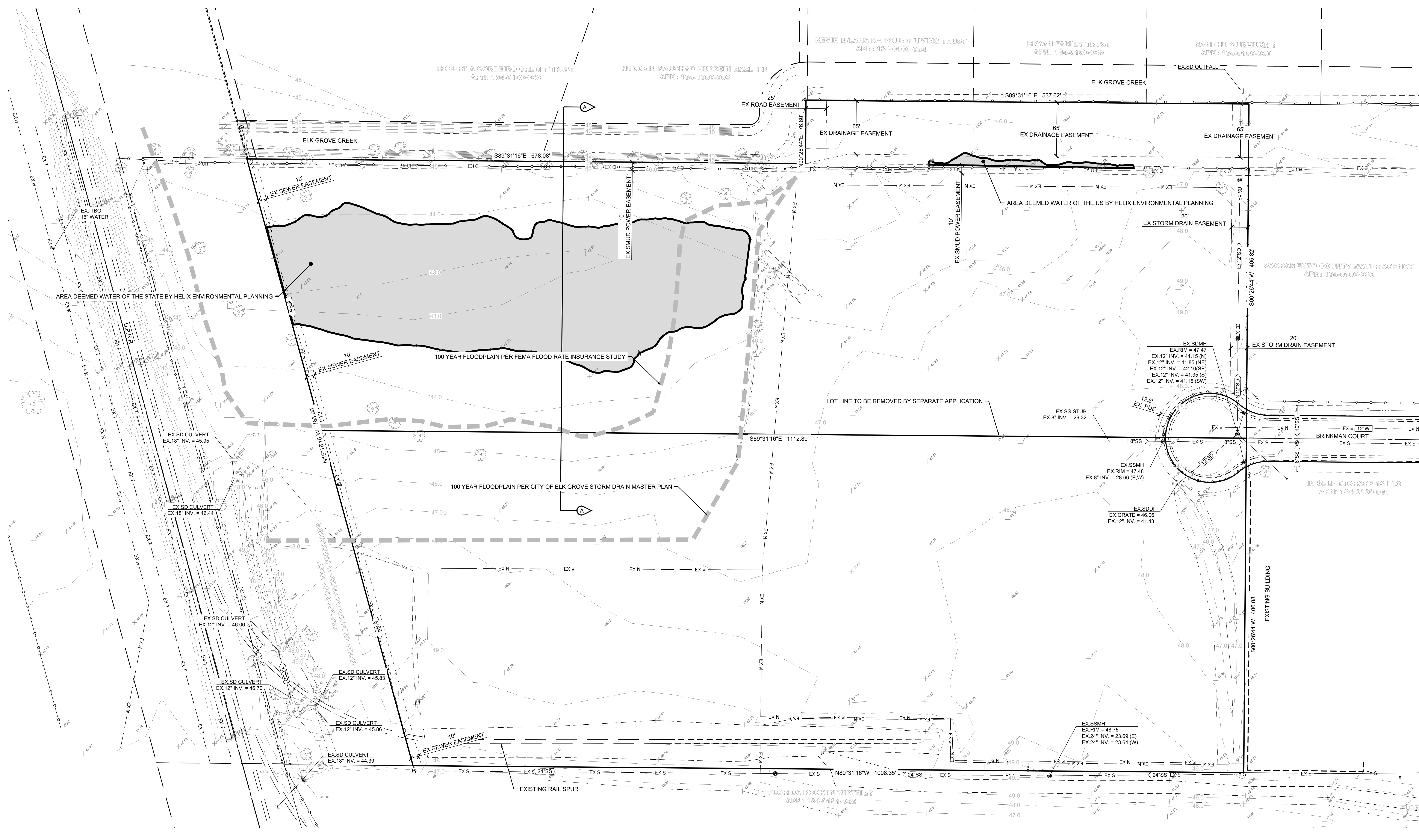
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scale : AS NOTED

project number : 19-061 & 20-002

**TOPOGRAPHIC  
SURVEY  
BUILDING A**

sheet no. :



**LEGEND**

EX GRADE CONTOUR	50
WATER LINE	EX W
SANITARY SEWER	EX S
STORM DRAIN	EX SD
SEWER MANHOLE	EX SMH
STORM MANHOLE	EX SDH
DRAIN INLET	EX DI
CURB INLET	EX CI
WATER VALVE	EX V
AIR RELEASE VALVE	EX ARV
BLOWOFF	EX BO
FIRE HYDRANT	EX FH
TYPICAL ELECTROLIER	EX EL
TYPICAL LUMINAIRE	EX LU
UTILITY POLE	EX UP
SIGNAGE	EX SIG

- NOTES**
- FLOOD ZONE: ZONE AE & ZONE X - PANEL NO. 06067C0338H
  - THIS PROPERTY HAS A GENTLE SLOPE WITH ELEVATIONS RANGING FROM 50' TO 43.1'.
  - EXISTING UTILITIES ARE BASED ON RECORD INFORMATION AND TOPOGRAPHIC SURVEY.
  - SEE LANDSCAPE PLAN FOR TREE REMOVAL INFORMATION.
  - NO EXISTING STRUCTURES WERE FOUND ONSITE.
  - NO WELLS WERE FOUND ONSITE.
  - PROJECT VERTICAL DATUM IS NGVD 29

**SURVEYOR CERTIFICATION**

THIS PLAN CORRECTLY REPRESENTS TITLE REPORT 15-016452 RA ISSUED BY STEWART TITLE ON JULY 31ST 2017 AND BOUNDARY LINE ADJUSTMENT 201712010575

*Douglas F. Banks*  
DOUGLAS F. BANKS P.L.S. 8159

NO. 8159  
STATE OF CALIFORNIA





OWNER / DEVELOPER:



PRELIMINARY DESIGN DOCUMENTS FOR:

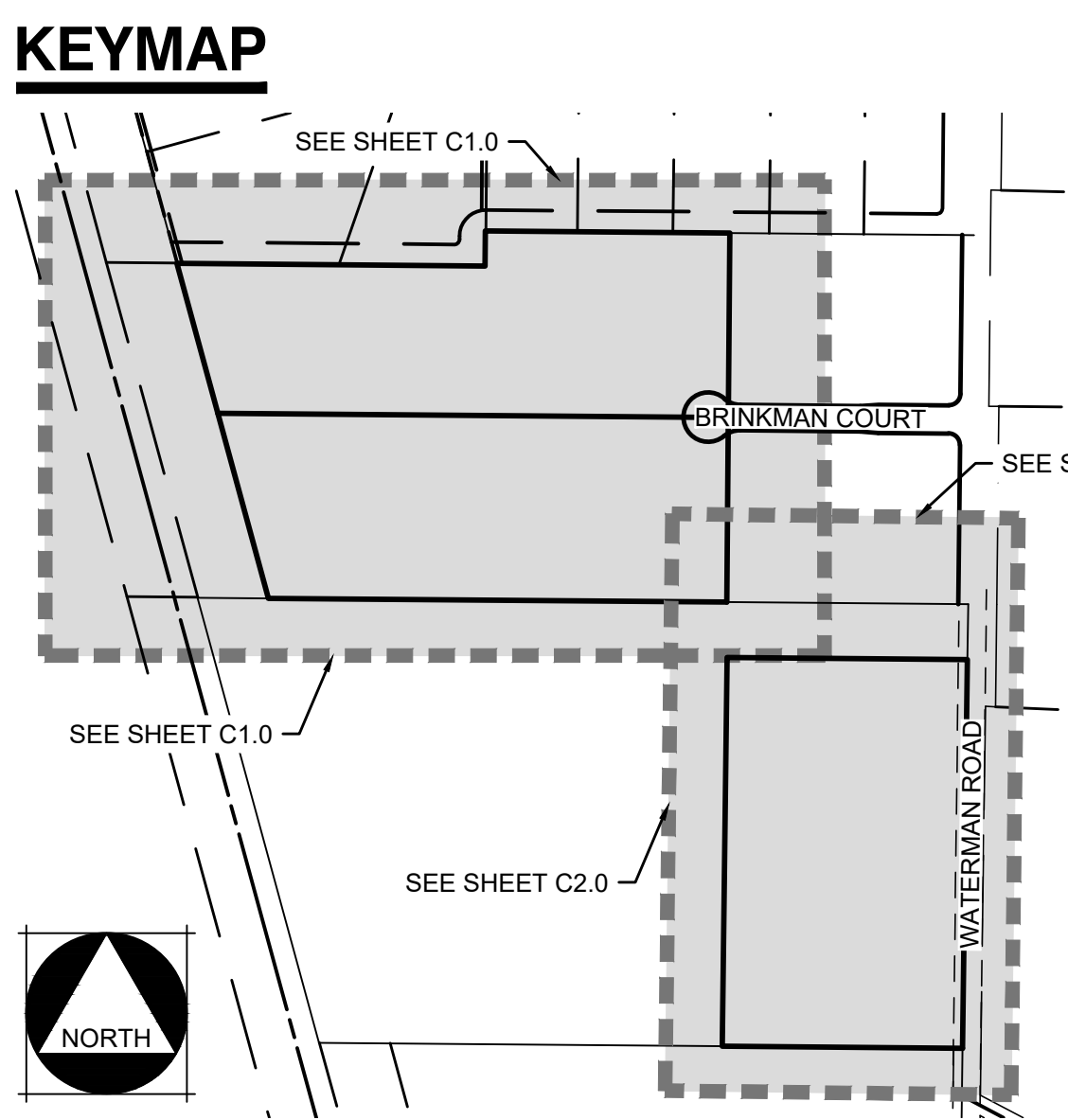
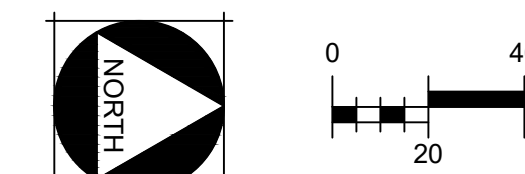
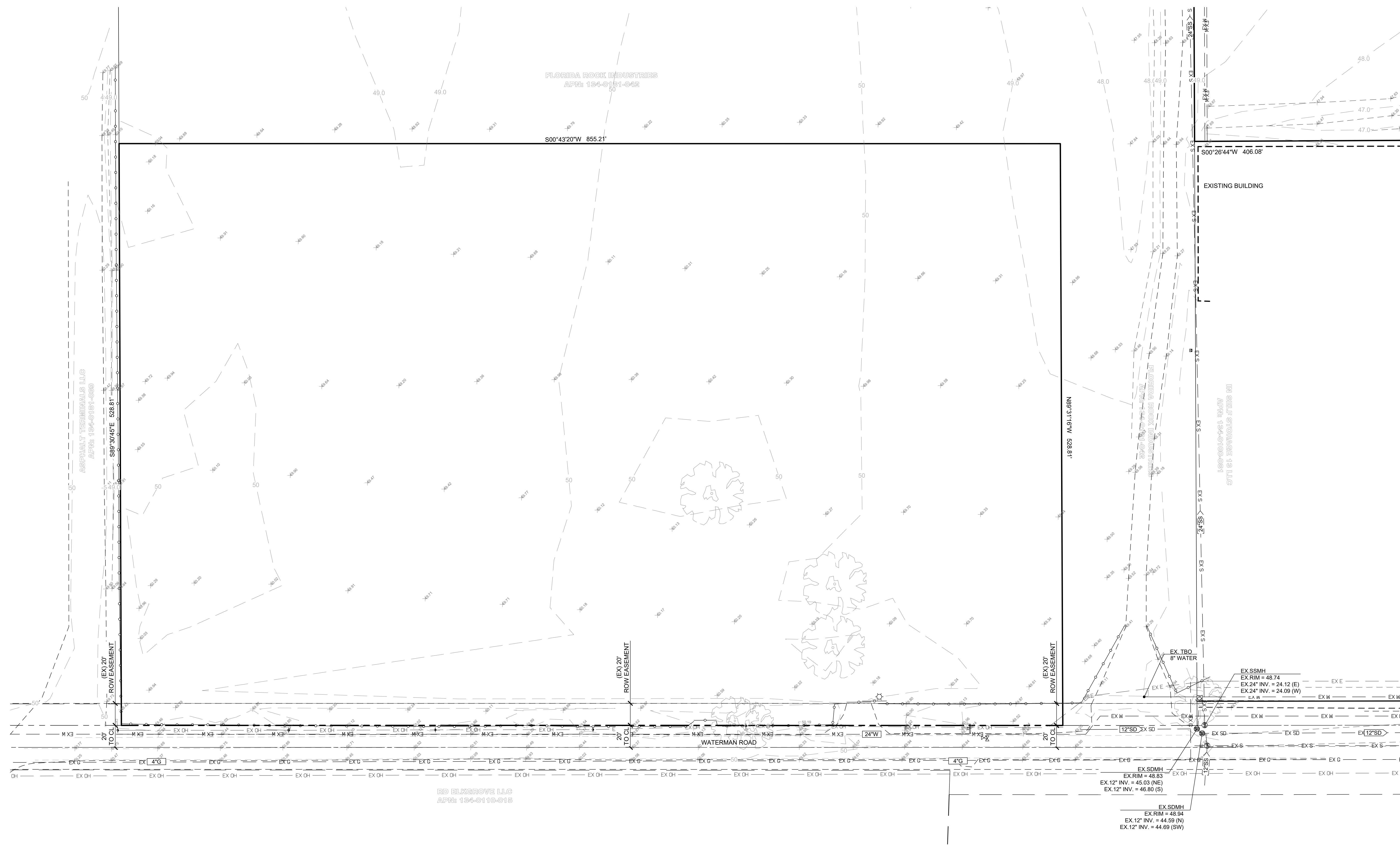
## WATERMAN ROAD AT BRINKMAN COURT LOGISTICS CENTER

CITY OF ELK GROVE, CALIFORNIA

approved for the owner by:

approved for the architect by:

issue :	description :	date :
A	INITIAL PLANNING SUBMITAL	04-28-2020



LEGEND	
EX GRADE CONTOUR	
WATER LINE	
SANITARY SEWER	
STORM DRAIN	
SEWER MANHOLE	
STORM MANHOLE	
DRAIN INLET	
CURB INLET	
WATER VALVE	
AIR RELEASE VALVE	
BLOWOFF	
FIRE HYDRANT	
TYPICAL ELECTROLIER	
TYPICAL LUMINAIRE	
UTILITY POLE	
SIGNAGE	

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DOUGLAS F. BANKS P.L.S. 8159

NO. 8159  
STATE OF CALIFORNIA

### CIVIL ENGINEER & LAND SURVEYOR:

1242 DUPONT COURT  
MANTECA, CA 95336  
PHONE: 209.239.6229

drawn by: DB plot date: 2/18/2021

checked by: SLS

stamp

scale: AS NOTED  
project number: 19-061 & 20-002

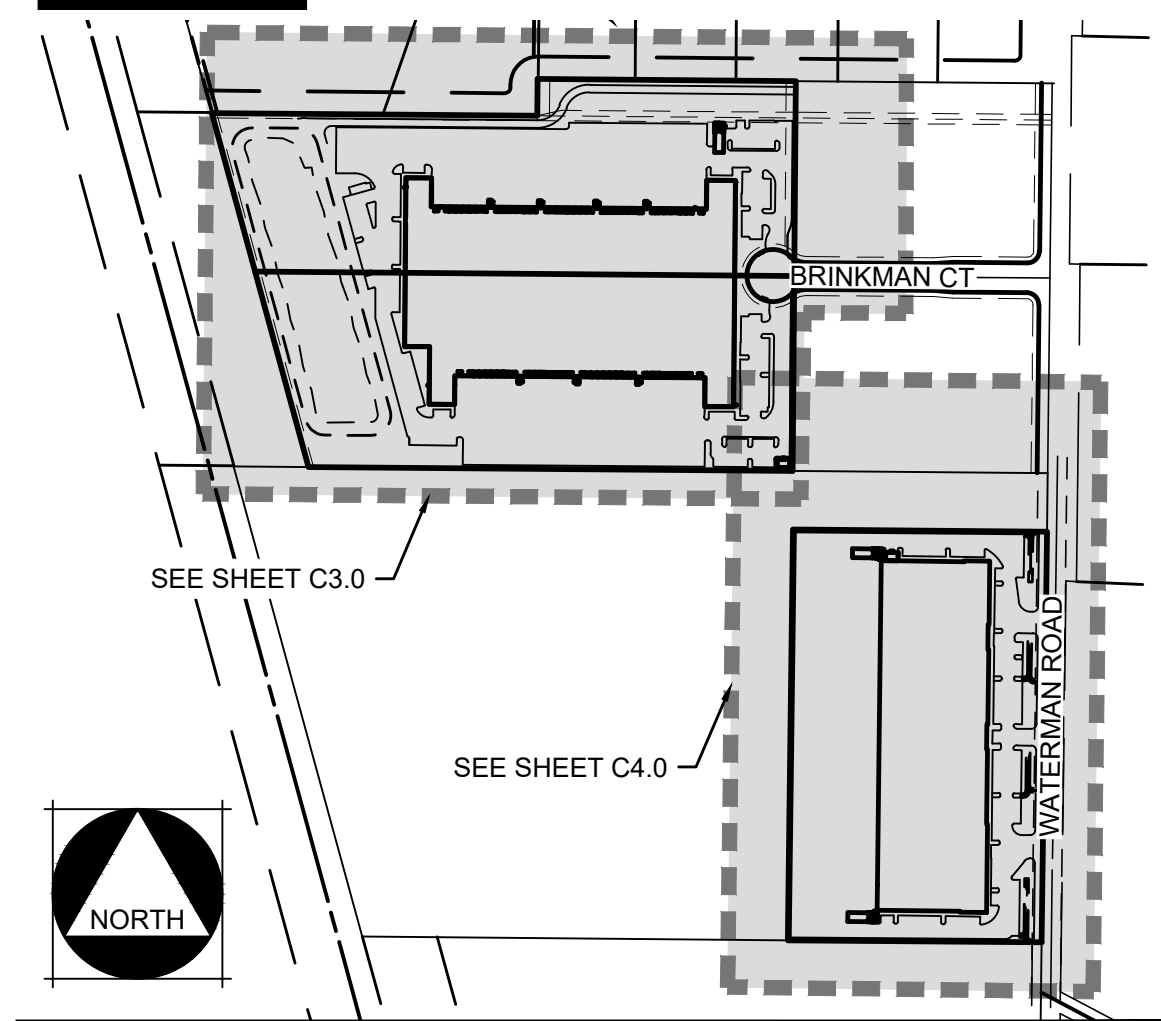
TOPOGRAPHIC  
SURVEY  
BUILDING B

sheet no.: **C2.0**

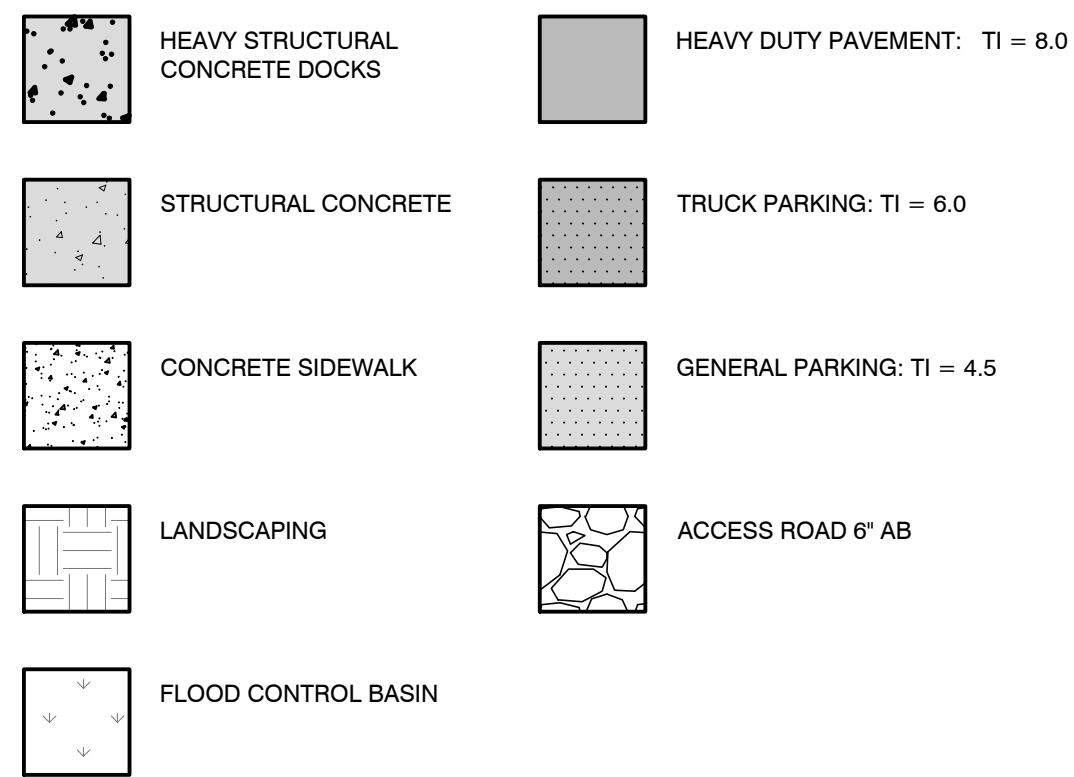
***Proposed Grading & Drainage Plan***



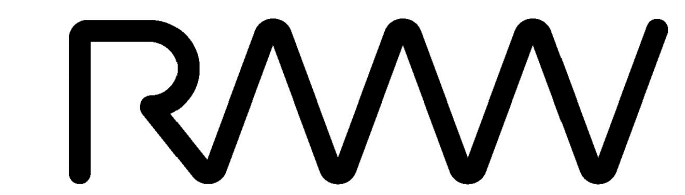
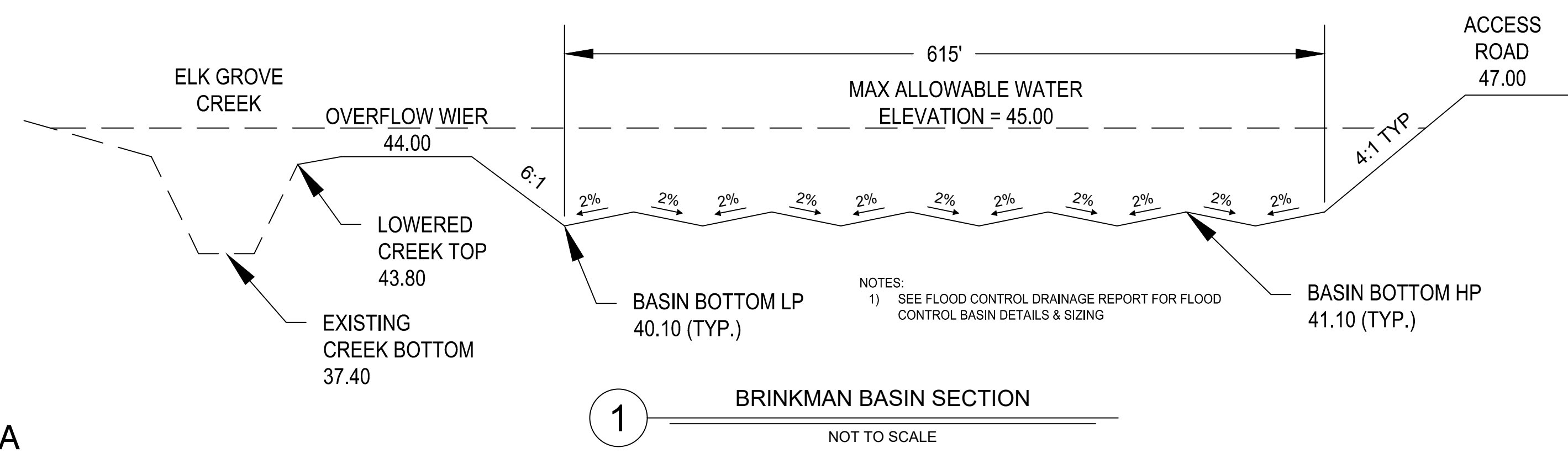
**KEY MAP**



**PAVEMENT LEGEND**



**SITE PLAN  
BUILDING A**  
9195 BRINKMAN COURT  
ELK GROVE, CA. 95624  
BEING A PORTION OF NW 1/4 OF SECTION 7,  
T. 6 N., R. 6 E., M.D.B.M.,  
CITY OF ELK GROVE, SACRAMENTO COUNTY, CALIFORNIA



RAW  
Architecture  
Interiors

1718 Third Street  
Suite 101  
Sacramento  
California 95811

Office  
916 449-1400

rmw.com

OWNER / DEVELOPER:



**BUZZ OATES**  
555 CAPITOL MALL SUITE 900  
SACRAMENTO, CA 95814  
PHONE: 916.379.3800

PRELIMINARY DESIGN DOCUMENTS FOR:

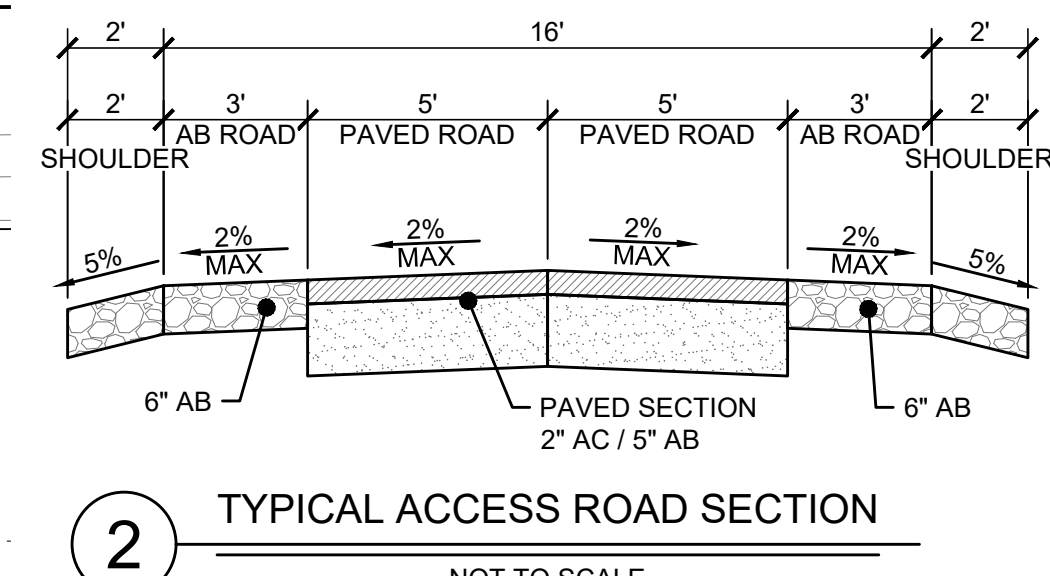
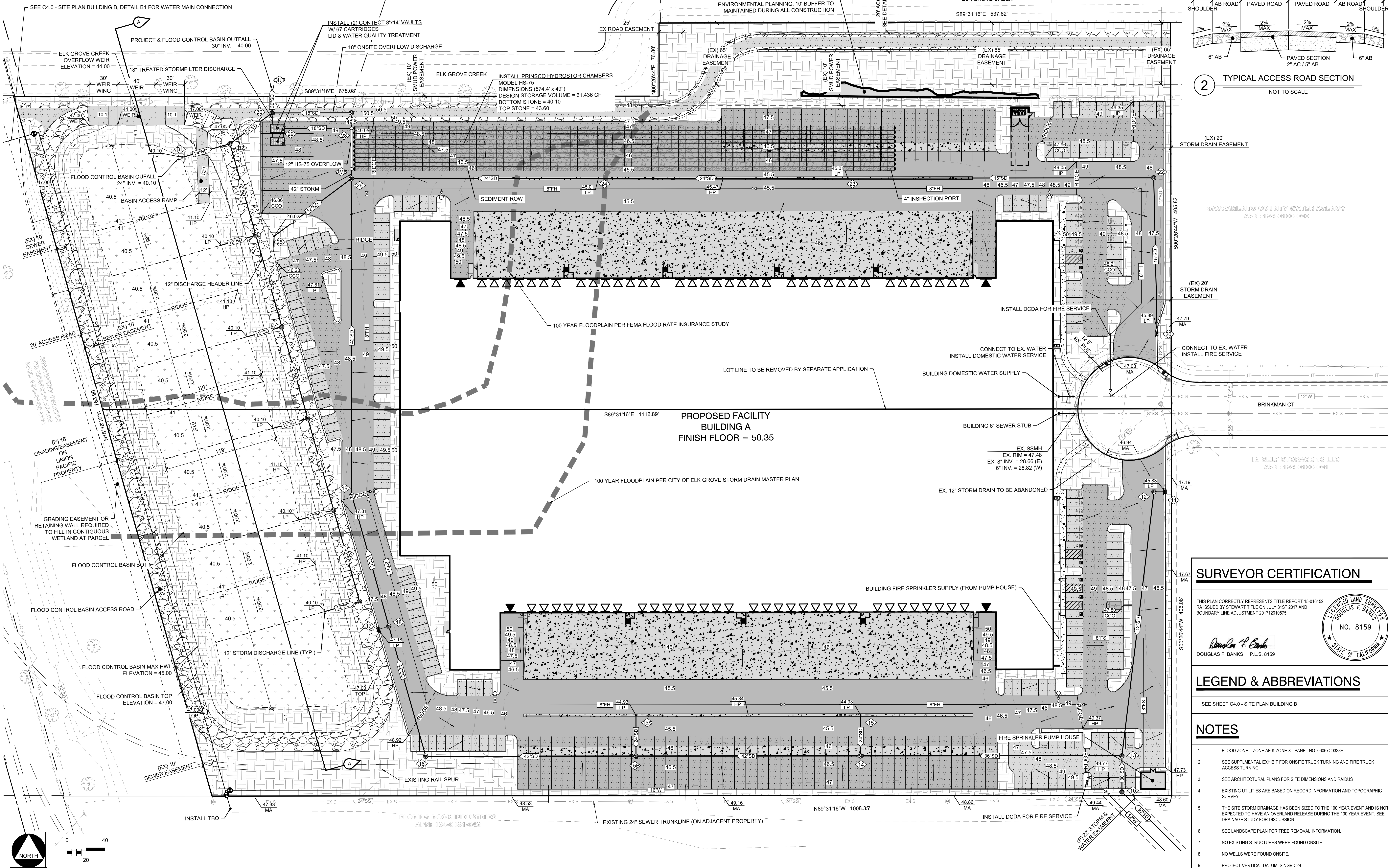
**WATERMAN ROAD AT  
BRINKMAN COURT  
LOGISTICS CENTER**

CITY OF ELK GROVE, CALIFORNIA

approved for the owner by:

approved for the architect by:

issue : description : date :  
A INITIAL PLANNING SUBMITAL 04-29-2020

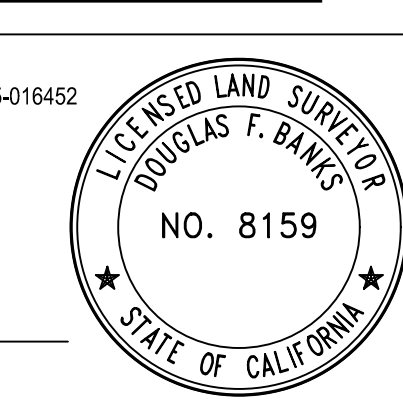


**2 TYPICAL ACCESS ROAD SECTION**  
NOT TO SCALE

**SURVEYOR CERTIFICATION**

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RA ISSUED BY STEWART TITLE ON JULY 31ST 2017 AND  
BOUNDARY LINE ADJUSTMENT 201712010575

*Douglas F. Banks*  
DOUGLAS F. BANKS P.L.S. 8159



**LEGEND & ABBREVIATIONS**

SEE SHEET C4.0 - SITE PLAN BUILDING B

**NOTES**

- FLOOD ZONE: ZONE AE & ZONE X - PANEL NO. 06067C0338H
- SEE SUPPLEMENTAL EXHIBIT FOR ONSITE TRUCK TURNING AND FIRE TRUCK ACCESS TURNING
- SEE ARCHITECTURAL PLANS FOR SITE DIMENSIONS AND RADII
- EXISTING UTILITIES ARE BASED ON RECORD INFORMATION AND TOPOGRAPHIC SURVEY.
- THE SITE STORM DRAINAGE HAS BEEN SIZED TO THE 100 YEAR EVENT AND IS NOT EXPECTED TO HAVE AN OVERLAND RELEASE DURING THE 100 YEAR EVENT. SEE DRAINAGE STUDY FOR DISCUSSION.
- SEE LANDSCAPE PLAN FOR TREE REMOVAL INFORMATION.
- NO EXISTING STRUCTURES WERE FOUND ONSITE.
- NO WELLS WERE FOUND ONSITE.
- PROJECT VERTICAL DATUM IS NGVD 29

CIVIL ENGINEER & LAND SURVEYOR:

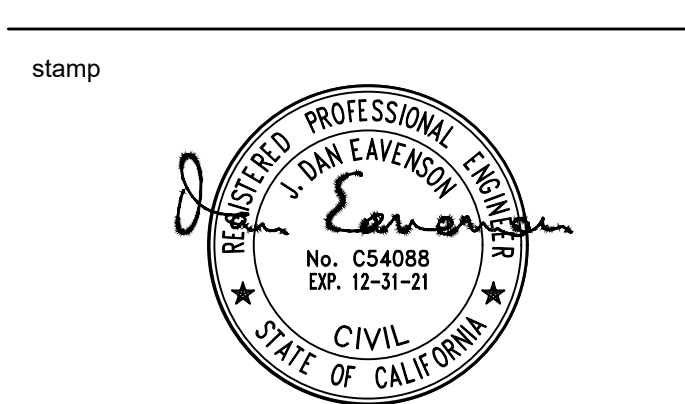


1242 DUPONT COURT  
MANTECA, CA 95336  
PHONE: 209.239.6229

drawn by: DB plot date: 2/16/2021

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stamp



scale: AS NOTED

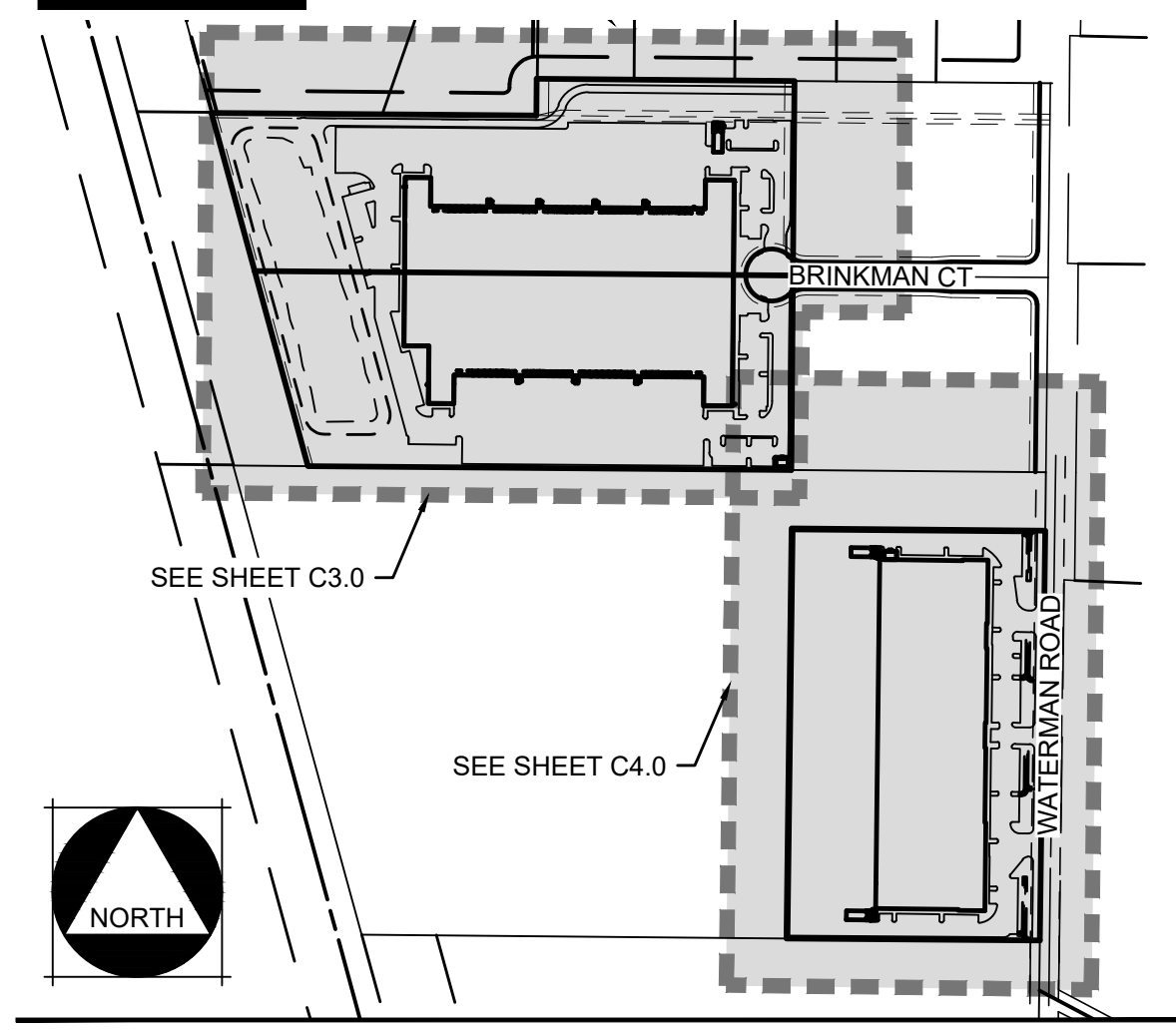
project number: 19-061 & 20-002

**SITE PLAN  
BUILDING A**

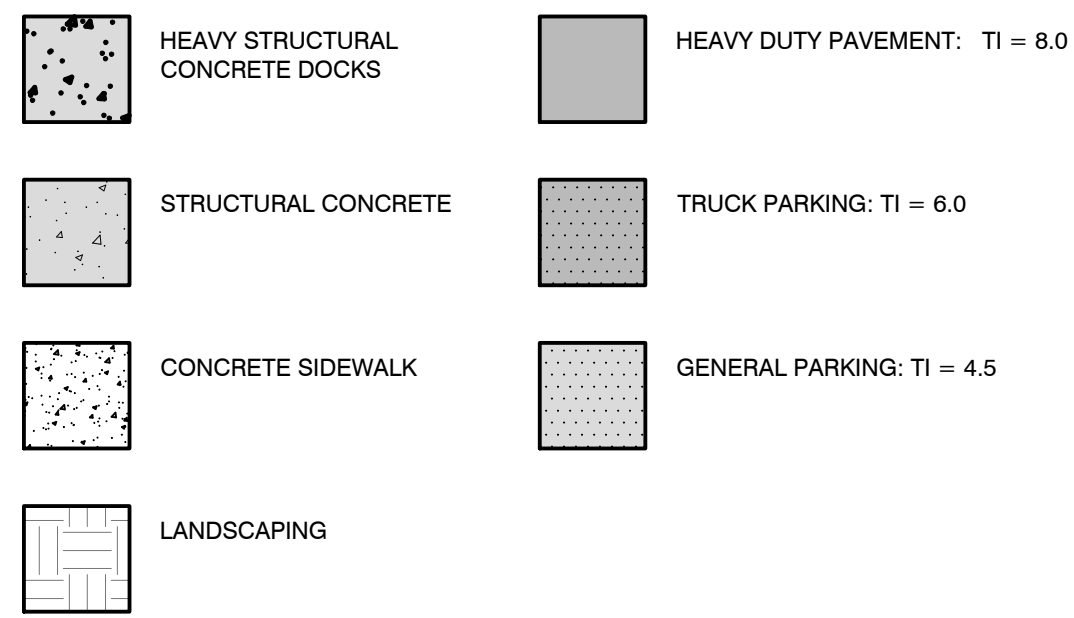
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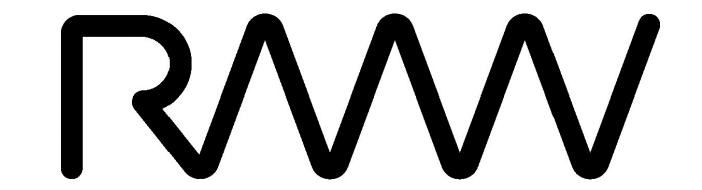
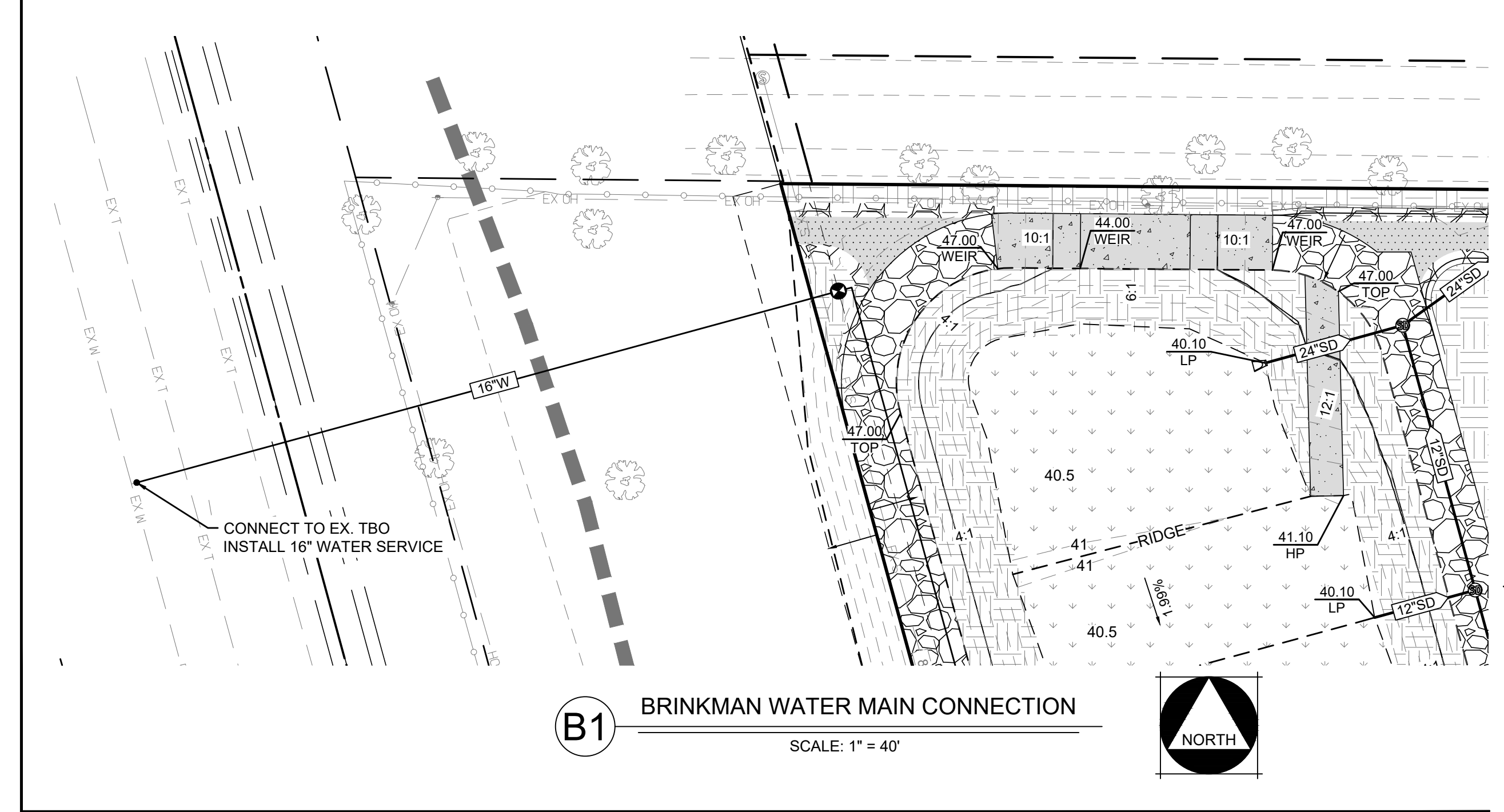
KEY MAP



PAVEMENT LEGEND



**SITE PLAN  
BUILDING B**  
10000 WATERMAN ROAD  
ELK GROVE, CA. 95624  
BEING A PORTION OF NW 1/4 OF SECTION 7,  
T. 6 N., R. 6 E., M.D.B.M.,  
CITY OF ELK GROVE, SACRAMENTO COUNTY, CALIFORNIA



RMW  
Architecture  
Interiors

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Sacramento  
California 95811

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rmw.com

OWNER / DEVELOPER:



**BUZZ OATES**  
555 CAPITOL MALL SUITE 900  
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PHONE: 916.379.3800

PRELIMINARY DESIGN DOCUMENTS FOR:

**WATERMAN ROAD AT  
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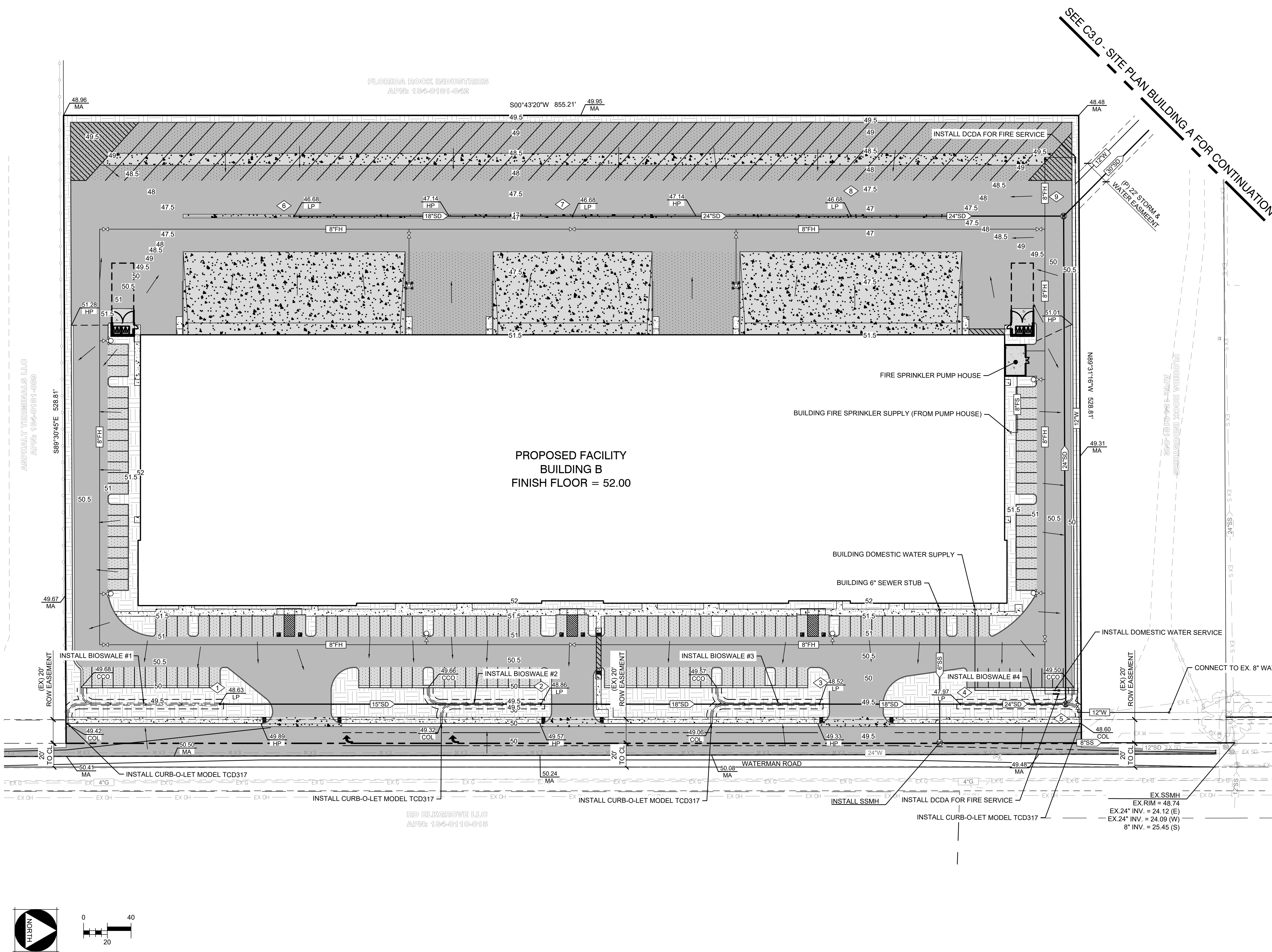
CITY OF ELK GROVE, CALIFORNIA

approved for the owner by:

approved for the architect by:

issue : description : date :

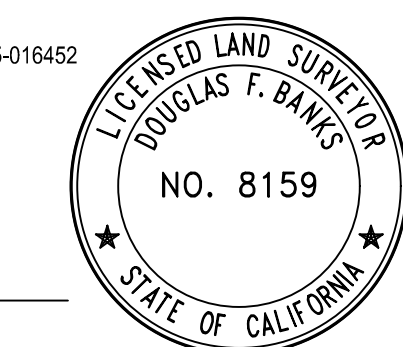
A INITIAL PLANNING SUBMITAL 04-29-2020



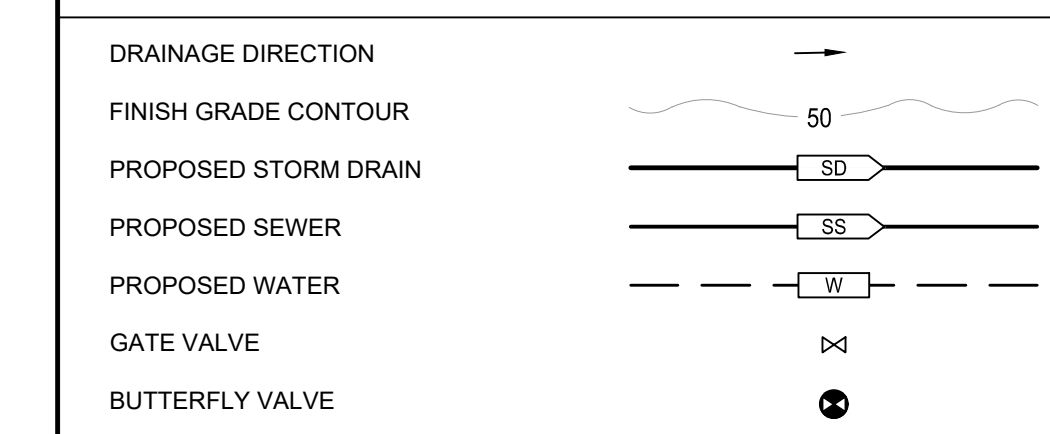
**SURVEYOR CERTIFICATION**

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RA ISSUED BY STEWART TITLE ON JULY 31ST 2017 AND  
BOUNDARY LINE ADJUSTMENT 201712010575

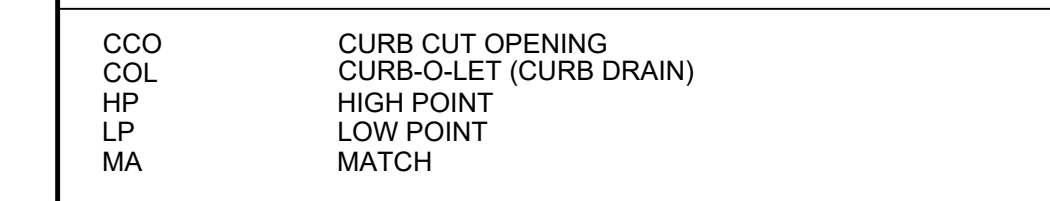
*Douglas F. Banks*  
DOUGLAS F. BANKS P.L.S. 8159



**LEGEND**



**ABBREVIATIONS:**



**NOTES**

- FLOOD ZONE: ZONE AE & ZONE X - PANEL NO. 0606700338H
- SEE SUPPLEMENTAL EXHIBIT FOR ONSITE TRUCK TURNING AND FIRE TRUCK ACCESS TURNING
- SEE ARCHITECTURAL PLANS FOR SITE DIMENSIONS AND RAIDS
- EXISTING UTILITIES ARE BASED ON RECORD INFORMATION AND TOPOGRAPHIC SURVEY.
- SEE LANDSCAPE PLAN FOR TREE REMOVAL INFORMATION.
- NO EXISTING STRUCTURES WERE FOUND ONSITE.
- NO WELLS WERE FOUND ONSITE.
- PROJECT VERTICAL DATUM IS NGVD 29

CIVIL ENGINEER & LAND SURVEYOR:



1242 DUPONT COURT  
MANTECA, CA 95336  
PHONE: 209.239.6229

drawn by : DB plot date : 2/16/2021

checked by : SLS

stamp



scale : AS NOTED

project number : 19-061 & 20-002

**SITE PLAN  
BUILDING B**

sheet no. :

**C4.0**



## **Appendix B – LID & Water Quality Calculations**

## **Water Quality LID Mass Loading Calculations**

# MCR ENGINEERING

1242 Dupont Court  
Manteca, CA 95336  
(209) 239-6229  
FAX (209) 239-8839

Project Name: Waterman & Brinkman Logistics Center

Job: 19-061

By: DB

Date: 2/10/2021

## Water Quality LID Mass Loading - Design Calculations

### Volume Requirements:

P (Mean Annual Rainfall Depth) = 18 inches  
%<sub>p</sub> (% of Annual Rainfall Requiring Treatment) = 80% *Per agency WQV requirements*  
Soil Type = D

### R<sub>v</sub> Calculation:

Land Use Type	A ( ac )	A (sf)	R <sub>v</sub> (sf)
Forest/Open space	0.00	0	0.05
Managed turf (disturbed soils)	3.82	166,532	0.25
Impervious cover	22.35	973,487	0.95
Total / Composite:	26.17	1,140,019	0.85

### Annual Runoff Volume Calculation:

Composite R<sub>v</sub> (Runoff Coefficient) = 0.85  
P<sub>T</sub> (Annual Rainfall Requiring Treatment) = 12.2 in  
A (Total Area) = 26.17 acres  
V<sub>T</sub> (Annual Runoff Volume Requiring Treatment) = 26.62 acre-ft  
1,159,735 cf

### TSS Calculation:

Land Use Type	A ( ac )	A (sf)	C <sub>TSS</sub> (mg/L)
Light Industrial	26.17	1,140,019	75
	0.00	0	0
Totals:	26.17	1,140,019	75

### Mass Load Calculation:

V<sub>T</sub> (Annual Runoff Volume Requiring Treatment) = 1,159,735 cf  
C<sub>TSS</sub> (Average Annual Pollutant TSS Concentration) = 75 mg/L  
M<sub>total</sub> (Average Annual Pollutant Load on System) = 5,430 lbs

### Mass Loading Treatment Requirements:

Area Treated by Swales = 4.69 acres  
% TSS Removed By Pretreatment = 18%  
Required TSS % Removal = 80% *Per agency requirements*  
M<sub>treat</sub> (Remaining Pollutant Load Requiring Treatment) = 3,371 lbs

### Mass Based Filter Design Calculations: Inputs per Contech Specifications

M<sub>treat</sub> (Pollutant Load Required to be Treated) = 3,371 lbs  
Filter Size = 27"  
Individual Mass Load = 54 lbs  
Required Number of Cartridges = 63  
Design Number of Cartridges = 67  
Individual Cartridge Discharge = 22.5 gpm  
Peak Flowrate = 3.36 cfs

## Swale Calculations

# MCR ENGINEERING

1242 Dupont Court  
 Manteca, CA 95336  
 (209) 239-6229  
 FAX (209) 239-8839

Project Name: Waterman & Brinkman Logistics Center

JOB: 19-061

BY: DB

DATE: 2/10/2021

## Swale - Design Calculations

\*\*References Per Sacramento Region Storm Water Quality Design Manual

### Hydraulic Constants

Site Soils Type = **D**  
 Min. Req. Hydraulic Residence Time = **7** min  
 Design Rainfall Intensity = **0.18** in/hr

### Swale Geometric Parameters

Max. Bottom Width = **10** ft  
 Min. Bottom Width = **2.00** ft  
 Max Side Slope (Run:Rise) = **3:1**

### Swale Hydraulic Parameters

Max Longitudinal Slope = **0.025** (ft/ft)  
 Min Longitudinal Slope = **0.005** (ft/ft)  
 Max. Design Depth = **0.42** ft  
 Min. Design Depth = **0.25** ft

### Summary

Total Treated Area = **4.69** acres  
 Total Swale Length = **360** ft

Land Use Description:	A.C / P.C.C	Disturbed Soil	
	CR:	0.95	0.25

Hydrology							Swale Geometry					Flow Characteristics					Treatment Calculations				
Node	Drainage Area (sf)	Composite "CR"	Use Area (sf) **See Above	Use Area (sf) **See Above	Use Area (sf) **See Above	Design Rainfall Intensity (in/hr)	Design Flow (cfs)	Bottom Width (ft)	Swale Total Depth (ft)	Side Slope (Run:Rise)	Swale Top Width	Longitudinal Slope (ft/ft)	Manning's Roughness Coefficient	Design Normal Depth (ft)	Flow Area (sf)	Wetted Flow Perimeter (sf)	Flow Velocity (ft/s)	Min. Req. Hyd. Residence Time (min)	Req. Length (ft)	Actual Length (ft)	Actual Hyd. Residence Time (min)
I.D.	A	CR	a	a	a	i	Q	b	D	Z	CR	S	n	Y <sub>n</sub>	A	P <sub>w</sub>	V	T <sub>R</sub>	L <sub>R</sub>	L <sub>A</sub>	T <sub>A</sub>
1	56,459	0.822	46,142	10,317		0.18	0.192	2	1	3:1	8	0.005	0.2	0.32	0.95	4.03	0.20	7.0	85	105	8.7
2	46,046	0.848	39,353	6,693		0.18	0.161	2	1	3:1	8	0.005	0.2	0.29	0.84	3.85	0.19	7.0	80	85	7.4
3	48,286	0.852	41,554	6,732		0.18	0.170	2	1	3:1	8	0.005	0.2	0.30	0.87	3.91	0.19	7.0	82	85	7.3

# Water Quality (WQV) Calculations

# MCR ENGINEERING

1242 Dupont Court  
Manteca, CA 95336  
(209) 239-6229  
FAX (209) 239-8839

Project Name: Waterman & Brinkman Logistics Center

Job: 19-061

By: DB

Date: 2/10/2021

## Water Quality - Design Calculations

Design Volume Per MS4 Requirements

### Volume Requirements:

CASQA Rain Gauge Station = SACRAMENTO 5 ESE *Per CASQA BMP Appendix D*

$P_6$  (Mean 6 hr Rainfall Depth) = 0.55 inches

Required Drawdown Time = 48 Hours a (Regression Constant) = 1.963

Impervious Areas	A	A	Pervious Areas	A	A
	( ac )	(sf)		( ac )	(sf)
Pavement	10.10	439,848	Landscape	3.82	166,532
Concrete	2.67	116,236	Flood Control Basin	3.49	151,971
Building Roof	9.58	417,403			
Totals:	22.35	973,487	Totals:	7.31	318,503

Total Area = 29.66 ac

% Impervious = 75.3%  $C_{BMP} = 0.55$

$P_0$  (Unit Stormwater Volume) = 0.59 in

$P_0 = (a \times C \times P_6)$

Required Volume of Storage = 1.46 ac-ft

63,645 cf

Required Design Volume of Storage = 1.46 ac-ft

63,645 cf

### Proprietary Filter Design Calculations:

Required Design Volume of Storage = 1.46 ac-ft 63,645 cf

Provided Underground Domes Volume = 1.41 ac-ft 61,436 cf

Provided Storm Drain Pipe Volume = 0.49 ac-ft 21,274 cf

Total Provided Volume Storage = 1.90 ac-ft 82,710 cf

Check Design Volume = **Volume Requirements Met**

Required Discharge Flowrate = 0.37 cfs

Design Discharge Flowrate = 3.36 cfs *See Mass-Loading Calculations*

Check Design Volume = **Discharge Requirements Met**

**Preliminary Storm Drain (Rational Method) Calculations**





MCR ENGINEERING, INC.  
 1242 DUPONT COURT  
 MANTECA, CA 95336  
 TEL : ( 209 ) 239 - 6229  
 FAX : ( 209 ) 239 - 8839

# STORM DRAIN SYSTEM DESIGN

**Waterman & Brinkman**  
**Elk Grove, California**

**Hydrology Intensities per NOAA Atlas 14:**

Land Use:	Res	LDR	MDR	HDR	COM	IND	PARK	SCHL	Pave	Roof	Lawn
Weighted Coeff.:	0.50	0.50	0.60	0.75	0.95	0.80	0.25	0.40	0.95	0.95	0.20
Min. TC (min):	30	25	20	15	10	10	28	24	15	10	25
Frequency:	10 Years										

Date: 2/10/2021  
 By: DB

PIPE:  
 Type = PVC  
 Roughness Coeff. = 0.013 inches  
 Design Flow v = 2.0 fps

Line Designation	From	Invert Elev.	To	Invert Elev.	Area (Acres)	Land Use	Runoff Coeff.	Area X Coeff.	Total Area X Coeff.	Duration (min)	Intensity (in/hr)	Runoff (cfs)	Length (ft)	Pipe Diam (in)	Pipe Slope	Capacity (cfs)	Velocity (fps)	Flow Time (min)	Fall (feet)	HL Factor	Head Loss-HL (ft)	Hyd. Grade-HGL (ft)	Velocity (fps) Actual
					A		C	AxC	ΣAxC	T	I	Q	L	D	S	Qc	V	T	F	K	HL	HGL	V
Dead-End MH	1	44.62	2	44.24	1.30	IND	0.80	1.040	1.040	10.00	1.66	1.73	271	15	0.00140	2.42	2.0	3.21	0.38	1.50	0.24	45.87	1.4
	2	43.99	3	43.73	1.06	IND	0.80	0.848	1.888	13.21	1.45	2.75	235	18	0.00110	3.49	2.0	2.52	0.26	0.00	0.16	45.49	1.6
	3	43.73	4	43.60	1.11	IND	0.80	0.888	2.776	15.73	1.32	3.66	119	18	0.00110	3.49	2.0	0.96	0.13	0.00	0.14	45.25	2.1
	4	43.10	5	43.04	1.23	IND	0.80	0.984	3.760	16.68	1.29	4.87	89	24	0.00075	6.21	2.0	0.96	0.07	0.00	0.04	45.10	1.5
	5	43.04	9	42.73	0.00	IND	0.80	0.000	3.760	17.64	1.27	4.77	411	24	0.00075	6.21	2.0	4.51	0.31	0.00	0.18	45.04	1.5
Dead-End MH	6	42.30	7	42.04	1.90	IND	0.80	1.520	1.520	10.00	1.66	2.52	235	18	0.00110	3.49	2.0	2.74	0.26	1.50	0.18	44.58	1.4
	7	41.54	8	41.36	1.46	IND	0.80	1.168	2.688	12.74	1.48	3.99	235	24	0.00075	6.21	2.0	3.08	0.18	0.00	0.07	44.39	1.3
	8	41.36	9	41.23	1.91	IND	0.80	1.528	4.216	15.82	1.32	5.55	179	24	0.00075	6.21	2.0	1.69	0.13	0.00	0.11	44.32	1.8
Junct-2	9	41.23	10	41.12	0.00	IND	0.80	0.000	7.976	22.15	1.14	9.13	196	30	0.00055	9.64	2.0	1.76	0.11	0.00	0.10	44.21	1.9
	10	41.12	13	41.10	0.00	IND	0.80	0.000	7.976	23.91	1.10	8.75	38	30	0.00055	9.64	2.0	0.36	0.02	0.00	0.02	44.12	1.8
Dead-End MH	11	42.15	12	42.13	0.89	IND	0.80	0.712	0.712	10.00	1.66	1.18	12	12	0.00190	1.56	2.0	0.13	0.02	1.50	0.07	44.47	1.5
	12	42.13	13	41.60	0.00	IND	0.80	0.000	0.712	10.13	1.65	1.18	280	12	0.00190	1.56	2.0	3.12	0.53	0.00	0.30	44.40	1.5
Junct-2	13	41.10	14	40.98	0.00	IND	0.80	0.000	8.688	24.26	1.09	9.44	274	36	0.00044	14.02	2.0	3.42	0.12	0.00	0.05	44.10	1.3
Dead-End MH	15	40.51	14	40.48	2.91	IND	0.80	2.328	2.328	10.00	1.66	3.86	43	24	0.00075	6.21	2.0	0.58	0.03	1.50	0.05	44.03	1.2
Junct-2	14	40.48	15B	40.40	0.00	IND	0.80	0.000	11.016	27.68	0.99	10.94	236	42	0.00035	18.86	2.0	3.46	0.08	0.00	0.03	43.98	1.1
Dead-End MH	15A	40.43	15B	40.40	2.89	IND	0.80	2.312	2.312	10.00	1.66	3.84	43	24	0.00075	6.21	2.0	0.59	0.03	1.50	0.05	43.94	1.2
Junct-2	15B	40.40	16	40.32	0.00	IND	0.80	0.000	13.328	31.14	0.92	12.25	221	42	0.00035	18.86	2.0	2.89	0.08	0.00	0.03	43.90	1.3
	16	40.32	18	40.27	0.00	IND	0.80	0.000	13.328	34.03	0.89	11.88	141	42	0.00035	18.86	2.0	1.90	0.05	0.00	0.02	43.82	1.2

	From	Invert Elev.	To	Invert Elev.	Area (Acres)	Land Use	Runoff Coeff.	Area X Coeff.	Total Area X Coeff.	Duration (min)	Intensity (in/hr)	Runoff (cfs)	Length (ft)	Pipe Diam (in)	Pipe Slope	Capacity (cfs)	Velocity (fps)	Flow Time (min)	Fall (feet)	HL Factor	Head Loss-HL (ft)	Hyd. Grade-HGL (ft)	Velocity (fps) Actual
Line Designation					A		C	AxC	ΣAxC	T	I	Q	L	D	S	Qc	V	T	F	K	HL	HGL	V
Dead-End MH	17	42.79	18	42.77	0.50	IND	0.80	0.400	0.400	10.00	1.66	0.66	12	12	0.00190	1.56	2.0	0.24	0.02	1.50	0.02	43.79	0.8
Junct-2	18	40.27	19	40.22	0.00	IND	0.80	0.000	13.728	35.93	0.87	11.99	143	42	0.00035	18.86	2.0	1.91	0.05	0.00	0.02	43.77	1.2
	19	40.22	26	40.10	0.00	IND	0.80	0.000	13.728	37.84	0.86	11.74	333	42	0.00035	18.86	2.0	4.55	0.12	0.00	0.05	43.72	1.2
Dead-End MH	20	41.92	22	41.69	0.59	IND	0.80	0.472	0.472	10.00	1.66	0.78	164	15	0.00140	2.42	2.0	3.42	0.23	1.50	0.03	43.17	0.6
	22	41.69	23	41.24	0.00	IND	0.80	0.000	0.472	13.42	1.44	0.68	321	15	0.00140	2.42	2.0	6.69	0.45	0.00	0.04	42.94	0.6
	23	40.49	24	40.30	3.04	IND	0.80	2.432	2.904	20.10	1.20	3.49	262	24	0.00075	6.21	2.0	3.93	0.20	0.00	0.06	42.49	1.1
	24	40.30	26	40.10	2.95	IND	0.80	2.360	5.264	24.04	1.09	5.75	259	24	0.00075	6.21	2.0	2.36	0.19	0.00	0.17	42.30	1.8
Dead-End MH	25	42.80	26	42.60	1.10	IND	0.80	0.880	0.880	10.00	1.66	1.46	102	12	0.00190	1.56	2.0	0.91	0.19	1.50	0.25	43.80	1.9
Junct-3	26	40.10	DMS	40.10	0.00	IND	0.80	0.000	19.872	42.39	0.81	16.13	10	42	0.00035	18.86	2.0	0.10	0.00	0.00	0.00	40.10	1.7
	DMS	40.41	28	40.35	0.00	IND	0.80	0.000	19.872	42.49	0.81	16.12	42	15	0.00140	2.42	2.0	0.05	0.06	0.00	2.60	45.77	13.1
	28	40.10	29	40.03	0.00	IND	0.80	0.000	19.872	42.54	0.81	16.11	70	18	0.00110	3.49	2.0	0.13	0.08	0.00	1.64	43.17	9.1
	29	40.03	30	40.01	0.00	IND	0.80	0.000	19.872	42.67	0.81	16.08	12	18	0.00110	3.49	2.0	0.02	0.01	0.00	0.28	41.53	9.1
Dead-End MH	B1	40.10	B2	40.06	0.00	IND	0.80	0.000	0.000	10.00	1.66	0.00	64	24	0.00075	6.21	2.0	1.33	0.05	1.50	0.00	42.10	0.0
	B2	40.06	30	40.01	0.00	IND	0.80	0.000	0.000	11.33	1.57	0.00	55	24	0.00075	6.21	2.0	1.15	0.04	0.00	0.00	42.06	0.0
Junct-2	30	40.01	OUT	40.00	0.00	IND	0.80	0.000	19.872	42.69	0.81	16.08	25	30	0.00055	9.64	2.0	0.13	0.01	1.25	0.25	40.25	3.3

## **Appendix C – Hydrologic Analysis Results**

***SAHM Report***

**SAHM**

**PROJECT REPORT**

## *General Model Information*

Project Name: Brinkman & Waterman Preconstruction  
Site Name:  
Site Address:  
City:  
Report Date: 2/3/2021  
Gage: ELK GROV  
Data Start: 1963/10/01  
Data End: 2004/09/30  
Timestep: Hourly  
Precip Scale: 0.941  
Version Date: 2020/10/14

## *POC Thresholds*

---

Low Flow Threshold for POC1:	25 Percent of the 2 Year
High Flow Threshold for POC1:	10 Year

---

## Landuse Basin Data

### Pre-Project Land Use

#### Predevelopment

Bypass:	No
GroundWater:	No
Pervious Land Use D,Grass,Flat(0-1%)	acre 26.18
Pervious Total	26.18
Impervious Land Use	acre
Impervious Total	0
Basin Total	26.18

Element Flows To:		
Surface	Interflow	Groundwater

## *Mitigated Land Use*

### Waterman Pavement to Swales

Bypass:	No
Impervious Land Use	acre
Imperv,Mod (1-2%)	3.59
Element Flows To:	
Outlet 1	Outlet 2
Surface Swale	Swale



## Basin 1

Bypass:	No
GroundWater:	No
Pervious Land Use D,Grass,Flat(0-1%)	acre 0.42
Pervious Total	0.42
Impervious Land Use Imperv,Mod (1-2%)	acre 5.94
Impervious Total	5.94
Basin Total	6.36

Element Flows To:		
Surface	Interflow	Groundwater
Vault 4	Vault 4	

Lateral Basin 1

Bypass: No

GroundWater: No

Pervious Land Use acre  
D,Grass,Flat(0-1%) 2.25

Element Flows To:

Surface	Interflow	Groundwater
Vault 4	Vault 4	

## Lateral I Basin 2

Bypass:	No
Impervious Land Use	acre
Imperv,Mod (1-2%)	13.98
Element Flows To:	
Outlet 1	Outlet 2
Lateral Basin 1	

*Routing Elements*  
*Pre-Project Routing*

## Mitigated Routing

### Vegetated Swale Swale

Bottom Length:	310.00 ft.
Bottom Width:	2.00 ft.
Material thickness of first layer:	0.5
Material type for first layer:	Sandy loam
Material thickness of second layer:	0.75
Material type for second layer:	GRAVEL
Material thickness of third layer:	0
Material type for third layer:	GRAVEL
Infiltration On	
Infiltration rate:	0.05
Infiltration safety factor:	1
Total Volume Infiltrated (ac-ft.):	0.983
Total Volume Through Riser (ac-ft.):	81.561
Total Volume Through Facility (ac-ft.):	166.477
Percent Infiltrated:	0.59
Total Precip Applied to Facility:	0.628
Total Evap From Facility:	0.312
Underdrain used	
Underdrain Diameter (feet):	0.5
Orifice Diameter (in.):	2
Offset (in.):	0
Flow Through Underdrain (ac-ft.):	83.933
Total Outflow (ac-ft.):	166.477
Percent Through Underdrain:	50.42
Discharge Structure	
Riser Height:	1 ft.
Riser Diameter:	18 in.
Element Flows To:	
Outlet 1	Outlet 2
Vault 4	Vault 4

Landscape Swale Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.0142	0.0000	0.0000	0.0000
0.0797	0.0142	0.0002	0.0000	0.0000
0.1593	0.0142	0.0005	0.0000	0.0000
0.2390	0.0142	0.0007	0.0000	0.0000
0.3187	0.0142	0.0009	0.0086	0.0003
0.3984	0.0142	0.0011	0.0131	0.0004
0.4780	0.0142	0.0014	0.0201	0.0007
0.5577	0.0142	0.0016	0.0211	0.0007
0.6374	0.0142	0.0018	0.0405	0.0007
0.7170	0.0142	0.0021	0.0511	0.0007
0.7967	0.0142	0.0023	0.0597	0.0007
0.8764	0.0142	0.0025	0.0672	0.0007
0.9560	0.0142	0.0028	0.0740	0.0007
1.0357	0.0142	0.0030	0.0802	0.0007
1.1154	0.0142	0.0032	0.0860	0.0007
1.1951	0.0142	0.0035	0.0916	0.0007
1.2500	0.0142	0.0036	0.0957	0.0007

Landscape Swale Hydraulic Table

**Stage(feet)Area(ac.)Volume(ac-ft.)Discharge(cfs)To Amended(cfs)Infilt(cfs)**

1.2500	0.0142	0.0036	0.0000	0.0338	0.0000
1.3297	0.0142	0.0048	0.0000	0.0338	0.0000
1.4093	0.0142	0.0059	0.0000	0.0446	0.0000
1.4890	0.0142	0.0070	0.0000	0.0499	0.0000
1.5687	0.0142	0.0082	0.0000	0.0553	0.0000
1.6484	0.0142	0.0093	0.0000	0.0607	0.0000
1.7280	0.0142	0.0105	0.0000	0.0661	0.0000
1.8077	0.0142	0.0116	0.0000	0.0715	0.0000
1.8874	0.0142	0.0127	0.0000	0.0769	0.0000
1.9670	0.0142	0.0139	0.0000	0.0822	0.0000
2.0467	0.0142	0.0150	0.0000	0.0876	0.0000
2.1264	0.0142	0.0161	0.0000	0.0930	0.0000
2.2060	0.0142	0.0173	0.0000	0.0984	0.0000
2.2857	0.0142	0.0184	0.1074	0.1038	0.0000
2.3654	0.0142	0.0195	0.6219	0.1092	0.0000
2.4451	0.0142	0.0207	1.3540	0.1145	0.0000
2.5247	0.0142	0.0218	2.2144	0.1199	0.0000
2.6044	0.0142	0.0229	3.1226	0.1253	0.0000
2.6841	0.0142	0.0241	3.9965	0.1307	0.0000
2.7637	0.0142	0.0252	4.7601	0.1361	0.0000
2.8434	0.0142	0.0263	5.3597	0.1415	0.0000
2.9231	0.0142	0.0275	5.7827	0.1469	0.0000
3.0027	0.0142	0.0286	6.1485	0.1521	0.0000
3.0824	0.0142	0.0297	6.4657	0.1521	0.0000
3.1621	0.0142	0.0309	6.7680	0.1521	0.0000
3.2418	0.0142	0.0320	7.0574	0.1521	0.0000
3.3214	0.0142	0.0331	7.3354	0.1521	0.0000
3.4011	0.0142	0.0343	7.6032	0.1521	0.0000
3.4808	0.0142	0.0354	7.8620	0.1521	0.0000
3.5604	0.0142	0.0365	8.1124	0.1521	0.0000
3.6401	0.0142	0.0377	8.3554	0.1521	0.0000
3.7198	0.0142	0.0388	8.5915	0.1521	0.0000
3.7995	0.0142	0.0399	8.8213	0.1521	0.0000
3.8791	0.0142	0.0411	9.0452	0.1521	0.0000
3.9588	0.0142	0.0422	9.2637	0.1521	0.0000
4.0385	0.0142	0.0433	9.4772	0.1521	0.0000
4.1181	0.0142	0.0445	9.6860	0.1521	0.0000
4.1978	0.0142	0.0456	9.8904	0.1521	0.0000
4.2775	0.0142	0.0467	10.091	0.1521	0.0000
4.3571	0.0142	0.0479	10.287	0.1521	0.0000
4.4368	0.0142	0.0490	10.480	0.1521	0.0000
4.5165	0.0142	0.0501	10.669	0.1521	0.0000
4.5962	0.0142	0.0513	10.855	0.1521	0.0000
4.6758	0.0142	0.0524	11.038	0.1521	0.0000
4.7555	0.0142	0.0535	11.217	0.1521	0.0000
4.8352	0.0142	0.0547	11.394	0.1521	0.0000
4.9148	0.0142	0.0558	11.569	0.1521	0.0000
4.9945	0.0142	0.0569	11.740	0.1521	0.0000
5.0742	0.0142	0.0581	11.909	0.1521	0.0000
5.1538	0.0142	0.0592	12.076	0.1521	0.0000
5.2335	0.0142	0.0603	12.241	0.1521	0.0000
5.3132	0.0142	0.0615	12.403	0.1521	0.0000
5.3929	0.0142	0.0626	12.563	0.1521	0.0000
5.4725	0.0142	0.0637	12.722	0.1521	0.0000
5.5522	0.0142	0.0649	12.878	0.1521	0.0000
5.6319	0.0142	0.0660	13.032	0.1521	0.0000
5.7115	0.0142	0.0671	13.185	0.1521	0.0000
5.7912	0.0142	0.0683	13.336	0.1521	0.0000

5.8709	0.0142	0.0694	13.485	0.1521	0.0000
5.9505	0.0142	0.0706	13.632	0.1521	0.0000
6.0302	0.0142	0.0717	13.778	0.1521	0.0000
6.1099	0.0142	0.0728	13.923	0.1521	0.0000
6.1896	0.0142	0.0740	14.066	0.1521	0.0000
6.2692	0.0142	0.0751	14.207	0.1521	0.0000
6.3489	0.0142	0.0762	14.347	0.1521	0.0000
6.4286	0.0142	0.0774	14.486	0.1521	0.0000
6.5082	0.0142	0.0785	14.624	0.1521	0.0000
6.5879	0.0142	0.0796	14.760	0.1521	0.0000
6.6676	0.0142	0.0808	14.895	0.1521	0.0000
6.7473	0.0142	0.0819	15.029	0.1521	0.0000
6.8269	0.0142	0.0830	15.161	0.1521	0.0000
6.9066	0.0142	0.0842	15.292	0.1521	0.0000
6.9863	0.0142	0.0853	15.423	0.1521	0.0000
7.0659	0.0142	0.0864	15.552	0.1521	0.0000
7.1456	0.0142	0.0876	15.680	0.1521	0.0000
7.2253	0.0142	0.0887	15.807	0.1521	0.0000
7.2500	0.0142	0.0890	15.933	0.1521	0.0000

## Surface Swale Swale

Element Flows To:

Outlet 1

Outlet 2

Vault 4

Vegetated Swale Swale



## Vault 4

Width: 58 ft.  
 Length: 263 ft.  
 Depth: 5 ft.  
 Discharge Structure  
 Riser Height: 4 ft.  
 Riser Diameter: 24 in.  
 Element Flows To:  
 Outlet 1                      Outlet 2

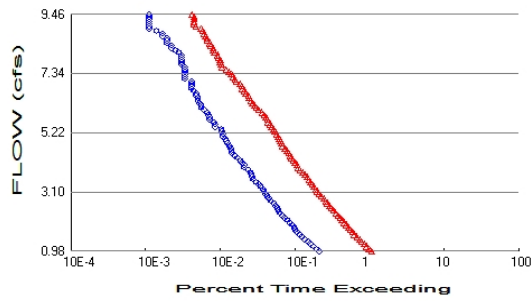
Vault Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.350	0.000	0.000	0.000
0.0556	0.350	0.019	0.000	0.000
0.1111	0.350	0.038	0.000	0.000
0.1667	0.350	0.058	0.000	0.000
0.2222	0.350	0.077	0.000	0.000
0.2778	0.350	0.097	0.000	0.000
0.3333	0.350	0.116	0.000	0.000
0.3889	0.350	0.136	0.000	0.000
0.4444	0.350	0.155	0.000	0.000
0.5000	0.350	0.175	0.000	0.000
0.5556	0.350	0.194	0.000	0.000
0.6111	0.350	0.214	0.000	0.000
0.6667	0.350	0.233	0.000	0.000
0.7222	0.350	0.252	0.000	0.000
0.7778	0.350	0.272	0.000	0.000
0.8333	0.350	0.291	0.000	0.000
0.8889	0.350	0.311	0.000	0.000
0.9444	0.350	0.330	0.000	0.000
1.0000	0.350	0.350	0.000	0.000
1.0556	0.350	0.369	0.000	0.000
1.1111	0.350	0.389	0.000	0.000
1.1667	0.350	0.408	0.000	0.000
1.2222	0.350	0.428	0.000	0.000
1.2778	0.350	0.447	0.000	0.000
1.3333	0.350	0.466	0.000	0.000
1.3889	0.350	0.486	0.000	0.000
1.4444	0.350	0.505	0.000	0.000
1.5000	0.350	0.525	0.000	0.000
1.5556	0.350	0.544	0.000	0.000
1.6111	0.350	0.564	0.000	0.000
1.6667	0.350	0.583	0.000	0.000
1.7222	0.350	0.603	0.000	0.000
1.7778	0.350	0.622	0.000	0.000
1.8333	0.350	0.642	0.000	0.000
1.8889	0.350	0.661	0.000	0.000
1.9444	0.350	0.680	0.000	0.000
2.0000	0.350	0.700	0.000	0.000
2.0556	0.350	0.719	0.000	0.000
2.1111	0.350	0.739	0.000	0.000
2.1667	0.350	0.758	0.000	0.000
2.2222	0.350	0.778	0.000	0.000
2.2778	0.350	0.797	0.000	0.000
2.3333	0.350	0.817	0.000	0.000

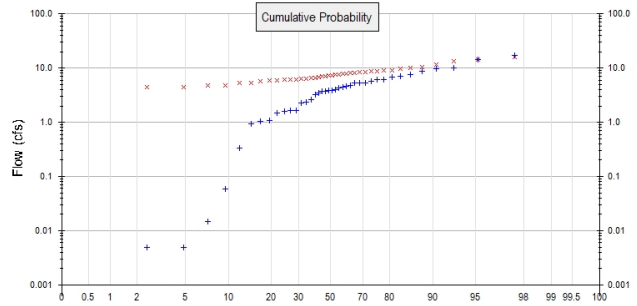
2.3889	0.350	0.836	0.000	0.000
2.4444	0.350	0.856	0.000	0.000
2.5000	0.350	0.875	0.000	0.000
2.5556	0.350	0.894	0.000	0.000
2.6111	0.350	0.914	0.000	0.000
2.6667	0.350	0.933	0.000	0.000
2.7222	0.350	0.953	0.000	0.000
2.7778	0.350	0.972	0.000	0.000
2.8333	0.350	0.992	0.000	0.000
2.8889	0.350	1.011	0.000	0.000
2.9444	0.350	1.031	0.000	0.000
3.0000	0.350	1.050	0.000	0.000
3.0556	0.350	1.070	0.000	0.000
3.1111	0.350	1.089	0.000	0.000
3.1667	0.350	1.108	0.000	0.000
3.2222	0.350	1.128	0.000	0.000
3.2778	0.350	1.147	0.000	0.000
3.3333	0.350	1.167	0.000	0.000
3.3889	0.350	1.186	0.000	0.000
3.4444	0.350	1.206	0.000	0.000
3.5000	0.350	1.225	0.000	0.000
3.5556	0.350	1.245	0.000	0.000
3.6111	0.350	1.264	0.000	0.000
3.6667	0.350	1.284	0.000	0.000
3.7222	0.350	1.303	0.000	0.000
3.7778	0.350	1.322	0.000	0.000
3.8333	0.350	1.342	0.000	0.000
3.8889	0.350	1.361	0.000	0.000
3.9444	0.350	1.381	0.000	0.000
4.0000	0.350	1.400	0.000	0.000
4.0556	0.350	1.420	0.277	0.000
4.1111	0.350	1.439	0.784	0.000
4.1667	0.350	1.459	1.438	0.000
4.2222	0.350	1.478	2.205	0.000
4.2778	0.350	1.498	3.059	0.000
4.3333	0.350	1.517	3.979	0.000
4.3889	0.350	1.536	4.939	0.000
4.4444	0.350	1.556	5.917	0.000
4.5000	0.350	1.575	6.887	0.000
4.5556	0.350	1.595	7.826	0.000
4.6111	0.350	1.614	8.711	0.000
4.6667	0.350	1.634	9.523	0.000
4.7222	0.350	1.653	10.24	0.000
4.7778	0.350	1.673	10.86	0.000
4.8333	0.350	1.692	11.38	0.000
4.8889	0.350	1.712	11.81	0.000
4.9444	0.350	1.731	12.16	0.000
5.0000	0.350	1.750	12.46	0.000
5.0556	0.350	1.770	12.94	0.000
5.1111	0.000	0.000	13.28	0.000

# Analysis Results

## POC 1



+ Pre-Project



x Mitigated

### Pre-Project Landuse Totals for POC #1

Total Pervious Area: 26.18  
 Total Impervious Area: 0

### Mitigated Landuse Totals for POC #1

Total Pervious Area: 2.67  
 Total Impervious Area: 23.51

Flow Frequency Method: Log Pearson Type III 17B

### Flow Frequency Return Periods for Pre-Project. POC #1

Return Period	Flow(cfs)
2 year	3.91816
5 year	6.434209
10 year	9.460531
25 year	14.987424

### Flow Frequency Return Periods for Mitigated. POC #1

Return Period	Flow(cfs)
2 year	7.35776
5 year	8.968029
10 year	11.198595
25 year	14.596795

## Annual Peaks

### Annual Peaks for Pre-Project and Mitigated. POC #1

Year	Pre-Project	Mitigated
1964	3.957	8.774
1965	3.257	6.015
1966	0.058	4.738
1967	9.661	10.175
1968	1.059	4.736
1969	8.818	9.854
1970	5.359	7.924
1971	5.369	8.933
1972	0.015	4.518
1973	10.007	10.589
1974	1.656	6.409
1975	0.005	5.373
1976	0.005	5.788
1977	0.005	2.511

1978	4.770	8.994
1979	4.238	6.980
1980	3.918	8.842
1981	0.339	4.380
1982	6.093	7.358
1983	7.626	11.389
1984	4.611	6.547
1985	1.050	5.298
1986	6.690	7.644
1987	2.645	5.976
1988	1.659	6.034
1989	3.677	6.550
1990	3.526	7.391
1991	2.265	8.005
1992	4.420	7.508
1993	3.922	5.923
1994	1.582	6.864
1995	17.238	15.996
1996	7.108	14.268
1997	14.458	13.505
1998	5.618	7.853
1999	5.401	7.173
2000	6.026	8.429
2001	1.489	6.297
2002	2.336	8.038
2003	0.944	8.472
2004	3.673	6.096

### Ranked Annual Peaks

Ranked Annual Peaks for Pre-Project and Mitigated. POC #1

<b>Rank</b>	<b>Pre-Project</b>	<b>Mitigated</b>
1	17.2379	15.9963
2	14.4579	14.2675
3	10.0066	13.5053
4	9.6614	11.3890
5	8.8179	10.5893
6	7.6263	10.1751
7	7.1082	9.8538
8	6.6904	8.9945
9	6.0926	8.9328
10	6.0264	8.8423
11	5.6182	8.7738
12	5.4006	8.4719
13	5.3690	8.4287
14	5.3591	8.0379
15	4.7697	8.0047
16	4.6108	7.9244
17	4.4199	7.8531
18	4.2380	7.6442
19	3.9572	7.5084
20	3.9215	7.3912
21	3.9182	7.3578
22	3.6775	7.1730
23	3.6731	6.9798
24	3.5259	6.8638
25	3.2575	6.5496
26	2.6450	6.5473
27	2.3358	6.4089

28	2.2650	6.2965
29	1.6590	6.0955
30	1.6556	6.0338
31	1.5818	6.0153
32	1.4893	5.9756
33	1.0589	5.9233
34	1.0495	5.7883
35	0.9438	5.3730
36	0.3393	5.2983
37	0.0578	4.7385
38	0.0146	4.7357
39	0.0049	4.5184
40	0.0048	4.3796
41	0.0048	2.5113

## Duration Flows

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.9795	762	3839	503	Fail
1.0652	699	3539	506	Fail
1.1509	641	3277	511	Fail
1.2365	586	3043	519	Fail
1.3222	541	2838	524	Fail
1.4079	486	2650	545	Fail
1.4935	445	2446	549	Fail
1.5792	418	2280	545	Fail
1.6649	387	2137	552	Fail
1.7505	363	2003	551	Fail
1.8362	352	1891	537	Fail
1.9219	330	1781	539	Fail
2.0075	306	1663	543	Fail
2.0932	284	1559	548	Fail
2.1789	263	1457	553	Fail
2.2645	247	1372	555	Fail
2.3502	230	1273	553	Fail
2.4359	217	1191	548	Fail
2.5215	209	1114	533	Fail
2.6072	198	1048	529	Fail
2.6929	189	986	521	Fail
2.7785	174	933	536	Fail
2.8642	161	884	549	Fail
2.9499	153	815	532	Fail
3.0355	146	759	519	Fail
3.1212	138	720	521	Fail
3.2069	135	681	504	Fail
3.2925	125	650	520	Fail
3.3782	117	618	528	Fail
3.4639	108	586	542	Fail
3.5495	100	554	554	Fail
3.6352	97	525	541	Fail
3.7209	94	488	519	Fail
3.8065	91	457	502	Fail
3.8922	85	424	498	Fail
3.9779	76	405	532	Fail
4.0635	75	386	514	Fail
4.1492	70	362	517	Fail
4.2349	67	343	511	Fail
4.3205	61	323	529	Fail
4.4062	56	309	551	Fail
4.4919	52	299	575	Fail
4.5775	51	282	552	Fail
4.6632	50	267	534	Fail
4.7489	48	249	518	Fail
4.8345	45	240	533	Fail
4.9202	43	229	532	Fail
5.0059	42	223	530	Fail
5.0915	39	214	548	Fail
5.1772	39	204	523	Fail
5.2629	38	196	515	Fail
5.3485	37	187	505	Fail
5.4342	31	177	570	Fail
5.5199	31	168	541	Fail

5.6055	30	158	526	Fail
5.6912	26	155	596	Fail
5.7769	26	148	569	Fail
5.8625	25	140	560	Fail
5.9482	24	130	541	Fail
6.0339	22	117	531	Fail
6.1195	20	110	550	Fail
6.2052	20	104	520	Fail
6.2909	19	98	515	Fail
6.3765	18	92	511	Fail
6.4622	18	88	488	Fail
6.5479	17	86	505	Fail
6.6335	17	79	464	Fail
6.7192	16	77	481	Fail
6.8049	15	72	480	Fail
6.8905	15	70	466	Fail
6.9762	15	66	440	Fail
7.0619	15	59	393	Fail
7.1475	12	57	475	Fail
7.2332	12	53	441	Fail
7.3189	12	51	425	Fail
7.4045	12	47	391	Fail
7.4902	12	43	358	Fail
7.5759	12	38	316	Fail
7.6615	11	37	336	Fail
7.7472	11	36	327	Fail
7.8329	11	36	327	Fail
7.9185	11	34	309	Fail
8.0042	11	33	300	Fail
8.0899	10	30	300	Fail
8.1755	9	29	322	Fail
8.2612	8	29	362	Fail
8.3469	8	27	337	Fail
8.4325	7	26	371	Fail
8.5182	7	24	342	Fail
8.6039	7	24	342	Fail
8.6895	6	23	383	Fail
8.7752	6	22	366	Fail
8.8609	5	21	419	Fail
8.9465	4	20	500	Fail
9.0322	4	17	425	Fail
9.1179	4	16	400	Fail
9.2035	4	16	400	Fail
9.2892	4	16	400	Fail
9.3749	4	16	400	Fail
9.4605	4	15	375	Fail

The development has an increase in flow durations for more than a 10% increase from the 2 year to the 10 year flow.

The development has an increase in flow durations for more than 10% of the flows for the range of the duration analysis.

# Water Quality



## *Model Default Modifications*

Total of 0 changes have been made.

### *PERLND Changes*

No PERLND changes have been made.

### *IMPLND Changes*

No IMPLND changes have been made.

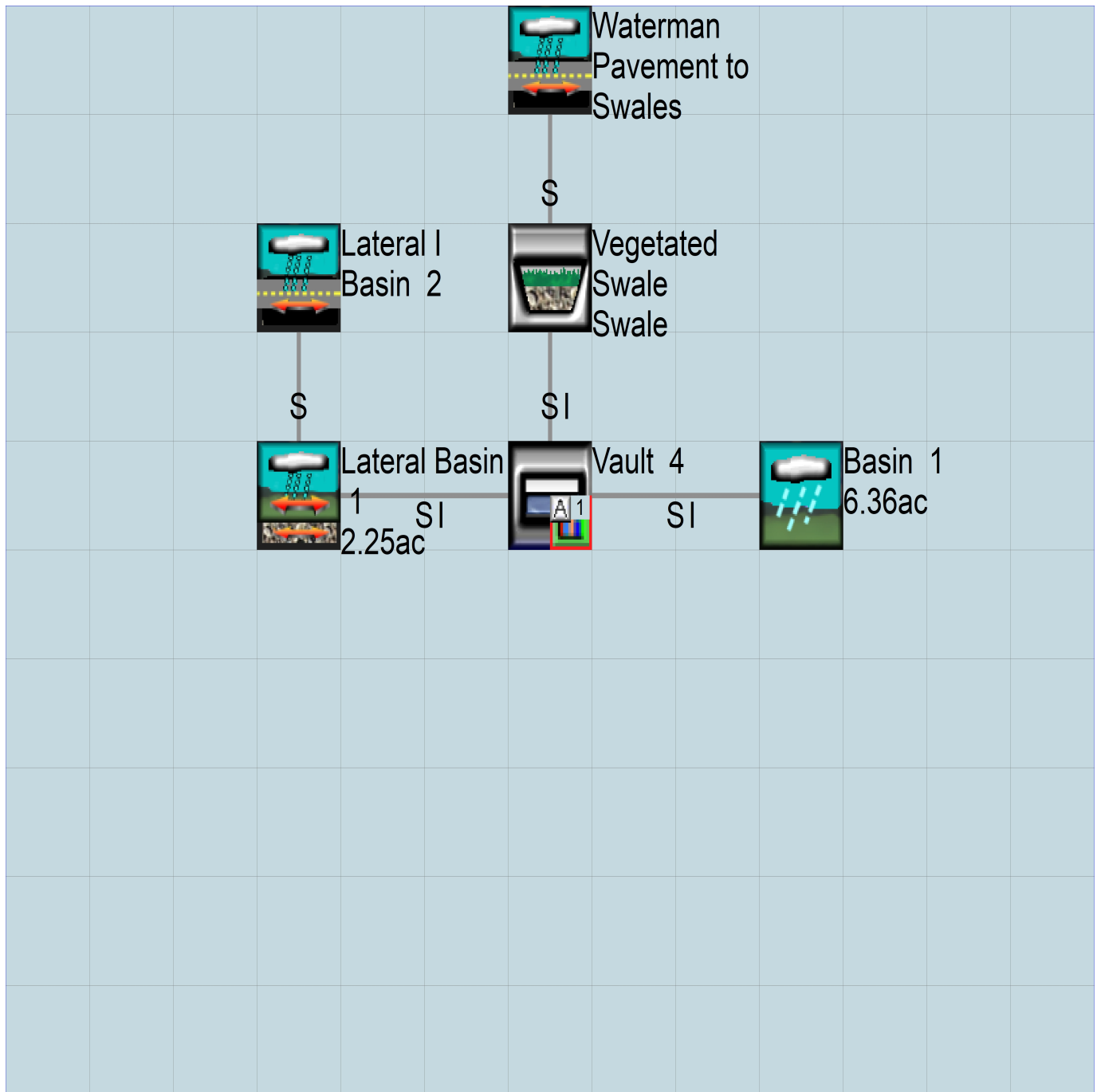
Appendix  
Pre-Project Schematic



Predevelopment

26.18ac

Mitigated Schematic



# Pre-Project UCI File

RUN

GLOBAL

```
WVHM4 model simulation
START      1963 10 01      END      2004 09 30
RUN INTERP OUTPUT LEVEL   3      0
RESUME     0 RUN          1
UNIT SYSTEM 1
```

END GLOBAL

FILES

```
<File> <Un#> <-----File Name----->***
<-ID->                                     ***
WDM      26      Brinkman & Waterman Preconstruction.wdm
MESSU    25      PreBrinkman & Waterman Preconstruction.MES
          27      PreBrinkman & Waterman Preconstruction.L61
          28      PreBrinkman & Waterman Preconstruction.L62
          30      POCBrinkman & Waterman Preconstruction1.dat
```

END FILES

OPN SEQUENCE

```
INGRP          INDELT 00:60
  PERLND        49
  COPY          501
  DISPLY        1
```

END INGRP

END OPN SEQUENCE

DISPLY

DISPLY-INFO1

```
# - #<-----Title----->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
1      Predevelopment          MAX          1    2    30    9
```

END DISPLY-INFO1

END DISPLY

COPY

TIMESERIES

```
# - # NPT NMN ***
1      1    1
501    1    1
```

END TIMESERIES

END COPY

GENER

OPCODE

```
#      # OPCD ***
```

END OPCODE

PARM

```
#      #          K ***
```

END PARM

END GENER

PERLND

GEN-INFO

```
<PLS ><-----Name----->NBLKS  Unit-systems  Printer ***
# - #          User  t-series  Engl  Metr ***
          in  out          ***
```

```
49      D,Grass,Flat(0-1%)  1    1    1    1    27    0
```

END GEN-INFO

\*\*\* Section PWATER\*\*\*

ACTIVITY

```
<PLS > ***** Active Sections *****
# - # ATMP SNOW PWAT  SED  PST  PWG  PQAL MSTL PEST NITR PHOS TRAC ***
49      0    0    1    0    0    0    0    0    0    0    0    0
```

END ACTIVITY

PRINT-INFO

```
<PLS > ***** Print-flags ***** PIVL  PYR
# - # ATMP SNOW PWAT  SED  PST  PWG  PQAL MSTL PEST NITR PHOS TRAC *****
49      0    0    4    0    0    0    0    0    0    0    0    0    1    9
```

END PRINT-INFO

```

PWAT-PARM1
<PLS > PWATER variable monthly parameter value flags ***
# - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE INFC HWT ***
49 0 0 0 1 0 0 0 0 1 0 0
END PWAT-PARM1

PWAT-PARM2
<PLS > PWATER input info: Part 2 ***
# - # ***FOREST LZSN INFILT LSUR SLSUR KVARY AGWRC
49 0 4.4 0.03 400 0.01 3 0.92
END PWAT-PARM2

PWAT-PARM3
<PLS > PWATER input info: Part 3 ***
# - # ***PETMAX PETMIN INFEXP INFILD DEEPFR BASETP AGWETP
49 40 35 2 2 0 0 0.05
END PWAT-PARM3

PWAT-PARM4
<PLS > PWATER input info: Part 4 ***
# - # CEPSC UZSN NSUR INTFW IRC LZETP ***
49 0 0.3 0.25 0.7 0.5 0
END PWAT-PARM4

MON-LZETPARM
<PLS > PWATER input info: Part 3 ***
# - # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ***
49 0.4 0.4 0.4 0.45 0.5 0.55 0.55 0.55 0.55 0.45 0.4
END MON-LZETPARM

MON-INTERCEP
<PLS > PWATER input info: Part 3 ***
# - # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ***
49 0.12 0.12 0.12 0.11 0.1 0.1 0.1 0.1 0.1 0.1 0.11 0.12
END MON-INTERCEP

PWAT-STATE1
<PLS > *** Initial conditions at start of simulation
ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
# - # *** CEPS SURS UZS IFWS LZS AGWS GWVS
49 0 0 0.15 0 4 0.05 0
END PWAT-STATE1

END PERLND

IMPLND
GEN-INFO
<PLS ><-----Name-----> Unit-systems Printer ***
# - # User t-series Engl Metr ***
in out ***

END GEN-INFO
*** Section IWATER***

ACTIVITY
<PLS > ***** Active Sections *****
# - # ATMP SNOW IWAT SLD IWG IQAL ***
END ACTIVITY

PRINT-INFO
<ILS > ***** Print-flags ***** PIVL PYR
# - # ATMP SNOW IWAT SLD IWG IQAL *****
END PRINT-INFO

IWAT-PARM1
<PLS > IWATER variable monthly parameter value flags ***
# - # CSNO RTOP VRS VNN RTLI ***
END IWAT-PARM1

IWAT-PARM2
<PLS > IWATER input info: Part 2 ***
# - # *** LSUR SLSUR NSUR RETSC
END IWAT-PARM2

```

```

IWAT-PARM3
  <PLS >      IWATER input info: Part 3      ***
  # - # ***PETMAX      PETMIN
END IWAT-PARM3

IWAT-STATE1
  <PLS > *** Initial conditions at start of simulation
  # - # *** RETS      SURS
END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->      <--Area-->      <-Target->      MBLK      ***
<Name> #      <-factor->      <Name> #      Tbl#      ***
Predevelopment***
PERLND 49      26.18      COPY 501      12
PERLND 49      26.18      COPY 501      13

*****Routing*****
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> #      <Name> # #<-factor->strg <Name> # #      <Name> # #      ***
COPY 501 OUTPUT MEAN 1 1 12.1      DISPLY 1      INPUT TIMSER 1

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> #      <Name> # #<-factor->strg <Name> # #      <Name> # #      ***
END NETWORK

RCHRES
GEN-INFO
RCHRES      Name      Nexits      Unit Systems      Printer      ***
# - #<-----><----> User T-series Engl Metr LKFG      ***
      in out      ***
END GEN-INFO
*** Section RCHRES***

ACTIVITY
<PLS > ***** Active Sections *****
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
END ACTIVITY

PRINT-INFO
<PLS > ***** Print-flags ***** PIVL PYR
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR *****
END PRINT-INFO

HYDR-PARM1
RCHRES      Flags for each HYDR Section      ***
# - # VC A1 A2 A3 ODFVFG for each *** ODGTFG for each      FUNCT for each
      FG FG FG FG possible exit *** possible exit      possible exit
      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
END HYDR-PARM1

HYDR-PARM2
# - # FTABNO      LEN      DELTH      STCOR      KS      DB50      ***
<-----><-----><-----><-----><-----><----->      ***
END HYDR-PARM2
HYDR-INIT
RCHRES      Initial conditions for each HYDR section      ***
# - # *** VOL      Initial value of COLIND      Initial value of OUTDGT
      *** ac-ft      for each possible exit      for each possible exit
<-----><----->      <---><---><---><---><---> *** <---><---><---><---><--->
END HYDR-INIT
END RCHRES

```

SPEC-ACTIONS  
 END SPEC-ACTIONS  
 FTABLES  
 END FTABLES

EXT SOURCES

<-Volume->	<Member>	SsysSgap	<--Mult-->	Tran	<-Target vols>	<-Grp>	<-Member->	***
<Name>	#	<Name>	#	tem strg	<-factor->	strg	<Name>	# #
WDM	2	PREC		ENGL	0.941		PERLND	1 999 EXTNL PREC
WDM	2	PREC		ENGL	0.941		IMPLND	1 999 EXTNL PREC
WDM	1	EVAP		ENGL	0.85		PERLND	1 999 EXTNL PETINP
WDM	1	EVAP		ENGL	0.85		IMPLND	1 999 EXTNL PETINP

END EXT SOURCES

EXT TARGETS

<-Volume->	<-Grp>	<-Member->	<--Mult-->	Tran	<-Volume->	<Member>	Tsys	Tgap	Amd	***
<Name>	#	<Name>	#	#<-factor->	strg	<Name>	#	<Name>	tem strg	strg***
COPY	501	OUTPUT	MEAN	1 1	12.1	WDM	501	FLOW	ENGL	REPL

END EXT TARGETS

MASS-LINK

<Volume>	<-Grp>	<-Member->	<--Mult-->	<Target>	<-Grp>	<-Member->	***
<Name>	#	<Name>	#	<-factor->	<Name>	#	#***
MASS-LINK			12				
PERLND	PWATER	SURO		0.083333	COPY	INPUT	MEAN
END MASS-LINK			12				
MASS-LINK			13				
PERLND	PWATER	IFWO		0.083333	COPY	INPUT	MEAN
END MASS-LINK			13				

END MASS-LINK

END RUN

# Mitigated UCI File

RUN

GLOBAL

WVHM4 model simulation  
START 1963 10 01 END 2004 09 30  
RUN INTERP OUTPUT LEVEL 3 0  
RESUME 0 RUN 1 UNIT SYSTEM 1  
END GLOBAL

FILES

<File>	<Un#>	<-----File Name----->	***
<-ID->			***
WDM	26	Brinkman & Waterman Preconstruction.wdm	
MESSU	25	MitBrinkman & Waterman Preconstruction.MES	
	27	MitBrinkman & Waterman Preconstruction.L61	
	28	MitBrinkman & Waterman Preconstruction.L62	
	30	POCBrinkman & Waterman Preconstruction1.dat	

END FILES

OPN SEQUENCE

INGRP INDELT 00:60  
IMPLND 6  
PERLND 49  
IMPLND 2  
IMPLND 9  
GENER 2  
RCHRES 1  
RCHRES 2  
PERLND 67  
RCHRES 3  
COPY 1  
COPY 501  
DISPLY 1

END INGRP

END OPN SEQUENCE

DISPLY

DISPLY-INFO1

#	-	#	<-----Title----->	***	TRAN	PIVL	DIG1	FIL1	PYR	DIG2	FIL2	YRND
1			Vault 4		MAX				1	2	30	9

END DISPLY-INFO1

END DISPLY

COPY

TIMESERIES

#	-	#	NPT	NMN	***
1			1	1	
501			1	1	

END TIMESERIES

END COPY

GENER

OPCODE

#	#	OPCD	***
2		24	

END OPCODE

PARM

#	#	K	***
2		0.	

END PARM

END GENER

PERLND

GEN-INFO

<PLS >	<-----Name----->	NBLKS	Unit-systems		Printer		***
#	-	#	User	t-series	Engl	Metr	***
				in	out		***
49	D,Grass,Flat(0-1%)	1	1	1	1	27	0
67	D,Grass,Flat(0-1%)	1	1	1	1	27	0

END GEN-INFO

\*\*\* Section PWATER\*\*\*



ACTIVITY  
 <PLS > \*\*\*\*\* Active Sections \*\*\*\*\*  
 # - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC \*\*\*  
 49 0 0 1 0 0 0 0 0 0 0 0 0 0  
 67 0 0 1 0 0 0 0 0 0 0 0 0 0  
 END ACTIVITY

PRINT-INFO  
 <PLS > \*\*\*\*\* Print-flags \*\*\*\*\* PIVL PYR  
 # - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC \*\*\*\*\*  
 49 0 0 4 0 0 0 0 0 0 0 0 0 0 1 9  
 67 0 0 4 0 0 0 0 0 0 0 0 0 0 1 9  
 END PRINT-INFO

PWAT-PARM1  
 <PLS > PWATER variable monthly parameter value flags \*\*\*  
 # - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE INFC HWT \*\*\*  
 49 0 0 0 1 0 0 0 0 1 0 0  
 67 0 0 0 1 0 0 0 0 1 0 0  
 END PWAT-PARM1

PWAT-PARM2  
 <PLS > PWATER input info: Part 2 \*\*\*  
 # - # \*\*\*FOREST LZSN INFILT LSUR SLSUR KVARV AGWRC  
 49 0 4.4 0.03 400 0.01 3 0.92  
 67 0 4.4 0.03 400 0.01 3 0.92  
 END PWAT-PARM2

PWAT-PARM3  
 <PLS > PWATER input info: Part 3 \*\*\*  
 # - # \*\*\*PETMAX PETMIN INFEXP INFILD DEEPFR BASETP AGWETP  
 49 40 35 2 2 0 0 0.05  
 67 40 35 2 2 0 0 0.05  
 END PWAT-PARM3

PWAT-PARM4  
 <PLS > PWATER input info: Part 4 \*\*\*  
 # - # CEPSC UZSN NSUR INTFW IRC LZETP \*\*\*  
 49 0 0.3 0.25 0.7 0.5 0  
 67 0 0.3 0.25 0.7 0.5 0  
 END PWAT-PARM4

MON-LZETP  
 <PLS > PWATER input info: Part 3 \*\*\*  
 # - # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 49 0.4 0.4 0.4 0.45 0.5 0.55 0.55 0.55 0.55 0.55 0.45 0.4  
 67 0.4 0.4 0.4 0.45 0.5 0.55 0.55 0.55 0.55 0.55 0.45 0.4  
 END MON-LZETP

MON-INTERCEP  
 <PLS > PWATER input info: Part 3 \*\*\*  
 # - # JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC \*\*\*  
 49 0.12 0.12 0.12 0.11 0.1 0.1 0.1 0.1 0.1 0.1 0.11 0.12  
 67 0.12 0.12 0.12 0.11 0.1 0.1 0.1 0.1 0.1 0.1 0.11 0.12  
 END MON-INTERCEP

PWAT-STATE1  
 <PLS > \*\*\* Initial conditions at start of simulation  
 ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 \*\*\*  
 # - # \*\*\* CEPS SURS UZS IFWS LZS AGWS GWVS  
 49 0 0 0.15 0 4 0.05 0  
 67 0 0 0.15 0 4 0.05 0  
 END PWAT-STATE1

END PERLND

IMPLND

GEN-INFO  
 <PLS > <-----Name-----> Unit-systems Printer \*\*\*  
 # - # User t-series Engl Metr \*\*\*  
 in out \*\*\*  
 6 Imperv,Mod (1-2%) 1 1 1 27 0  
 2 Imperv,Mod (1-2%) 1 1 1 27 0

9 Imperv,Mod (1-2%) 1 1 1 27 0  
 END GEN-INFO  
 \*\*\* Section IWATER\*\*\*

ACTIVITY  
 <PLS > \*\*\*\*\* Active Sections \*\*\*\*\*  
 # - # ATMP SNOW IWAT SLD IWG IQAL \*\*\*  
 6 0 0 1 0 0 0  
 2 0 0 1 0 0 0  
 9 0 0 1 0 0 0  
 END ACTIVITY

PRINT-INFO  
 <ILS > \*\*\*\*\* Print-flags \*\*\*\*\* PIVL PYR  
 # - # ATMP SNOW IWAT SLD IWG IQAL \*\*\*\*\*  
 6 0 0 4 0 0 0 1 9  
 2 0 0 4 0 0 0 1 9  
 9 0 0 4 0 0 0 1 9  
 END PRINT-INFO

IWAT-PARM1  
 <PLS > IWATER variable monthly parameter value flags \*\*\*  
 # - # CSNO RTOP VRS VNN RTLI \*\*\*  
 6 0 0 0 0 0  
 2 0 0 0 0 0  
 9 0 0 0 0 0  
 END IWAT-PARM1

IWAT-PARM2  
 <PLS > IWATER input info: Part 2 \*\*\*  
 # - # \*\*\* LSUR SLSUR NSUR RETSC  
 6 100 0.02 0.05 0.1  
 2 100 0.02 0.05 0.1  
 9 100 0.02 0.05 0.1  
 END IWAT-PARM2

IWAT-PARM3  
 <PLS > IWATER input info: Part 3 \*\*\*  
 # - # \*\*\*PETMAX PETMIN  
 6 0 0  
 2 0 0  
 9 0 0  
 END IWAT-PARM3

IWAT-STATE1  
 <PLS > \*\*\* Initial conditions at start of simulation  
 # - # \*\*\* RETS SURS  
 6 0 0  
 2 0 0  
 9 0 0  
 END IWAT-STATE1

END IMPLND

SCHEMATIC  
 <-Source-> <--Area--> <-Target-> MBLK \*\*\*  
 <Name> # <-factor-> <Name> # Tbl# \*\*\*  
 Waterman Pavement to Swales\*\*\*  
 IMPLND 6 3.59 RCHRES 1 5  
 Basin 1\*\*\*  
 PERLND 49 0.42 RCHRES 3 2  
 PERLND 49 0.42 RCHRES 3 3  
 IMPLND 2 5.94 RCHRES 3 5  
 Lateral Basin 1\*\*\*  
 PERLND 67 2.25 RCHRES 3 2  
 PERLND 67 2.25 RCHRES 3 3  
 Lateral I Basin 2\*\*\*  
 IMPLND 9 6.2133 PERLND 67 50

\*\*\*\*\*Routing\*\*\*\*\*

```

RCHRES    2                1    RCHRES    3        7
RCHRES    2                1    COPY     1       17
RCHRES    2                1    RCHRES    3        8
RCHRES    2                1    COPY     1       18
RCHRES    1                1    RCHRES    3        7
RCHRES    1                1    COPY     1       17
RCHRES    1                1    RCHRES    2        8
PERLND   49                0.42  COPY     1       12
IMPLND    2                5.94  COPY     1       15
PERLND   49                0.42  COPY     1       13
PERLND   67                2.25  COPY     1       12
PERLND   67                2.25  COPY     1       13
RCHRES    3                1    COPY    501       16
END SCHEMATIC

```

NETWORK

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # #<-factor->strg <Name> # # <Name> # # ***
COPY 501 OUTPUT MEAN 1 1 12.1 DISPLY 1 INPUT TIMSER 1
GENER 2 OUTPUT TIMSER .0002778 RCHRES 1 EXTNL OUTDGT 1

```

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # #<-factor->strg <Name> # # <Name> # # ***
END NETWORK

```

RCHRES

```

GEN-INFO
RCHRES          Name          Nexits  Unit Systems      Printer          ***
# - #<-----><-----> User T-series Engl Metr LKFG          ***
              in out
1    Surface Swale S-006    2    1    1    1    28    0    1
2    Vegetated Swale -005    2    1    1    1    28    0    1
3    Vault 4            1    1    1    1    28    0    1
END GEN-INFO
*** Section RCHRES***

```

ACTIVITY

```

<PLS > ***** Active Sections *****
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
1    1    0    0    0    0    0    0    0    0    0
2    1    0    0    0    0    0    0    0    0    0
3    1    0    0    0    0    0    0    0    0    0
END ACTIVITY

```

PRINT-INFO

```

<PLS > ***** Print-flags ***** PIVL  PYR
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL  PYR *****
1    4    0    0    0    0    0    0    0    0    0    1    9
2    4    0    0    0    0    0    0    0    0    0    1    9
3    4    0    0    0    0    0    0    0    0    0    1    9
END PRINT-INFO

```

HYDR-PARM1

```

RCHRES  Flags for each HYDR Section          ***
# - # VC A1 A2 A3 ODFVFG for each *** ODGTFG for each FUNCT for each
      FG FG FG FG possible exit *** possible exit possible exit
      * * * * * * * * * * * * * * * * * * * * *
1    0  1  0  0    4  5  0  0  0    0  1  0  0  0    2  1  2  2  2
2    0  1  0  0    4  5  0  0  0    0  0  0  0  0    2  2  2  2  2
3    0  1  0  0    4  0  0  0  0    0  0  0  0  0    2  2  2  2  2
END HYDR-PARM1

```

HYDR-PARM2

```

# - # FTABNO          LEN          DELTH          STCOR          KS          DB50          ***
<-----><-----><-----><-----><-----><----->
1    1    0.01         0.0          0.0          0.0          0.0
2    2    0.06         0.0          0.0          0.0          0.0
3    3    0.05         0.0          0.0          0.5          0.0

```

```

END HYDR-PARM2
HYDR-INIT
  RCHRES Initial conditions for each HYDR section ***
  # - # *** VOL Initial value of COLIND Initial value of OUTDGT
  *** ac-ft for each possible exit for each possible exit
<-----><-----> <---><---><---><---><---> *** <---><---><---><---><--->
  1 0 4.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
  2 0 4.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
  3 0 4.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
END HYDR-INIT
END RCHRES

```

```

SPEC-ACTIONS
*** User-Defined Variable Quantity Lines
***
*** addr
*** <----->
*** kwd varnam optyp opn vari s1 s2 s3 tp multiply lc ls ac as agfn ***
<****> <-----> <-----> <--> <-----><--><--><--><--><-----> <--><--> <--> ***
UVQUAN vol2 RCHRES 2 VOL 4
UVQUAN v2m2 GLOBAL WORKSP 1 3
UVQUAN vpo2 GLOBAL WORKSP 2 3
UVQUAN v2d2 GENER 2 K 1 3
*** User-Defined Target Variable Names
***
*** addr or
*** <----->
*** kwd varnam ct vari s1 s2 s3 frac oper vari s1 s2 s3 frac oper
<****> <-----><--> <-----><--><--><--> <-----> <--> <-----><--><--><--> <-----> <-->
UVNAME v2m2 1 WORKSP 1 1.0 QUAN
UVNAME vpo2 1 WORKSP 2 1.0 QUAN
UVNAME v2d2 1 K 1 1.0 QUAN
*** opt foplop dcdts yr mo dy hr mn d t vnam s1 s2 s3 ac quantity tc ts rp
<****><--><--><--><--><--> <--> <--> <--> <--><--> <-----> <--> <--><-->
GENER 2 v2m2 = 506.03
*** Compute remaining available pore space
GENER 2 vpo2 = v2m2
GENER 2 vpo2 -= vol2
*** Check to see if VPORA goes negative; if so set VPORA = 0.0
IF (vpo2 < 0.0) THEN
GENER 2 vpo2 = 0.0
END IF
*** Infiltration volume
GENER 2 v2d2 = vpo2
END SPEC-ACTIONS

```

```

FTABLES
FTABLE 2
  17 5
  Depth Area Volume Outflow1 Outflow2 Velocity Travel Time***
  (ft) (acres) (acre-ft) (cfs) (cfs) (ft/sec) (Minutes)***
0.000000 0.014233 0.000000 0.000000 0.000000
0.079670 0.014233 0.000228 0.000000 0.000000
0.159341 0.014233 0.000456 0.000000 0.000000
0.239011 0.014233 0.000684 0.000000 0.000000
0.318681 0.014233 0.000912 0.008641 0.000293
0.398352 0.014233 0.001140 0.013098 0.000445
0.478022 0.014233 0.001368 0.020134 0.000683
0.557692 0.014233 0.001603 0.021144 0.000718
0.637363 0.014233 0.001838 0.040548 0.000718
0.717033 0.014233 0.002073 0.051055 0.000718
0.796703 0.014233 0.002309 0.059703 0.000718
0.876374 0.014233 0.002544 0.067234 0.000718
0.956044 0.014233 0.002779 0.074003 0.000718
1.035714 0.014233 0.003015 0.080213 0.000718
1.115385 0.014233 0.003250 0.086011 0.000718
1.195055 0.014233 0.003485 0.091618 0.000718
1.250000 0.014233 0.011617 0.095711 0.000718
END FTABLE 2
FTABLE 1
  77 5
  Depth Area Volume Outflow1 Outflow2 Velocity Travel Time***
  (ft) (acres) (acre-ft) (cfs) (cfs) (ft/sec) (Minutes)***

```

0.000000	0.014233	0.000000	0.000000	0.000000
0.079670	0.014233	0.001134	0.000000	0.033789
0.159341	0.014233	0.002268	0.000000	0.044557
0.239011	0.014233	0.003402	0.000000	0.049941
0.318681	0.014233	0.004536	0.000000	0.055325
0.398352	0.014233	0.005670	0.000000	0.060709
0.478022	0.014233	0.006804	0.000000	0.066093
0.557692	0.014233	0.007938	0.000000	0.071477
0.637363	0.014233	0.009072	0.000000	0.076861
0.717033	0.014233	0.010206	0.000000	0.082245
0.796703	0.014233	0.011340	0.000000	0.087629
0.876374	0.014233	0.012474	0.000000	0.093013
0.956044	0.014233	0.013608	0.000000	0.098397
1.035714	0.014233	0.014742	0.107406	0.103781
1.115385	0.014233	0.015876	0.621878	0.109165
1.195055	0.014233	0.017010	1.353976	0.114549
1.274725	0.014233	0.018143	2.214396	0.119933
1.354396	0.014233	0.019277	3.122637	0.125316
1.434066	0.014233	0.020411	3.996465	0.130700
1.513736	0.014233	0.021545	4.760149	0.136084
1.593407	0.014233	0.022679	5.359734	0.141468
1.673077	0.014233	0.023813	5.782721	0.146852
1.752747	0.014233	0.024947	6.148464	0.152051
1.832418	0.014233	0.026081	6.465657	0.152051
1.912088	0.014233	0.027215	6.768001	0.152051
1.991758	0.014233	0.028349	7.057404	0.152051
2.071429	0.014233	0.029483	7.335398	0.152051
2.151099	0.014233	0.030617	7.603234	0.152051
2.230769	0.014233	0.031751	7.861952	0.152051
2.310440	0.014233	0.032885	8.112422	0.152051
2.390110	0.014233	0.034019	8.355388	0.152051
2.469780	0.014233	0.035153	8.591485	0.152051
2.549451	0.014233	0.036287	8.821266	0.152051
2.629121	0.014233	0.037421	9.045211	0.152051
2.708791	0.014233	0.038555	9.263744	0.152051
2.788462	0.014233	0.039689	9.477240	0.152051
2.868132	0.014233	0.040823	9.686030	0.152051
2.947802	0.014233	0.041957	9.890414	0.152051
3.027473	0.014233	0.043091	10.09066	0.152051
3.107143	0.014233	0.044225	10.28701	0.152051
3.186813	0.014233	0.045359	10.47968	0.152051
3.266484	0.014233	0.046493	10.66887	0.152051
3.346154	0.014233	0.047627	10.85476	0.152051
3.425824	0.014233	0.048761	11.03753	0.152051
3.505495	0.014233	0.049895	11.21731	0.152051
3.585165	0.014233	0.051029	11.39426	0.152051
3.664835	0.014233	0.052162	11.56850	0.152051
3.744505	0.014233	0.053296	11.74016	0.152051
3.824176	0.014233	0.054430	11.90935	0.152051
3.903846	0.014233	0.055564	12.07616	0.152051
3.983516	0.014233	0.056698	12.24070	0.152051
4.063187	0.014233	0.057832	12.40306	0.152051
4.142857	0.014233	0.058966	12.56332	0.152051
4.222527	0.014233	0.060100	12.72156	0.152051
4.302198	0.014233	0.061234	12.87786	0.152051
4.381868	0.014233	0.062368	13.03228	0.152051
4.461538	0.014233	0.063502	13.18489	0.152051
4.541209	0.014233	0.064636	13.33576	0.152051
4.620879	0.014233	0.065770	13.48494	0.152051
4.700549	0.014233	0.066904	13.63249	0.152051
4.780220	0.014233	0.068038	13.77846	0.152051
4.859890	0.014233	0.069172	13.92289	0.152051
4.939560	0.014233	0.070306	14.06585	0.152051
5.019231	0.014233	0.071440	14.20736	0.152051
5.098901	0.014233	0.072574	14.34749	0.152051
5.178571	0.014233	0.073708	14.48625	0.152051
5.258242	0.014233	0.074842	14.62370	0.152051
5.337912	0.014233	0.075976	14.75987	0.152051
5.417582	0.014233	0.077110	14.89479	0.152051
5.497253	0.014233	0.078244	15.02850	0.152051

5.576923	0.014233	0.079378	15.16104	0.152051
5.656593	0.014233	0.080512	15.29242	0.152051
5.736264	0.014233	0.081646	15.42269	0.152051
5.815934	0.014233	0.082780	15.55186	0.152051
5.895604	0.014233	0.083914	15.67997	0.152051
5.975275	0.014233	0.085048	15.80704	0.152051
6.000000	0.014233	0.085399	15.93310	0.152051

END FTABLE 1  
 FTABLE 3  
 92 4

Depth (ft)	Area (acres)	Volume (acre-ft)	Outflow1 (cfs)	Velocity (ft/sec)	Travel Time*** (Minutes)***
0.000000	0.350184	0.000000	0.000000		
0.055556	0.350184	0.019455	0.000000		
0.111111	0.350184	0.038909	0.000000		
0.166667	0.350184	0.058364	0.000000		
0.222222	0.350184	0.077819	0.000000		
0.277778	0.350184	0.097273	0.000000		
0.333333	0.350184	0.116728	0.000000		
0.388889	0.350184	0.136183	0.000000		
0.444444	0.350184	0.155637	0.000000		
0.500000	0.350184	0.175092	0.000000		
0.555556	0.350184	0.194546	0.000000		
0.611111	0.350184	0.214001	0.000000		
0.666667	0.350184	0.233456	0.000000		
0.722222	0.350184	0.252910	0.000000		
0.777778	0.350184	0.272365	0.000000		
0.833333	0.350184	0.291820	0.000000		
0.888889	0.350184	0.311274	0.000000		
0.944444	0.350184	0.330729	0.000000		
1.000000	0.350184	0.350184	0.000000		
1.055556	0.350184	0.369638	0.000000		
1.111111	0.350184	0.389093	0.000000		
1.166667	0.350184	0.408548	0.000000		
1.222222	0.350184	0.428002	0.000000		
1.277778	0.350184	0.447457	0.000000		
1.333333	0.350184	0.466912	0.000000		
1.388889	0.350184	0.486366	0.000000		
1.444444	0.350184	0.505821	0.000000		
1.500000	0.350184	0.525275	0.000000		
1.555556	0.350184	0.544730	0.000000		
1.611111	0.350184	0.564185	0.000000		
1.666667	0.350184	0.583639	0.000000		
1.722222	0.350184	0.603094	0.000000		
1.777778	0.350184	0.622549	0.000000		
1.833333	0.350184	0.642003	0.000000		
1.888889	0.350184	0.661458	0.000000		
1.944444	0.350184	0.680913	0.000000		
2.000000	0.350184	0.700367	0.000000		
2.055556	0.350184	0.719822	0.000000		
2.111111	0.350184	0.739277	0.000000		
2.166667	0.350184	0.758731	0.000000		
2.222222	0.350184	0.778186	0.000000		
2.277778	0.350184	0.797641	0.000000		
2.333333	0.350184	0.817095	0.000000		
2.388889	0.350184	0.836550	0.000000		
2.444444	0.350184	0.856004	0.000000		
2.500000	0.350184	0.875459	0.000000		
2.555556	0.350184	0.894914	0.000000		
2.611111	0.350184	0.914368	0.000000		
2.666667	0.350184	0.933823	0.000000		
2.722222	0.350184	0.953278	0.000000		
2.777778	0.350184	0.972732	0.000000		
2.833333	0.350184	0.992187	0.000000		
2.888889	0.350184	1.011642	0.000000		
2.944444	0.350184	1.031096	0.000000		
3.000000	0.350184	1.050551	0.000000		
3.055556	0.350184	1.070006	0.000000		
3.111111	0.350184	1.089460	0.000000		
3.166667	0.350184	1.108915	0.000000		

```

3.222222 0.350184 1.128370 0.000000
3.277778 0.350184 1.147824 0.000000
3.333333 0.350184 1.167279 0.000000
3.388889 0.350184 1.186733 0.000000
3.444444 0.350184 1.206188 0.000000
3.500000 0.350184 1.225643 0.000000
3.555556 0.350184 1.245097 0.000000
3.611111 0.350184 1.264552 0.000000
3.666667 0.350184 1.284007 0.000000
3.722222 0.350184 1.303461 0.000000
3.777778 0.350184 1.322916 0.000000
3.833333 0.350184 1.342371 0.000000
3.888889 0.350184 1.361825 0.000000
3.944444 0.350184 1.381280 0.000000
4.000000 0.350184 1.400735 0.000000
4.055556 0.350184 1.420189 0.277796
4.111111 0.350184 1.439644 0.784769
4.166667 0.350184 1.459099 1.438492
4.222222 0.350184 1.478553 2.205262
4.277778 0.350184 1.498008 3.059929
4.333333 0.350184 1.517463 3.979211
4.388889 0.350184 1.536917 4.939668
4.444444 0.350184 1.556372 5.917238
4.500000 0.350184 1.575826 6.887532
4.555556 0.350184 1.595281 7.826549
4.611111 0.350184 1.614736 8.711714
4.666667 0.350184 1.634190 9.523132
4.722222 0.350184 1.653645 10.24504
4.777778 0.350184 1.673100 10.86741
4.833333 0.350184 1.692554 11.38772
4.888889 0.350184 1.712009 11.81283
4.944444 0.350184 1.731464 12.16099
5.000000 0.350184 1.750918 12.46394
5.055556 0.350184 1.770373 12.94375

```

END FTABLE 3

END FTABLES

EXT SOURCES

```

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # tem strg<-factor->strg <Name> # # <Name> # # ***
WDM 2 PREC ENGL 0.941 PERLND 1 999 EXTNL PREC
WDM 2 PREC ENGL 0.941 IMPLND 1 999 EXTNL PREC
WDM 1 EVAP ENGL 0.85 PERLND 1 999 EXTNL PETINP
WDM 1 EVAP ENGL 0.85 IMPLND 1 999 EXTNL PETINP
WDM 2 PREC ENGL 0.941 RCHRES 1 EXTNL PREC
WDM 1 EVAP ENGL 0.5 RCHRES 1 EXTNL POTEV
WDM 1 EVAP ENGL 0.595 RCHRES 2 EXTNL POTEV

```

END EXT SOURCES

EXT TARGETS

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name> # <Name> # #<-factor->strg <Name> # <Name> tem strg strg***
RCHRES 3 HYDR RO 1 1 1 WDM 1004 FLOW ENGL REPL
RCHRES 3 HYDR STAGE 1 1 1 WDM 1005 STAG ENGL REPL
COPY 1 OUTPUT MEAN 1 1 12.1 WDM 701 FLOW ENGL REPL
COPY 501 OUTPUT MEAN 1 1 12.1 WDM 801 FLOW ENGL REPL

```

END EXT TARGETS

MASS-LINK

```

<Volume> <-Grp> <-Member-><--Mult--> <Target> <-Grp> <-Member->***
<Name> <Name> # #<-factor-> <Name> <Name> # #***
MASS-LINK 2
PERLND PWATER SURO 0.083333 RCHRES INFLOW IVOL
END MASS-LINK 2

```

```

MASS-LINK 3
PERLND PWATER IFWO 0.083333 RCHRES INFLOW IVOL
END MASS-LINK 3

```

MASS-LINK	5					
IMPLND	IWATER	SURO	0.083333	RCHRES	INFLOW	IVOL
END MASS-LINK	5					
MASS-LINK	7					
RCHRES	OFLOW	OVOL	1	RCHRES	INFLOW	IVOL
END MASS-LINK	7					
MASS-LINK	8					
RCHRES	OFLOW	OVOL	2	RCHRES	INFLOW	IVOL
END MASS-LINK	8					
MASS-LINK	12					
PERLND	PWATER	SURO	0.083333	COPY	INPUT	MEAN
END MASS-LINK	12					
MASS-LINK	13					
PERLND	PWATER	IFWO	0.083333	COPY	INPUT	MEAN
END MASS-LINK	13					
MASS-LINK	15					
IMPLND	IWATER	SURO	0.083333	COPY	INPUT	MEAN
END MASS-LINK	15					
MASS-LINK	16					
RCHRES	ROFLOW			COPY	INPUT	MEAN
END MASS-LINK	16					
MASS-LINK	17					
RCHRES	OFLOW	OVOL	1	COPY	INPUT	MEAN
END MASS-LINK	17					
MASS-LINK	18					
RCHRES	OFLOW	OVOL	2	COPY	INPUT	MEAN
END MASS-LINK	18					
MASS-LINK	50					
IMPLND	IWATER	SURO		PERLND	EXTNL	SURLI
END MASS-LINK	50					

END MASS-LINK

END RUN



*Pre-Project HSPF Message File*

## Mitigated HSPF Message File

ERROR/WARNING ID: 341 6

DATE/TIME: 1967/ 1/21 22: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition.

Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	8.0081E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1967/ 1/21 22: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-1.372E+05	4.4968	4.4968E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1969/ 1/26 3: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition.

Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.9553E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1969/ 1/26 3: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-1.182E+05	3.8745	3.8745E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1972/11/ 4 1: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.7627E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1972/11/ 4 1: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-4.884E+04	1.6011	1.6011E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1973/ 2/27 18: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	8.2953E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1973/ 2/27 18: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-2.406E+05	7.8857	7.8857E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1980/ 1/ 9 18: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.7446E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1980/ 1/ 9 18: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT	
0.0000E+00	3.0508E+04	-4.235E+04	1.3882	1.3882E+00		2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1981/11/13 21: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.7472E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1981/11/13 21: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT	
0.0000E+00	3.0508E+04	-4.327E+04	1.4182	1.4182E+00		2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1982/10/25 23: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.8576E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1982/10/25 23: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0).

Probably ftable was extrapolated. If extrapolation was small, no problem.  
Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-8.302E+04	2.7214	2.7214E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1983/ 2/12 18: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition.  
Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.8809E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1983/ 2/12 18: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0).  
Probably ftable was extrapolated. If extrapolation was small, no problem.  
Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-9.140E+04	2.9959	2.9959E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1991/ 2/28 19: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition.  
Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.9945E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1991/ 2/28 19: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0).  
Probably ftable was extrapolated. If extrapolation was small, no problem.  
Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-1.323E+05	4.3367	4.3367E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1995/ 1/10 8: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	9.3964E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1995/ 1/10 8: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-6.370E+05	20.879	2.0879E+01	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1995/ 3/10 16: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.9518E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1995/ 3/10 16: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-1.169E+05	3.8330	3.8330E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1995/12/12 13: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS V1 V2 VOL  
92 7.6270E+04 7.7117E+04 7.9639E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1995/12/12 13: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-1.213E+05	3.9756	3.9756E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1996/ 4/ 1 17: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS V1 V2 VOL  
92 7.6270E+04 7.7117E+04 8.2868E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1996/ 4/ 1 17: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT
0.0000E+00	3.0508E+04	-2.375E+05	7.7861	7.7861E+00	2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1996/12/12 8: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS V1 V2 VOL  
92 7.6270E+04 7.7117E+04 7.9508E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1996/12/12 8: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT	
0.0000E+00	3.0508E+04	-1.166E+05	3.8214	3.8214E+00		2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 1997/ 1/22 19: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	8.8601E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 1997/ 1/22 19: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT	
0.0000E+00	3.0508E+04	-4.439E+05	14.551	1.4551E+01		2

---

ERROR/WARNING ID: 341 6

DATE/TIME: 2000/ 5/15 18: 0

RCHRES: 3

The volume of water in this reach/mixed reservoir is greater than the value in the "volume" column of the last row of RCHTAB(). To continue the simulation the table has been extrapolated, based on information contained in the last two rows. This will usually result in some loss of accuracy. If depth is being calculated it will also cause an error condition. Relevant data are:

NROWS	V1	V2	VOL
92	7.6270E+04	7.7117E+04	7.8648E+04

---

ERROR/WARNING ID: 341 5

DATE/TIME: 2000/ 5/15 18: 0

RCHRES: 3

Calculation of relative depth, using Newton's method of successive approximations, converged to an invalid value (not in range 0.0 to 1.0). Probably ftable was extrapolated. If extrapolation was small, no problem. Remedy; extend ftable. Relevant data are:

A	B	C	RDEP1	RDEP2	COUNT	
0.0000E+00	3.0508E+04	-8.560E+04	2.8057	2.8057E+00		2





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## ***SacCalc Results***

**Sacramento Hydrologic Calculator Report**

February 11, 2021 17:38

Project Title: Brinkman & Waterman Undeveloped

Method: Sacramento County HEC-1 method

Comments:

Date: 2/3/2021

Prepared by: MCR

Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
BRINK	19.71	45	Basin "n"	-	Computed	-	Computed	-	Computed	-
WAT	10.38	49	Basin "n"	-	Computed	-	Computed	-	Computed	-

Basin "n" Method Data for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)																
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1
BRINK	1419	200	.0028	Undeveloped																100	
				Developed																	
WAT	817	260	0.0024	Undeveloped																100	
				Developed																	

Refer to the Drainage manual for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																		
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*	
BRINK	B																			
	C																			
	D																		100	
WAT	B																			
	C																			
	D																		100	

Refer to the help file for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

## Sacramento Hydrologic Calculator Report

February 11, 2021 17:41

Project Title: Brinkman &amp; Waterman Developed

Method: Sacramento County HEC-1 method

Comments: Hydrographs for the developed Waterman and Brinkman Sites

Date: 2/2/2021

Prepared by: MCR

## Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
DMA-1	1.3	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-2	1.06	50.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-3	1.11	50.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-4	1.23	50.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-6	1.9	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-7	1.46	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-8	1.91	47.8	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-11	0.89	48.2	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-15	2.91	46	Basin "n"	-	Computed	-	Computed	-	Computed	-
DM-15A	2.89	45.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-17	0.5	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-25	1.1	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-24	2.95	45.8	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-23	3.04	45.8	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-20	0.59	48	Basin "n"	-	Computed	-	Computed	-	Computed	-

Basin "n" Method Data for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)															
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2
DMA-1	433	128	0.0061	Undeveloped			0													
				Developed			100													
DMA-2	361	104	0.009	Undeveloped			0													
				Developed			100													
DMA-3	374	96	0.0093	Undeveloped			0													
				Developed			100													
DMA-4	466	225	0.006	Undeveloped			0													
				Developed			100													
DMA-6	348	14	0.015	Undeveloped			0													
				Developed			100													
DMA-7	322	5	0.017	Undeveloped			0													
				Developed			100													
DMA-8	347	14	0.015	Undeveloped			0													
				Developed			100													
DMA-11	386	137	0.01	Undeveloped			0													
				Developed			100													
DMA-15	480	40	0.0098	Undeveloped			0													
				Developed			100													
DM-15A	469	50	0.0044	Undeveloped			0													
				Developed			100													
DMA-17	251	98	0.0096	Undeveloped			0													
				Developed			100													
DMA-25	344	132	0.011	Undeveloped			0													
				Developed			100													
DMA-24	473	44	.0028	Undeveloped			0													
				Developed			100													
DMA-23	491	54	0.01	Undeveloped			0													
				Developed			100													
DMA-20	272	92	0.012	Undeveloped			0													
				Developed			100													

Refer to the Drainage manual for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines



Infiltration Loss Rate Data

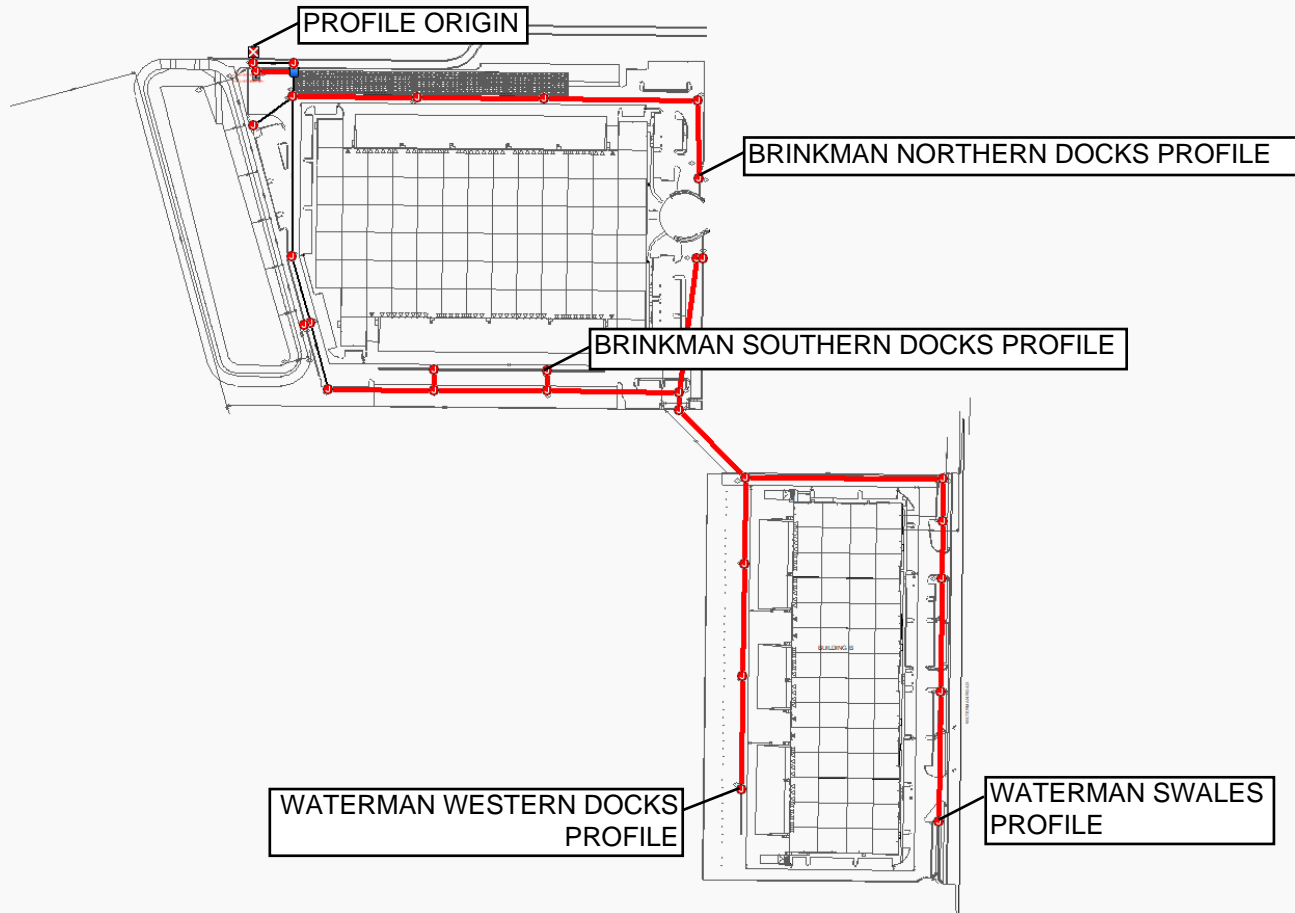
Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
DMA-1	B																		
	C																		
	D			100															
DMA-2	B																		
	C																		
	D			100															
DMA-3	B																		
	C																		
	D			100															
DMA-4	B																		
	C																		
	D			100															
DMA-6	B																		
	C																		
	D			100															
DMA-7	B																		
	C																		
	D			100															
DMA-8	B																		
	C																		
	D			100															
DMA-11	B																		
	C																		
	D			100															
DMA-15	B																		
	C																		
	D			100															
DM-15A	B																		
	C																		
	D			100															
DMA-17	B																		
	C																		
	D			100															
DMA-25	B																		
	C																		
	D			100															
DMA-24	B																		
	C																		
	D			100															
DMA-23	B																		
	C																		
	D			100															
DMA-20	B																		
	C																		
	D			100															

Refer to the help file for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

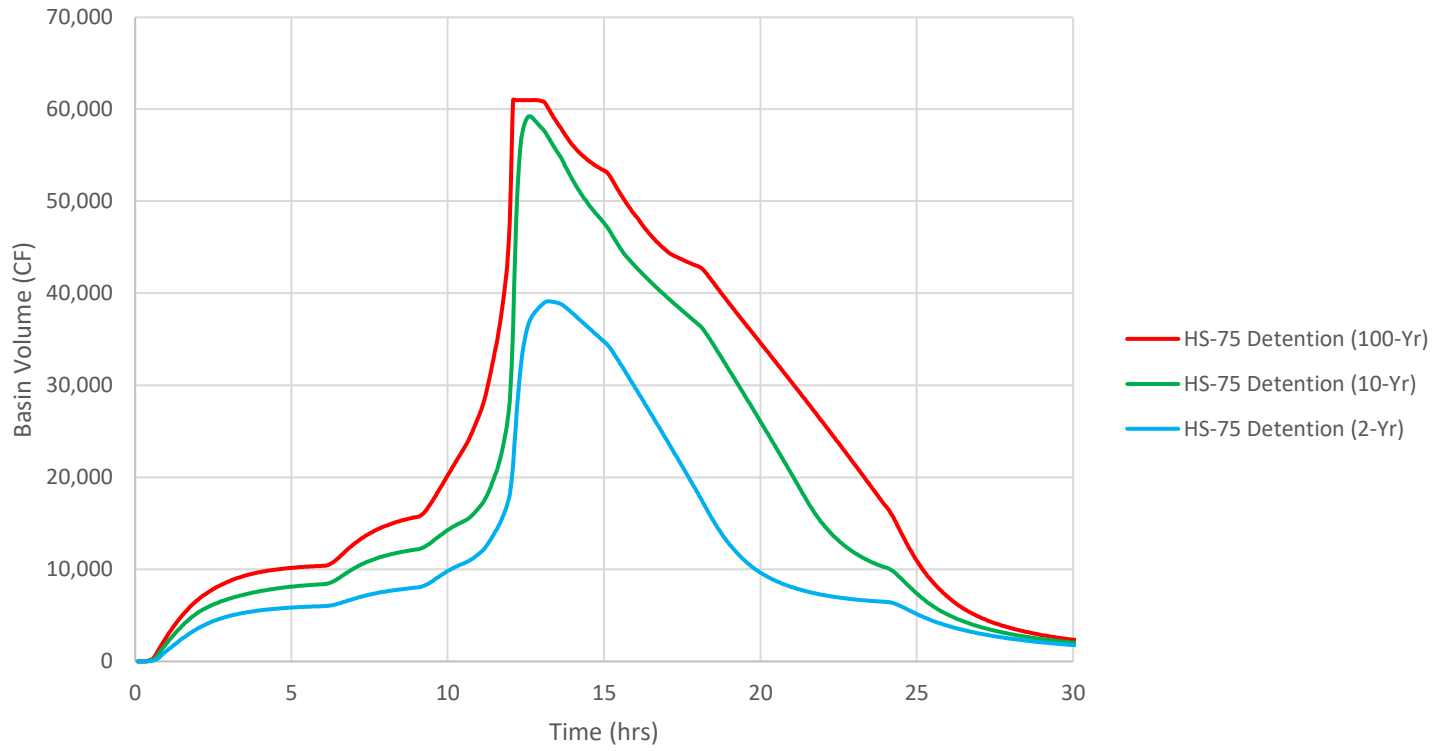
## **Appendix D – SSA Model & Results**

***SSA Plan***

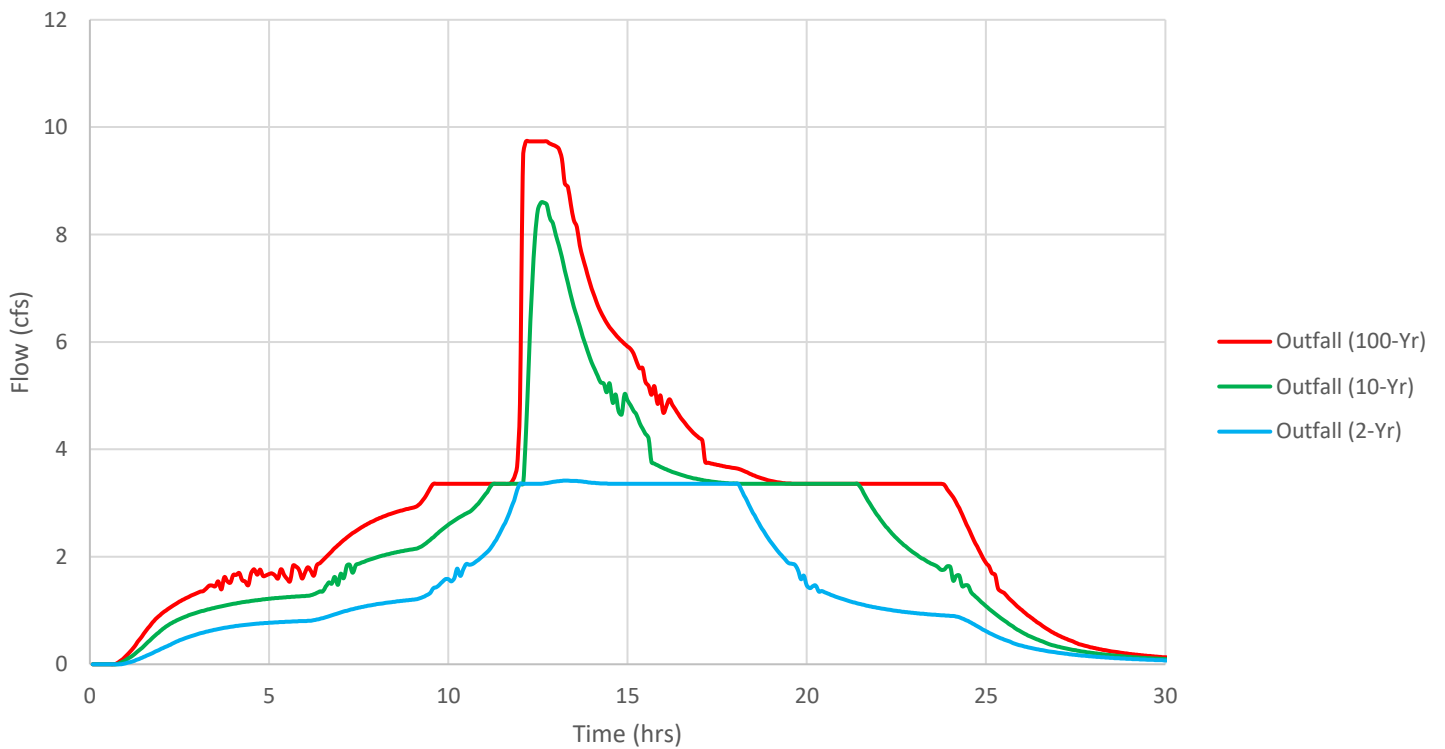


## ***SSA Hydrographs***

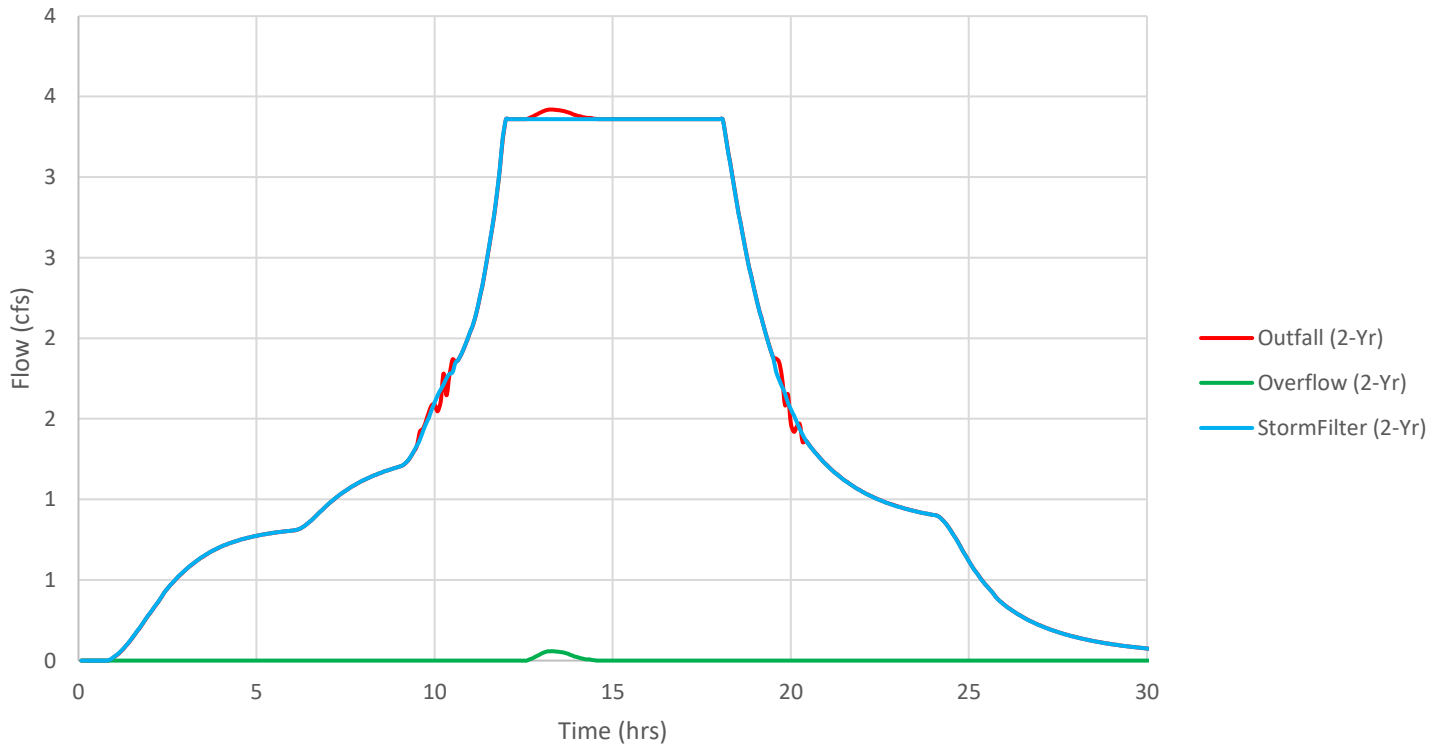
### Onsite Detention Basin Volume Hydrographs



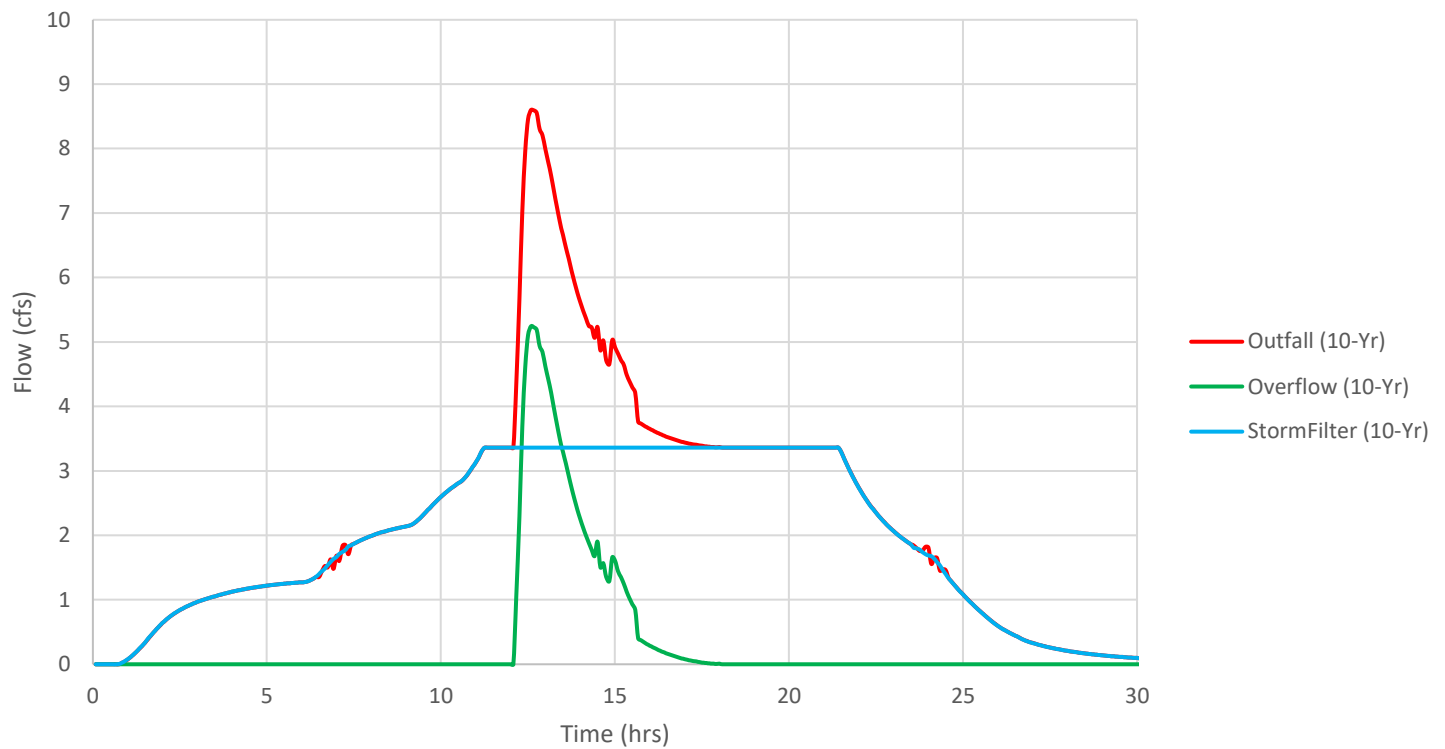
### Onsite Compiled Discharge Hydrographs



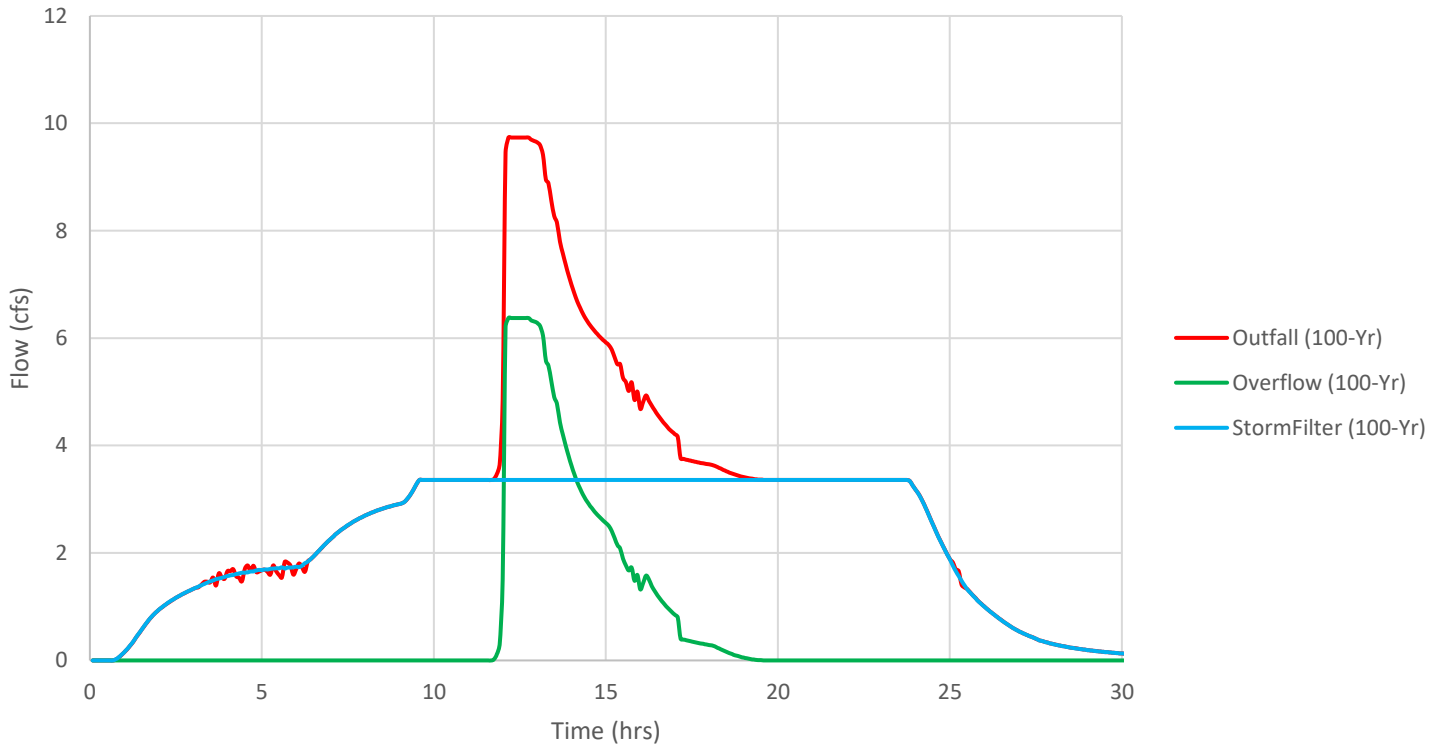
### Onsite 2-Year Hydrographs



### Onsite 10-Year Hydrographs



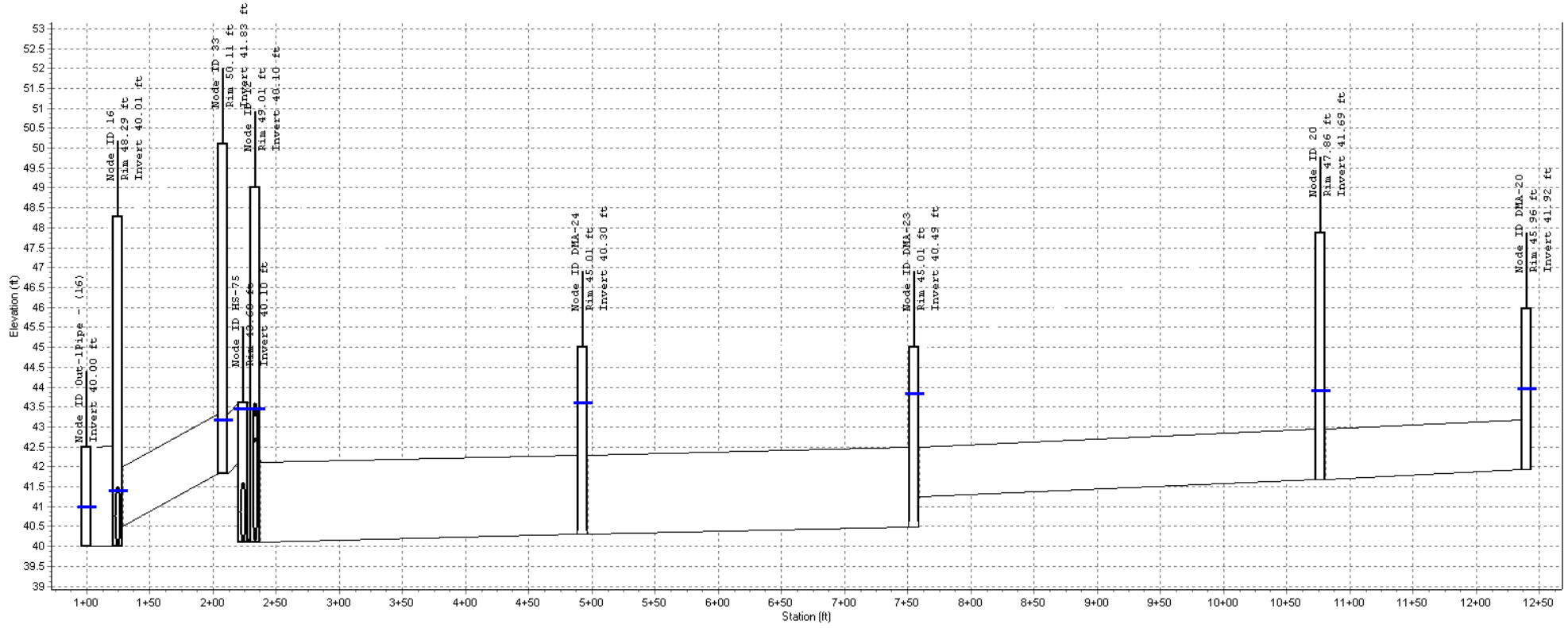
### Onsite 100-Year Hydrographs



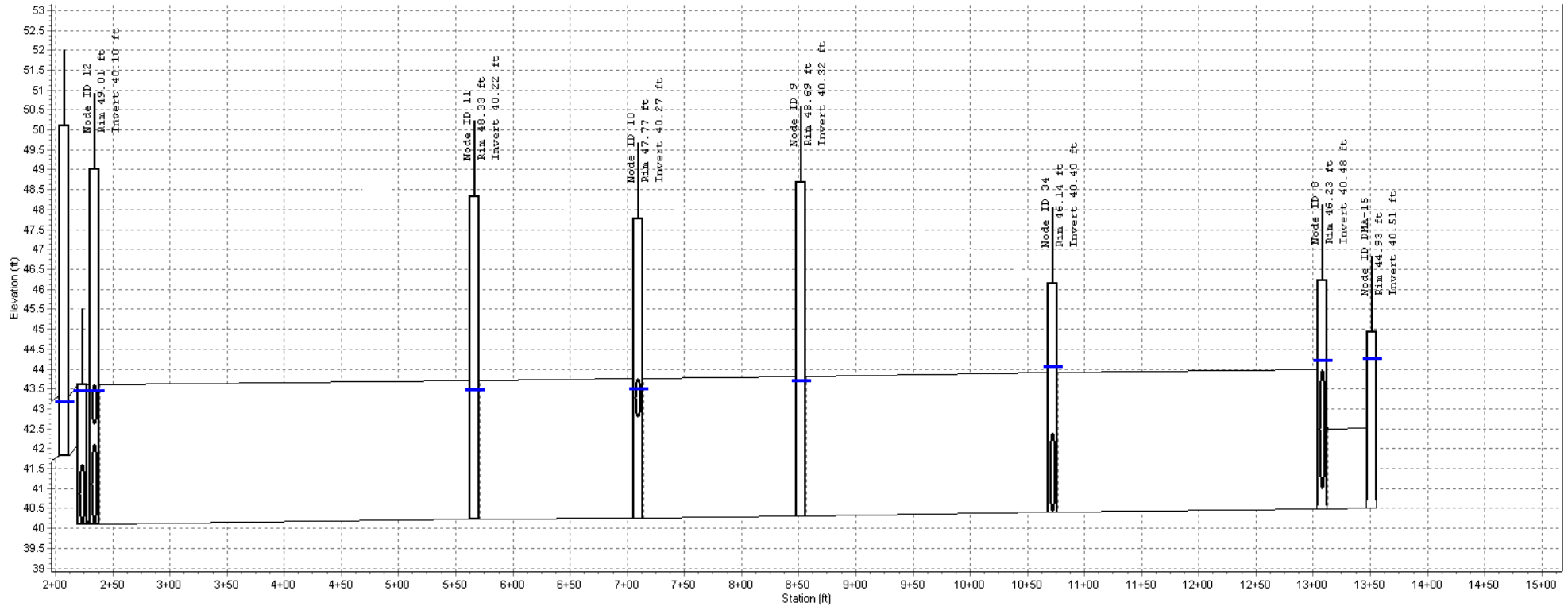


## ***SSA Profiles***

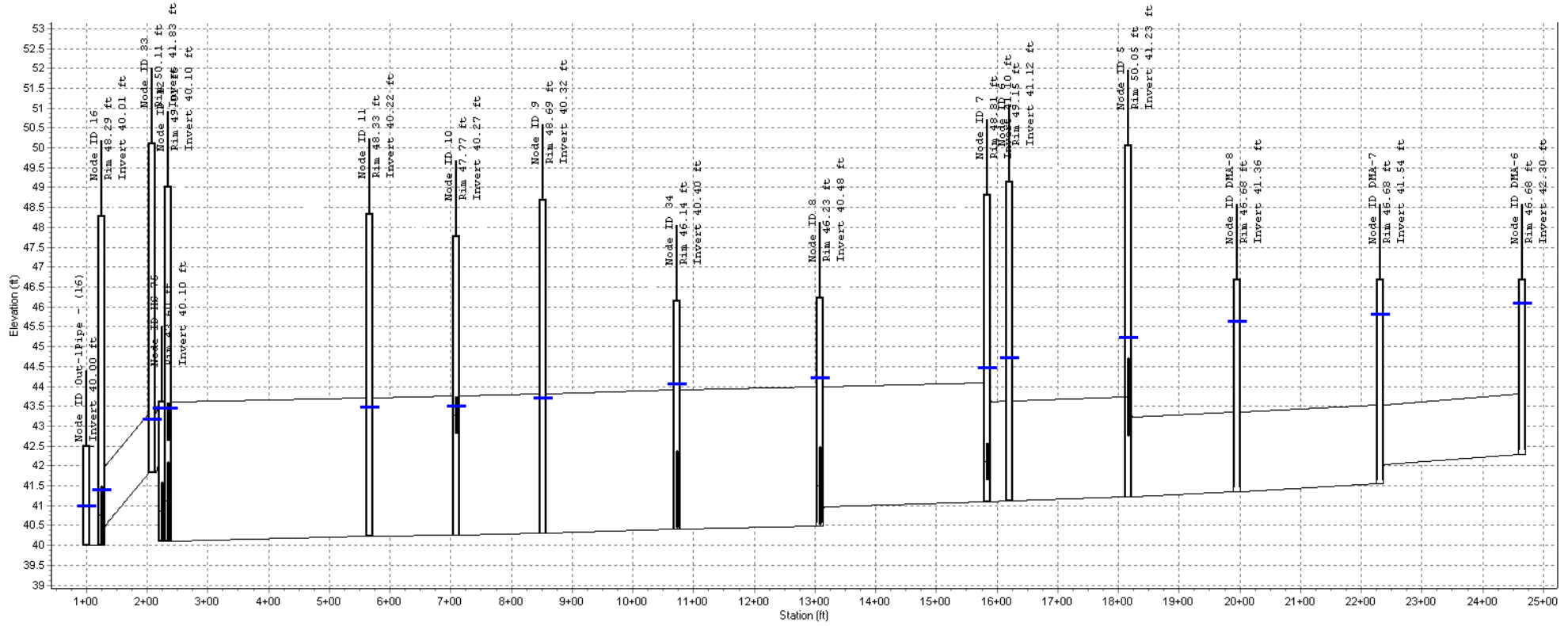
# Brinkman Northern Docks Profile



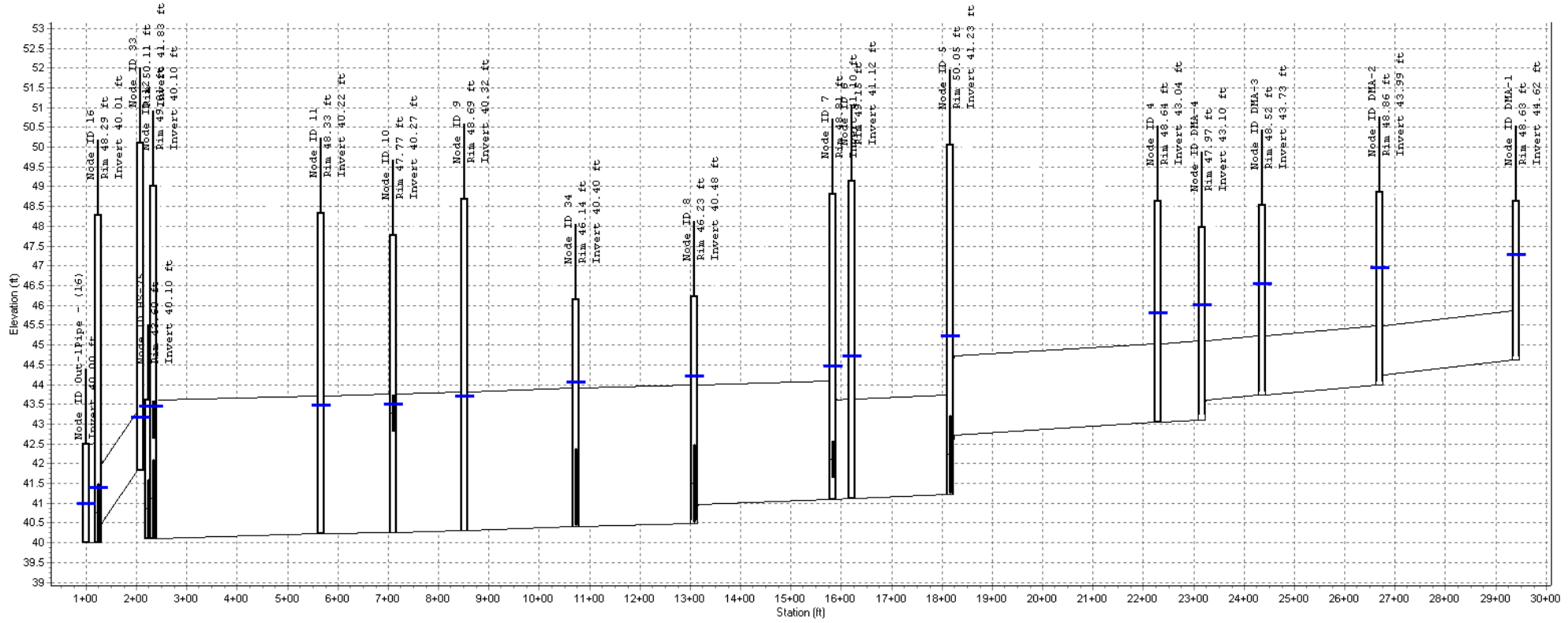
# Brinkman Southern Docks Profile



### Waterman Western Docks Profile



# Waterman Swales Profile



***SSA Reports***

\*\*\*\*\*  
 Project Description  
 \*\*\*\*\*

File Name ..... 19-061 SSA Model 2yr-24hr.SPF

\*\*\*\*\*  
 Analysis Options  
 \*\*\*\*\*

Flow Units ..... cfs  
 Link Routing Method ..... Hydrodynamic  
 Storage Node Exfiltration.. None  
 Starting Date ..... JAN-01-2000 00:00:00  
 Ending Date ..... JAN-03-2000 00:00:00  
 Report Time Step ..... 00:05:00

\*\*\*\*\*  
 Element Count  
 \*\*\*\*\*

Number of rain gages ..... 0  
 Number of subbasins ..... 0  
 Number of nodes ..... 32  
 Number of links ..... 32

\*\*\*\*\*  
 Node Summary  
 \*\*\*\*\*

Node ID	Element Type	Invert Elevation ft	Maximum Elev. ft	Ponded Area ft <sup>2</sup>	External Inflow
4	JUNCTION	43.04	48.64	0.00	
5	JUNCTION	41.23	50.05	0.00	
6	JUNCTION	41.12	49.15	0.00	
7	JUNCTION	41.10	48.81	0.00	
8	JUNCTION	40.48	46.23	0.00	
9	JUNCTION	40.32	48.69	0.00	
10	JUNCTION	40.27	47.77	0.00	
11	JUNCTION	40.22	48.33	0.00	
12	JUNCTION	40.10	49.01	0.00	
15	JUNCTION	40.03	47.70	0.00	
16	JUNCTION	40.01	48.29	0.00	
20	JUNCTION	41.69	47.86	0.00	
26	JUNCTION	42.13	46.28	0.00	
33	JUNCTION	41.83	50.11	0.00	
34	JUNCTION	40.40	46.14	0.00	
DMA-1	JUNCTION	44.62	48.63	0.00	Yes
DMA-11	JUNCTION	42.15	45.83	0.00	Yes
DMA-15	JUNCTION	40.51	44.93	0.00	Yes
DMA-15A	JUNCTION	40.43	44.93	0.00	Yes
DMA-17	JUNCTION	42.79	47.18	0.00	Yes
DMA-2	JUNCTION	43.99	48.86	0.00	Yes
DMA-20	JUNCTION	41.92	45.96	0.00	Yes
DMA-23	JUNCTION	40.49	45.01	0.00	Yes
DMA-24	JUNCTION	40.30	45.01	0.00	Yes
DMA-25	JUNCTION	42.80	46.02	0.00	Yes
DMA-3	JUNCTION	43.73	48.52	0.00	Yes
DMA-4	JUNCTION	43.10	47.97	0.00	Yes
DMA-6	JUNCTION	42.30	46.68	0.00	Yes
DMA-7	JUNCTION	41.54	46.68	0.00	Yes
DMA-8	JUNCTION	41.36	46.68	0.00	Yes

Out-1Pipe - (16)	OUTFALL	40.00	42.50	0.00
HS-75	STORAGE	40.10	43.60	0.00

\*\*\*\*\*  
Link Summary  
\*\*\*\*\*

Link ID	From Node	To Node	Element Type	Length ft	Slope %	Manning's Roughness
Outfall	16	Out-1Pipe - (16)	CONDUIT	24.5	0.2000	0.0130
Overflow	33	16	CONDUIT	83.4	1.5941	0.0130
Pipe - (1)	DMA-1	DMA-2	CONDUIT	270.5	0.2000	0.0130
Pipe - (10)	10	11	CONDUIT	142.9	0.2000	0.0130
Pipe - (11)	11	12	CONDUIT	333.0	0.2000	0.0130
Pipe - (12)	12	HS-75	CONDUIT	10.0	0.2000	0.0130
Pipe - (14)	HS-75	15	CONDUIT	77.7	0.2000	0.0130
Pipe - (17)	DMA-20	20	CONDUIT	163.6	0.2000	0.0130
Pipe - (19)	20	DMA-23	CONDUIT	321.4	0.2000	0.0130
Pipe - (2)	DMA-2	DMA-3	CONDUIT	234.5	0.2000	0.0130
Pipe - (20)	DMA-23	DMA-24	CONDUIT	262.0	0.2000	0.0130
Pipe - (21)	DMA-24	12	CONDUIT	259.3	0.2000	0.0130
Pipe - (22)	DMA-25	12	CONDUIT	101.8	0.2000	0.0130
Pipe - (23)	DMA-17	10	CONDUIT	12.0	0.2000	0.0130
Pipe - (24)	DMA-11	26	CONDUIT	12.0	0.2000	0.0130
Pipe - (25)	26	7	CONDUIT	279.6	0.2000	0.0130
Pipe - (26)	DMA-15	8	CONDUIT	43.0	0.2000	0.0130
Pipe - (27)	DMA-15A	34	CONDUIT	43.0	0.2000	0.0130
Pipe - (28)	DMA-6	DMA-7	CONDUIT	234.5	0.2000	0.0130
Pipe - (29)	DMA-7	DMA-8	CONDUIT	234.5	0.2000	0.0130
Pipe - (3)	DMA-3	DMA-4	CONDUIT	118.6	0.2000	0.0130
Pipe - (3) (1)	DMA-4	4	CONDUIT	88.8	0.2000	0.0130
Pipe - (30)	DMA-8	5	CONDUIT	179.2	0.2000	0.0130
Pipe - (31)	HS-75	33	CONDUIT	16.0	1.6875	0.0130
Pipe - (4)	4	5	CONDUIT	411.0	0.2000	0.0130
Pipe - (5)	5	6	CONDUIT	196.0	0.2000	0.0130
Pipe - (6)	6	7	CONDUIT	38.0	0.2000	0.0130
Pipe - (7)	7	8	CONDUIT	274.5	0.2000	0.0130
Pipe - (8)	8	34	CONDUIT	236.0	0.2000	0.0130
Pipe - (8) (1)	34	9	CONDUIT	220.9	0.2000	0.0130
Pipe - (9)	9	10	CONDUIT	142.0	0.2000	0.0130
StormFilter	15	16	CONDUIT	17.0	0.2000	0.0130

\*\*\*\*\*  
Cross Section Summary  
\*\*\*\*\*

Link Design ID	Shape	Depth/ Diameter	Width	No. of Barrels	Cross Sectional Area	Full Flow Hydraulic Radius
Flow Capacity		ft	ft		ft <sup>2</sup>	ft
-----						
Outfall	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34						
Overflow	CIRCULAR	1.50	1.50	1	1.77	0.38
13.26						
Pipe - (1)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89						
Pipe - (10)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99						
Pipe - (11)	CIRCULAR	3.50	3.50	1	9.62	0.88



44.99	Pipe - (12)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	Pipe - (14)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (17)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89	Pipe - (19)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89	Pipe - (2)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (20)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (21)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (22)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (23)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (24)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (25)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (26)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (27)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (28)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (29)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (3)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (3) (1)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (30)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (31)	CIRCULAR	1.50	1.50	1	1.77	0.38
13.65	Pipe - (4)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (5)	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34	Pipe - (6)	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34	Pipe - (7)	CIRCULAR	3.00	3.00	1	7.07	0.75
29.83	Pipe - (8)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	Pipe - (8) (1)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	Pipe - (9)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	StormFilter	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70							

*****	Volume	Volume
Flow Routing Continuity	acre-ft	Mgallons
*****	-----	-----
External Inflow .....	3.588	1.169
External Outflow .....	3.575	1.165
Initial Stored Volume ....	0.000	0.000
Final Stored Volume .....	0.012	0.004
Continuity Error (%) .....	0.000	

\*\*\*\*\*  
Node Depth Summary  
\*\*\*\*\*

Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days hh:mm	Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
4	0.37	1.25	44.29	0 12:06	0	0	0:00:00
5	0.57	1.85	43.08	0 12:08	0	0	0:00:00
6	0.62	1.80	42.92	0 12:08	0	0	0:00:00
7	0.61	1.73	42.83	0 12:09	0	0	0:00:00
8	0.89	2.16	42.64	0 12:09	0	0	0:00:00
9	0.97	2.10	42.42	0 12:10	0	0	0:00:00
10	1.00	2.04	42.31	0 12:10	0	0	0:00:00
11	1.02	2.03	42.25	0 13:09	0	0	0:00:00
12	1.10	2.14	42.24	0 13:12	0	0	0:00:00
15	1.02	2.07	42.10	0 13:13	0	0	0:00:00
16	0.62	0.83	40.84	0 13:15	0	0	0:00:00
20	0.20	0.56	42.25	0 13:11	0	0	0:00:00
26	0.16	0.77	42.90	0 12:08	0	0	0:00:00
33	0.01	0.14	41.97	0 13:15	0	0	0:00:00
34	0.93	2.15	42.55	0 12:09	0	0	0:00:00
DMA-1	0.20	0.71	45.33	0 12:03	0	0	0:00:00
DMA-11	0.16	0.77	42.92	0 12:08	0	0	0:00:00
DMA-15	0.86	2.13	42.64	0 12:09	0	0	0:00:00
DMA-15A	0.90	2.12	42.55	0 12:10	0	0	0:00:00
DMA-17	0.12	0.41	43.20	0 12:02	0	0	0:00:00
DMA-2	0.23	1.04	45.03	0 12:04	0	0	0:00:00
DMA-20	0.14	0.47	42.39	0 12:02	0	0	0:00:00
DMA-23	0.76	1.76	42.25	0 13:11	0	0	0:00:00
DMA-24	0.92	1.95	42.25	0 13:11	0	0	0:00:00
DMA-25	0.17	0.68	43.48	0 12:02	0	0	0:00:00
DMA-3	0.29	1.10	44.83	0 12:04	0	0	0:00:00
DMA-4	0.36	1.31	44.41	0 12:05	0	0	0:00:00
DMA-6	0.24	0.95	43.25	0 12:07	0	0	0:00:00
DMA-7	0.38	1.64	43.18	0 12:07	0	0	0:00:00
DMA-8	0.49	1.79	43.15	0 12:08	0	0	0:00:00
Out-1Pipe - (16)	0.43	0.61	40.61	0 13:15	0	0	0:00:00
HS-75	1.08	2.14	42.24	0 13:13	0	0	0:00:00

\*\*\*\*\*  
Node Flow Summary  
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Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow cfs	Time of Peak Inflow Occurrence days hh:mm	Maximum Flooding Overflow cfs	Time of Peak Flooding Occurrence days hh:mm
4	JUNCTION	0.00	4.52	0 12:04	0.00	
5	JUNCTION	0.00	8.31	0 12:05	0.00	
6	JUNCTION	0.00	8.14	0 12:06	0.00	
7	JUNCTION	0.00	8.65	0 12:07	0.00	
8	JUNCTION	0.00	10.69	0 12:07	0.00	
9	JUNCTION	0.00	12.13	0 12:08	0.00	
10	JUNCTION	0.00	12.30	0 12:09	0.00	
11	JUNCTION	0.00	12.21	0 12:09	0.00	
12	JUNCTION	0.00	17.36	0 12:08	0.00	
15	JUNCTION	0.00	3.41	0 12:03	0.00	
16	JUNCTION	0.00	3.42	0 13:15	0.00	
20	JUNCTION	0.00	0.65	0 12:03	0.00	
26	JUNCTION	0.00	0.96	0 12:02	0.00	

33	JUNCTION	0.00	0.06	0	13:13	0.00
34	JUNCTION	0.00	12.46	0	12:07	0.00
DMA-1	JUNCTION	1.41	1.41	0	12:02	0.00
DMA-11	JUNCTION	0.97	0.97	0	12:02	0.00
DMA-15	JUNCTION	3.16	3.16	0	12:02	0.00
DMA-15A	JUNCTION	3.14	3.14	0	12:02	0.00
DMA-17	JUNCTION	0.54	0.54	0	12:02	0.00
DMA-2	JUNCTION	1.15	2.52	0	12:02	0.00
DMA-20	JUNCTION	0.64	0.64	0	12:02	0.00
DMA-23	JUNCTION	3.30	3.72	0	12:02	0.00
DMA-24	JUNCTION	3.20	6.51	0	12:02	0.00
DMA-25	JUNCTION	1.19	1.19	0	12:02	0.00
DMA-3	JUNCTION	1.21	3.45	0	12:03	0.00
DMA-4	JUNCTION	1.34	4.61	0	12:03	0.00
DMA-6	JUNCTION	2.06	2.06	0	12:02	0.00
DMA-7	JUNCTION	1.59	3.54	0	12:02	0.00
DMA-8	JUNCTION	2.07	4.98	0	12:02	0.00
Out-1Pipe - (16)	OUTFALL	0.00	3.42	0	13:15	0.00
HS-75	STORAGE	0.00	17.07	0	12:08	0.00

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Storage Node Summary  
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Storage Node ID	Maximum Time of Max.	Maximum Total Pondered Exfiltration Rate	Maximum Pondered Exfiltration Volume	Time of Max Pondered Volume	Average Pondered Volume	Average Pondered Volume	Maximum Storage Node Outflow
Maximum Time of Max.	Rate	Volume	Volume	days hh:mm	Volume	Volume	cfs
cfm	hh:mm:ss	1000 ft <sup>3</sup>	(%)		1000 ft <sup>3</sup>	(%)	
HS-75	0:00:00	39.134	64	0 13:13	16.918	28	3.42
0.00		0.000					

\*\*\*\*\*  
Outfall Loading Summary  
\*\*\*\*\*

Outfall Node ID	Flow Frequency (%)	Average Flow cfs	Peak Inflow cfs
Out-1Pipe - (16)	99.81	2.03	3.42
System	99.81	2.03	3.42

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link ID	Element Reported Type	Time of Peak Flow	Maximum Velocity	Length Factor	Peak Flow during	Design Flow	Ratio of Maximum
Ratio of	Total	Peak Flow	Velocity	Factor	during	Flow	Maximum

Maximum Flow Depth	Surcharged minutes	Time Condition	Occurrence days hh:mm	Attained ft/sec		Analysis cfs	Capacity cfs	/Design Flow
0.29	0	Outfall Calculated CONDUIT	0 13:15	2.94	1.00	3.42	18.34	0.19
0.16	0	Overflow Calculated CONDUIT	0 13:15	0.33	1.00	0.06	13.26	0.00
0.59	0	Pipe - (1) Calculated CONDUIT	0 12:02	1.94	1.00	1.38	2.89	0.48
0.57	0	Pipe - (10) Calculated CONDUIT	0 12:09	2.16	1.00	12.21	44.99	0.27
0.60	0	Pipe - (11) Calculated CONDUIT	0 12:10	2.27	1.00	12.12	44.99	0.27
0.61	0	Pipe - (12) Calculated CONDUIT	0 12:08	3.96	1.00	17.07	44.99	0.38
1.00	265	Pipe - (14) Calculated CONDUIT	0 12:03	2.43	1.00	3.41	4.70	0.72
0.36	0	Pipe - (17) Calculated CONDUIT	0 12:03	1.78	1.00	0.65	2.89	0.22
0.63	0	Pipe - (19) Calculated CONDUIT	0 12:06	1.28	1.00	0.57	2.89	0.20
0.71	0	Pipe - (2) Calculated CONDUIT	0 12:04	1.74	1.00	2.34	4.70	0.50
0.93	0	Pipe - (20) Calculated CONDUIT	0 12:03	1.23	1.00	3.38	10.12	0.33
0.99	0	Pipe - (21) Calculated CONDUIT	0 12:03	2.26	1.00	6.25	10.12	0.62
0.57	0	Pipe - (22) Calculated CONDUIT	0 12:02	2.56	1.00	1.18	1.59	0.74
0.36	0	Pipe - (23) Calculated CONDUIT	0 12:02	2.14	1.00	0.54	1.59	0.34
0.77	0	Pipe - (24) Calculated CONDUIT	0 12:02	2.15	1.00	0.96	1.59	0.60
0.89	0	Pipe - (25) Calculated CONDUIT	0 12:02	1.60	1.00	0.91	1.59	0.57
1.00	11	Pipe - (26) Calculated CONDUIT	0 12:02	1.09	1.00	3.10	10.12	0.31
1.00	11	Pipe - (27) SURCHARGED CONDUIT	0 12:02	1.09	1.00	3.08	10.12	0.30
0.70	0	Pipe - (28) Calculated CONDUIT	0 12:02	2.00	1.00	1.96	4.70	0.42
0.86	0	Pipe - (29) Calculated CONDUIT	0 12:03	1.20	1.00	2.94	10.12	0.29
0.63	0	Pipe - (3) Calculated CONDUIT	0 12:04	2.92	1.00	3.39	4.70	0.72
0.64	0	Pipe - (3) (1) Calculated CONDUIT	0 12:04	2.30	1.00	4.52	10.12	0.45
0.91	0	Pipe - (30) Calculated CONDUIT	0 12:03	1.68	1.00	4.42	10.12	0.44
0.09	0	Pipe - (31) Calculated CONDUIT	0 13:13	1.31	1.00	0.06	13.65	0.00
0.49	0	Pipe - (4) Calculated CONDUIT	0 12:07	2.74	1.00	4.20	10.12	0.41
0.73	0	Pipe - (5) Calculated CONDUIT	0 12:06	2.20	1.00	8.14	18.34	0.44
0.71	0	Pipe - (6) Calculated CONDUIT	0 12:07	2.24	1.00	8.01	18.34	0.44
0.56	0	Pipe - (7) Calculated CONDUIT	0 12:08	2.11	1.00	8.49	29.83	0.28
0.61	0	Pipe - (8) Calculated CONDUIT	0 12:08	1.68	1.00	10.33	44.99	0.23
0.61	0	Pipe - (8) (1) Calculated CONDUIT	0 12:08	2.02	1.00	12.13	44.99	0.27

0.61	0	Calculated							
Pipe - (9)		CONDUIT	0	12:09	2.03	1.00	11.97	44.99	0.27
0.59	0	Calculated							
StormFilter		CONDUIT	0	11:57	2.95	1.00	3.36	4.70	0.72
0.78	0	Calculated							

\*\*\*\*\*  
Highest Flow Instability Indexes  
\*\*\*\*\*  
All links are stable.

WARNING 110 : Initial water surface elevation defined for Storage Node HS-75 is below storage node invert elevation.

Assumed initial water surface elevation equal to invert elevation.

WARNING 005 : Minimum slope used for Conduit Outfall.  
WARNING 005 : Minimum slope used for Conduit Pipe - (1).  
WARNING 005 : Minimum slope used for Conduit Pipe - (10).  
WARNING 005 : Minimum slope used for Conduit Pipe - (11).  
WARNING 004 : Minimum elevation drop used for Conduit Pipe - (12).  
WARNING 005 : Minimum slope used for Conduit Pipe - (12).  
WARNING 005 : Minimum slope used for Conduit Pipe - (14).  
WARNING 005 : Minimum slope used for Conduit Pipe - (17).  
WARNING 005 : Minimum slope used for Conduit Pipe - (19).  
WARNING 005 : Minimum slope used for Conduit Pipe - (2).  
WARNING 005 : Minimum slope used for Conduit Pipe - (20).  
WARNING 005 : Minimum slope used for Conduit Pipe - (21).  
WARNING 005 : Minimum slope used for Conduit Pipe - (22).  
WARNING 005 : Minimum slope used for Conduit Pipe - (23).  
WARNING 005 : Minimum slope used for Conduit Pipe - (24).  
WARNING 005 : Minimum slope used for Conduit Pipe - (25).  
WARNING 005 : Minimum slope used for Conduit Pipe - (26).  
WARNING 005 : Minimum slope used for Conduit Pipe - (27).  
WARNING 005 : Minimum slope used for Conduit Pipe - (28).  
WARNING 005 : Minimum slope used for Conduit Pipe - (29).  
WARNING 005 : Minimum slope used for Conduit Pipe - (3).  
WARNING 005 : Minimum slope used for Conduit Pipe - (3) (1).  
WARNING 005 : Minimum slope used for Conduit Pipe - (30).  
WARNING 005 : Minimum slope used for Conduit Pipe - (4).  
WARNING 005 : Minimum slope used for Conduit Pipe - (5).  
WARNING 005 : Minimum slope used for Conduit Pipe - (6).  
WARNING 005 : Minimum slope used for Conduit Pipe - (7).  
WARNING 005 : Minimum slope used for Conduit Pipe - (8).  
WARNING 005 : Minimum slope used for Conduit Pipe - (8) (1).  
WARNING 005 : Minimum slope used for Conduit Pipe - (9).  
WARNING 005 : Minimum slope used for Conduit StormFilter.

Analysis began on: Thu Feb 11 16:56:41 2021  
Analysis ended on: Thu Feb 11 16:56:47 2021  
Total elapsed time: 00:00:06

\*\*\*\*\*  
 Project Description  
 \*\*\*\*\*

File Name ..... 19-061 SSA Model 10yr-24hr.SPF

\*\*\*\*\*  
 Analysis Options  
 \*\*\*\*\*

Flow Units ..... cfs  
 Link Routing Method ..... Hydrodynamic  
 Storage Node Exfiltration.. None  
 Starting Date ..... JAN-01-2000 00:00:00  
 Ending Date ..... JAN-03-2000 00:00:00  
 Report Time Step ..... 00:05:00

\*\*\*\*\*  
 Element Count  
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Number of rain gages ..... 0  
 Number of subbasins ..... 0  
 Number of nodes ..... 32  
 Number of links ..... 32

\*\*\*\*\*  
 Node Summary  
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Node ID	Element Type	Invert Elevation ft	Maximum Elev. ft	Ponded Area ft <sup>2</sup>	External Inflow
4	JUNCTION	43.04	48.64	0.00	
5	JUNCTION	41.23	50.05	0.00	
6	JUNCTION	41.12	49.15	0.00	
7	JUNCTION	41.10	48.81	0.00	
8	JUNCTION	40.48	46.23	0.00	
9	JUNCTION	40.32	48.69	0.00	
10	JUNCTION	40.27	47.77	0.00	
11	JUNCTION	40.22	48.33	0.00	
12	JUNCTION	40.10	49.01	0.00	
15	JUNCTION	40.03	47.70	0.00	
16	JUNCTION	40.01	48.29	0.00	
20	JUNCTION	41.69	47.86	0.00	
26	JUNCTION	42.13	46.28	0.00	
33	JUNCTION	41.83	50.11	0.00	
34	JUNCTION	40.40	46.14	0.00	
DMA-1	JUNCTION	44.62	48.63	0.00	Yes
DMA-11	JUNCTION	42.15	45.83	0.00	Yes
DMA-15	JUNCTION	40.51	44.93	0.00	Yes
DMA-15A	JUNCTION	40.43	44.93	0.00	Yes
DMA-17	JUNCTION	42.79	47.18	0.00	Yes
DMA-2	JUNCTION	43.99	48.86	0.00	Yes
DMA-20	JUNCTION	41.92	45.96	0.00	Yes
DMA-23	JUNCTION	40.49	45.01	0.00	Yes
DMA-24	JUNCTION	40.30	45.01	0.00	Yes
DMA-25	JUNCTION	42.80	46.02	0.00	Yes
DMA-3	JUNCTION	43.73	48.52	0.00	Yes
DMA-4	JUNCTION	43.10	47.97	0.00	Yes
DMA-6	JUNCTION	42.30	46.68	0.00	Yes
DMA-7	JUNCTION	41.54	46.68	0.00	Yes
DMA-8	JUNCTION	41.36	46.68	0.00	Yes

Out-1Pipe - (16)	OUTFALL	40.00	42.50	0.00
HS-75	STORAGE	40.10	43.60	0.00

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Link Summary  
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Link ID	From Node	To Node	Element Type	Length ft	Slope %	Manning's Roughness
Outfall	16	Out-1Pipe - (16)	CONDUIT	24.5	0.2000	0.0130
Overflow	33	16	CONDUIT	83.4	1.5941	0.0130
Pipe - (1)	DMA-1	DMA-2	CONDUIT	270.5	0.2000	0.0130
Pipe - (10)	10	11	CONDUIT	142.9	0.2000	0.0130
Pipe - (11)	11	12	CONDUIT	333.0	0.2000	0.0130
Pipe - (12)	12	HS-75	CONDUIT	10.0	0.2000	0.0130
Pipe - (14)	HS-75	15	CONDUIT	77.7	0.2000	0.0130
Pipe - (17)	DMA-20	20	CONDUIT	163.6	0.2000	0.0130
Pipe - (19)	20	DMA-23	CONDUIT	321.4	0.2000	0.0130
Pipe - (2)	DMA-2	DMA-3	CONDUIT	234.5	0.2000	0.0130
Pipe - (20)	DMA-23	DMA-24	CONDUIT	262.0	0.2000	0.0130
Pipe - (21)	DMA-24	12	CONDUIT	259.3	0.2000	0.0130
Pipe - (22)	DMA-25	12	CONDUIT	101.8	0.2000	0.0130
Pipe - (23)	DMA-17	10	CONDUIT	12.0	0.2000	0.0130
Pipe - (24)	DMA-11	26	CONDUIT	12.0	0.2000	0.0130
Pipe - (25)	26	7	CONDUIT	279.6	0.2000	0.0130
Pipe - (26)	DMA-15	8	CONDUIT	43.0	0.2000	0.0130
Pipe - (27)	DMA-15A	34	CONDUIT	43.0	0.2000	0.0130
Pipe - (28)	DMA-6	DMA-7	CONDUIT	234.5	0.2000	0.0130
Pipe - (29)	DMA-7	DMA-8	CONDUIT	234.5	0.2000	0.0130
Pipe - (3)	DMA-3	DMA-4	CONDUIT	118.6	0.2000	0.0130
Pipe - (3) (1)	DMA-4	4	CONDUIT	88.8	0.2000	0.0130
Pipe - (30)	DMA-8	5	CONDUIT	179.2	0.2000	0.0130
Pipe - (31)	HS-75	33	CONDUIT	16.0	1.6875	0.0130
Pipe - (4)	4	5	CONDUIT	411.0	0.2000	0.0130
Pipe - (5)	5	6	CONDUIT	196.0	0.2000	0.0130
Pipe - (6)	6	7	CONDUIT	38.0	0.2000	0.0130
Pipe - (7)	7	8	CONDUIT	274.5	0.2000	0.0130
Pipe - (8)	8	34	CONDUIT	236.0	0.2000	0.0130
Pipe - (8) (1)	34	9	CONDUIT	220.9	0.2000	0.0130
Pipe - (9)	9	10	CONDUIT	142.0	0.2000	0.0130
StormFilter	15	16	CONDUIT	17.0	0.2000	0.0130

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Cross Section Summary  
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Link Design ID	Shape	Depth/ Diameter	Width	No. of Barrels	Cross Sectional Area	Full Flow Hydraulic Radius
Flow Capacity		ft	ft		ft <sup>2</sup>	ft
-----						
Outfall	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34						
Overflow	CIRCULAR	1.50	1.50	1	1.77	0.38
13.26						
Pipe - (1)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89						
Pipe - (10)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99						
Pipe - (11)	CIRCULAR	3.50	3.50	1	9.62	0.88

44.99							
Pipe - (12)	CIRCULAR	3.50	3.50	1	9.62	0.88	
44.99							
Pipe - (14)	CIRCULAR	1.50	1.50	1	1.77	0.38	
4.70							
Pipe - (17)	CIRCULAR	1.25	1.25	1	1.23	0.31	
2.89							
Pipe - (19)	CIRCULAR	1.25	1.25	1	1.23	0.31	
2.89							
Pipe - (2)	CIRCULAR	1.50	1.50	1	1.77	0.38	
4.70							
Pipe - (20)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (21)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (22)	CIRCULAR	1.00	1.00	1	0.79	0.25	
1.59							
Pipe - (23)	CIRCULAR	1.00	1.00	1	0.79	0.25	
1.59							
Pipe - (24)	CIRCULAR	1.00	1.00	1	0.79	0.25	
1.59							
Pipe - (25)	CIRCULAR	1.00	1.00	1	0.79	0.25	
1.59							
Pipe - (26)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (27)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (28)	CIRCULAR	1.50	1.50	1	1.77	0.38	
4.70							
Pipe - (29)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (3)	CIRCULAR	1.50	1.50	1	1.77	0.38	
4.70							
Pipe - (3) (1)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (30)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (31)	CIRCULAR	1.50	1.50	1	1.77	0.38	
13.65							
Pipe - (4)	CIRCULAR	2.00	2.00	1	3.14	0.50	
10.12							
Pipe - (5)	CIRCULAR	2.50	2.50	1	4.91	0.63	
18.34							
Pipe - (6)	CIRCULAR	2.50	2.50	1	4.91	0.63	
18.34							
Pipe - (7)	CIRCULAR	3.00	3.00	1	7.07	0.75	
29.83							
Pipe - (8)	CIRCULAR	3.50	3.50	1	9.62	0.88	
44.99							
Pipe - (8) (1)	CIRCULAR	3.50	3.50	1	9.62	0.88	
44.99							
Pipe - (9)	CIRCULAR	3.50	3.50	1	9.62	0.88	
44.99							
StormFilter	CIRCULAR	1.50	1.50	1	1.77	0.38	
4.70							

*****	Volume	Volume
Flow Routing Continuity	acre-ft	Mgallons
*****	-----	-----
External Inflow .....	5.773	1.881
External Outflow .....	5.760	1.877
Initial Stored Volume ....	0.000	0.000
Final Stored Volume .....	0.012	0.004
Continuity Error (%) .....	-0.000	



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Node Depth Summary  
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Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days hh:mm	Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
4	0.47	4.44	47.48	0 12:03	0	0	0:00:00
5	0.97	5.51	46.74	0 12:04	0	0	0:00:00
6	1.02	4.24	45.36	0 12:04	0	0	0:00:00
7	1.02	4.15	45.25	0 12:04	0	0	0:00:00
8	1.40	3.79	44.27	0 12:05	0	0	0:00:00
9	1.50	3.47	43.79	0 12:06	0	0	0:00:00
10	1.53	3.33	43.60	0 12:06	0	0	0:00:00
11	1.56	3.25	43.47	0 12:35	0	0	0:00:00
12	1.64	3.35	43.45	0 12:36	0	0	0:00:00
15	1.55	3.27	43.30	0 12:36	0	0	0:00:00
16	0.79	1.38	41.39	0 12:37	0	0	0:00:00
20	0.54	6.17	47.86	0 12:00	0.00	0	0:00:00
26	0.40	3.62	45.75	0 12:00	0	0	0:00:00
33	0.25	1.34	43.17	0 12:36	0	0	0:00:00
34	1.45	3.71	44.11	0 12:04	0	0	0:00:00
DMA-1	0.26	4.01	48.63	0 12:01	0.00	0	0:00:00
DMA-11	0.40	3.68	45.83	0 12:00	0.00	0	0:00:00
DMA-15	1.37	3.81	44.32	0 12:05	0	0	0:00:00
DMA-15A	1.43	3.74	44.17	0 12:04	0	0	0:00:00
DMA-17	0.19	0.83	43.62	0 12:06	0	0	0:00:00
DMA-2	0.32	4.87	48.86	0 12:01	0.00	0	0:00:00
DMA-20	0.43	4.04	45.96	0 12:00	0.00	0	0:00:00
DMA-23	1.30	4.52	45.01	0 11:59	0.00	0	0:00:00
DMA-24	1.47	4.71	45.01	0 11:59	0.00	0	0:00:00
DMA-25	0.24	1.17	43.97	0 12:01	0	0	0:00:00
DMA-3	0.38	4.79	48.52	0 12:03	0.00	0	0:00:00
DMA-4	0.46	4.67	47.77	0 12:03	0	0	0:00:00
DMA-6	0.43	4.38	46.68	0 12:00	0.00	0	0:00:00
DMA-7	0.75	5.14	46.68	0 12:00	0.00	0	0:00:00
DMA-8	0.88	5.32	46.68	0 12:03	0.00	0	0:00:00
Out-1Pipe - (16)	0.56	0.98	40.98	0 12:37	0	0	0:00:00
HS-75	1.62	3.34	43.44	0 12:36	0	0	0:00:00

\*\*\*\*\*  
Node Flow Summary  
\*\*\*\*\*

Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow cfs	Time of Peak Inflow Occurrence days hh:mm	Maximum Flooding Overflow cfs	Time of Peak Flooding Occurrence days hh:mm
4	JUNCTION	0.00	9.79	0 12:02	0.00	
5	JUNCTION	0.00	20.01	0 12:03	0.00	
6	JUNCTION	0.00	19.45	0 12:03	0.00	
7	JUNCTION	0.00	21.15	0 12:03	0.00	
8	JUNCTION	0.00	25.87	0 12:04	0.00	
9	JUNCTION	0.00	29.41	0 12:05	0.00	
10	JUNCTION	0.00	28.78	0 12:05	0.00	
11	JUNCTION	0.00	28.13	0 12:05	0.00	
12	JUNCTION	0.00	39.54	0 12:05	0.00	
15	JUNCTION	0.00	3.37	0 11:13	0.00	
16	JUNCTION	0.00	8.63	0 12:36	0.00	
20	JUNCTION	0.00	2.29	0 11:59	0.93	0 12:00
26	JUNCTION	0.00	1.83	0 12:02	0.00	

33	JUNCTION	0.00	5.27	0	12:36	0.00		
34	JUNCTION	0.00	29.53	0	12:04	0.00		
DMA-1	JUNCTION	2.67	2.67	0	12:02	0.85	0	12:01
DMA-11	JUNCTION	1.83	1.83	0	12:02	0.18	0	12:00
DMA-15	JUNCTION	5.98	5.98	0	12:02	0.00		
DMA-15A	JUNCTION	5.94	5.94	0	12:02	0.00		
DMA-17	JUNCTION	1.03	1.03	0	12:02	0.00		
DMA-2	JUNCTION	2.18	4.85	0	12:02	0.44	0	12:01
DMA-20	JUNCTION	1.21	2.37	0	12:00	2.06	0	12:00
DMA-23	JUNCTION	6.25	7.46	0	12:02	1.24	0	11:59
DMA-24	JUNCTION	6.06	13.53	0	12:02	0.69	0	11:59
DMA-25	JUNCTION	2.26	2.26	0	12:02	0.00		
DMA-3	JUNCTION	2.28	7.13	0	12:02	0.08	0	12:03
DMA-4	JUNCTION	2.53	9.66	0	12:02	0.00		
DMA-6	JUNCTION	3.91	3.91	0	12:02	1.51	0	12:00
DMA-7	JUNCTION	3.00	6.91	0	12:02	1.48	0	12:00
DMA-8	JUNCTION	3.93	10.83	0	12:02	0.08	0	12:04
Out-1Pipe - (16)	OUTFALL	0.00	8.63	0	12:37	0.00		
HS-75	STORAGE	0.00	39.07	0	12:06	0.00		

\*\*\*\*\*  
Storage Node Summary  
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Storage Node ID	Maximum Time of Max.	Maximum Total Pondered Exfiltration Rate	Maximum Pondered Exfiltration Volume	Time of Max Pondered Volume	Average Pondered Volume	Average Pondered Volume	Maximum Storage Node Outflow
Maximum Time of Max.	Rate	Volume	Volume	days hh:mm	Volume	Volume	cfs
cfm	hh:mm:ss	1000 ft <sup>3</sup>	(%)		1000 ft <sup>3</sup>	(%)	
HS-75	0:00:00	59.251	97	0 12:36	27.623	45	8.63
0.00		0.000					

\*\*\*\*\*  
Outfall Loading Summary  
\*\*\*\*\*

Outfall Node ID	Flow Frequency (%)	Average Flow cfs	Peak Inflow cfs
Out-1Pipe - (16)	99.88	3.36	8.63
System	99.88	3.36	8.63

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link ID	Element Reported Type	Time of Peak Flow	Maximum Velocity	Length Factor	Peak Flow during	Design Flow	Ratio of Maximum
Ratio of	Total	Peak Flow	Velocity	Factor	during	Flow	Maximum

Maximum Flow Depth	Surcharged minutes	Time Condition	Occurrence days hh:mm	Attained ft/sec		Analysis cfs	Capacity cfs	/Design Flow
0.47	0	Outfall CONDUIT Calculated	0 12:37	3.80	1.00	8.63	18.34	0.47
0.74	0	Overflow CONDUIT Calculated	0 12:36	3.78	1.00	5.27	13.26	0.40
1.00	8	Pipe - (1) CONDUIT SURCHARGED	0 12:02	2.18	1.00	2.67	2.89	0.93
0.92	0	Pipe - (10) CONDUIT Calculated	0 12:05	3.07	1.00	28.13	44.99	0.63
0.94	0	Pipe - (11) CONDUIT Calculated	0 12:06	3.10	1.00	27.20	44.99	0.60
0.96	0	Pipe - (12) CONDUIT Calculated	0 12:06	5.31	1.00	39.07	44.99	0.87
1.00	482	Pipe - (14) CONDUIT SURCHARGED	0 11:13	2.42	1.00	3.37	4.70	0.72
1.00	81	Pipe - (17) CONDUIT SURCHARGED	0 12:00	1.60	1.00	1.23	2.89	0.42
1.00	112	Pipe - (19) CONDUIT SURCHARGED	0 12:00	1.38	1.00	1.59	2.89	0.55
1.00	9	Pipe - (2) CONDUIT SURCHARGED	0 12:02	2.75	1.00	4.85	4.70	1.03
1.00	216	Pipe - (20) CONDUIT SURCHARGED	0 12:02	2.38	1.00	7.46	10.12	0.74
1.00	284	Pipe - (21) CONDUIT SURCHARGED	0 12:02	4.31	1.00	13.53	10.12	1.34
0.82	0	Pipe - (22) CONDUIT > CAPACITY	0 12:02	3.28	1.00	2.27	1.59	1.42
0.83	0	Pipe - (23) CONDUIT Calculated	0 12:02	2.51	1.00	1.02	1.59	0.64
1.00	87	Pipe - (24) CONDUIT SURCHARGED	0 12:02	2.33	1.00	1.83	1.59	1.15
1.00	90	Pipe - (25) CONDUIT SURCHARGED	0 12:00	2.44	1.00	1.92	1.59	1.20
1.00	214	Pipe - (26) CONDUIT SURCHARGED	0 12:02	1.90	1.00	5.98	10.12	0.59
1.00	238	Pipe - (27) CONDUIT SURCHARGED	0 12:02	1.89	1.00	5.94	10.12	0.59
1.00	17	Pipe - (28) CONDUIT SURCHARGED	0 12:02	2.21	1.00	3.91	4.70	0.83
1.00	40	Pipe - (29) CONDUIT SURCHARGED	0 12:02	2.20	1.00	6.91	10.12	0.68
1.00	7	Pipe - (3) CONDUIT SURCHARGED	0 12:02	4.12	1.00	7.13	4.70	1.52
1.00	6	Pipe - (3) (1) CONDUIT SURCHARGED	0 12:02	3.28	1.00	9.79	10.12	0.97
1.00	65	Pipe - (30) CONDUIT SURCHARGED	0 12:02	3.45	1.00	10.83	10.12	1.07
0.89	0	Pipe - (31) CONDUIT Calculated	0 12:36	3.18	1.00	5.27	13.65	0.39
1.00	5	Pipe - (4) CONDUIT SURCHARGED	0 12:03	3.09	1.00	9.55	10.12	0.94
1.00	14	Pipe - (5) CONDUIT SURCHARGED	0 12:03	3.96	1.00	19.45	18.34	1.06
1.00	12	Pipe - (6) CONDUIT SURCHARGED	0 12:03	3.97	1.00	19.47	18.34	1.06
1.00	4	Pipe - (7) CONDUIT SURCHARGED	0 12:04	2.91	1.00	20.45	29.83	0.69
1.00	3	Pipe - (8) CONDUIT SURCHARGED	0 12:04	2.55	1.00	24.50	44.99	0.54
1.00	(1)	Pipe - (8) (1) CONDUIT	0 12:05	3.07	1.00	29.41	44.99	0.65

1.00	0	Calculated							
Pipe - (9)		CONDUIT	0	12:05	2.96	1.00	28.04	44.99	0.62
0.97	0	Calculated							
StormFilter		CONDUIT	0	11:12	2.95	1.00	3.36	4.70	0.72
0.96	0	Calculated							

```

*****
Highest Flow Instability Indexes
*****
Link Pipe - (22) (6)
Link Outfall (5)
Link StormFilter (2)
Link Overflow (2)

```

WARNING 110 : Initial water surface elevation defined for Storage Node HS-75 is below storage node invert elevation.

Assumed initial water surface elevation equal to invert elevation.

```

WARNING 005 : Minimum slope used for Conduit Outfall.
WARNING 005 : Minimum slope used for Conduit Pipe - (1).
WARNING 005 : Minimum slope used for Conduit Pipe - (10).
WARNING 005 : Minimum slope used for Conduit Pipe - (11).
WARNING 004 : Minimum elevation drop used for Conduit Pipe - (12).
WARNING 005 : Minimum slope used for Conduit Pipe - (12).
WARNING 005 : Minimum slope used for Conduit Pipe - (14).
WARNING 005 : Minimum slope used for Conduit Pipe - (17).
WARNING 005 : Minimum slope used for Conduit Pipe - (19).
WARNING 005 : Minimum slope used for Conduit Pipe - (2).
WARNING 005 : Minimum slope used for Conduit Pipe - (20).
WARNING 005 : Minimum slope used for Conduit Pipe - (21).
WARNING 005 : Minimum slope used for Conduit Pipe - (22).
WARNING 005 : Minimum slope used for Conduit Pipe - (23).
WARNING 005 : Minimum slope used for Conduit Pipe - (24).
WARNING 005 : Minimum slope used for Conduit Pipe - (25).
WARNING 005 : Minimum slope used for Conduit Pipe - (26).
WARNING 005 : Minimum slope used for Conduit Pipe - (27).
WARNING 005 : Minimum slope used for Conduit Pipe - (28).
WARNING 005 : Minimum slope used for Conduit Pipe - (29).
WARNING 005 : Minimum slope used for Conduit Pipe - (3).
WARNING 005 : Minimum slope used for Conduit Pipe - (3) (1).
WARNING 005 : Minimum slope used for Conduit Pipe - (30).
WARNING 005 : Minimum slope used for Conduit Pipe - (4).
WARNING 005 : Minimum slope used for Conduit Pipe - (5).
WARNING 005 : Minimum slope used for Conduit Pipe - (6).
WARNING 005 : Minimum slope used for Conduit Pipe - (7).
WARNING 005 : Minimum slope used for Conduit Pipe - (8).
WARNING 005 : Minimum slope used for Conduit Pipe - (8) (1).
WARNING 005 : Minimum slope used for Conduit Pipe - (9).
WARNING 005 : Minimum slope used for Conduit StormFilter.

```

```

Analysis began on: Thu Feb 11 16:55:43 2021
Analysis ended on: Thu Feb 11 16:55:49 2021
Total elapsed time: 00:00:06

```

\*\*\*\*\*  
Project Description

\*\*\*\*\*

File Name ..... 19-061 SSA Model 100yr-24hr.SPF

\*\*\*\*\*

Analysis Options

\*\*\*\*\*

Flow Units ..... cfs  
 Link Routing Method ..... Hydrodynamic  
 Storage Node Exfiltration.. None  
 Starting Date ..... JAN-01-2000 00:00:00  
 Ending Date ..... JAN-03-2000 00:00:00  
 Report Time Step ..... 00:05:00

\*\*\*\*\*

Element Count

\*\*\*\*\*

Number of rain gages ..... 0  
 Number of subbasins ..... 0  
 Number of nodes ..... 32  
 Number of links ..... 32

\*\*\*\*\*

Node Summary

\*\*\*\*\*

Node ID	Element Type	Invert Elevation ft	Maximum Elev. ft	Ponded Area ft <sup>2</sup>	External Inflow
4	JUNCTION	43.04	48.64	0.00	
5	JUNCTION	41.23	50.05	0.00	
6	JUNCTION	41.12	49.15	0.00	
7	JUNCTION	41.10	48.81	0.00	
8	JUNCTION	40.48	46.23	0.00	
9	JUNCTION	40.32	48.69	0.00	
10	JUNCTION	40.27	47.77	0.00	
11	JUNCTION	40.22	48.33	0.00	
12	JUNCTION	40.10	49.01	0.00	
15	JUNCTION	40.03	47.70	0.00	
16	JUNCTION	40.01	48.29	0.00	
20	JUNCTION	41.69	47.86	0.00	
26	JUNCTION	42.13	46.28	0.00	
33	JUNCTION	41.83	50.11	0.00	
34	JUNCTION	40.40	46.14	0.00	
DMA-1	JUNCTION	44.62	48.63	0.00	Yes
DMA-11	JUNCTION	42.15	45.83	0.00	Yes
DMA-15	JUNCTION	40.51	44.93	0.00	Yes
DMA-15A	JUNCTION	40.43	44.93	0.00	Yes
DMA-17	JUNCTION	42.79	47.18	0.00	Yes
DMA-2	JUNCTION	43.99	48.86	0.00	Yes
DMA-20	JUNCTION	41.92	45.96	0.00	Yes
DMA-23	JUNCTION	40.49	45.01	0.00	Yes
DMA-24	JUNCTION	40.30	45.01	0.00	Yes
DMA-25	JUNCTION	42.80	46.02	0.00	Yes
DMA-3	JUNCTION	43.73	48.52	0.00	Yes
DMA-4	JUNCTION	43.10	47.97	0.00	Yes
DMA-6	JUNCTION	42.30	46.68	0.00	Yes
DMA-7	JUNCTION	41.54	46.68	0.00	Yes
DMA-8	JUNCTION	41.36	46.68	0.00	Yes

Out-1Pipe - (16)	OUTFALL	40.00	42.50	0.00
HS-75	STORAGE	40.10	43.60	0.00

\*\*\*\*\*  
Link Summary  
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Link ID	From Node	To Node	Element Type	Length ft	Slope %	Manning's Roughness
Outfall	16	Out-1Pipe - (16)	CONDUIT	24.5	0.2000	0.0130
Overflow	33	16	CONDUIT	83.4	1.5941	0.0130
Pipe - (1)	DMA-1	DMA-2	CONDUIT	270.5	0.2000	0.0130
Pipe - (10)	10	11	CONDUIT	142.9	0.2000	0.0130
Pipe - (11)	11	12	CONDUIT	333.0	0.2000	0.0130
Pipe - (12)	12	HS-75	CONDUIT	10.0	0.2000	0.0130
Pipe - (14)	HS-75	15	CONDUIT	77.7	0.2000	0.0130
Pipe - (17)	DMA-20	20	CONDUIT	163.6	0.2000	0.0130
Pipe - (19)	20	DMA-23	CONDUIT	321.4	0.2000	0.0130
Pipe - (2)	DMA-2	DMA-3	CONDUIT	234.5	0.2000	0.0130
Pipe - (20)	DMA-23	DMA-24	CONDUIT	262.0	0.2000	0.0130
Pipe - (21)	DMA-24	12	CONDUIT	259.3	0.2000	0.0130
Pipe - (22)	DMA-25	12	CONDUIT	101.8	0.2000	0.0130
Pipe - (23)	DMA-17	10	CONDUIT	12.0	0.2000	0.0130
Pipe - (24)	DMA-11	26	CONDUIT	12.0	0.2000	0.0130
Pipe - (25)	26	7	CONDUIT	279.6	0.2000	0.0130
Pipe - (26)	DMA-15	8	CONDUIT	43.0	0.2000	0.0130
Pipe - (27)	DMA-15A	34	CONDUIT	43.0	0.2000	0.0130
Pipe - (28)	DMA-6	DMA-7	CONDUIT	234.5	0.2000	0.0130
Pipe - (29)	DMA-7	DMA-8	CONDUIT	234.5	0.2000	0.0130
Pipe - (3)	DMA-3	DMA-4	CONDUIT	118.6	0.2000	0.0130
Pipe - (3) (1)	DMA-4	4	CONDUIT	88.8	0.2000	0.0130
Pipe - (30)	DMA-8	5	CONDUIT	179.2	0.2000	0.0130
Pipe - (31)	HS-75	33	CONDUIT	16.0	1.6875	0.0130
Pipe - (4)	4	5	CONDUIT	411.0	0.2000	0.0130
Pipe - (5)	5	6	CONDUIT	196.0	0.2000	0.0130
Pipe - (6)	6	7	CONDUIT	38.0	0.2000	0.0130
Pipe - (7)	7	8	CONDUIT	274.5	0.2000	0.0130
Pipe - (8)	8	34	CONDUIT	236.0	0.2000	0.0130
Pipe - (8) (1)	34	9	CONDUIT	220.9	0.2000	0.0130
Pipe - (9)	9	10	CONDUIT	142.0	0.2000	0.0130
StormFilter	15	16	CONDUIT	17.0	0.2000	0.0130

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Cross Section Summary  
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Link Design ID	Shape	Depth/ Diameter	Width	No. of Barrels	Cross Sectional Area	Full Flow Hydraulic Radius
Flow Capacity		ft	ft		ft <sup>2</sup>	ft
-----						
Outfall	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34						
Overflow	CIRCULAR	1.50	1.50	1	1.77	0.38
13.26						
Pipe - (1)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89						
Pipe - (10)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99						
Pipe - (11)	CIRCULAR	3.50	3.50	1	9.62	0.88

44.99	Pipe - (12)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	Pipe - (14)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (17)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89	Pipe - (19)	CIRCULAR	1.25	1.25	1	1.23	0.31
2.89	Pipe - (2)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (20)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (21)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (22)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (23)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (24)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (25)	CIRCULAR	1.00	1.00	1	0.79	0.25
1.59	Pipe - (26)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (27)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (28)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (29)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (3)	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70	Pipe - (3) (1)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (30)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (31)	CIRCULAR	1.50	1.50	1	1.77	0.38
13.65	Pipe - (4)	CIRCULAR	2.00	2.00	1	3.14	0.50
10.12	Pipe - (5)	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34	Pipe - (6)	CIRCULAR	2.50	2.50	1	4.91	0.63
18.34	Pipe - (7)	CIRCULAR	3.00	3.00	1	7.07	0.75
29.83	Pipe - (8)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	Pipe - (8) (1)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	Pipe - (9)	CIRCULAR	3.50	3.50	1	9.62	0.88
44.99	StormFilter	CIRCULAR	1.50	1.50	1	1.77	0.38
4.70							

*****	Volume	Volume
Flow Routing Continuity	acre-ft	Mgallons
*****	-----	-----
External Inflow .....	8.395	2.736
External Outflow .....	7.274	2.370
Initial Stored Volume ....	0.000	0.000
Final Stored Volume .....	0.013	0.004
Continuity Error (%) .....	-0.000	

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Node Depth Summary  
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Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days hh:mm		Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
4	0.58	5.60	48.64	0	11:59	0.00	0	0:00:00
5	1.17	8.82	50.05	0	11:59	0.00	0	0:00:00
6	1.22	8.03	49.15	0	11:59	0.00	0	0:00:00
7	1.21	7.47	48.57	0	11:59	0	0	0:00:00
8	1.64	5.75	46.23	0	11:59	0.00	0	0:00:00
9	1.75	8.37	48.69	0	11:59	0.00	0	0:00:00
10	1.77	7.50	47.77	0	12:00	0.00	0	0:00:00
11	1.80	8.11	48.33	0	12:00	0.00	0	0:00:00
12	1.89	3.81	43.91	0	12:05	0	0	0:00:00
15	1.79	3.44	43.47	0	12:04	0	0	0:00:00
16	0.87	1.48	41.49	0	12:10	0	0	0:00:00
20	0.70	5.34	47.03	0	11:55	0	0	0:00:00
26	0.54	3.77	45.90	0	11:59	0	0	0:00:00
33	0.37	1.51	43.34	0	12:05	0	0	0:00:00
34	1.70	5.74	46.14	0	11:59	0.00	0	0:00:00
DMA-1	0.33	4.01	48.63	0	11:58	0.55	11	0:00:00
DMA-11	0.54	3.68	45.83	0	11:59	0.20	11	0:00:00
DMA-15	1.61	4.42	44.93	0	11:59	1.66	13	0:00:00
DMA-15A	1.67	4.50	44.93	0	11:59	0.22	8	0:00:00
DMA-17	0.26	4.39	47.18	0	12:00	0.00	0	0:00:00
DMA-2	0.41	4.87	48.86	0	11:58	0.00	1	0:00:00
DMA-20	0.58	4.04	45.96	0	11:55	0.00	0	0:00:00
DMA-23	1.56	4.52	45.01	0	11:58	0.99	12	0:00:00
DMA-24	1.73	4.64	44.94	0	12:03	0	0	0:00:00
DMA-25	0.31	3.22	46.02	0	11:58	0.00	0	0:00:00
DMA-3	0.47	4.79	48.52	0	11:58	0.01	3	0:00:00
DMA-4	0.57	4.87	47.97	0	11:59	0.01	0	0:00:00
DMA-6	0.57	4.38	46.68	0	11:56	0.77	12	0:00:00
DMA-7	0.95	5.14	46.68	0	11:59	0.31	8	0:00:00
DMA-8	1.08	5.32	46.68	0	11:59	0.06	3	0:00:00
Out-1Pipe - (16)	0.62	1.04	41.04	0	12:10	0	0	0:00:00
HS-75	1.86	3.50	43.60	0	12:04	8.54	43	0:00:00

\*\*\*\*\*  
Node Flow Summary  
\*\*\*\*\*

Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow cfs	Time of Peak Inflow Occurrence days hh:mm		Maximum Flooding Overflow cfs	Time of Peak Flooding Occurrence days hh:mm	
4	JUNCTION	0.00	12.25	0	11:59	5.34	0	11:59
5	JUNCTION	0.00	22.01	0	11:59	6.16	0	11:59
6	JUNCTION	0.00	19.22	0	12:02	2.93	0	11:59
7	JUNCTION	0.00	20.56	0	12:02	0.00		
8	JUNCTION	0.00	28.23	0	11:59	7.95	0	11:59
9	JUNCTION	0.00	32.39	0	11:59	6.91	0	11:59
10	JUNCTION	0.00	32.99	0	11:59	3.26	0	12:00
11	JUNCTION	0.00	33.58	0	12:00	6.42	0	12:00
12	JUNCTION	0.00	50.14	0	12:00	0.00		
15	JUNCTION	0.00	3.37	0	09:34	0.00		
16	JUNCTION	0.00	9.74	0	12:05	0.00		
20	JUNCTION	0.00	2.10	0	12:02	0.00		
26	JUNCTION	0.00	2.46	0	11:59	0.00		



33	JUNCTION	0.00	6.40	0	12:05	0.00		
34	JUNCTION	0.00	33.49	0	11:59	7.87	0	11:59
DMA-1	JUNCTION	4.62	5.57	0	12:02	5.57	0	12:02
DMA-11	JUNCTION	3.16	3.16	0	12:02	1.82	0	12:02
DMA-15	JUNCTION	10.34	11.12	0	12:03	11.11	0	12:03
DMA-15A	JUNCTION	10.27	10.27	0	12:02	3.67	0	12:00
DMA-17	JUNCTION	1.78	2.76	0	11:59	1.88	0	12:00
DMA-2	JUNCTION	3.77	6.29	0	11:59	1.18	0	11:58
DMA-20	JUNCTION	2.10	2.10	0	12:02	0.26	0	11:55
DMA-23	JUNCTION	10.81	12.90	0	12:02	8.99	0	12:03
DMA-24	JUNCTION	10.49	15.89	0	11:59	0.00		
DMA-25	JUNCTION	3.91	3.91	0	12:02	0.25	0	11:58
DMA-3	JUNCTION	3.95	9.36	0	11:59	1.39	0	11:59
DMA-4	JUNCTION	4.12	12.26	0	11:59	3.57	0	11:59
DMA-6	JUNCTION	6.75	6.75	0	12:02	5.98	0	12:03
DMA-7	JUNCTION	5.19	8.86	0	11:59	4.17	0	12:02
DMA-8	JUNCTION	6.79	14.14	0	11:59	4.00	0	11:59
Out-1Pipe - (16)	OUTFALL	0.00	9.73	0	12:10	0.00		
HS-75	STORAGE	0.00	48.88	0	12:01	32.14	0	12:05

\*\*\*\*\*  
Storage Node Summary  
\*\*\*\*\*

Storage Node ID	Maximum Time of Max.	Maximum Total Pondered Exfiltration Rate	Maximum Pondered Exfiltration Volume	Time of Max Pondered Volume	Average Pondered Volume	Average Pondered Volume	Maximum Storage Node Outflow
cfm	hh:mm:ss	1000 ft <sup>3</sup>	(%)	days hh:mm	1000 ft <sup>3</sup>	(%)	cfs
HS-75	0:00:00	60.999	100	0 12:04	32.229	53	9.76
0.00		0.000					

\*\*\*\*\*  
Outfall Loading Summary  
\*\*\*\*\*

Outfall Node ID	Flow Frequency (%)	Average Flow cfs	Peak Inflow cfs
Out-1Pipe - (16)	99.90	4.07	9.73
System	99.90	4.07	9.73

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link ID	Ratio of Total	Element Reported Type	Time of Peak Flow	Maximum Velocity	Length Factor	Peak Flow during	Design Flow	Ratio of Maximum
---------	----------------	-----------------------	-------------------	------------------	---------------	------------------	-------------	------------------

Maximum Flow Depth	Time Surcharged minutes	Condition	Occurrence days hh:mm	Attained ft/sec		Analysis cfs	Capacity cfs	/Design Flow
0.50	0	Outfall CONDUIT Calculated	0 12:10	3.93	1.00	9.73	18.34	0.53
0.83	0	Overflow CONDUIT Calculated	0 12:05	4.08	1.00	6.38	13.26	0.48
1.00	18	Pipe - (1) CONDUIT SURCHARGED	0 11:59	2.79	1.00	3.42	2.89	1.18
1.00	29	Pipe - (10) CONDUIT SURCHARGED	0 12:00	3.52	1.00	33.58	44.99	0.75
1.00	27	Pipe - (11) CONDUIT SURCHARGED	0 12:00	3.28	1.00	31.40	44.99	0.70
1.00	43	Pipe - (12) CONDUIT SURCHARGED	0 12:01	5.45	1.00	48.88	44.99	1.09
1.00	657	Pipe - (14) CONDUIT SURCHARGED	0 09:34	2.42	1.00	3.37	4.70	0.72
1.00	125	Pipe - (17) CONDUIT SURCHARGED	0 12:02	1.71	1.00	2.10	2.89	0.73
1.00	192	Pipe - (19) CONDUIT SURCHARGED	0 12:02	1.71	1.00	2.10	2.89	0.73
1.00	20	Pipe - (2) CONDUIT SURCHARGED	0 11:59	3.56	1.00	6.29	4.70	1.34
1.00	20	Pipe - (20) CONDUIT SURCHARGED	0 11:58	2.65	1.00	8.33	10.12	0.82
1.00	315	Pipe - (21) CONDUIT SURCHARGED	0 11:59	5.06	1.00	15.90	10.12	1.57
1.00	415	Pipe - (22) CONDUIT SURCHARGED	0 12:02	5.01	1.00	3.91	1.59	2.45
1.00	18	Pipe - (23) CONDUIT SURCHARGED	0 12:02	2.67	1.00	1.78	1.59	1.11
1.00	28	Pipe - (24) CONDUIT SURCHARGED	0 11:59	3.14	1.00	2.46	1.59	1.55
1.00	134	Pipe - (25) CONDUIT SURCHARGED	0 11:59	3.14	1.00	2.46	1.59	1.55
1.00	137	Pipe - (26) CONDUIT SURCHARGED	0 11:59	2.62	1.00	8.22	10.12	0.81
1.00	315	Pipe - (27) CONDUIT SURCHARGED	0 12:00	2.86	1.00	8.98	10.12	0.89
1.00	376	Pipe - (28) CONDUIT SURCHARGED	0 11:59	2.80	1.00	4.95	4.70	1.05
1.00	47	Pipe - (29) CONDUIT SURCHARGED	0 11:59	2.82	1.00	8.86	10.12	0.88
1.00	84	Pipe - (3) CONDUIT SURCHARGED	0 11:59	5.30	1.00	9.36	4.70	1.99
1.00	19	Pipe - (3) (1) CONDUIT SURCHARGED	0 11:59	3.96	1.00	12.25	10.12	1.21
1.00	19	Pipe - (30) CONDUIT SURCHARGED	0 11:59	4.50	1.00	14.13	10.12	1.40
1.00	104	Pipe - (31) CONDUIT SURCHARGED	0 12:05	3.62	1.00	6.40	13.65	0.47
1.00	42	Pipe - (4) CONDUIT SURCHARGED	0 12:02	3.43	1.00	10.77	10.12	1.06
1.00	19	Pipe - (5) CONDUIT SURCHARGED	0 12:02	3.92	1.00	19.22	18.34	1.05
1.00	61	Pipe - (6) CONDUIT SURCHARGED	0 12:02	3.92	1.00	19.22	18.34	1.05
1.00	71	Pipe - (7) CONDUIT SURCHARGED	0 12:02	2.91	1.00	20.57	29.83	0.69
1.00	25	Pipe - (8) CONDUIT SURCHARGED	0 11:59	2.62	1.00	25.23	44.99	0.56
1.00	26	Pipe - (8) (1) CONDUIT SURCHARGED	0 11:59	3.37	1.00	32.39	44.99	0.72

1.00	27	SURCHARGED							
Pipe - (9)		CONDUIT	0	11:59	3.32	1.00	31.82	44.99	0.71
1.00	28	SURCHARGED							
StormFilter		CONDUIT	0	09:33	2.95	1.00	3.36	4.70	0.72
0.99	0	Calculated							

```

*****
Highest Flow Instability Indexes
*****
Link Pipe - (22) (12)
Link Outfall (7)
Link StormFilter (4)
Link Pipe - (25) (1)
Link Overflow (1)

```

WARNING 110 : Initial water surface elevation defined for Storage Node HS-75 is below storage node invert elevation.

```

    Assumed initial water surface elevation equal to invert elevation.
WARNING 005 : Minimum slope used for Conduit Outfall.
WARNING 005 : Minimum slope used for Conduit Pipe - (1).
WARNING 005 : Minimum slope used for Conduit Pipe - (10).
WARNING 005 : Minimum slope used for Conduit Pipe - (11).
WARNING 004 : Minimum elevation drop used for Conduit Pipe - (12).
WARNING 005 : Minimum slope used for Conduit Pipe - (12).
WARNING 005 : Minimum slope used for Conduit Pipe - (14).
WARNING 005 : Minimum slope used for Conduit Pipe - (17).
WARNING 005 : Minimum slope used for Conduit Pipe - (19).
WARNING 005 : Minimum slope used for Conduit Pipe - (2).
WARNING 005 : Minimum slope used for Conduit Pipe - (20).
WARNING 005 : Minimum slope used for Conduit Pipe - (21).
WARNING 005 : Minimum slope used for Conduit Pipe - (22).
WARNING 005 : Minimum slope used for Conduit Pipe - (23).
WARNING 005 : Minimum slope used for Conduit Pipe - (24).
WARNING 005 : Minimum slope used for Conduit Pipe - (25).
WARNING 005 : Minimum slope used for Conduit Pipe - (26).
WARNING 005 : Minimum slope used for Conduit Pipe - (27).
WARNING 005 : Minimum slope used for Conduit Pipe - (28).
WARNING 005 : Minimum slope used for Conduit Pipe - (29).
WARNING 005 : Minimum slope used for Conduit Pipe - (3).
WARNING 005 : Minimum slope used for Conduit Pipe - (3) (1).
WARNING 005 : Minimum slope used for Conduit Pipe - (30).
WARNING 005 : Minimum slope used for Conduit Pipe - (4).
WARNING 005 : Minimum slope used for Conduit Pipe - (5).
WARNING 005 : Minimum slope used for Conduit Pipe - (6).
WARNING 005 : Minimum slope used for Conduit Pipe - (7).
WARNING 005 : Minimum slope used for Conduit Pipe - (8).
WARNING 005 : Minimum slope used for Conduit Pipe - (8) (1).
WARNING 005 : Minimum slope used for Conduit Pipe - (9).
WARNING 005 : Minimum slope used for Conduit StormFilter.

```

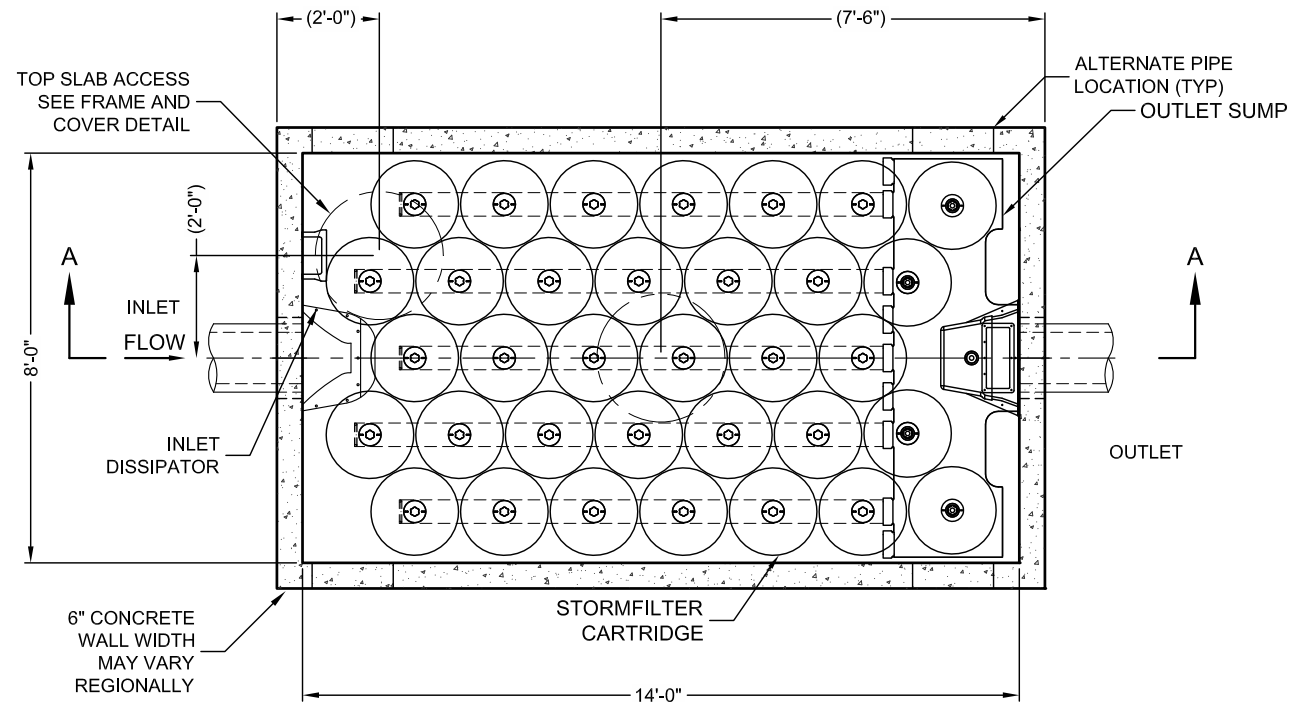
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Analysis began on: Thu Feb 11 16:29:10 2021
Analysis ended on: Thu Feb 11 16:29:18 2021
Total elapsed time: 00:00:08

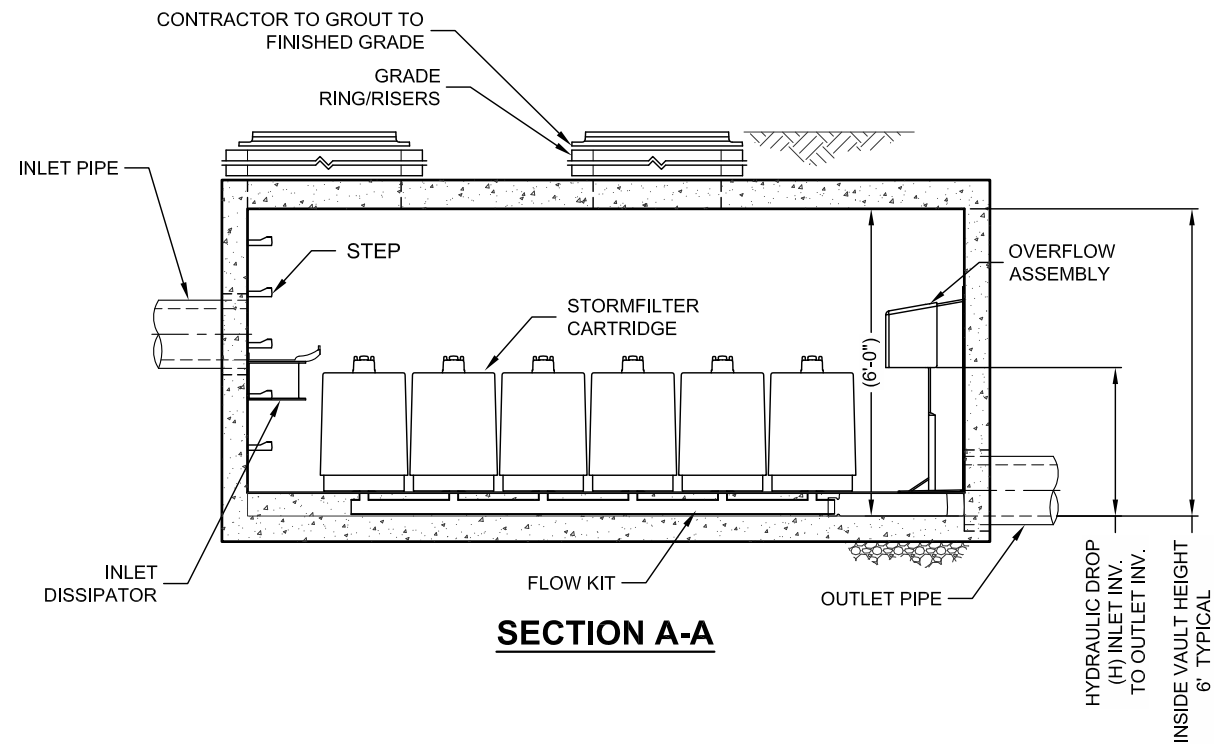
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## **Appendix E – Storm Drain Device Manufacturer Specifications**

***Contech Vault StormFilter 8'x14'***



**PLAN VIEW**  
VAULT STYLE: OUTLET SUMP (NIB)



**SECTION A-A**

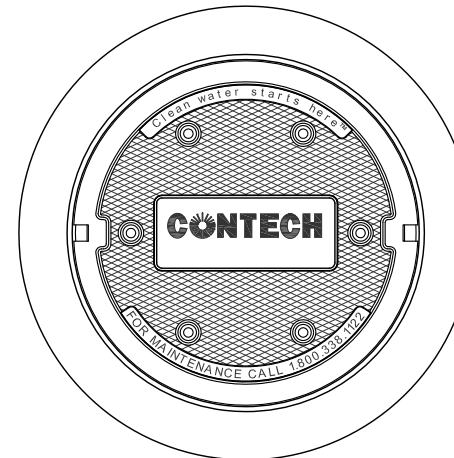
**STORMFILTER DESIGN NOTES**

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD VAULT STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (34). VAULT STYLE OPTIONS INCLUDE INLET BAY (27), INLET BAY/OUTLET BAY (22), OUTLET BAY (29), INLET BAY/FULL HEIGHT BAFFLE (28), FULL HEIGHT BAFFLE WALL (25). STORMFILTER 8X14 PEAK HYDRAULIC CAPACITY IS 1.8 CFS. IF THE SITE CONDITIONS EXCEED 1.8 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

**CARTRIDGE SELECTION**

CARTRIDGE HEIGHT	27"			18"			LOW DROP		
	RECOMMENDED HYDRAULIC DROP (H)								
	3.05'			2.3'			1.8'		
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf	1.67* gpm/sf	1 gpm/sf	2 gpm/sf	1.67* gpm/sf	1 gpm/sf	2 gpm/sf	1.67* gpm/sf	1 gpm/sf
CARTRIDGE FLOW RATE (gpm)	22.5	18.79	11.25	15	12.53	7.5	10	8.35	5

\* 1.67 gpm/sf SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY



**FRAME AND COVER**  
(DIAMETER VARIES)  
N.T.S.

**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	*		
WATER QUALITY FLOW RATE (cfs)	*		
PEAK FLOW RATE (cfs)	*		
RETURN PERIOD OF PEAK FLOW (yrs)	*		
CARTRIDGE HEIGHT (27", 18", LOW DROP(LD))	*		
NUMBER OF CARTRIDGES REQUIRED	*		
CARTRIDGE FLOW RATE	*		
MEDIA TYPE (PERLITE, ZPG, PSORB)	*		
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE #1	*	*	*
INLET PIPE #2	*	*	*
OUTLET PIPE	*	*	*
UPSTREAM RIM ELEVATION	*		
DOWNSTREAM RIM ELEVATION	*		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
	*	*	
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

**GENERAL NOTES**

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. [www.ContechES.com](http://www.ContechES.com)
- STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
- SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).
- STORMFILTER STRUCTURE SHALL BE PRECAST CONFORMING TO ASTM C-857 AND AASHTO LOAD FACTOR DESIGN METHOD.

**INSTALLATION NOTES**

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER VAULT (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL VAULT SECTIONS AND ASSEMBLE VAULT.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.



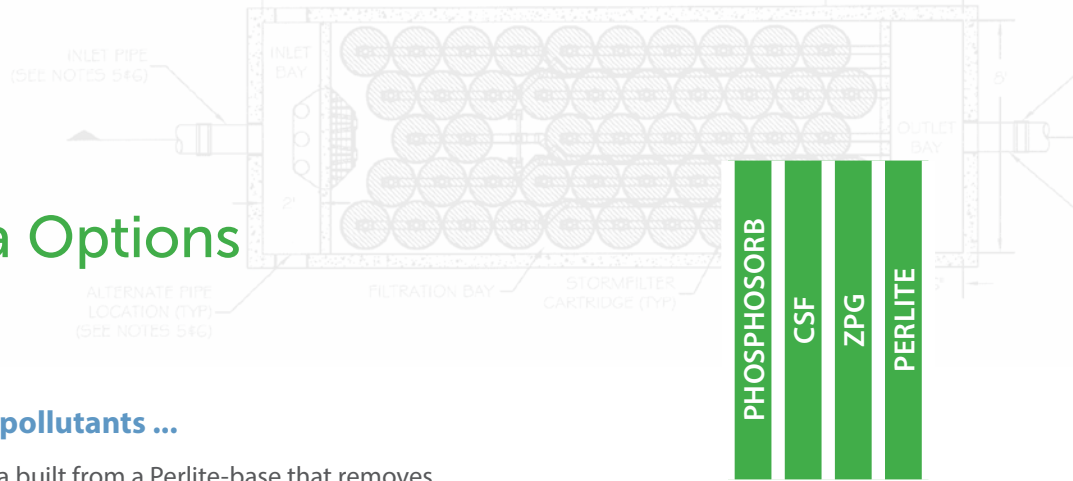
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 5,322,222; 5,324,476; 5,717,477; 5,846,767; 6,022,037; 6,043,640; 6,043,641; 6,043,642; 6,043,643; 6,043,644; 6,043,645; 6,043,646; 6,043,647; 6,043,648; 6,043,649; 6,043,650; 6,043,651; 6,043,652; 6,043,653; 6,043,654; 6,043,655; 6,043,656; 6,043,657; 6,043,658; 6,043,659; 6,043,660; 6,043,661; 6,043,662; 6,043,663; 6,043,664; 6,043,665; 6,043,666; 6,043,667; 6,043,668; 6,043,669; 6,043,670; 6,043,671; 6,043,672; 6,043,673; 6,043,674; 6,043,675; 6,043,676; 6,043,677; 6,043,678; 6,043,679; 6,043,680; 6,043,681; 6,043,682; 6,043,683; 6,043,684; 6,043,685; 6,043,686; 6,043,687; 6,043,688; 6,043,689; 6,043,690; 6,043,691; 6,043,692; 6,043,693; 6,043,694; 6,043,695; 6,043,696; 6,043,697; 6,043,698; 6,043,699; 6,043,700; 6,043,701; 6,043,702; 6,043,703; 6,043,704; 6,043,705; 6,043,706; 6,043,707; 6,043,708; 6,043,709; 6,043,710; 6,043,711; 6,043,712; 6,043,713; 6,043,714; 6,043,715; 6,043,716; 6,043,717; 6,043,718; 6,043,719; 6,043,720; 6,043,721; 6,043,722; 6,043,723; 6,043,724; 6,043,725; 6,043,726; 6,043,727; 6,043,728; 6,043,729; 6,043,730; 6,043,731; 6,043,732; 6,043,733; 6,043,734; 6,043,735; 6,043,736; 6,043,737; 6,043,738; 6,043,739; 6,043,740; 6,043,741; 6,043,742; 6,043,743; 6,043,744; 6,043,745; 6,043,746; 6,043,747; 6,043,748; 6,043,749; 6,043,750; 6,043,751; 6,043,752; 6,043,753; 6,043,754; 6,043,755; 6,043,756; 6,043,757; 6,043,758; 6,043,759; 6,043,760; 6,043,761; 6,043,762; 6,043,763; 6,043,764; 6,043,765; 6,043,766; 6,043,767; 6,043,768; 6,043,769; 6,043,770; 6,043,771; 6,043,772; 6,043,773; 6,043,774; 6,043,775; 6,043,776; 6,043,777; 6,043,778; 6,043,779; 6,043,780; 6,043,781; 6,043,782; 6,043,783; 6,043,784; 6,043,785; 6,043,786; 6,043,787; 6,043,788; 6,043,789; 6,043,790; 6,043,791; 6,043,792; 6,043,793; 6,043,794; 6,043,795; 6,043,796; 6,043,797; 6,043,798; 6,043,799; 6,043,800; 6,043,801; 6,043,802; 6,043,803; 6,043,804; 6,043,805; 6,043,806; 6,043,807; 6,043,808; 6,043,809; 6,043,810; 6,043,811; 6,043,812; 6,043,813; 6,043,814; 6,043,815; 6,043,816; 6,043,817; 6,043,818; 6,043,819; 6,043,820; 6,043,821; 6,043,822; 6,043,823; 6,043,824; 6,043,825; 6,043,826; 6,043,827; 6,043,828; 6,043,829; 6,043,830; 6,043,831; 6,043,832; 6,043,833; 6,043,834; 6,043,835; 6,043,836; 6,043,837; 6,043,838; 6,043,839; 6,043,840; 6,043,841; 6,043,842; 6,043,843; 6,043,844; 6,043,845; 6,043,846; 6,043,847; 6,043,848; 6,043,849; 6,043,850; 6,043,851; 6,043,852; 6,043,853; 6,043,854; 6,043,855; 6,043,856; 6,043,857; 6,043,858; 6,043,859; 6,043,860; 6,043,861; 6,043,862; 6,043,863; 6,043,864; 6,043,865; 6,043,866; 6,043,867; 6,043,868; 6,043,869; 6,043,870; 6,043,871; 6,043,872; 6,043,873; 6,043,874; 6,043,875; 6,043,876; 6,043,877; 6,043,878; 6,043,879; 6,043,880; 6,043,881; 6,043,882; 6,043,883; 6,043,884; 6,043,885; 6,043,886; 6,043,887; 6,043,888; 6,043,889; 6,043,890; 6,043,891; 6,043,892; 6,043,893; 6,043,894; 6,043,895; 6,043,896; 6,043,897; 6,043,898; 6,043,899; 6,043,900; 6,043,901; 6,043,902; 6,043,903; 6,043,904; 6,043,905; 6,043,906; 6,043,907; 6,043,908; 6,043,909; 6,043,910; 6,043,911; 6,043,912; 6,043,913; 6,043,914; 6,043,915; 6,043,916; 6,043,917; 6,043,918; 6,043,919; 6,043,920; 6,043,921; 6,043,922; 6,043,923; 6,043,924; 6,043,925; 6,043,926; 6,043,927; 6,043,928; 6,043,929; 6,043,930; 6,043,931; 6,043,932; 6,043,933; 6,043,934; 6,043,935; 6,043,936; 6,043,937; 6,043,938; 6,043,939; 6,043,940; 6,043,941; 6,043,942; 6,043,943; 6,043,944; 6,043,945; 6,043,946; 6,043,947; 6,043,948; 6,043,949; 6,043,950; 6,043,951; 6,043,952; 6,043,953; 6,043,954; 6,043,955; 6,043,956; 6,043,957; 6,043,958; 6,043,959; 6,043,960; 6,043,961; 6,043,962; 6,043,963; 6,043,964; 6,043,965; 6,043,966; 6,043,967; 6,043,968; 6,043,969; 6,043,970; 6,043,971; 6,043,972; 6,043,973; 6,043,974; 6,043,975; 6,043,976; 6,043,977; 6,043,978; 6,043,979; 6,043,980; 6,043,981; 6,043,982; 6,043,983; 6,043,984; 6,043,985; 6,043,986; 6,043,987; 6,043,988; 6,043,989; 6,043,990; 6,043,991; 6,043,992; 6,043,993; 6,043,994; 6,043,995; 6,043,996; 6,043,997; 6,043,998; 6,043,999; 6,044,000.

**CONTECH**  
ENGINEERED SOLUTIONS LLC

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9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069  
800-338-1122 513-645-7000 513-645-7993 FAX

SF0814  
STORMFILTER  
STANDARD DETAIL

# StormFilter Media Options



## Flexibility to target site-specific pollutants ...

- PhosphoSorb® is a lightweight media built from a Perlite-base that removes total phosphorus (TP) by adsorbing dissolved-P and filtering particulate-P simultaneously.
- CSF® Leaf Media is created from deciduous leaves processed into granular, organic media. CSF is most effective for removing soluble metals, TSS, oil and grease, and buffering acid rain.
- Perlite is naturally occurring puffed volcanic ash. Effective for removing TSS, oil, and grease.
- Zeolite is a naturally occurring mineral used to remove soluble metals, ammonium, and some organics.
- GAC (Granular Activated Carbon) has a micro-porous structure with an extensive surface area to provide high levels of adsorption. It is primarily used to remove oil and grease and organics such as PAHs and phthalates.

	PHOSPHOSORB	CSF	ZPG	PERLITE
Sediments	✓	✓	✓	✓
Oil and Grease	✓	✓	✓	✓
Soluble Metals	✓	✓	✓	
Organics		✓	✓	
Nutrients	✓	✓	✓	
Total Phosphorus	✓			

Note: Indicated media are most effective for associated pollutant type. Other media may treat pollutants, but to a lesser degree.

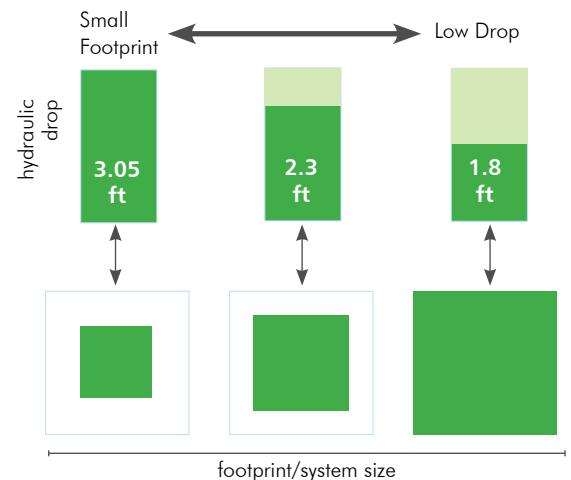
ZPG™ media is a proprietary blend of zeolite, perlite, and GAC, and is also available.

# Cartridge Options

## Flexibility to reduce size and costs ...

Every site is different, and one size does not fit all. Multiple cartridge heights give you design flexibility to design the StormFilter specifically for your site and reduce the cost of the system for the owner.

- 27" cartridge – Capitalizing on sites with at least 3.05 feet of available driving head, media surface area is maximized to allow the greatest treatment rate per cartridge; best for sites with footprint constraints
- 18" cartridge - The original StormFilter cartridge size provides a middle ground and operates with 2.3 feet of driving head
- Low Drop – Provides filtration treatment with only 1.8 feet of headloss; best for sites with limited by hydraulic constraints



CARTRIDGE FLOW RATES			
Cartridge Height	2 gpm/ft <sup>2</sup>	1.67* gpm/ft <sup>2</sup>	1 gpm/ft <sup>2</sup>
12" LD	10 gpm	8.35 gpm	5 gpm
18"	15 gpm	12.53 gpm	7.5 gpm
27"	22.5 gpm	18.79 gpm	11.25 gpm

MASS LOAD CAPACITY			
Cartridge Height	2 gpm/ft <sup>2</sup>	1.67* gpm/ft <sup>2</sup>	1 gpm/ft <sup>2</sup>
12" LD	15 lbs	18 lbs	24 lbs
18"	22.5 lbs	27 lbs	36 lbs
27"	33.8 lbs	40.45 lbs	54 lbs

\* For use with Phosphosorb media as per WA DOE GULD approval.

\* For use with Phosphosorb media as per WA DOE GULD approval.

***Prinsco Hydrostor Chamber HS75***



## Scope

This specification designates the requirements for Prinsco HydroStor HS75 Chambers to be used for controlling stormwater runoff. The HydroStor chambers function as a subsurface retention system by storing water and allowing infiltration into the soil or as a subsurface detention system by temporarily storing stormwater runoff and releasing the water at a controlled rate through an outlet.

## Chamber Requirements

Prinsco HydroStor HS75 chambers shall be curved to form a continuous arch shape with an open bottom. Chambers shall have 14 annular exterior corrugations. Chambers shall be equipped with lifting handles to facilitate the unloading and installation of the chambers.

End caps shall be curved and have adequate structural capacity to allow the end cap inlets to be cut at any invert elevation. Chambers and end caps shall meet or exceed the following standards:

- ASTM F2418-12 “Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers”
- ASTM F2787-13 “Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers”

## Materials

Prinsco HydroStor HS75 chambers shall be injection molded and constructed of polypropylene resin resistant to environmental stress cracking (ESCR) and with ability to maintain adequate stiffness through the construction and service life of the chamber. The end caps shall be thermoformed or injection molded from polypropylene resin.

The chamber material shall meet or exceed the requirements of designation PP0330B99945 as defined in ASTM D4101.

## Joint Performance

Joining of chambers shall be accomplished by overlapping the corrugations of longitudinally adjacent chambers along long lengths of chambers. Chambers and joints shall be installed in the direction stamped in the valley of the corrugation.

End caps are designed to fit over top of a corrugation on either end of the chamber. End caps shall have guides to allow easy cutting of various diameters of pipe that may be used to inlet water in to the system.

## Installation

Chambers and endcaps shall be installed in accordance with Prinsco’s published installation guidelines. Minimum cover heights for AASHTO H-20 loads shall be 18” (450 mm) as shown in the cross section detail. The minimum cover shall be measured from the top of the chamber to the bottom of flexible pavement or to the top of rigid pavement. Visit [www.prinsco.com](http://www.prinsco.com) or contact your local Prinsco representative for the latest installation guidelines.

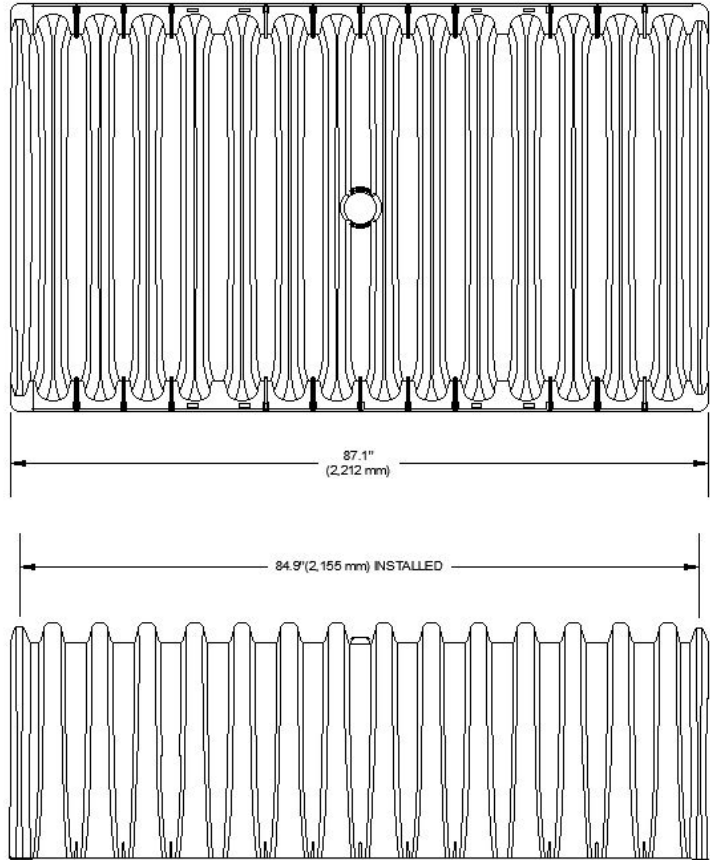
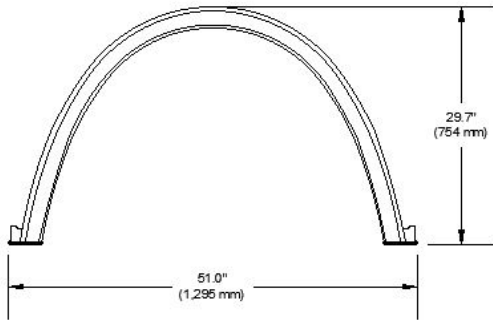
## Reference Specifications

This specification references the latest edition and revisions of the following standard specifications:

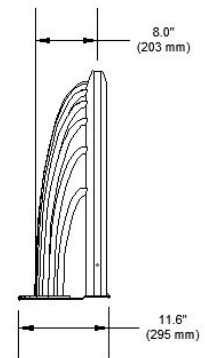
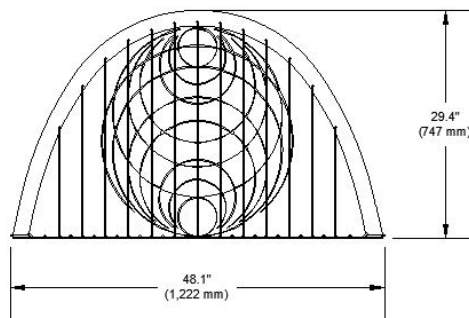
- ASTM F2418-12 – Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers
- ASTM F2787-13 – Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers
- ASTM D4101 – Standard Specification for Polypropylene Injection and Extrusion Materials

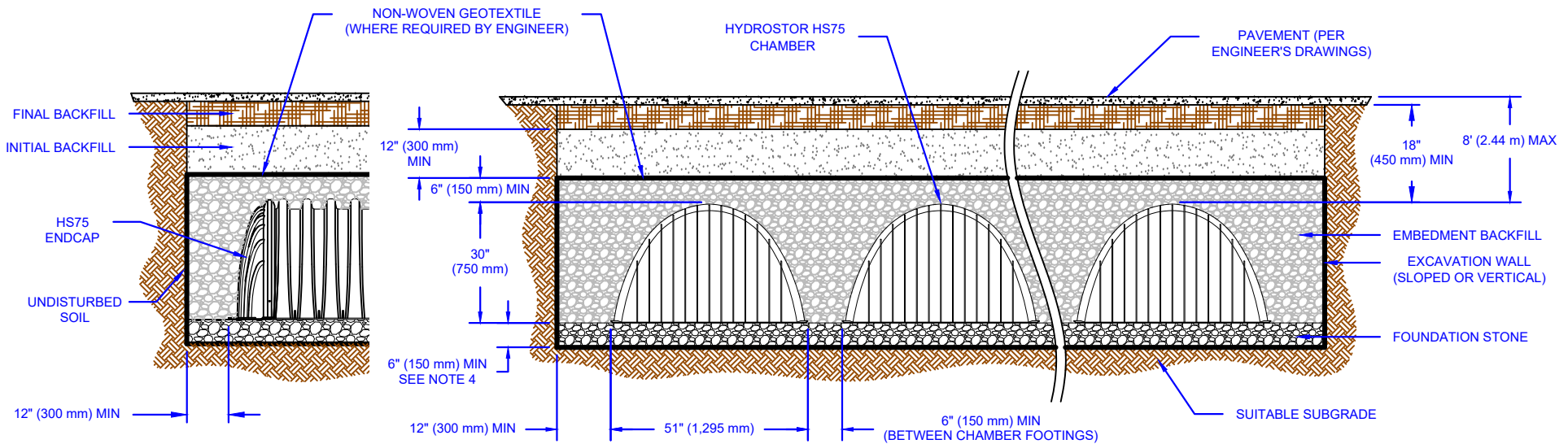


Chamber Specifications	
Chamber Size (L x W x H)	87.1" x 51.0" x 29.7" (2,212 x 1,295 x 754 mm)
Installed Length	84.9" (2,155 mm)
Chamber Storage	46.4 ft <sup>3</sup> (1.31 m <sup>3</sup> )
Min. Installed Storage*	74.9 ft <sup>3</sup> (2.12m <sup>3</sup> )
Weight / Chamber	70 lbs (32 kg)
Chambers / Pallet	33
Approx. Weight / Pallet	2,500 lbs (1,134 kg)



End Cap Specifications	
End Cap Size (L x W x H)	11.6" x 48.1" x 29.4" (295 x 1,222 x 747 mm)
Installed Length	8.0" (203 mm)
End Cap Storage	2.75 ft <sup>3</sup> (0.08 m <sup>3</sup> )
Min. Installed Storage*	12.02 ft <sup>3</sup> (0.34 m <sup>3</sup> )
Weight	12 lbs (5.44 kg)





**NOTES:**

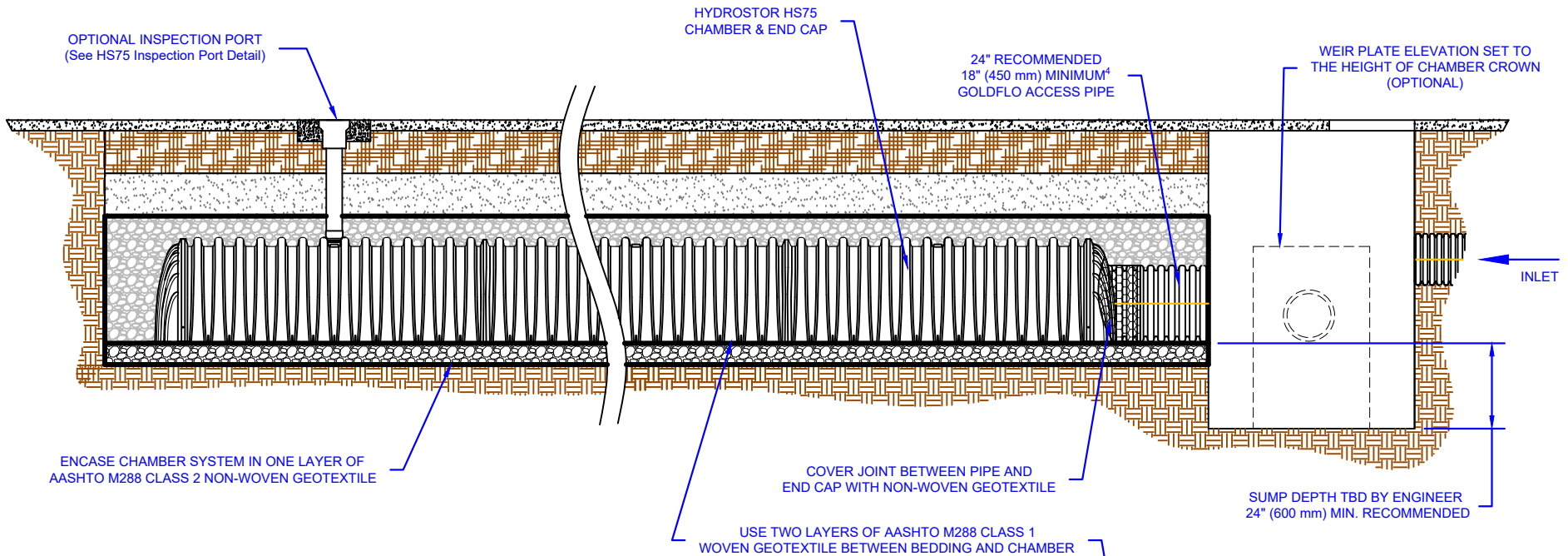
- HYDROSTOR HS75 CHAMBERS** SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418. HS75 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION GUIDELINES.
- SUBGRADE:** TRENCH BOTTOMS WITH UNSTABLE OR UNYIELDING MATERIAL SHALL BE EXCAVATED TO A DEPTH DIRECTED BY THE ENGINEER AND REPLACED WITH SUITABLE MATERIAL. FOR UNSTABLE MATERIALS, GEOTEXTILE MAY BE USED TO STABILIZE THE TRENCH BOTTOM, IF DIRECTED BY THE ENGINEER. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING SUBGRADE SUITABILITY.
- GEOTEXTILE:** A 4 oz/yd<sup>2</sup> (136 g/m<sup>2</sup>) OR HEAVIER NON-WOVEN GEOTEXTILE FILTER FABRIC SHOULD BE USED FOR EMBEDMENT BACKFILL MATERIAL SIZED 3/4 - 1 1/2 INCH (19 - 38 mm). A 6 oz/yd<sup>2</sup> (203 g/m<sup>2</sup>) NON-WOVEN GEOTEXTILE FILTER FABRIC SHOULD BE USED FOR EMBEDMENT BACKFILL MATERIAL SIZED 1 1/2 - 2 INCH (38 - 51 mm). GEOTEXTILE FILTER FABRIC IS PLACED AROUND THE SYSTEM TO PREVENT NATIVE SOIL FROM MIGRATING INTO THE EMBEDMENT BACKFILL MATERIAL. TO ENSURE FABRIC IS SUITABLE WITH IN SITU SOILS, A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED.
- FOUNDATION STONE:** SUITABLE MATERIAL SHALL BE A 3/4 - 2 INCH (19 - 51 mm), WASHED, CRUSHED ANGULAR STONE, OR AASHTO M43 SIZES (3, 357, 4, 467, 5, 56, 57) WITH WASHED, CRUSHED, ANGULAR STONE ADDED TO THE GRADATION, e.g., WASHED, CRUSHED, ANGULAR #3 (AASHTO M43) STONE. MINIMUM FOUNDATION STONE THICKNESS TO BE DETERMINED BY DESIGN ENGINEER. MINIMUM OF 6" (150 mm) RECOMMENDED. REFER TO PRINSCO DESIGN MANUAL FOR ADDITIONAL GUIDANCE. COMPACTION SHOULD BE DONE IN LIFTS OF NO MORE THAN 6 INCHES (150 mm) TO A DENSITY OF 95% STANDARD PROCTOR DENSITY.
- EMBEDMENT BACKFILL:** SUITABLE MATERIAL SHALL BE A 3/4 - 2 INCH (19 - 51 mm), WASHED, CRUSHED ANGULAR STONE, OR AASHTO M43 SIZES (3, 357, 4, 467, 5, 56, 57) WITH WASHED, CRUSHED, ANGULAR STONE ADDED TO THE GRADATION, e.g., WASHED, CRUSHED, ANGULAR #3 (AASHTO M43) STONE. EMBEDMENT BACKFILL SHALL EXTEND FROM TOP OF BEDDING TO NOT LESS THAN 6" (150 mm) INCHES ABOVE THE TOP OF THE CHAMBER. NO COMPACTION IS REQUIRED BUT AN EFFORT SHOULD BE MADE TO HAND KNIFE STONE IN BETWEEN ALL CORRUGATIONS.
- INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE A GRANULAR, WELL GRADED SOIL WITH LESS THAN 35% FINES OR AASHTO M43 SIZES (3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10). MOST PAVEMENT SUBBASE MATERIALS FALL WITHIN THIS GRADING CRITERIA. INITIAL BACKFILL SHALL EXTEND FROM TOP OF EMBEDMENT BACKFILL TO NOT LESS THAN 18 INCHES (450 mm) ABOVE THE TOP OF THE CHAMBER. COMPACTION TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
- FINAL BACKFILL:** SUITABLE MATERIALS SHALL BE ANY SOIL DIRECTED BY THE ENGINEER. FINAL BACKFILL SHALL EXTEND FROM TOP OF INITIAL BACKFILL TO NO MORE THAN 8 FEET (2.44 m) ABOVE THE TOP OF THE CHAMBER. COMPACTION LEVELS SHOULD FOLLOW ENGINEERS RECOMMENDATIONS.
- MINIMUM COVER:** FOR TRAFFIC APPLICATIONS A MINIMUM COVER OF 18 INCHES (450 mm) IS REQUIRED, MEASURED FROM THE TOP OF THE CHAMBER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR TO THE TOP OF RIGID PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING MAY OCCUR, INCREASE COVER TO 24 INCHES (600 mm). ADDITIONAL COVER MAY BE REQUIRED FOR CONSTRUCTION LOADS.
- MAXIMUM COVER:** A COVER HEIGHT OF OVER 8 FEET (2.44 m) IS NOT RECOMMENDED. COVER HEIGHT IS MEASURED FROM THE TOP OF THE CHAMBER TO THE TOP OF THE PAVEMENT
- LOAD RATING:** HS75 CHAMBERS ARE TRAFFIC RATED FOR H-20 VEHICLES WITH ADDITIONAL CONSIDERATION FOR LANE LOADING, COMMONLY REFERRED TO AS HL-93 LOAD RATING (AASHTO DESIGN TRUCK).

THIS DETAIL DEPICTS RECOMMENDED INSTALLATION PRACTICES AND IS NOT INTENDED TO SUPERSEDE ANY NATIONAL, STATE OR LOCAL SPECIFICATIONS. PRINSCO BEARS NO RESPONSIBILITY FOR ANY ALTERATIONS, REVISION AND/OR DEVIATION FROM THIS STANDARD DETAIL. PRINSCO HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICE FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION TO VERIFY SUITABILITY. © PRINSCO, INC.



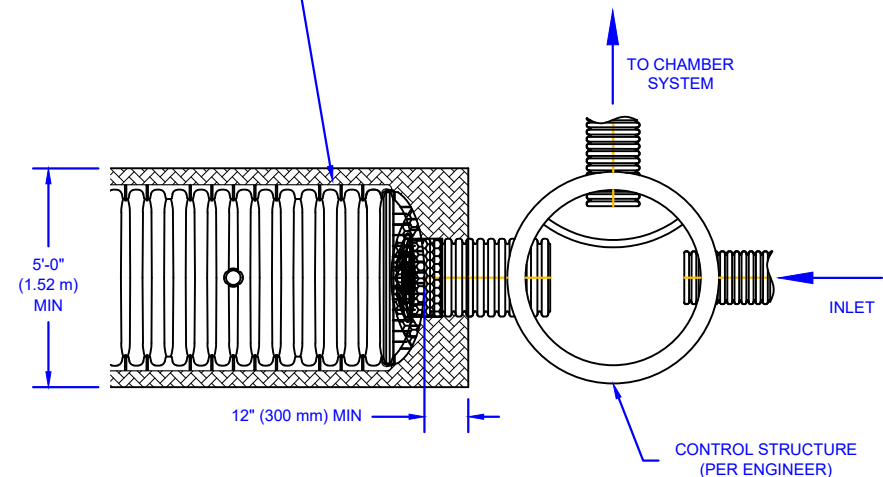
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TITLE: HYDROSTOR HS75 - CROSS SECTION		
DRAWN BY: TJW	DATE: 22-Apr-20	DRAWING NUMBER: D-7-300A
SCALE: NTS	SHEET: 1 OF 1	



**NOTES:**

1. HYDROSTOR HS75 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418. HS75 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION GUIDELINES.
2. **GEOTEXTILE:** TWO DIFFERENT GEOTEXTILES WILL BE USED IN CREATING A FUNCTIONING SEDIMENT ROW. TO ENSURE FABRIC IS SUITABLE WITH IN SITU SOILS, A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED.
  - A NON-WOVEN GEOTEXTILE FILTER FABRIC 4 oz/yd<sup>2</sup> (136 g/m<sup>2</sup>) OR HEAVIER SHOULD BE USED AROUND THE PERIMETER OF THE CHAMBER SYSTEM FOR EMBEDMENT BACKFILL MATERIAL SIZED 3/4 - 1 1/2 INCH (19 - 38 mm). A 6 oz/yd<sup>2</sup> (203 g/m<sup>2</sup>) NON-WOVEN GEOTEXTILE FILTER FABRIC SHOULD BE USED FOR EMBEDMENT BACKFILL MATERIAL SIZED 1 1/2 - 2 INCH (38 - 51 mm). GEOTEXTILE FILTER FABRIC IS PLACED AROUND THE SYSTEM TO PREVENT NATIVE SOIL FROM MIGRATING INTO THE EMBEDMENT BACKFILL MATERIAL.
  - TWO LAYERS OF 6 oz/yd<sup>2</sup> (203 g/m<sup>2</sup>) WOVEN FABRIC IS PLACED BETWEEN THE BEDDING AND THE CHAMBER FOR THE CREATION OF THE SEDIMENT ROW. THE TWO LAYERS PROVIDE A PROTECTIVE BARRIER FOR THE EMBEDMENT BACKFILL BUT STILL ALLOWING WATER TO INFILTRATE INTO THE SYSTEM. THE WOVEN GEOTEXTILE IS DURABLE ENOUGH TO ALLOW JETTING TO CLEAN THE SEDIMENT ROW.
3. **INSPECTION AND MAINTENANCE:** INSPECTION OF THE SYSTEM SHOULD OCCUR BIANNUALLY TO ENSURE LARGE AMOUNTS OF SEDIMENT OR DEBRIS HAVE NOT BEEN DEPOSITED IN THE SEDIMENT ROW. DURING THE FIRST YEAR, INSPECTION SHOULD OCCUR MORE FREQUENTLY DUE TO CONSTRUCTION SEDIMENT LOADING. TO CLEAN THE SYSTEM, A JET/VAC PROCESS CAN BE USED TO REMOVE SEDIMENT AND DEBRIS FROM THE SEDIMENT ROW. FOR MORE INFORMATION, REFER TO PRINSCO'S "RETENTION/DETENTION CLEANING AND MAINTENANCE" TECHNICAL NOTE.
4. **ACCESS PIPE:** PRINSCO RECOMMENDS A 24 INCH (600 mm) DIAMETER ACCESS PIPE TO THE SEDIMENT ROW. A 24 INCH (600 mm) INTERNAL SLEEVE ADAPTER (PART # HS75A-24) WILL BE REQUIRED TO CONNECT TO HS75 END CAPS. CONTACT YOUR LOCAL SALES REPRESENTATIVE WITH ANY QUESTIONS.

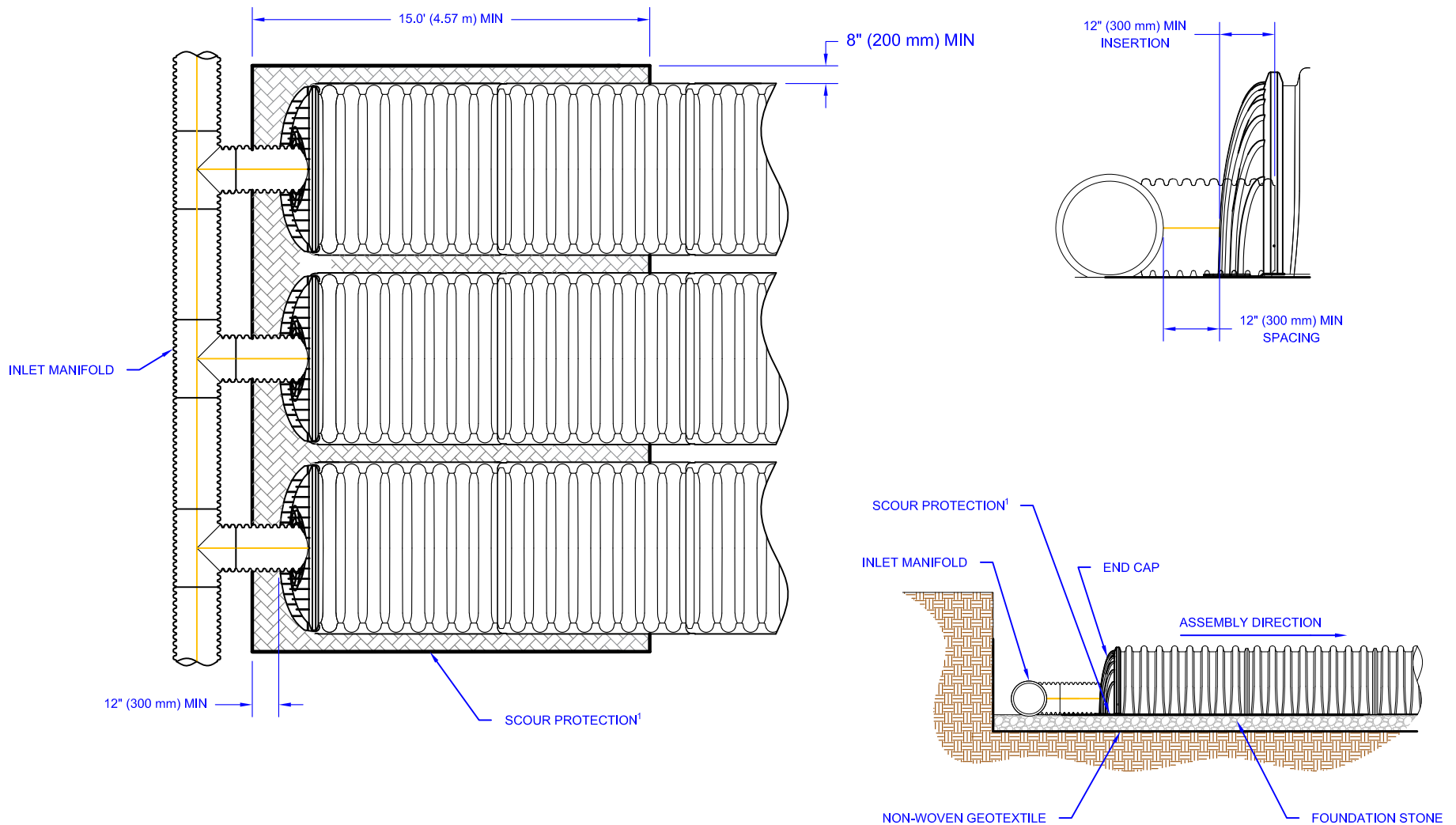


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TITLE: HYDROSTOR HS75 - SEDIMENT ROW		
DRAWN BY: TJW	DATE: 22-Apr-20	DRAWING NUMBER:
SCALE: NTS	SHEET: 1 OF 1	D-7-302



**NOTES:**

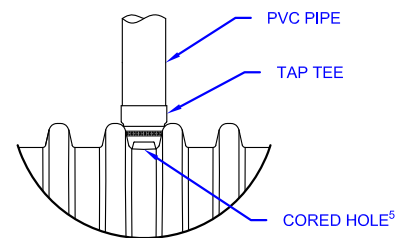
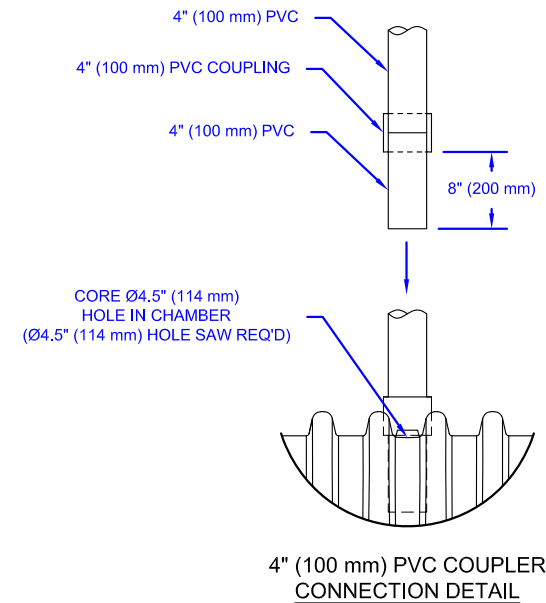
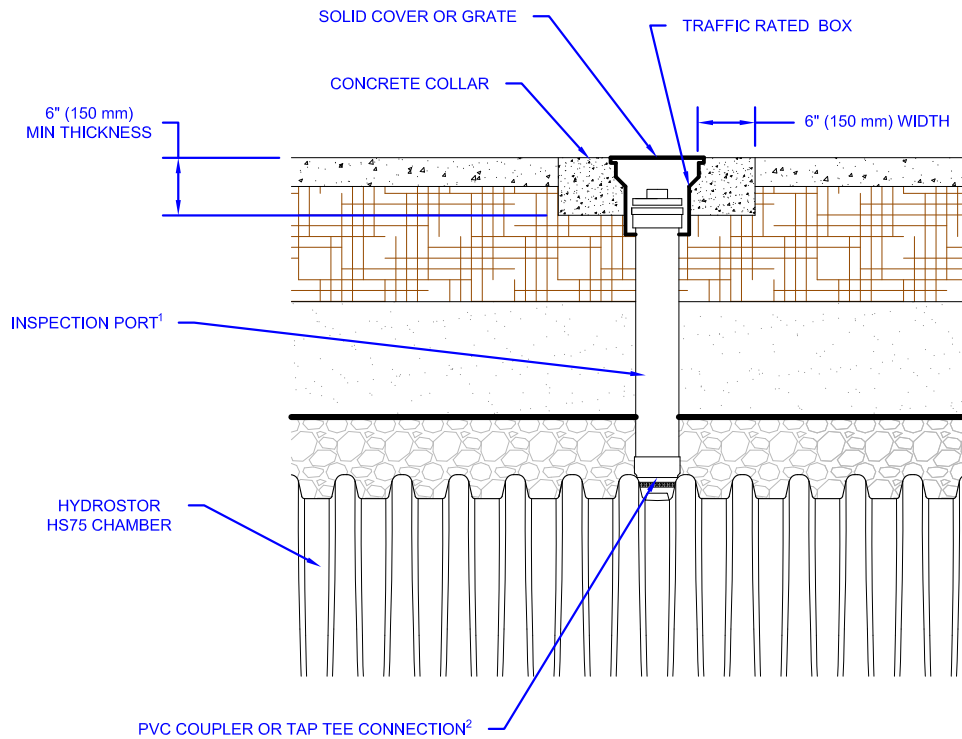
1. SCOUR PROTECTION SHOULD USE A MIN 6 oz/yd<sup>2</sup> (203 g/m<sup>2</sup>) WOVEN GEOTEXTILE. GEOTEXTILE SHOULD MEET AASHTO M288 CLASS 1 SPECIFICATION.
2. SCOUR PROTECTION IS ONLY NEEDED WITH CHAMBER ROWS CONNECTED TO THE INLET MANIFOLD.

THIS DETAIL DEPICTS RECOMMENDED INSTALLATION PRACTICES AND IS NOT INTENDED TO SUPERSEDE ANY NATIONAL, STATE OR LOCAL SPECIFICATIONS. PRINSCO BEARS NO RESPONSIBILITY FOR ANY ALTERATIONS, REVISION AND/OR DEVIATION FROM THIS STANDARD DETAIL. PRINSCO HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICE FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION TO VERIFY SUITABILITY. © PRINSCO, INC.

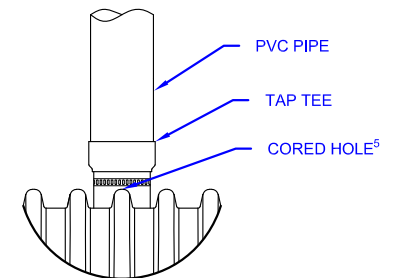


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SCALE: NTS	SHEET: 1 OF 1	D-7-307



4" (100 mm) TAP TEE  
CONNECTION DETAIL  
(SEE NOTE 1)



6" (150 mm) & 8" (200 mm) TAP TEE  
CONNECTION DETAIL  
(SEE NOTE 1)

**NOTES:**

1. 4" (100 mm) INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CIRCULAR CUT OUT POINT, LOCATED AT THE CENTER OF EACH HS75 CHAMBER. 6" (150 mm) OR 8" (200 mm) INSPECTION PORTS MAY BE CONNECTED THROUGH A CORED HOLE, CENTERED ON A CORRUGATION.
2. TAP TEE CONNECTION CAN CONSIST OF QWICKSEAL, INSERTA TEE OR APPROVED ENGINEERING EQUIVALENT.
3. ALL PVC FITTINGS TO BE SOLVENT CEMENTED.
4. PVC MAY BE EITHER SDR 35 OR SCH 40
5. CORED HOLE SIZES AS FOLLOWS: 4" (100 mm) CUT TO 5" (125 mm); 6" (150 mm) CUT TO 7" (180 mm); 8" (200 mm) CUT TO 9" (230 mm)

THIS DETAIL DEPICTS RECOMMENDED INSTALLATION PRACTICES AND IS NOT INTENDED TO SUPERSEDE ANY NATIONAL, STATE OR LOCAL SPECIFICATIONS. PRINSCO BEARS NO RESPONSIBILITY FOR ANY ALTERATIONS, REVISION AND/OR DEVIATION FROM THIS STANDARD DETAIL. PRINSCO HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICE FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION TO VERIFY SUITABILITY. © PRINSCO, INC.



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TITLE: HYDROSTOR HS75 - INSPECTION PORT		REV: B
DRAWN BY: ARB	DATE: 05-Jun-17	DRAWING NUMBER: D-7-303
SCALE: NTS	SHEET: 1 OF 1	



## **Appendix F – Geotechnical Report**

**GEOTECHNICAL INVESTIGATION**  
**BRINKMAN AND WATERMAN DEVELOPMENT**  
Brinkman Court and Waterman Road  
Elk Grove, California

RANEY GEOTECHNICAL INC. JOB NO. 146-538







June 10, 2016

Buzz Oates Development LP  
Attention: Cybil Bryant  
555 Capitol Mall, Ninth Floor  
Sacramento, CA 95814

**GEOTECHNICAL INVESTIGATION  
BRINKMAN AND WATERMAN DEVELOPMENT**

Brinkman Court and Waterman Road  
Elk Grove, California  
Job No. 146-538

**INTRODUCTION**

Our firm has completed a Geotechnical Investigation for a proposed industrial park development on Waterman Road at Brinkman Court in Elk Grove. The purposes of this investigation have been to evaluate surface and subsurface soil and groundwater conditions, provide recommendations for current rough grading of the property, and provide recommendations for future use in design and construction of building foundations and pavements. This report presents the results of the investigation. Raney Geotechnical performed investigations for two previously proposed developments on the site in 1992 and 2004.<sup>12</sup> Information from these previous investigations has been used in the preparation of this report.

Sixteen test pits extending to depths varying from varying from about two and one-half to 15 feet were excavated on the site as part of the referenced 1992 study. Fifteen test borings extending to depths of 15 to 20 feet and one boring to a depth of 50 feet were drilled on the site for the referenced 2004 investigation. To supplement this soils information, an experienced engineer has visited the site to observe current surface conditions and sample the surface soils. The test pit, boring and sampling locations are shown on Plate 1, *Plot Plan*.. Descriptions of the materials observed in the test pits and borings are shown on Plates 2 through 14, *Log of Test Pit*, and Plates 15 through 30, *Log of Boring*. The nomenclature used to describe the soils on the logs is defined on Plate 31, *Unified Soil Classification System*. Moisture, density and unconfined compressive strength test data are presented on the logs at

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<sup>1</sup>Raney Geotechnical; "Geotechnical Consulting, Kingsford Products Property, 10000 Waterman Road, Elk Grove, California"; June 1, 1992; Job No. 877-001.

<sup>2</sup>Raney Geotechnical, Inc.; "Status Report, James Hardie Distribution Center, 10000 Waterman Road, Elk Grove, California"; March 10, 2004; File No. 2462-001.

the depths of each sample tested. Atterberg Limits tests were performed on two samples of near surface soils for classification purposes, a Resistance value test was performed on one sample for evaluating pavement support properties, and treated soil compressive strength tests were performed on three samples to evaluate treatment effectiveness, all as part of the 2004 work. These test results are reproduced on Plate 32, *Atterberg Limit Data*; Plate 33, *Resistance Value Data*, and Plate 34, *Treated Soil Compressive Strength Data*. Samples of disturbed soils and fills on the surface of the site were recently obtained by our engineer and subjected to tests to measure the organic content of the soils; these test results are tabulated on Plate 35, *Organic Content Data*.

### **PROPOSED CONSTRUCTION**

We understand it is planned to rough grade the property for drainage and prepare areas for future industrial development. Grading plans indicate that maximum cuts of about three and one-half feet will be required on the south central portion of the property to encourage drainage towards swales exiting towards the rail alignment on the west side. Fills of up to two feet will be placed on the northerly portion of the property.

Future development is expected to include subdividing the property for warehouse and similar construction. The new buildings would be primarily of single story concrete tilt-up panel or metal construction with concrete slab-on-grade floors. Structural foundation loads are expected to be moderate and common to this type of construction. For the purposes of this report we have assumed that building floor levels will be near the existing site grades. Additional improvements would include pavements for automobile/truck parking and access.

### **SITE CONDITIONS AND CONCLUSIONS**

#### **SURFACE**

The approximate 52-acre site is bordered by Waterman Road, Brinkman Court, an Elk Grove Water District facility (9960 Waterman Road) and a self storage facility (Waterman Self Storage, 9200 Brinkman Court) on the east, Elk Grove Creek and industrial development off Kent Drive on the north, railroad tracks and vacant land on the west, and an Alon Asphalt Company terminal on the south.

The northerly two-thirds of the property was occupied by Kingsford Products from about 1966 until sometime in the late 1980's. We understand the property was used for manufacture of match-light charcoal. Most of the more industrial elements of the Kingsford facility appear to have been located on the central-west portion of the property. The facilities included buildings which have since been demolished as well as asphalt concrete paved parking and driveways off Waterman Road that partially remain. Two rail spurs off the westerly property line trend easterly on the central west portion to about half way across the property. The northerly rail spur is mostly embedded in asphalt concrete. The southerly spur has exposed rails on wood ties and ballast. Historical aerial photos indicate the areas northerly and westerly of the buildings were mostly used for bulk storage of raw materials. The

northwesterly corner appears to have been used as a detention pond and is up to a few feet lower than surrounding areas. Chainlink fencing encloses most of the former Kingsford site. Earthen berms were along portions of the property near Waterman Road. Concentrations of gravel, remnants of asphalt concrete and concrete slabs, are present in the former Kingsford building areas. Outside the former building areas, the surface soils appear fluffy/disturbed and are embedded with gravel, cobbles and rubble. Close examination shows significant amounts of charcoal chunks are also mixed into the surface soils. The gray cast and fluffiness of the soils also suggests that there are significant amounts of charcoal dust or other organic material mixed in. In the detention pond area, we observed significant amounts of decaying fruit pits mixed into the surface soils.

A 1937 photo suggests all of the property once supported orchards. More recent aerial photos indicate the southerly third of the property was separate from the operating Kingsford facility. It appears a house was present on the northeasterly corner of this area, and remaining areas appear to have been pasture or undeveloped fields. This southerly third is now relatively flat and, except for some tumbleweeds, is mostly devoid of surface vegetation. Some gravel, cobbles and rubble are mixed into the surface soils or spread with soils as a thin fill on the surface. The westerly portion appears to be covered with up to a foot of fill. Fruit pits also are visible on the surface. The debris/cobbles and fills suggest some of the soils from the Kingsford site may have been spread on the surface of the southerly portion. A few tree remnants are visible in the former house area at the northeast corner. Wire fences are along Waterman Road, the easterly half of the southerly property line, and along the Union Pacific rail alignment. A chain link fence separates the site from the asphalt facility on the west half of the property line.

### **SUBSURFACE**

The test borings drilled on the southerly portion of the property encountered soil profiles that appear to be typical for the native undisturbed soils on the site. The test pits completed on the northerly Kingsford portion of the property encountered similar undisturbed soils, except that the near surface materials have often been disturbed and altered by the previous site uses.

The undisturbed soil profile appears to generally consist of two to five feet of stiff to very stiff, light brown to brown fine sandy clayey silts and silty fine sandy clays on the surface, and overlying dense and variably cemented orange-brown to gray-brown fine sandy silts, silty sands, silty sandy gravels, and silty clays.

Our observation indicates that on the southerly portion of the site, the upper six to 12 inches of soils have been disturbed by discing. On the northerly former Kingsford area, most surface soils are disturbed to depths on the order of one foot or more by the previous site operations. On most areas east of the former building complex and ponds, this disturbance appears to be the mixing of soils and spreading of loose fills that include lumps of charcoal, charcoal dust and other organic materials, as well as gravel, cobbles and some rubble. These disturbed soils generally appear to be limited to the upper foot or two of the profile. At the pond area on the northwesterly portion of the Kingsford area, test pits and recent hand excavation revealed two to four feet of disturbed soils and fills. These fills included silts mixed with decaying fruit pits on the surface, and deeper layers containing high concentrations of charcoal.

The surface in the former building area of the Kingsford facility is uneven with scattered rubble and mounds of gravel visible. Test pits and surface observations suggest disturbance in this area may generally be on the order of two feet, but charcoal/gravel contamination may be less than on other areas. An exception is west of the former building complex and on the east side of the south rail spur. Test Pits 8 and 9 in this area encountered charcoal and charcoal residue to depths of 13 feet or more. This suggests a former waste pit was in this area.

### **BEARING CAPACITY AND MATERIALS SUITABILITY**

Loose existing fill materials and disturbed soils are indicated to be spread on the surface on much of the site. In most areas these loose and disturbed soils extend to depths on the order of one to two feet. On the former Kingsford facility and the westerly area of the southerly portion, much of these disturbed soils include concentrations of decaying or potentially decaying organic matter. Two to four feet of loose materials were observed in the detention pond area on the northwest corner. An apparent former waste pit on the central west edge of the property has charcoal-laden fill to depths of 13 feet or more. The disturbed soils are not considered suitable for support of building or pavement construction in their present condition. We recommend the disturbed soils in building and pavement areas be overexcavated and replaced with compacted engineered fill.

Soils with concentrations of organic materials (charcoal and fruit pits) are not recommended for support of buildings or floor slabs. We recommend such high organic content soils be overexcavated from beneath building footprints and replaced with engineered fills composed of only of inorganic native soils or imported fill. Most of the disturbed surface soils on the site are sands, silts and clays mixed with smaller amounts of organic materials; such soils are suitable for reuse as engineered fills, but only in pavement and landscaping areas. Fills with very high concentrations of charcoal and fruit pits were observed in the detention pond area as well as the apparent waste pit on the central-west edge. Such materials should not be used as engineered fill.

Beneath the existing fills and disturbed soils, the native undisturbed soils are indicated to have strength and compressibility properties that are favorable for support of the planned construction. The undisturbed surface soils as well as new engineered fill placed and compacted in accordance with our recommendations, are expected to be capable of supporting pavements, floors, and light to moderately loaded foundations.

### **EXPANSIVE SOILS**

The native near surface soils consist primarily of both low plasticity silts and moderate to high plasticity clays. The silts are of low swelling potential. The clays are capable of developing significant expansion pressures with variations in moisture content. Most surface soils on the Kingsford area consist of silts. Clays are the dominant surface soil type on the southerly portion. With the redistribution of soils that will occur during grading, we expect that most building areas on the former Kingsford site will be silts; and most building areas south of the Kingsford site will be clays. The clays will cause some movements of floor slabs, flatwork and pavements, and may affect foundations. Expansion effects on foundations can be reduced by extending the depth of foundations to bear on subsurface variably cemented soils.

Several procedures are commonly used for reducing expansive soil effects on floor slabs, including the construction of building pads using imported nonexpansive soils; reinforcement of floor slabs and preswelling of subgrade soils by saturation of the building pad prior to concrete placement; and chemical treatment of clays to alter their expansive properties. Chemical treatment has been used for many warehouse building pads in the area, and is recommended for building pad construction on this project. Treatment of floor subgrades to depths of 12 inches has produced significant reductions in expansive soil movements, but some floor movement still can occur. Details regarding treatment procedures are recommended in the Earthwork section below.

### **GROUNDWATER**

Groundwater was not encountered in the test borings and pits completed on site. Sacramento County groundwater maps indicate the permanent groundwater table is at depth on the order of 80 feet or more. Based on this information the permanent groundwater table is not expected to be a factor in design or construction.

During and shortly following the wet season, surface water can become perched on top of the relatively impermeable clays and cemented soil layers, forming a seasonal shallow water table and saturating the surface soils. High moisture content soils can be unstable under earthwork equipment and may require considerable aeration in order to achieve a moisture content which will allow compaction. Foundation, utility or other construction excavations attempted during or shortly following the wet season may experience perched water inflow. In swale areas high soil moisture contents may persist into the summer months. The potential for perched water and high soil moisture conditions should be considered in construction scheduling.

### **SOIL LIQUEFACTION POTENTIAL**

Soil liquefaction is the loss of strength of low- to no- cohesion soils (usually sands) that occurs when pore water pressure exceeds the confining stress (weight) of the soils. Liquefaction normally occurs only under saturated conditions and in soils with a low relative density. Liquefaction can occur during earthquakes as vibrations induce soils to readjust to a more compact state. Experience has shown that earthquake induced liquefaction normally occurs only within the upper 50 to 60 feet of the soil profile.

Our test borings show that soils to depths of more than 50 feet consist primarily of dense and variably cemented silts, sands, and clays. Considering the density of the soils and the lack of groundwater within the upper 60 feet of the soil profile, seismic induced liquefaction is not expected to occur on this site.

## **RECOMMENDATIONS**

### **EARTHWORK**

Earthwork is expected to include current rough grading of the property for proper drainage, and future detail grading for construction of buildings, pavements, and other improvements. As noted above,

significant amounts of disturbed and organics-laden soils are present on the property that will require overexcavation and replacement or recompaction in preparation for support of buildings and pavements. It would not be practical to remove unsuitable organic soils from building footprints when the future location of buildings is not known; and it is not necessary that the recompaction operations be performed as a part of rough grading.

The following earthwork recommendations have been split into recommendations for present rough grading and recommendations for future grading of building and pavement areas. In these recommendations, the removal and recompaction operations of the existing disturbed soils are reserved for the future building earthwork. It should be recognized that this may result in some fills that are placed during rough grading, being removed and reworked during final lot and building pad grading.

To reduce future rework, it may be desirable and is acceptable to modify these recommendations to include overexcavation and recompaction as part of the preparation of rough grading fill areas.

### **Rough Grading**

Areas designated to receive engineered fill should be cleared of surface vegetation, unwanted fences, asphalt concrete, concrete slabs, rubbish, rocks and rubble pieces exceeding six inches in maximum size, soil stockpiles, and any other existing construction or debris. Swales, ditches, and low areas to be filled should be cleaned out of any loose or saturated materials. Any underground pipes within two feet of original or final grade (whichever is lower) should be removed. Any abandoned pipes greater than two inches in diameter as well as any associated trench backfills should be removed regardless of depth. Excavations resulting from the removal of the above items, as well as any other disturbed or undesirable materials designated by our representative should be cleaned out to firm, undisturbed soils and sloped back to a dish-shaped configuration allowing through passage of earthwork equipment. Excavations extending below the planned finished grade level should be backfilled with engineered fill placed and compacted in accordance with the following recommendations.

Areas designated to receive engineered fill should be scarified to a depth of eight inches, brought to a uniform over-optimum moisture content, and compacted to at least 90 percent of the maximum dry density as determined by the ASTM D1557-02 test procedure. Engineered fill should be placed in lifts not exceeding six inches in compacted thickness, brought to a uniform over-optimum moisture content, and compacted to at least 90 percent of the ASTM D1557-02 maximum dry density. On site soils, including existing fills, are suitable for use as engineered fill provided they are processed to remove significant vegetable matter, wood, rock and rubble pieces exceeding six inches in maximum dimension, rubbish, or other undesirable substances. Imported fill materials should be reviewed and approved by our firm prior to importation to the site.

Permanent excavation and embankment slopes should not exceed an inclination of one vertical on two horizontal. A representative of this firm should be present during grading operations to test and observe earthwork construction.

### **Future Building and Pavement Grading**

General clearance of new construction areas should include the removal of unwanted fences, rails, ties, ballast, and any other unwanted structures or foundations. Any surface vegetation should be removed, along with rubbish, rocks and rubble pieces exceeding six inches in maximum size, soil stockpiles, and any other existing construction or debris. Swales, ditches, and low areas to be filled should be cleaned out of any loose or saturated materials. Any underground pipes within two feet of original or final grade (whichever is lower) should be removed. Any abandoned pipes greater than two inches in diameter as well as any associated trench backfills should be removed regardless of depth.

An apparent waste pit was encountered at Test Pits 8 and 9. Exploratory excavations should be made in these areas to define the limits of the pit and remove organic and other waste materials. Organic and waste materials should be removed from the site.

Excavations resulting from the removal of the above items, as well as any other disturbed or undesirable materials designated by our representative should be cleaned out to firm, undisturbed soils and sloped back to a dish-shaped configuration allowing through passage of earthwork equipment. Excavations extending below the planned subgrade level should be backfilled with engineered fill placed and compacted in accordance with the following recommendations.

All existing fill materials and disturbed soils in building and pavement areas should be overexcavated to expose firm undisturbed soils. Within the footprint of each building, defined as extending to five feet outside of building lines, the overexcavated soils should be removed from the building area and not reused in building area fills. The existing fill materials removed from building areas may be reused as engineered fill in pavement and landscape areas, provided the organic materials are not highly concentrated. Layers and pockets of dark colored concentrated charcoal or charcoal dust should not be mixed with surrounding materials, but should be removed from the site. Our representative should be present during site clearance to verify that undisturbed soils are exposed and that the removed soils are suitable for reuse as engineered fill.

Areas designated to receive engineered fill as well as building pad and pavement subgrades which are completed in excavation or left at existing grade should be scarified to a depth of eight inches, brought to a uniform over-optimum moisture content, and compacted to at least 90 percent of the maximum dry density as determined by the ASTM D1557-02 test procedure. Engineered fill should be placed in lifts not exceeding six inches in compacted thickness, brought to a uniform over-optimum moisture content, and compacted to at least 90 percent of the ASTM D1557-02 maximum dry density.

On site soils that do not contain highly concentrated organic materials, are suitable for use as engineered fill in pavement and landscape areas. Native inorganic soils are suitable for use as engineered fill in building areas as well as in pavement and landscape areas. All fill materials should be processed to remove significant vegetable matter, wood, rock and rubble pieces exceeding six inches in maximum dimension, rubbish, or other undesirable substances. Fills placed in building pad areas should not contain rock or rubble pieces exceeding three inches in maximum size. Imported fill materials should

be reviewed and approved by our firm prior to importation to the site.

To enhance slab performance, reduce soil expansion, and provide a more stable base for working during the rainy season, the upper portion of the building pads and any adjacent concrete flatwork areas should be treated with a combination of lime and cement. The treatment should extend at least five feet outside of building wall lines, or to the outer edges of surrounding portland cement concrete walkways or aprons, whichever is greater in extent. We recommend treatment to a depth of at least 12 inches. Treatment may be extended to greater depths if a higher level of performance is desired. As a minimum, the soils should initially be treated to a depth of 12 inches with at least three percent high calcium quicklime as measured by dry unit weight of the compacted soil. The treated soil should be brought to a uniform over optimum moisture content, thoroughly mixed with the lime, and lightly compacted to seal the surface. The lime/soil mixture should then be allowed to cure for a minimum of 16 hours but no more than three days prior to addition of portland cement. Prior to final compaction, the lime treated soil should be treated with at least four percent portland cement, as measured by dry unit weight of the compacted soil. The lime/cement treated soil mixture then should be brought to a uniform over-optimum moisture consistency, thoroughly mixed and recompact to at least 92 percent of the maximum dry density determined by the ASTM D1557-02 test procedure. Not more than three hours should elapse between the time the cement is mixed with the soil/water and final compaction is completed. The above concentrations of lime and cement are based on assumptions made regarding the soil composition of the upper 12 inches of the building pad. Some modifications to these concentrations may be required. The actual percentages of lime and cement to be used should be established by our engineers based on a review of the types of soils present on each area to be treated. Treatment should conform to applicable provisions of the Caltrans Standard Specifications, Sections 24 and 27. The treated pad should either be kept wet for a period of at least three days after compaction or seal coated.

Untreated pavement subgrades should be compacted to at least 90 percent of the ASTM D1557-02 maximum dry density regardless of whether the final grade is achieved by cutting, filling or is left at original grade.

Permanent excavation and embankment slopes should not exceed an inclination of one vertical on two horizontal. A representative of this firm should be present during grading operations to test and observe earthwork construction.

## **FOUNDATIONS**

The proposed buildings may be supported upon continuous and/or isolated spread foundations bearing in the dense and variably cemented soils indicated to be present below depths varying from about two to five feet below the existing site grades. The foundations should be extended to the depth necessary to bear on the cemented soils; foundation excavations should be observed by an Engineer from this office to verify that proper cemented soils are engaged. Foundations bearing in the cemented soils should maintain a minimum depth of 24 inches below the building pad or lowest surrounding subgrade level (whichever is lower). Unreinforced lean concrete may be used to backfill the deepened portions of foundation excavations. Lean concrete for this purpose should have a minimum strength at 28 days of 1000 pounds per square inch.



Foundations constructed as recommended above may be designed for maximum allowable bearing pressures of 6000 pounds per square foot (psf) for dead plus live load, or 8000 psf for total load, including the effects of either wind or seismic forces. A minimum foundation width or diameter of 24 inches, allowing for cleaning, should be maintained. The weight of foundation concrete below grade may be disregarded in sizing computations. Foundation excavations should not be allowed to stand open for extended periods prior to concrete placement. Unformed foundation excavations are expected to stand open without significant sloughing or raveling.

Signs, fences, trash enclosures, or other light appurtenant construction or equipment may be supported on continuous or isolated spread foundations based in undisturbed soils, engineered fill, or a combination of these materials. These foundations should be based at a minimum depth of 18 inches below the lowest surrounding subgrade level. Such foundations may be sized for maximum allowable bearing pressures of 3000 psf for dead plus live load, and 4000 psf for total load.

Resistance to lateral forces may be computed using a passive earth pressure equivalent to that exerted by a fluid weighing 300 pounds per cubic foot. This pressure may be considered to act against one and one-half times the projected diameter of drilled shafts. The sliding resistance of footings may be computed using a friction factor of 0.32 acting on the bottoms of footings. A soil-concrete adhesion value equivalent to 50 pounds per square foot per foot of depth along the sides of footings may be used in computation of lateral and uplift load resistance. The recommended passive pressure and friction values have been modified by appropriate factors of safety and may be applied directly in design calculations.

Foundation excavations should be clean of slough and should be pumped free of significant water when concrete is placed.

**SEISMIC DESIGN**

In design using the lateral force provisions of the 2013 California Building Code, the parameters in Table 1 may be used.

TABLE 1

Period (seconds)	Mapped Spectral Response Accelerations (g)		Site Class	Site Coefficients		Maximum Considered Earthquake Spectral Response Accelerations (g)		Design Spectral Response Accelerations (g)	
0.2	$S_s$	0.651	D	$F_a$	1.279	$S_{MS}$	0.833	$S_{DS}$	0.555
1	$S_1$	0.284		$F_v$	1.832	$S_{MI}$	0.520	$S_{DI}$	0.347

## **LOADING DOCK WALLS**

Restrained dock walls should be capable of resisting an at-rest soil pressure equivalent to that exerted by a fluid weighing 50 pounds per cubic foot. Wall design also should consider pressures associated with traffic or other adjacent surcharge. Care should be taken to avoid exertion of excessive compaction pressures in backfilling of walls. The above loading is based on the assumption that hydrostatic pressures will not develop behind the walls.

Walls should be drained as needed to relieve potential hydrostatic pressure. Where floor slabs or pavements adjoin the tops of walls, this should suffice to exclude significant water and further drainage measures would not be required.

Only nonexpansive silts, sands or gravels should be used to backfill dock area walls. On site clays should not be used in wall backfill. Use of 3/8-inch pea gravel or clean 3/4-inch crushed rock for wall backfill is acceptable and can facilitate placement and compaction procedures. Backfill should be placed in level lifts not exceeding 12 inches in compacted thickness. Each lift should be compacted at a uniform near optimum moisture content to at least 90 percent of the ASTM D1557-02 maximum dry density.

## **SLAB-ON-GRADE**

### **Thickness Requirements**

Because of stresses induced by truck cranes during panel erection and the expansive nature of the site soils, a minimum six-inch thick floor slab is suggested for all floor areas. Our calculations indicate a six-inch thick slab would be capable of supporting typical 3000- to 5000-pound capacity forklifts carrying loads of less than 3000 pounds. If the floor will support more heavily loaded forklifts, or if high racks are used, then a six-inch slab may not be sufficient and our firm may be contacted for further recommendations. A modulus of subgrade reaction of 150 pounds per cubic inch may be used for the treated building pads in determining slab thickness for forklift and rack loads.

Due to the expansive soil setting, floor slabs should be reinforced with No. 4 bars spaced on 24-inch centers in each direction as a minimum. The reinforcement should be chaired at the middepth of the slab. The above discussion of slab thickness is based on use of quality strength concrete (4000 pounds per square inch minimum 28-day compressive strength). We suggest slab concrete be placed at a slump of three to four inches. Fibermesh® may be used in concrete to increase toughness, if desired.

The floor slab should be thickened by at least 20 percent of the above recommended thickness at any drive-through doors. In addition, edges should be thickened wherever heavy materials will be stored within five feet of a free slab edge. A free slab edge is defined as any joint or edge where load transfer to adjacent areas is not provided, such as at building wall lines or undoweled expansion joints. The transition to the thickened edge may be achieved by tapering the slab thickness over a distance of five feet. Tapering may be accomplished by reducing the underlying aggregate base thickness at the edges.

### **Joints**

Shrinkage crack control joints should consist of sawcut grooves penetrating at least one-fourth of the slab thickness. Control joints should not be spaced farther apart than about 30 times the slab thickness. Construction cold joints and expansion joints in the warehouse slab should include dowels to provide load transfer. Dowels should be three-quarters inch in diameter, 14 inches long, and spaced on 12 inch centers for six inch thick slabs. One end of dowels at expansion and crack control joints should be greased and wrapped in plastic to allow horizontal movement. All reinforcement and dowels should be placed at the middepth of the slab.

### **Underlayment and Moisture Control**

The floor slab may be supported on the chemically treated building pad prepared as recommended above. In warehouse areas where minor moisture penetration through the slabs can be tolerated, the slab should be underlain by a minimum four-inch thick layer of Caltrans Class 2 aggregate base to serve as a leveling course. The aggregate base should be wetted immediately prior to placement of slab concrete. Moisture sensitive areas such as office areas receiving impervious floor coverings should be underlain by a minimum four-inch thick layer of clean three-quarter inch crushed rock graded such that 100 percent passes a one-inch sieve and none passes a No. 4 sieve, to serve as a capillary moisture break. In such areas the drainage rock should be covered with a plastic membrane at least 10-mils thick as a moisture vapor retarder. One to two inches of clean sand may be spread over the membrane for protection and to aid concrete curing, if desired. Alternatively, the membrane may be placed directly on the building pad beneath the rock.

With the use of water-based floor based floor adhesives, impervious floor coverings are extremely sensitive to slab moisture. Under some conditions, the small amount of moisture vapor which bypasses the vapor membrane, or even the excess water remaining in the slab from placement, can be sufficient to cause debonding and discoloration problems. To minimize moisture vapor problems, the capillary break gravel must be present to the minimum recommended thickness and the membrane must be continuous throughout the slab area. Any membrane seams should overlap by at least one foot. The membrane should be cut tight to penetrations. Tears and punctures should be sealed with membrane manufacturer-approved tape, or overlain by a second patching membrane. Slab concrete should be placed at as low a water-cement ratio as practical. The under-slab gravel layer should be protected from precipitation and other moisture; wetting of the sand over the membrane prior to concrete placement should be minimized. The edges of the slab at the building perimeter should be thickened to form a cutoff between the building exterior and under-slab gravel layers. If impervious floor coverings are planned and greater assurance against moisture problems is desired, consideration should be given to waterproofing of slabs with a quality commercial concrete sealant. A sealant or other waterproofing system may be necessary for the satisfactory performance of wood laminates, sheet vinyl, and other impervious flooring.

## **FLATWORK**

The expansive soils on the site will cause movement of exterior walkway slabs, resulting in cracking as well as horizontal and vertical separations at joints. These effects can be reduced by extending lime/cement treatment over these areas, or by placing at least 12 inches of imported nonexpansive fill beneath walkway slabs. Chemical treatment is required beneath flatwork immediately adjacent to the building to reduce the potential for differential movement between the interior floor and exterior slabs at doorways. Although use of chemical treatment or imported fill in other flatwork areas is not required by this report, we suggest such measures be considered. Consideration also should be given to use of reinforcement, frequent control joints, and thickened edges to retard subgrade moisture changes beneath flatwork. Placement of pavements or well-irrigated landscaped areas along the edges of flatwork can help reduce soil moisture content changes and expansive soil movements. Large shrubs or trees with invasive root systems can desiccate soils beneath flatwork, and should not be planted immediately adjacent to building or flatwork areas. The possibility of differential movement between the deeply supported building and adjacent flatwork should be recognized in establishing grades.

## **PAVEMENTS**

Resistance (R) value tests are used to evaluate pavement subgrade properties. Our site observation and work in the area indicates that the pavement subgrades are likely to consist of mixtures of clays on the southerly portion of the site and clayey silts on the northerly portion of the site. R values can range from five for the poorest quality clay subgrades to 70 or higher for high quality sand and gravel subgrades. An R value test on a sample of the clayey silts obtained an R value of 6. This R value has been used in the Caltrans Design Method for Flexible Pavements to evaluate pavement sections.

We typically attempt to determine pavement sections that include use of lime/cement treated soil subbase. Our observations and tests show most areas of the site have a relatively high percentage of organic material in the surface soils, which makes the soils less reactive to treatment and can result in treated strengths that have unreliable long term stability. Previous treated soil compressive strength tests on these soils did not obtain the strengths desired for pavement support. Based on this we recommend pavements on this project not rely upon a treated soil layer as part of the pavement section.

The Caltrans design method uses a traffic index (TI) to account for vehicle loads, frequency, and design life. A design life of 20 years is commonly used for commercial pavements. The Asphalt Institute has suggested that TI 4.5 may be reasonably representative of automobile parking lot traffic. Truck use areas require a higher traffic index. A TI of 7.0 is considered capable of supporting up to about 60 fully loaded, five-axle semi-trucks per week using any one section of the pavement. Pavement sections designed for TI 8.0 are considered capable of supporting up to about 190 fully loaded, five axle semi-trucks per week. Pavement section alternatives for a range of traffic indices are presented in Table 2. We can provide pavement sections for other traffic indices upon request.

**TABLE 2  
 PAVEMENT SECTION  
 ALTERNATIVES**

Design Traffic Index/ Use	Type B Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)
4.5	2.5	9
Auto Parking	3	7
6.0	3	13
10 to 20 Trucks per Week	4	11
7.0	3	17
Up to 60 Trucks per Week	4	15
8.0	3.5	20
Up to 190 Trucks per Week	4	19

Materials and construction within structural pavement sections should conform to the applicable provisions of the 2010 Caltrans Standard Specifications

The expansive subgrade soils will shrink and swell with moisture variations. This can lead to early cracking of asphalt concrete pavements, particularly adjacent to unpaved areas that are exposed to the weather. Similar cracking is prevalent when pavements are near the crown of slopes, as soil expansion cycles encourage slope soils to spread laterally and creep down hill. Such cracking is primarily cosmetic and periodic crack sealing can help ensure long-term pavement performance. The incidence of such cracking can be reduced by maintaining well-watered landscaping along the edges the pavements that prevent drying of the soils. If pavements are constructed during the dry months, occasional sprinkling or watering of the subgrade until the asphalt concrete is placed also can help maintain subgrade moisture and reduce future swelling/cracking. During the dry months, watering of landscape areas and planters adjacent to the paving should commence immediately after paving, if possible. Due to expansive soil movements, curbs and pavement edges will tend to spread laterally unless confined by the soils of adjacent landscaped areas. Slopes and retaining walls that result in significant portions of the adjacent grades being lower than the pavement edge should be avoided, if possible.

### LIMITATIONS

This report necessarily assumes uniform variation of soils between borings. Our recommendations are based upon this assumed uniformity and the information provided regarding the proposed construction. If unusual conditions are encountered during construction, the contractor or his representative should notify this firm immediately so that alternate recommendations can be made.

This report is applicable only to the proposed construction, as described herein, and should not be utilized for design or construction on any other site.

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The following Plates are attached and complete this report:

- Plate 1 - Plot Plan
- Plates 2 through 14 - Log of Test Pit, Test Pits 1 through 16
- Plates 15 through 31 - Log of Boring, Borings 1 through 16
- Plate 31 - Unified Soil Classification System
- Plate 32 - Atterberg Limits Data
- Plate 33 - Resistance Value Data
- Plate 34 - Treated Soil Compressive Strength Data
- Plate 35 - Organic Content Test Data

Sincerely,

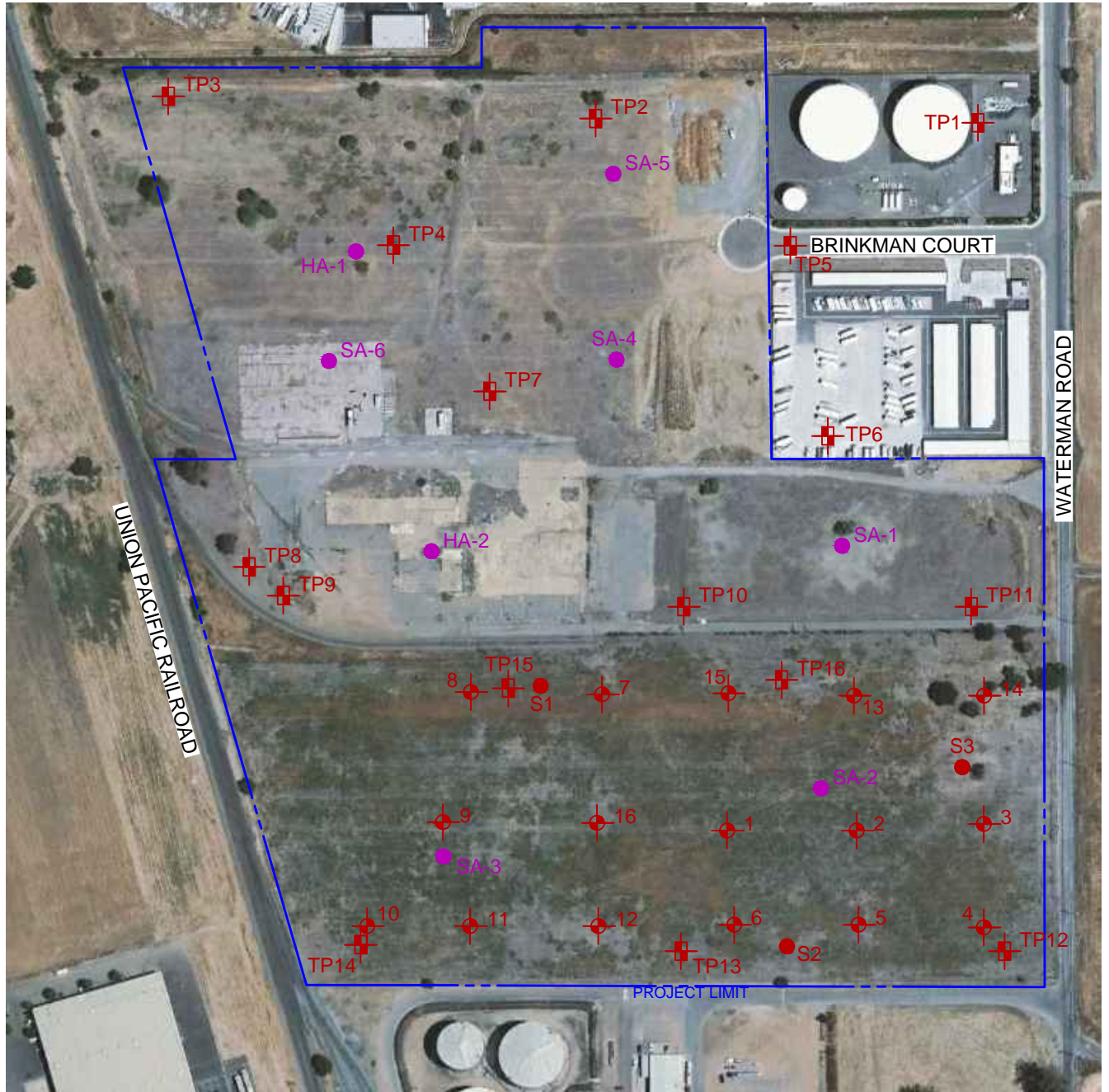
RANEY GEOTECHNICAL, INC.







William C. Boli  
Geotechnical Engineer No. 2004

(1) addressee

PROJECT NUMBER: 146-538  
 DRAWN BY: WCB  
 DATE: 6/2/16  
 PLATE NUMBER: 1

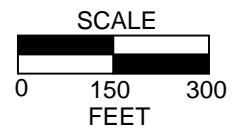


KEY:

-  TP4 TEST PIT EXCAVATED FOR 1992 INVESTIGATION
-  2 BORING DRILLED FOR 2004 INVESTIGATION
-  S1 SAMPLE LOCATION FOR 2004 INVESTIGATION
-  SA-3 SAMPLE LOCATION FOR THIS INVESTIGATION

NOTES:

1. TEST PIT, BORING AND SAMPLING LOCATIONS SHOWN ARE APPROXIMATE ONLY.
2. PREPARED FROM A 2007 GOOGLE EARTH PHOTOGRAPH.



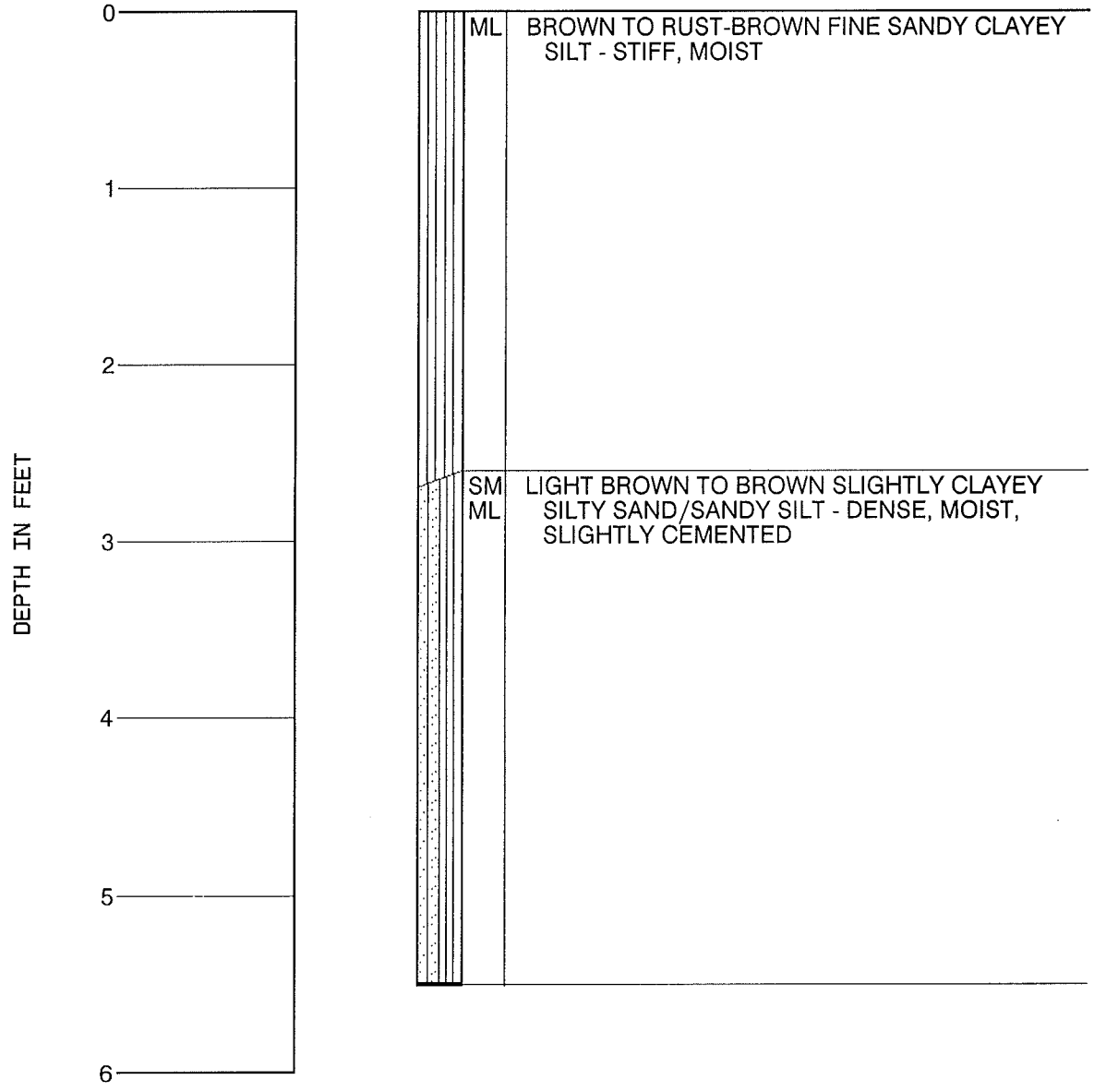
**PLOT PLAN**



PROJECT NUMBER: 877-001  
 DATE: 5/18/92  
 DRAWN BY: TSB  
 CHECKED BY:  
 PLATE NUMBER: 2

### TEST PIT 1

ELEVATION: 47.0 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORINGS.
4. ELEVATIONS SHOWN ARE APPROXIMATE AND WERE OBTAINED BY INTERPOLATION BETWEEN GROUND SURFACE ELEVATIONS SHOWN ON A PRELIMINARY ALTA/ASCM LAND TITLE SURVEY.

### LOG OF TEST PIT



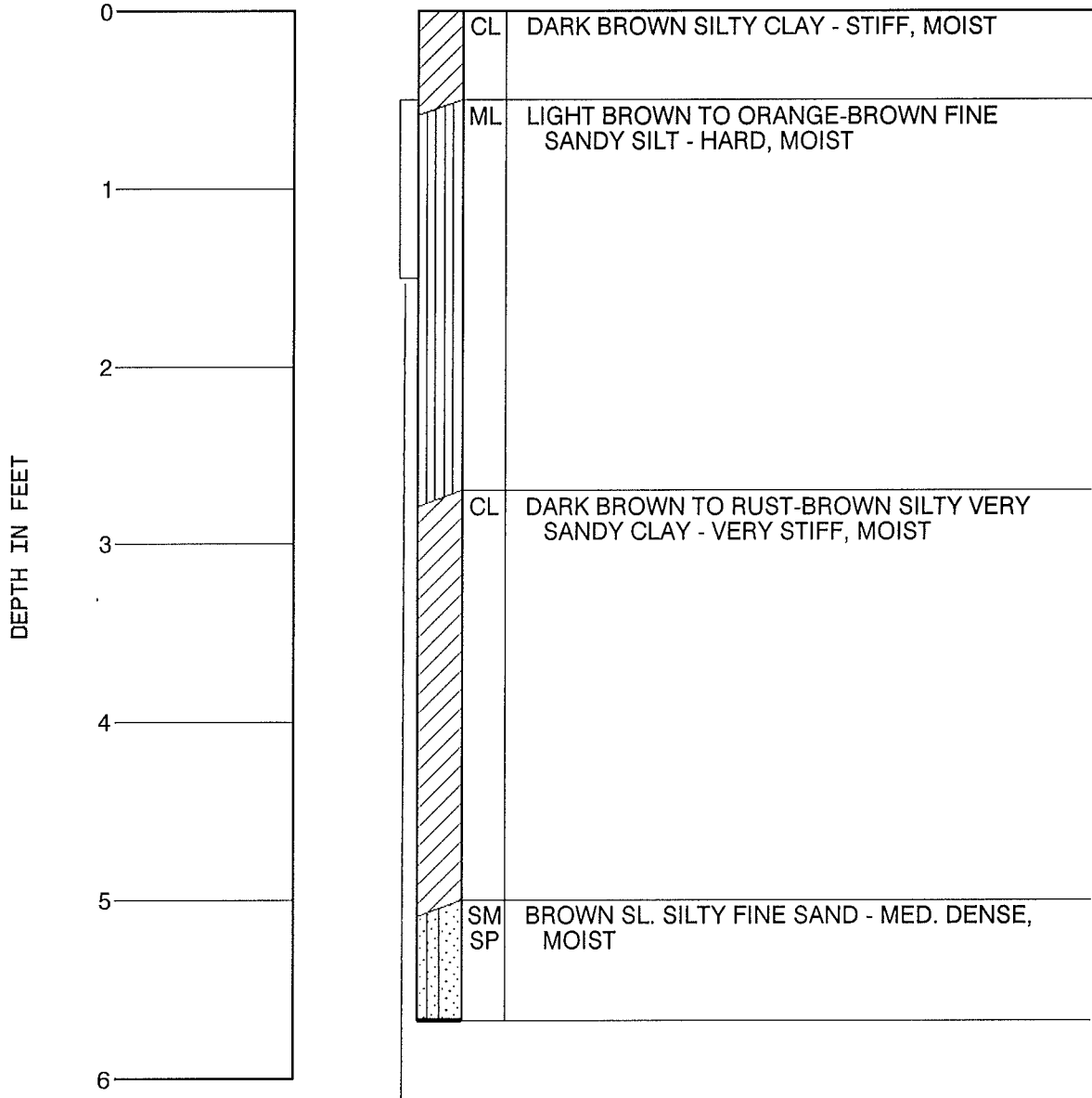


PROJECT NUMBER: 877-001  
 DRAWN BY: TSB  
 DATE: 5/18/92  
 PLATE NUMBER: 3  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

## TEST PIT 2

ELEVATION: 44.5 ± FEET

EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. BULK SAMPLE OBTAINED.
4. SEE NOTES ON PLATE 2.

### LOG OF TEST PIT

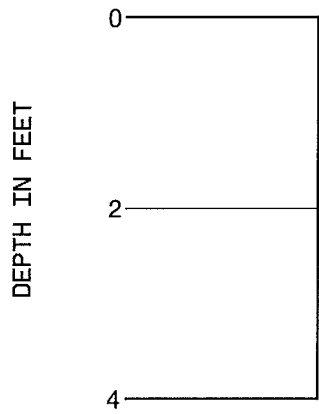


PROJECT NUMBER: 877-001  
 DRAWN BY: TSB  
 DATE: 5/18/92  
 PLATE NUMBER: 4  
 CHECKED BY:

### TEST PIT 3

ELEVATION: 44.0 ± FEET

EXCAVATED: 5/1/92

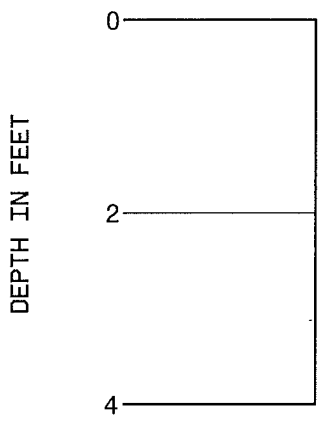


ML	TAN TO LIGHT BROWN FINE SANDY SILT - HARD, DRY, VARIABLY CEMENTED
SM ML	LIGHT BROWN SANDY SILT/SILTY SAND - DENSE, SL. MOIST, VARIABLY CEMENTED
SM	BROWN TO RUST-BROWN SILTY FINE SAND - DENSE, MOIST, VARIABLY CEMENTED

### TEST PIT 4

ELEVATION: 44.5 ± FEET

EXCAVATED: 5/1/92



ML	DARK BROWN FINE SANDY CLAYEY SILT - STIFF, MOIST
CL CH	DARK GRAY TO BLACK SILTY CLAY WITH OCCASIONAL CHARCOAL SEAMS - STIFF, MOIST
SM	ORANGE-BROWN SILTY FINE SAND - DENSE, MOIST, CEMENTED



**NOTES:**

1. THE TEST PIT LOGS DEPICT SUBSURFACE CONDITIONS ONLY AT THE TEST PIT LOCATIONS AND TIMES DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

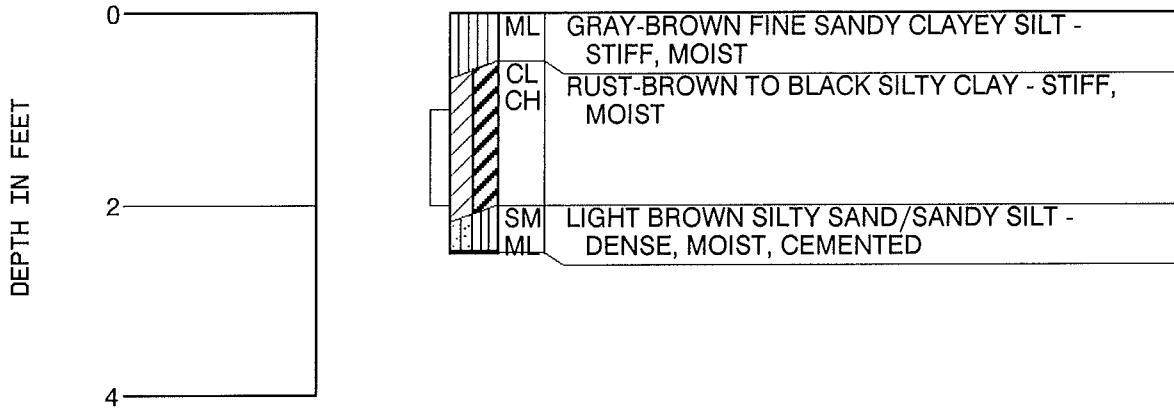
**LOG OF TEST PIT**



PROJECT NUMBER: 877-001  
 DRAWN BY: TSB  
 DATE: 5/18/92  
 PLATE NUMBER: 5  
 CHECKED BY:

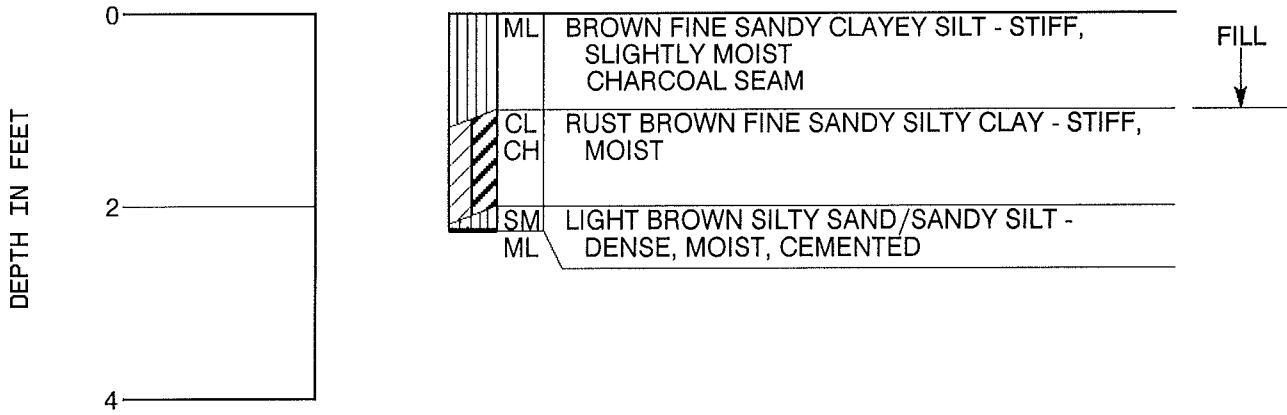
### TEST PIT 5

ELEVATION: 46.8 ± FEET  
 EXCAVATED: 5/1/92



### TEST PIT 6

ELEVATION: 46.8 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOGS DEPICT SUBSURFACE CONDITIONS ONLY AT THE TEST PIT LOCATIONS AND TIMES DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATES 2 AND 3.

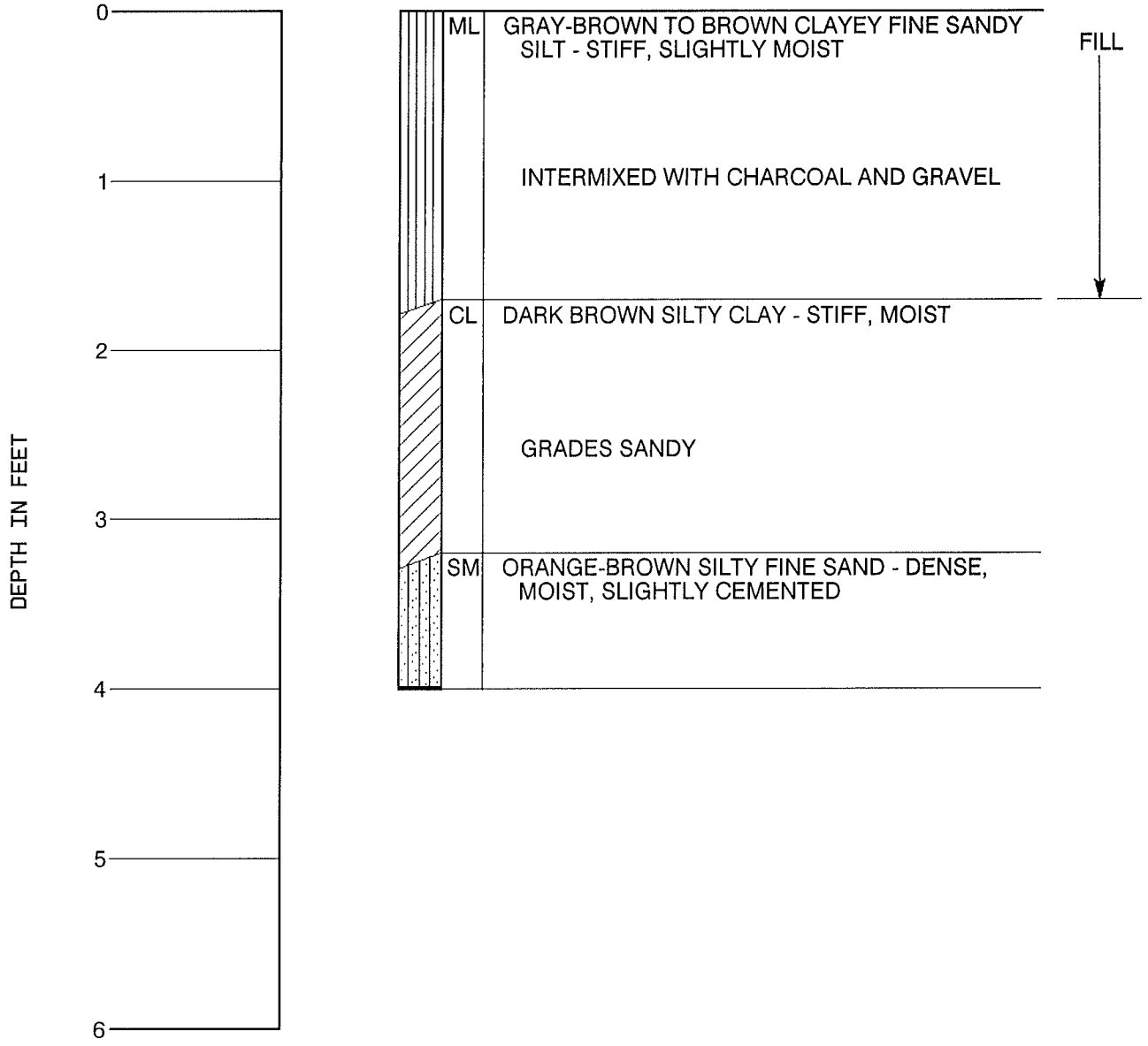
## LOG OF TEST PIT



PROJECT NUMBER: 877-001  
 DRAWN BY: TSB DATE: 5/18/92  
 PLATE NUMBER: 6  
 CHECKED BY: DATE:

### TEST PIT 7

ELEVATION: 47.5 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

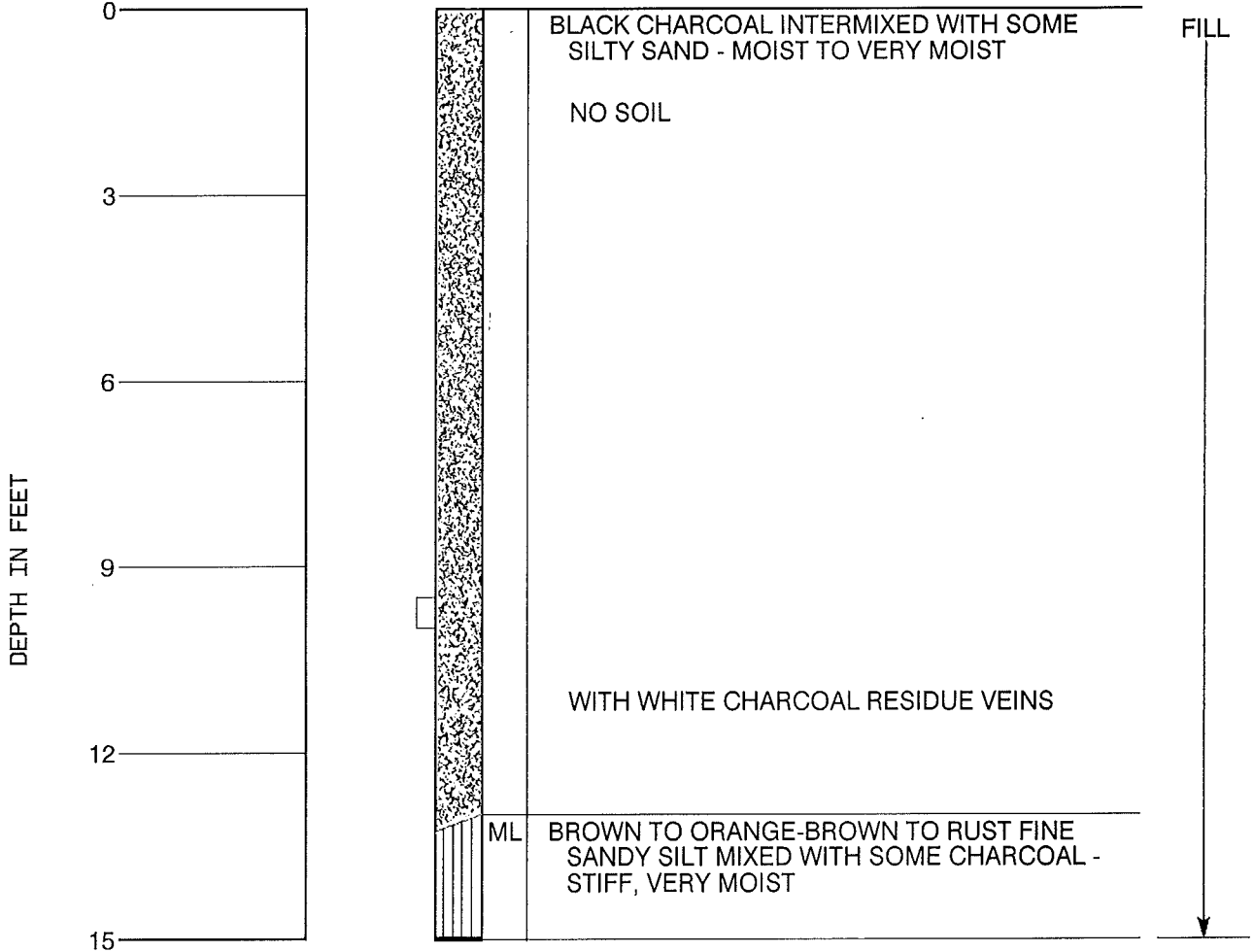
### LOG OF TEST PIT



PROJECT NUMBER: 877-001  
 DRAWN BY: TSB DATE: 5/18/92  
 PLATE NUMBER: 7  
 CHECKED BY: DATE:

### TEST PIT 8

ELEVATION: 49.5 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATES 2 AND 3.

**LOG OF TEST PIT**

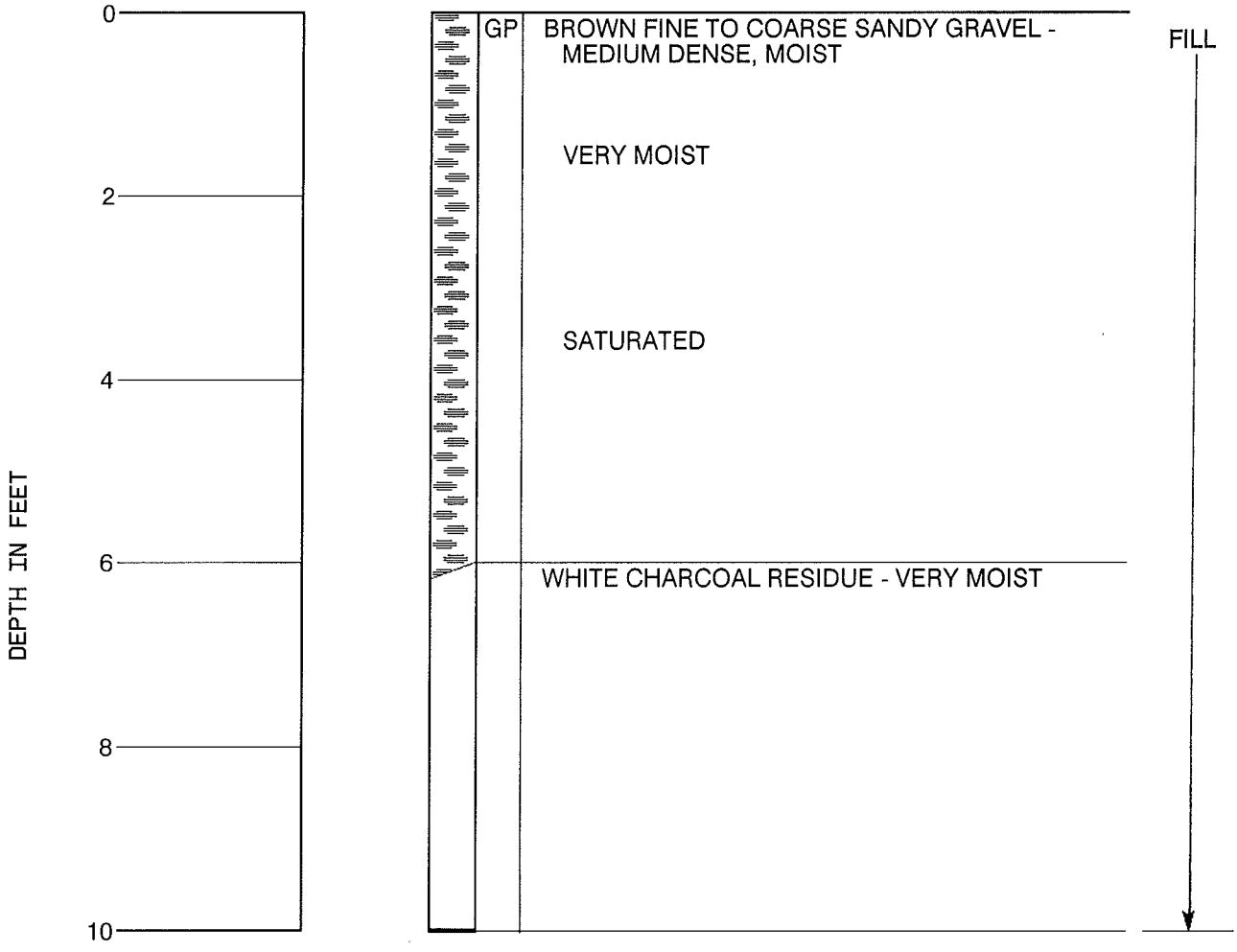


PROJECT NUMBER: 877-001  
 DATE: 5/18/92  
 DRAWN BY: TSB  
 CHECKED BY:  
 PLATE NUMBER: 8

### TEST PIT 9

ELEVATION: 50.0 ± FEET

EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

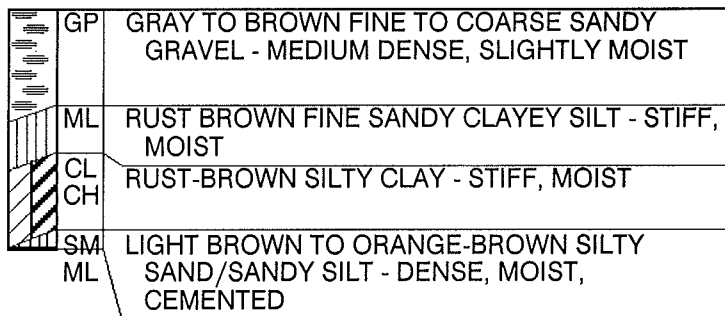
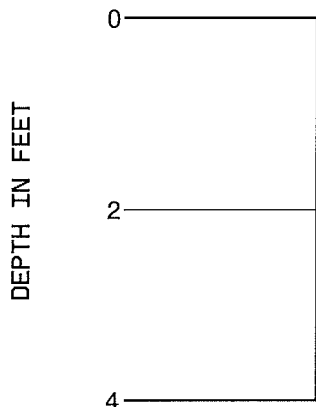
**LOG OF TEST PIT**



PROJECT NUMBER: 877-001  
 DATE: 5/18/92  
 DRAWN BY: TSB  
 CHECKED BY:  
 PLATE NUMBER: 9

### TEST PIT 10

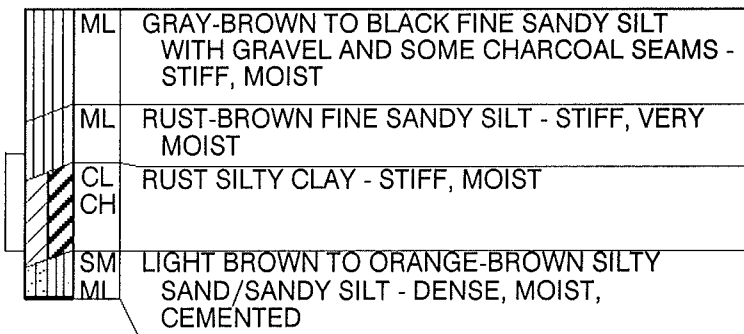
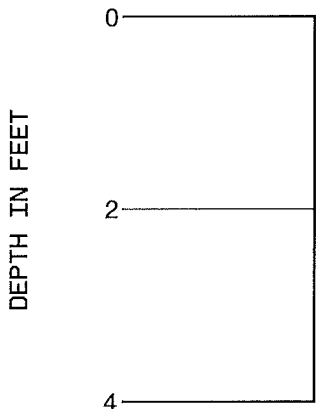
ELEVATION: 49.5 ± FEET  
 EXCAVATED: 5/1/92



FILL  
↓

### TEST PIT 11

ELEVATION: 50.0 ± FEET  
 EXCAVATED: 5/1/92



FILL  
↓

NOTES:

1. THE TEST PIT LOGS DEPICT SUBSURFACE CONDITIONS ONLY AT THE TEST PIT LOCATIONS AND TIMES DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

## LOG OF TEST PIT

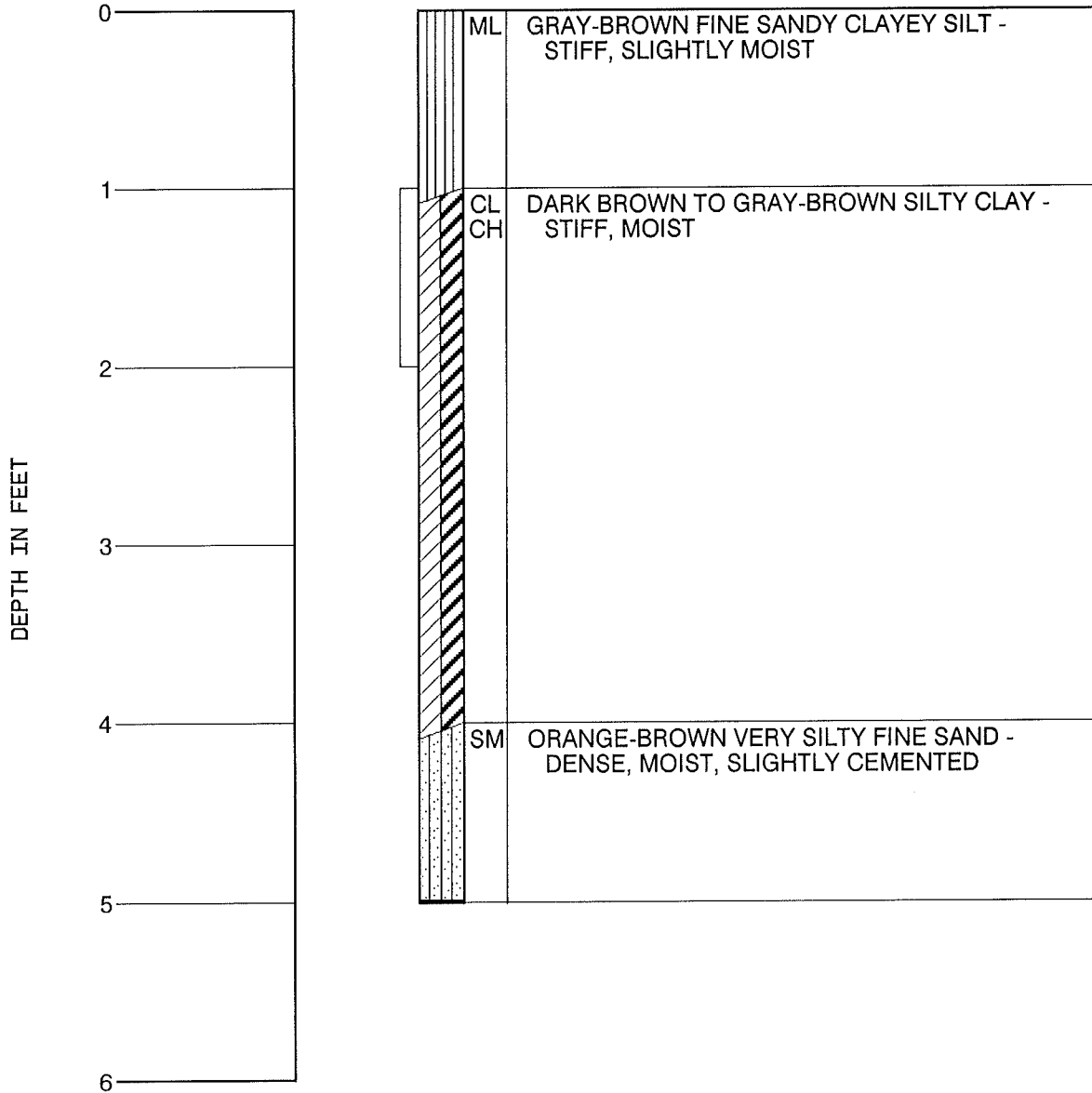


PROJECT NUMBER: 877-001  
 DRAWN BY: TSB  
 DATE: 5/18/92  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PLATE NUMBER: 10

## TEST PIT 12

ELEVATION: 50.5 ± FEET

EXCAVATED: 5/1/92



### NOTES:

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATES 2 AND 3.

LOG OF TEST PIT

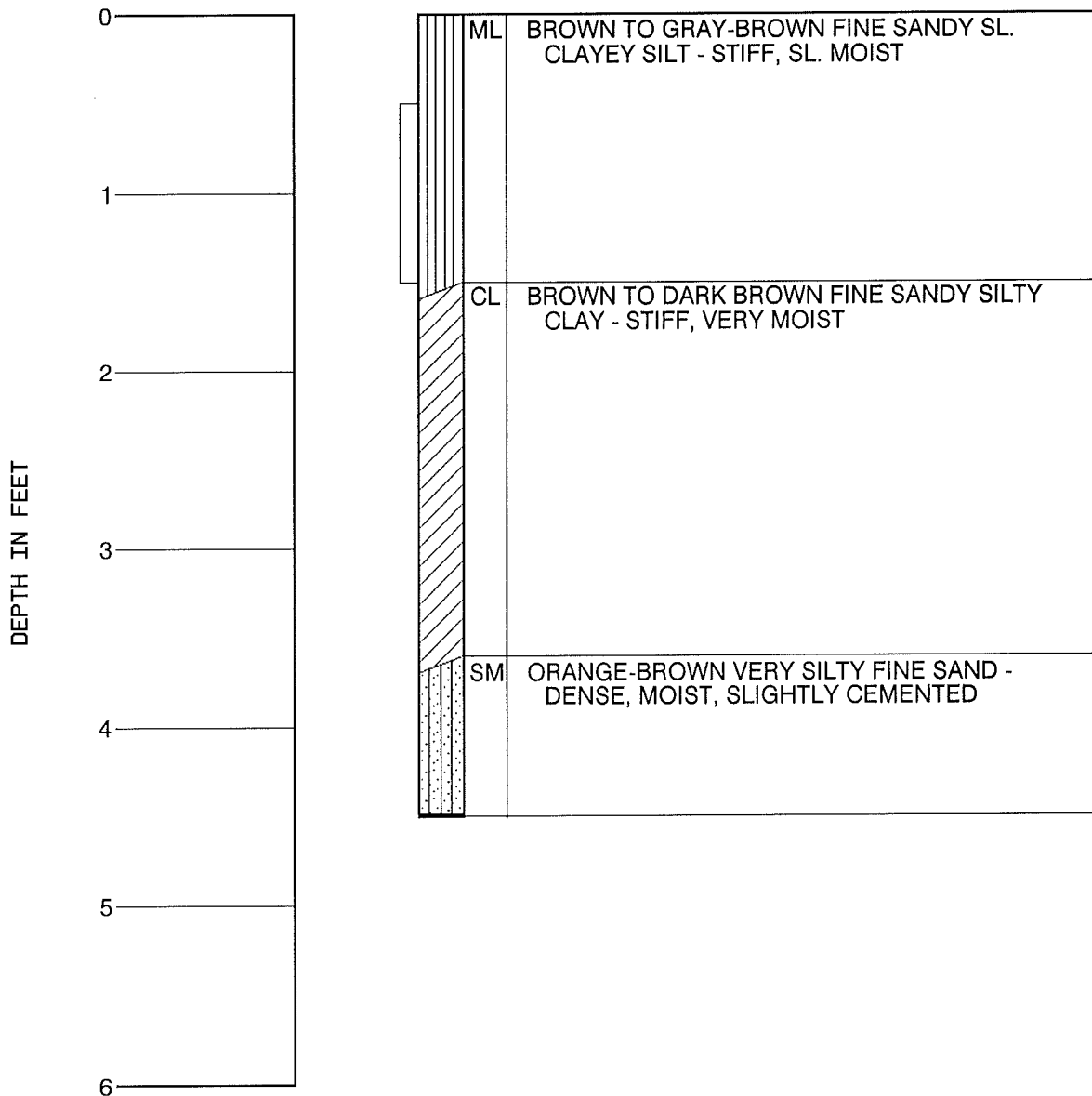




PROJECT NUMBER: 877-001  
 DATE: 5/18/92  
 DRAWN BY: TSB  
 CHECKED BY: \_\_\_\_\_  
 PLATE NUMBER: 11

### TEST PIT 13

ELEVATION: 49.5 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATES 2 AND 3.

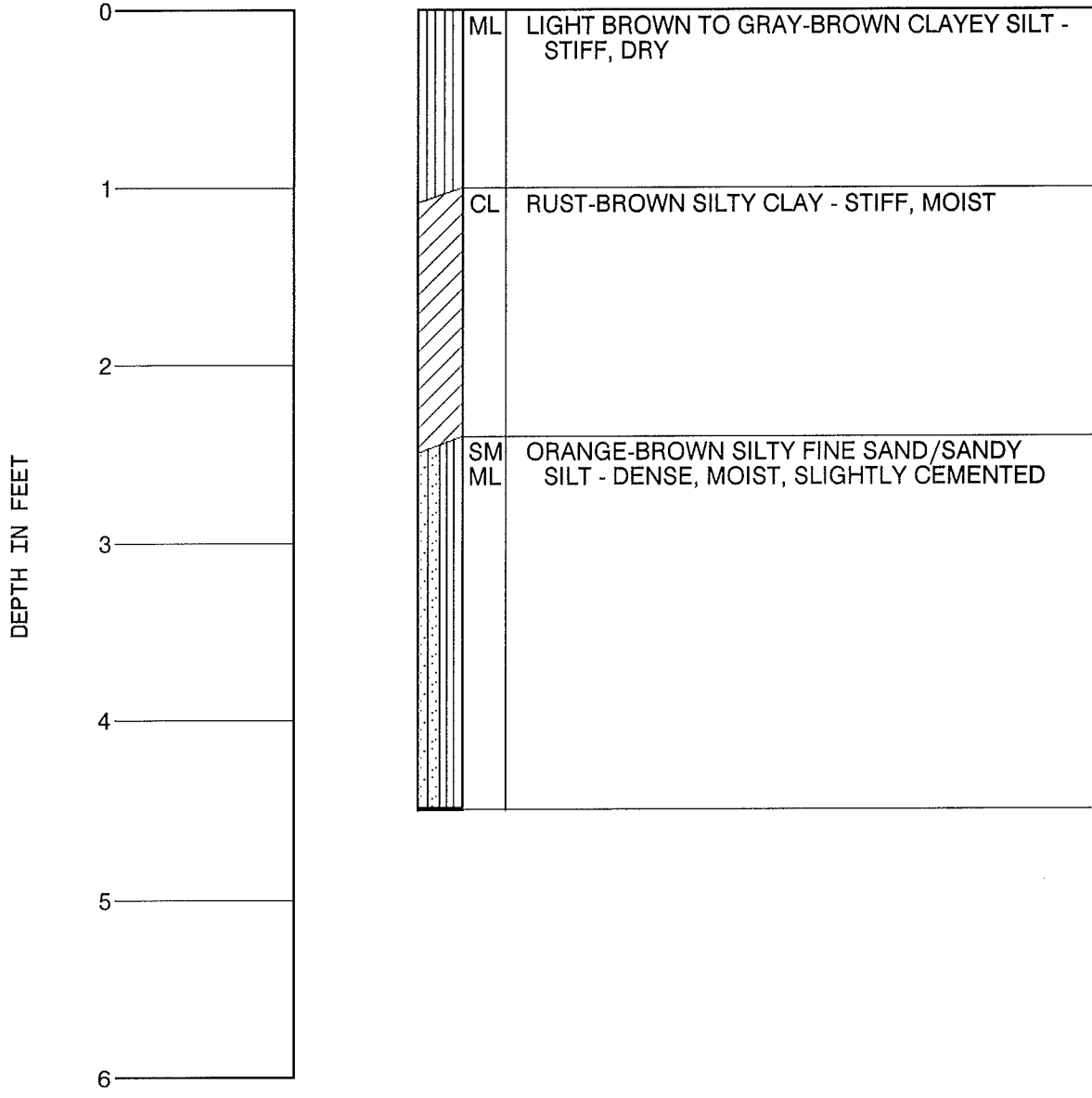
**LOG OF TEST PIT**



PROJECT NUMBER: 877-001  
 DRAWN BY: TSB  
 DATE: 5/18/92  
 PLATE NUMBER: 12  
 CHECKED BY:

### TEST PIT 14

ELEVATION: 49.5 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

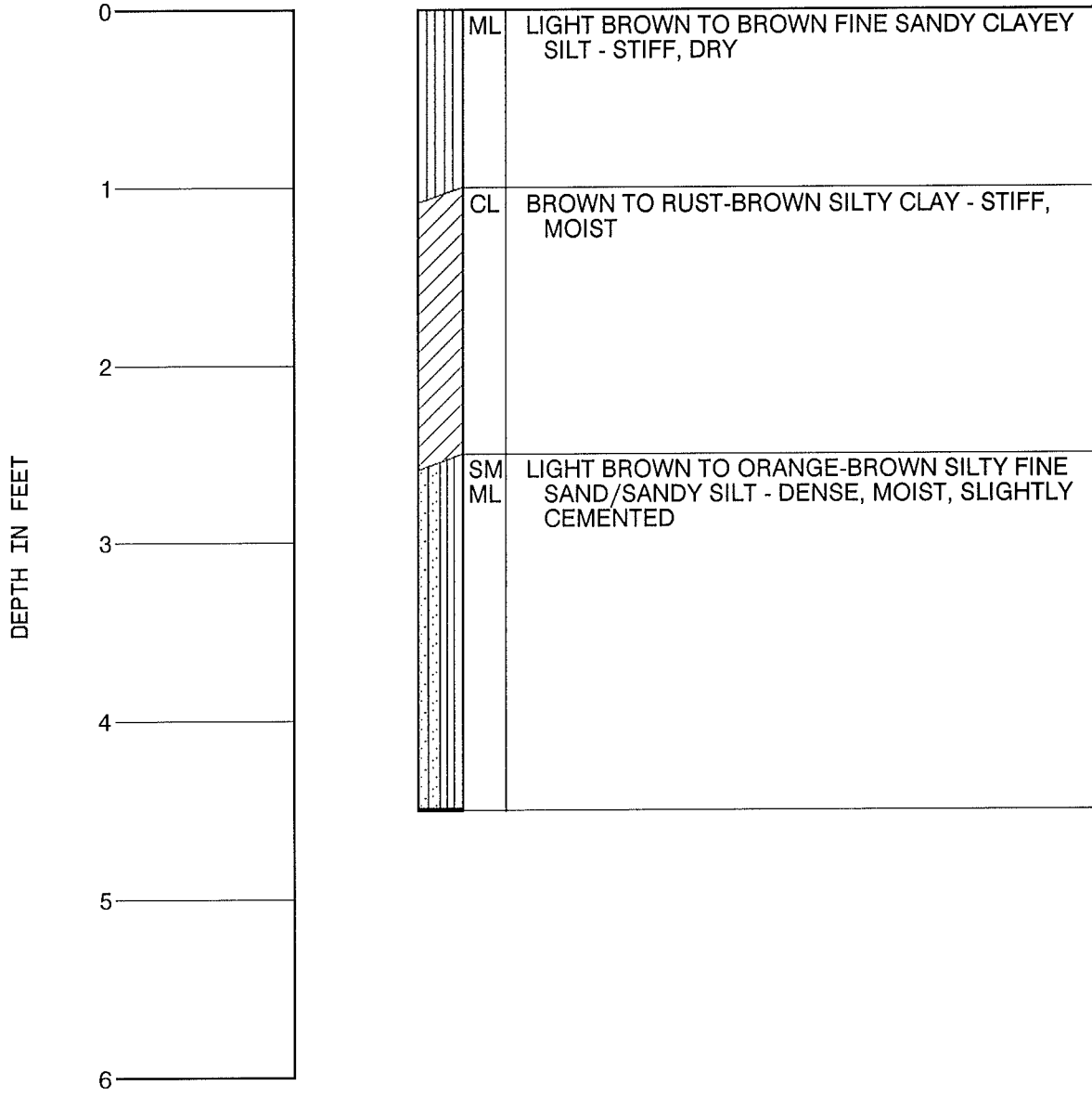
## LOG OF TEST PIT



PROJECT NUMBER: 877-001  
 DATE: 5/18/92  
 DRAWN BY: TSB  
 CHECKED BY: \_\_\_\_\_  
 PLATE NUMBER: 13

### TEST PIT 15

ELEVATION: 50.0 ± FEET  
 EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

## LOG OF TEST PIT

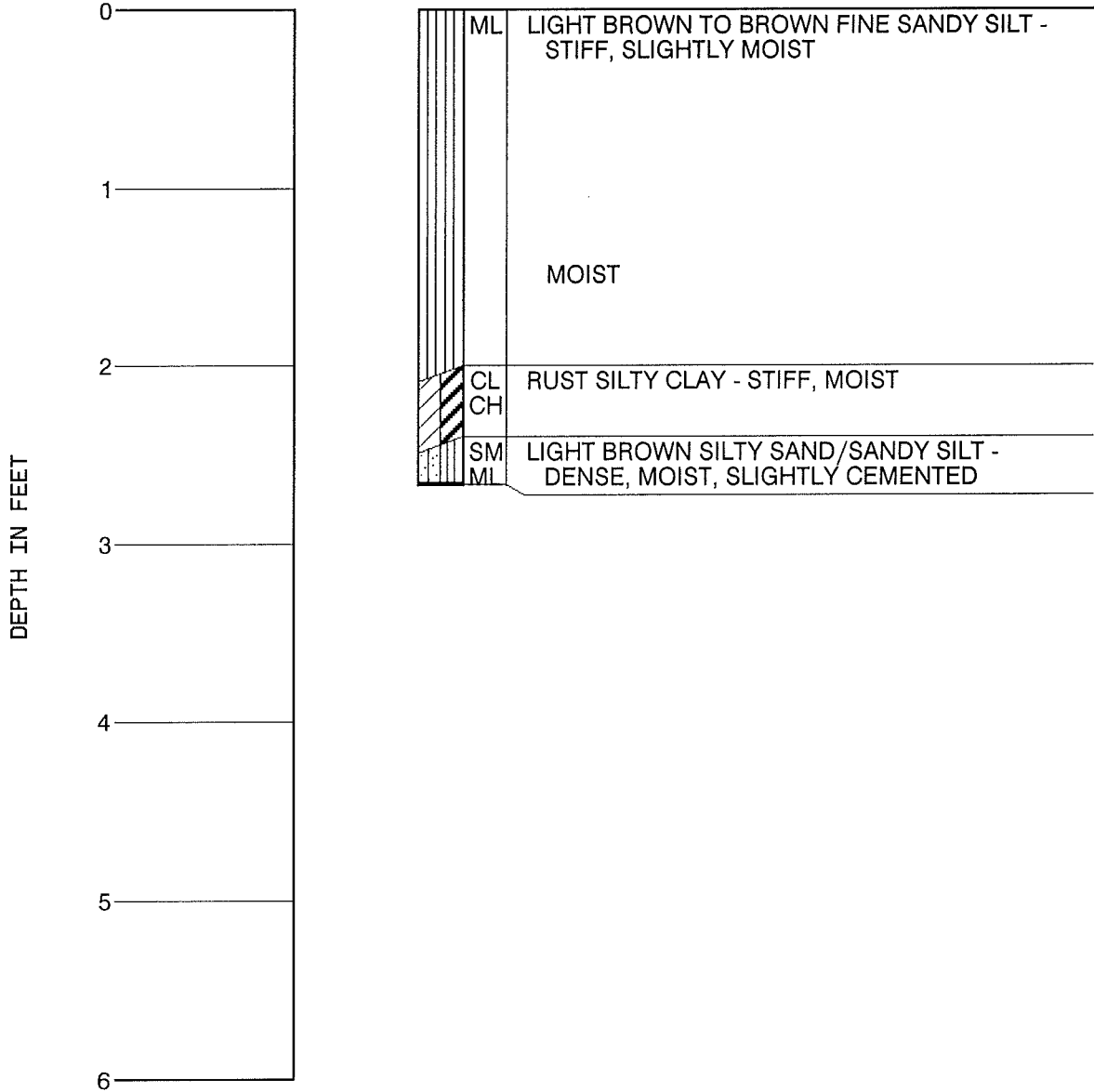


PROJECT NUMBER: 877-001  
 DATE: 5/18/92  
 DRAWN BY: TSB  
 CHECKED BY: \_\_\_\_\_

### TEST PIT 16

ELEVATION: 49.5 ± FEET

EXCAVATED: 5/1/92



**NOTES:**

1. THE TEST PIT LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 15.
3. SEE NOTES ON PLATE 2.

## LOG OF TEST PIT

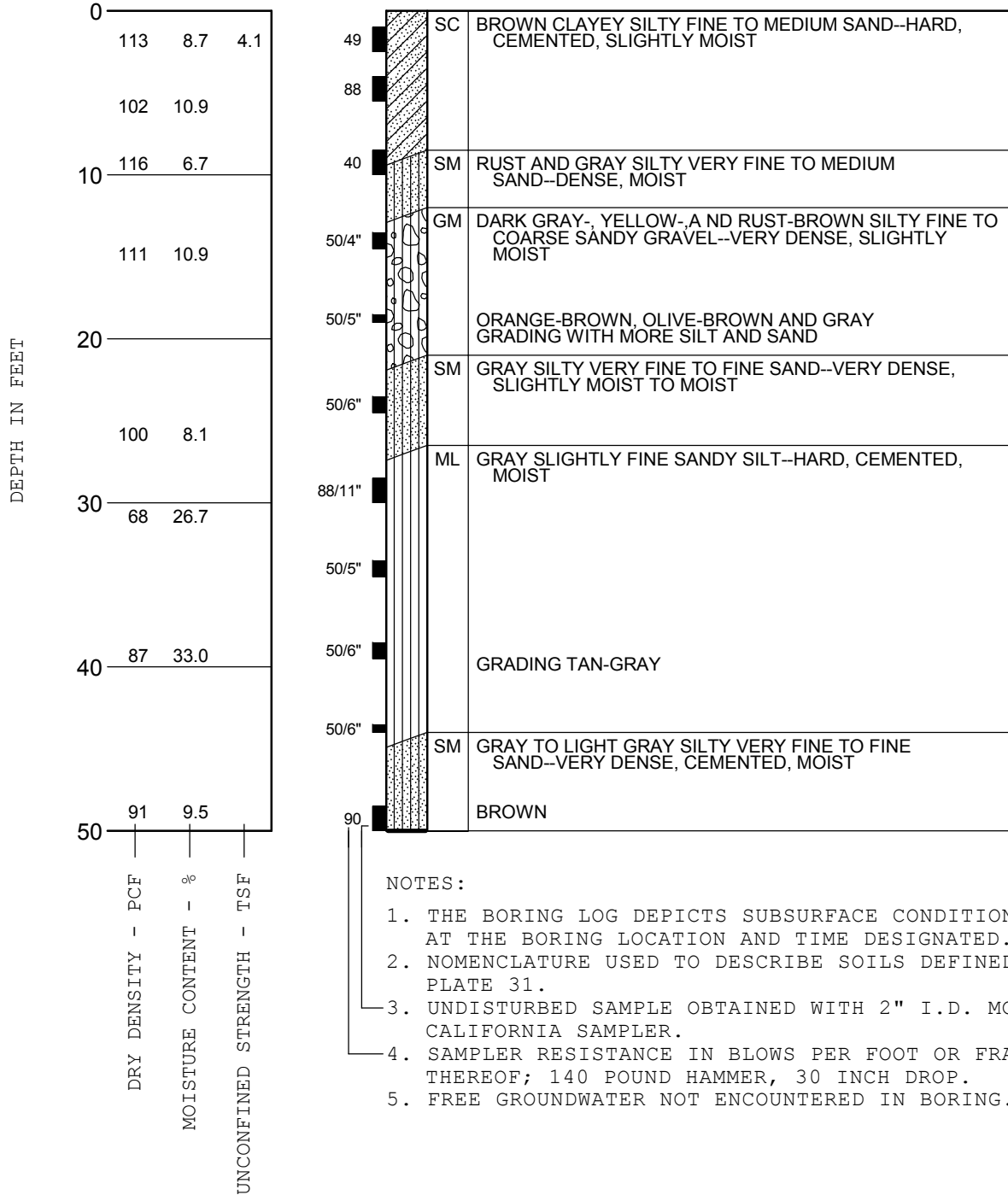


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 15

# BORING 1

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. UNDISTURBED SAMPLE OBTAINED WITH 2" I.D. MODIFIED CALIFORNIA SAMPLER.
4. SAMPLER RESISTANCE IN BLOWS PER FOOT OR FRACTION THEREOF; 140 POUND HAMMER, 30 INCH DROP.
5. FREE GROUNDWATER NOT ENCOUNTERED IN BORING.



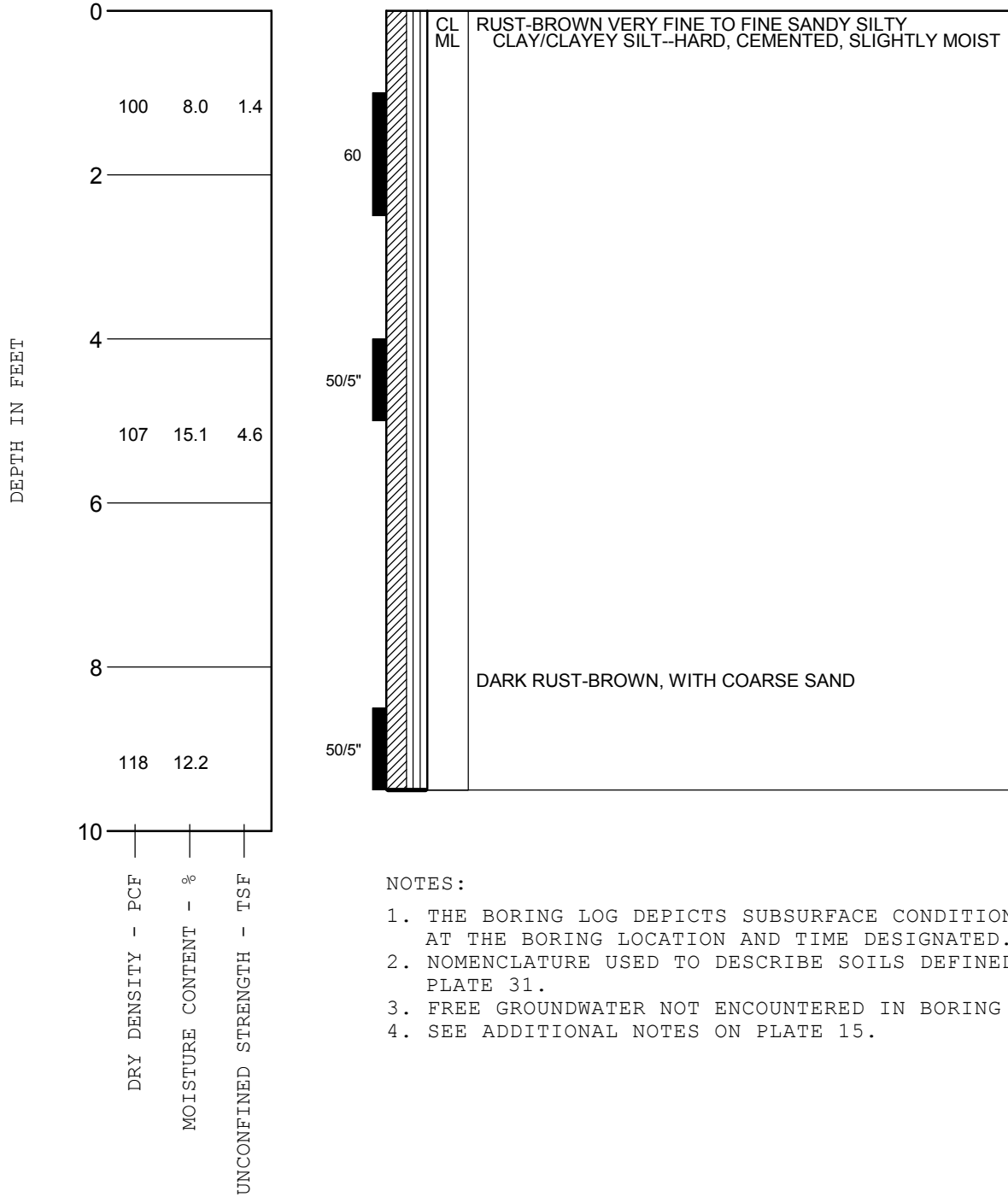
## LOG OF BORING

PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 16

## BORING 2

DRILLED: 9/10/03



### NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 2.
4. SEE ADDITIONAL NOTES ON PLATE 15.

LOG OF BORING

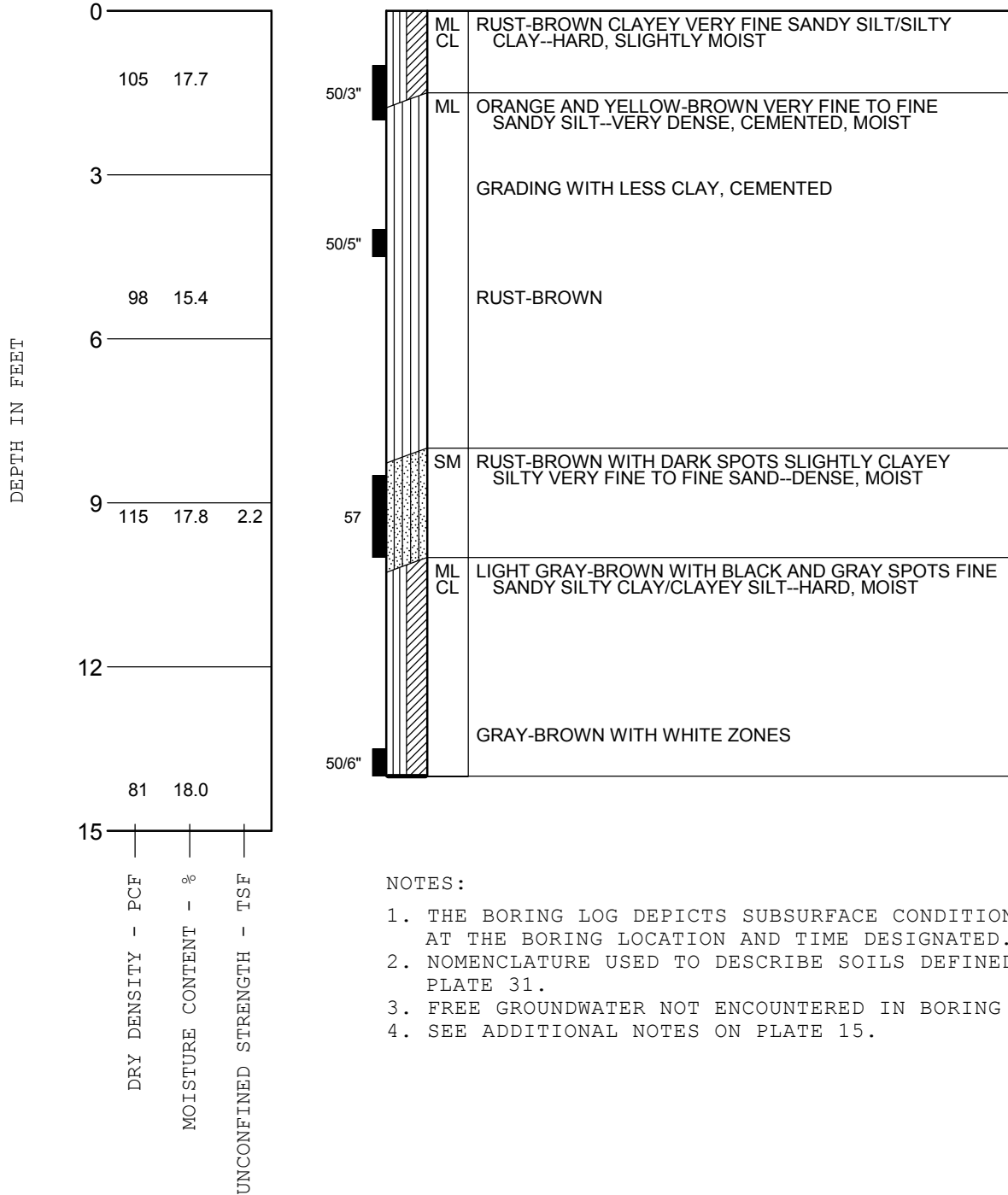


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 17

# BORING 3

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 3.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

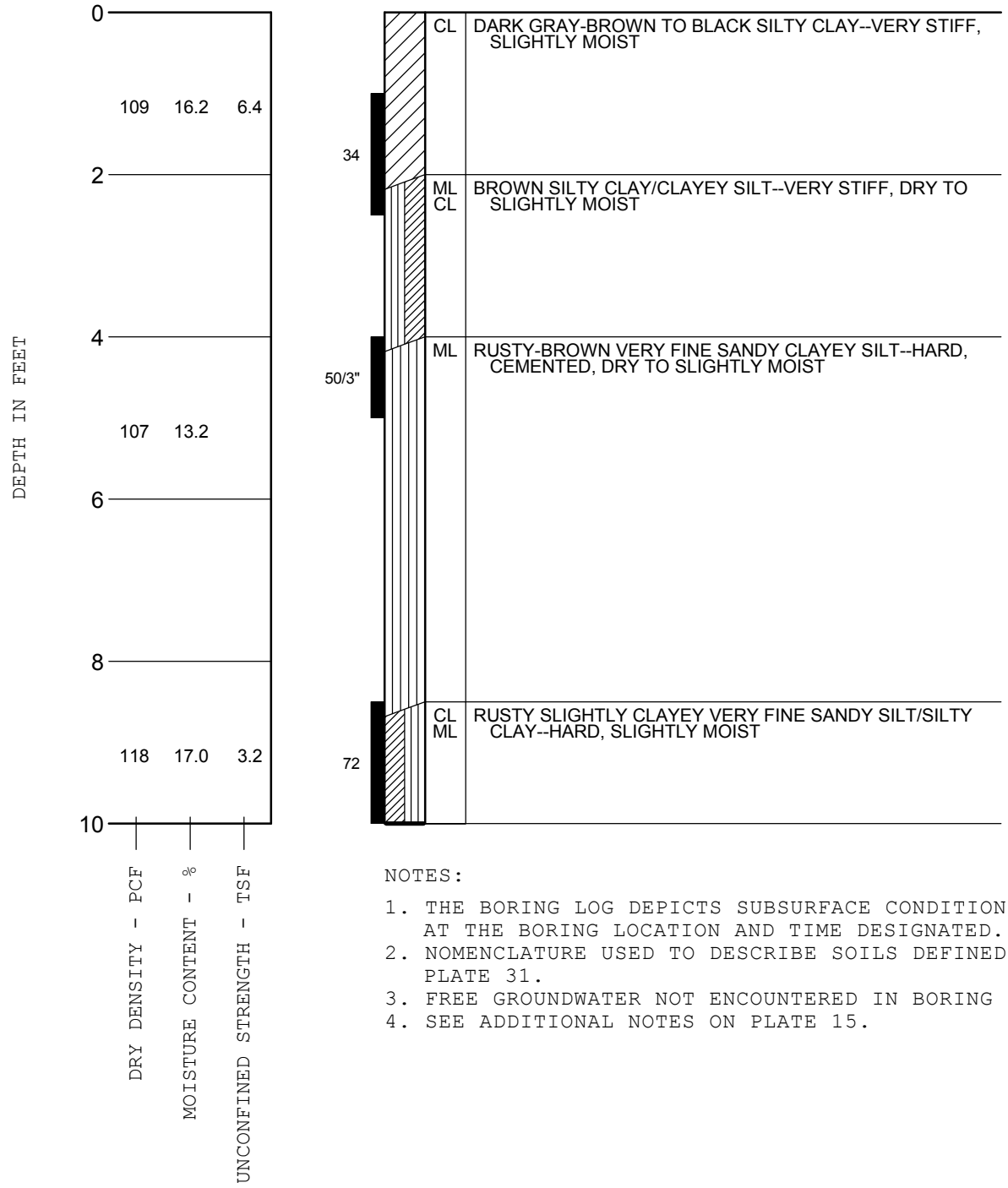


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 18

# BORING 4

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 4.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING



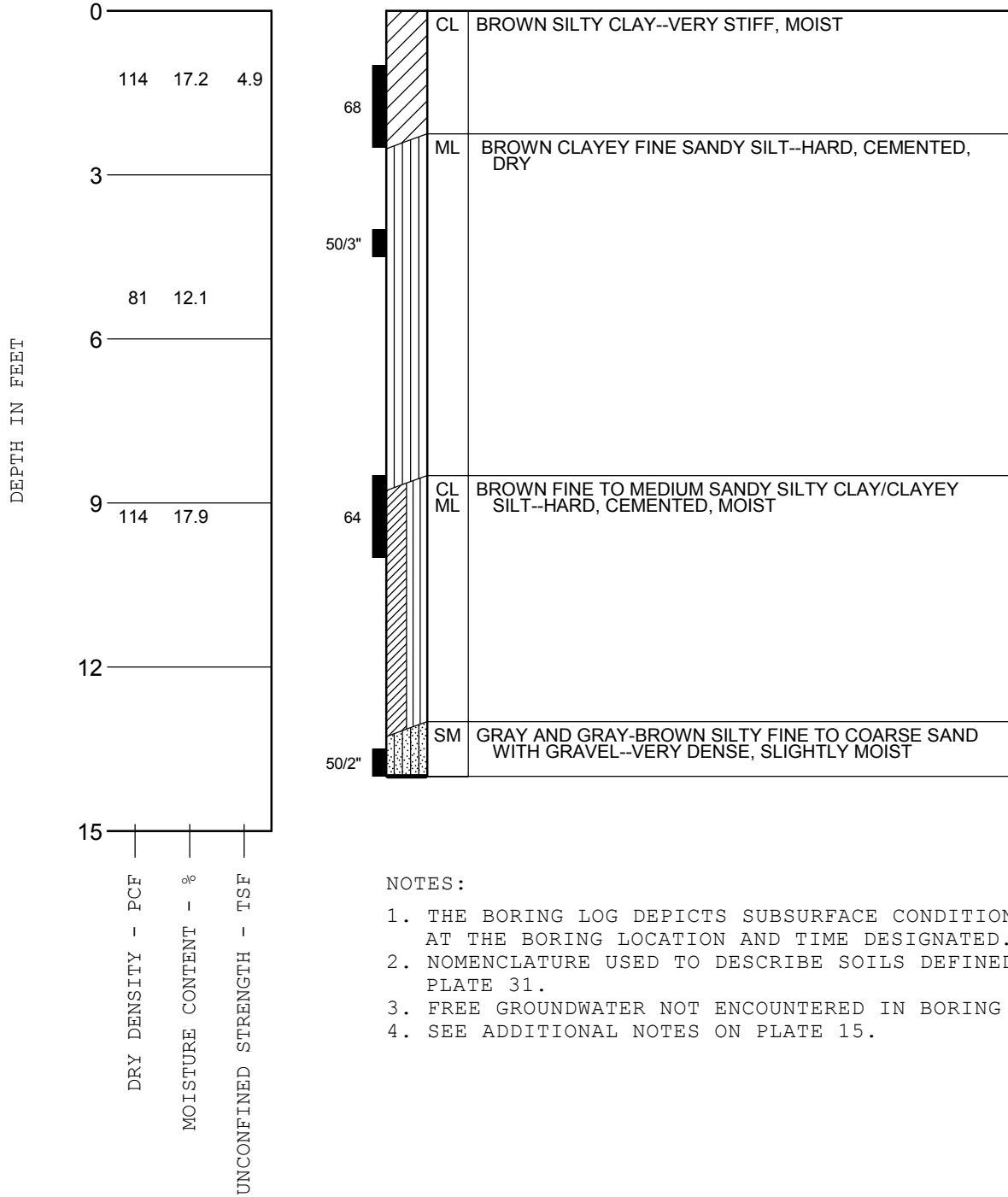


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 19

# BORING 5

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 5.
4. SEE ADDITIONAL NOTES ON PLATE 15.

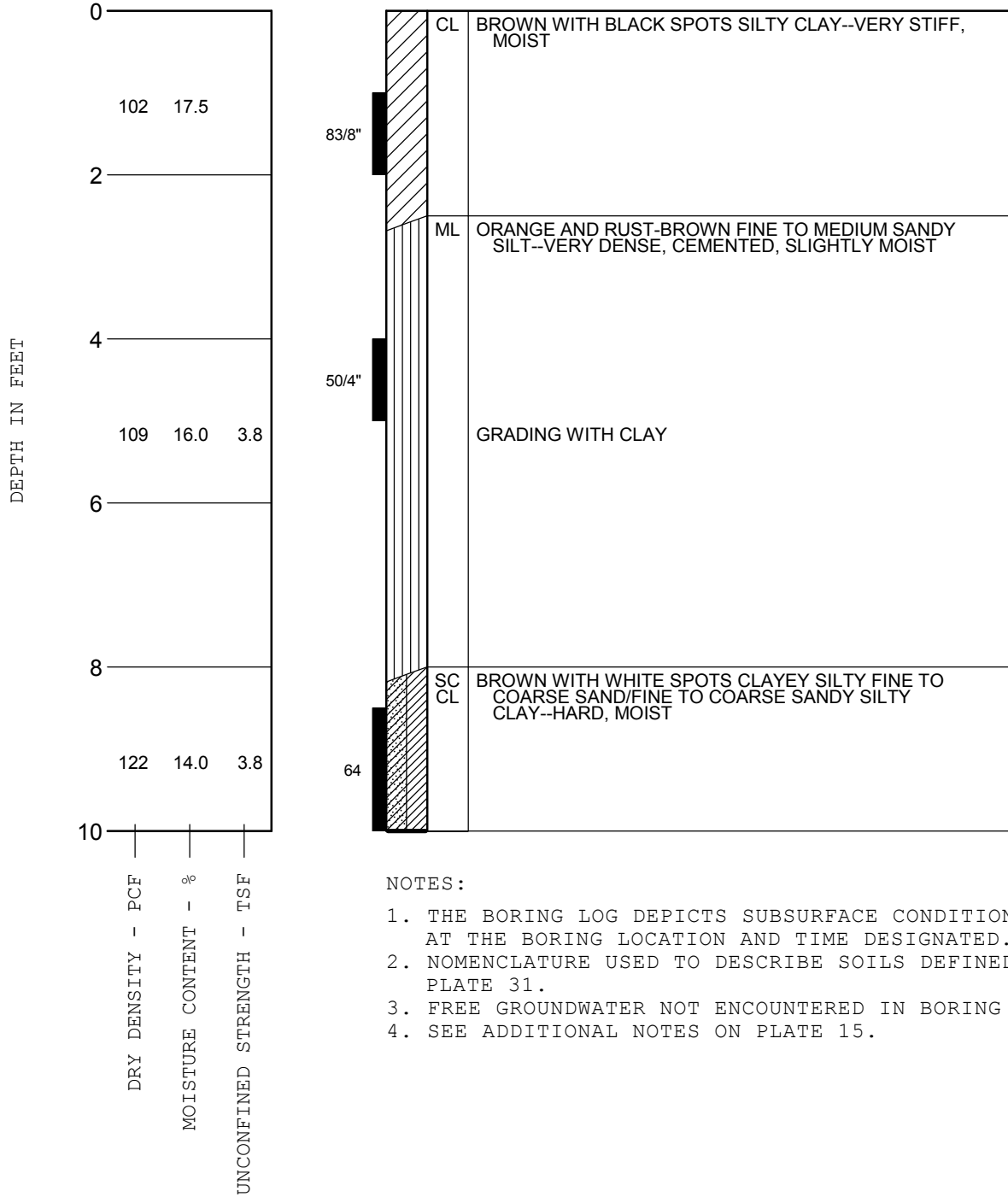
LOG OF BORING



PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04  
 PLATE NUMBER: 20

# BORING 6

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 6.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

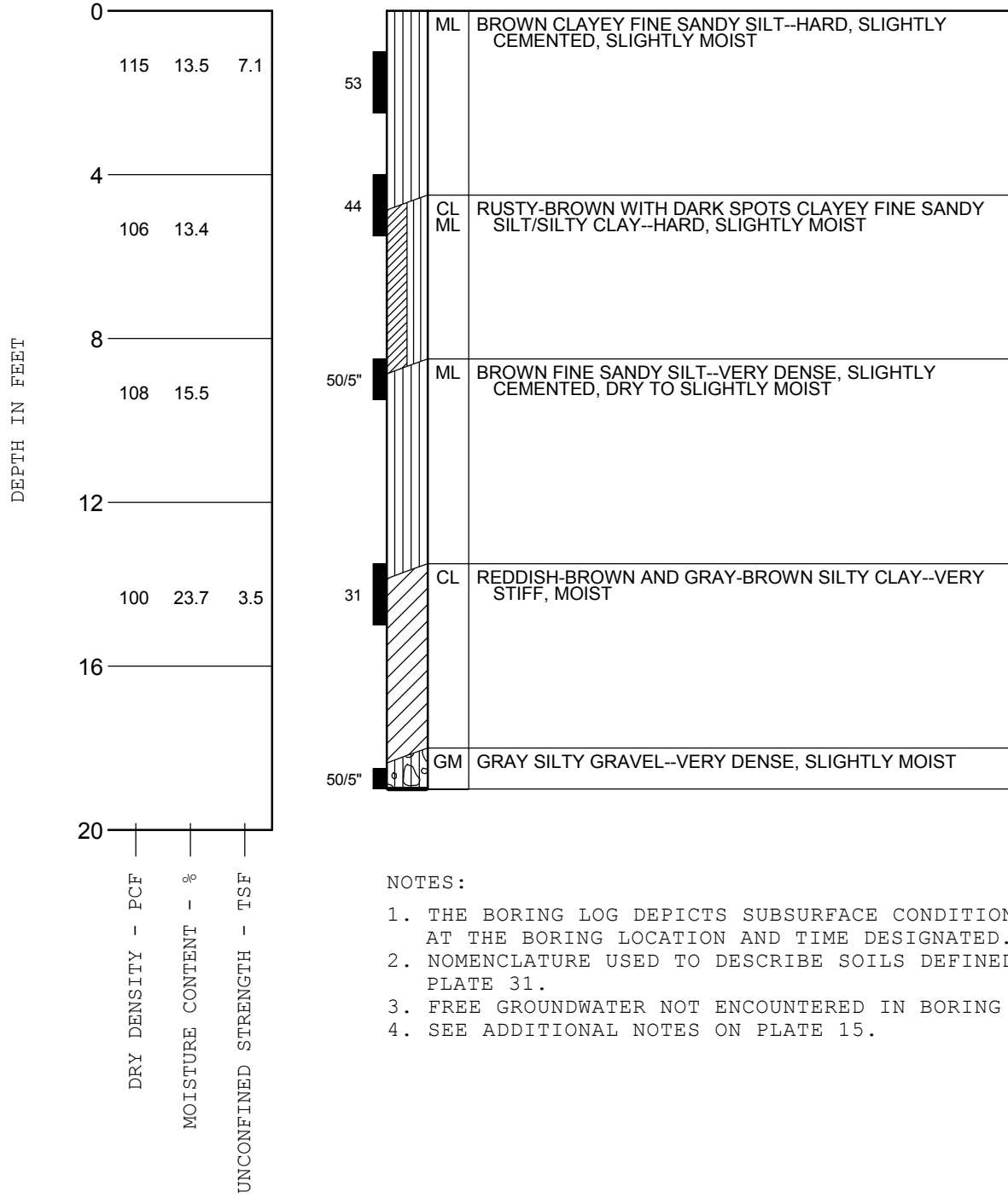


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 21

# BORING 7

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 7.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

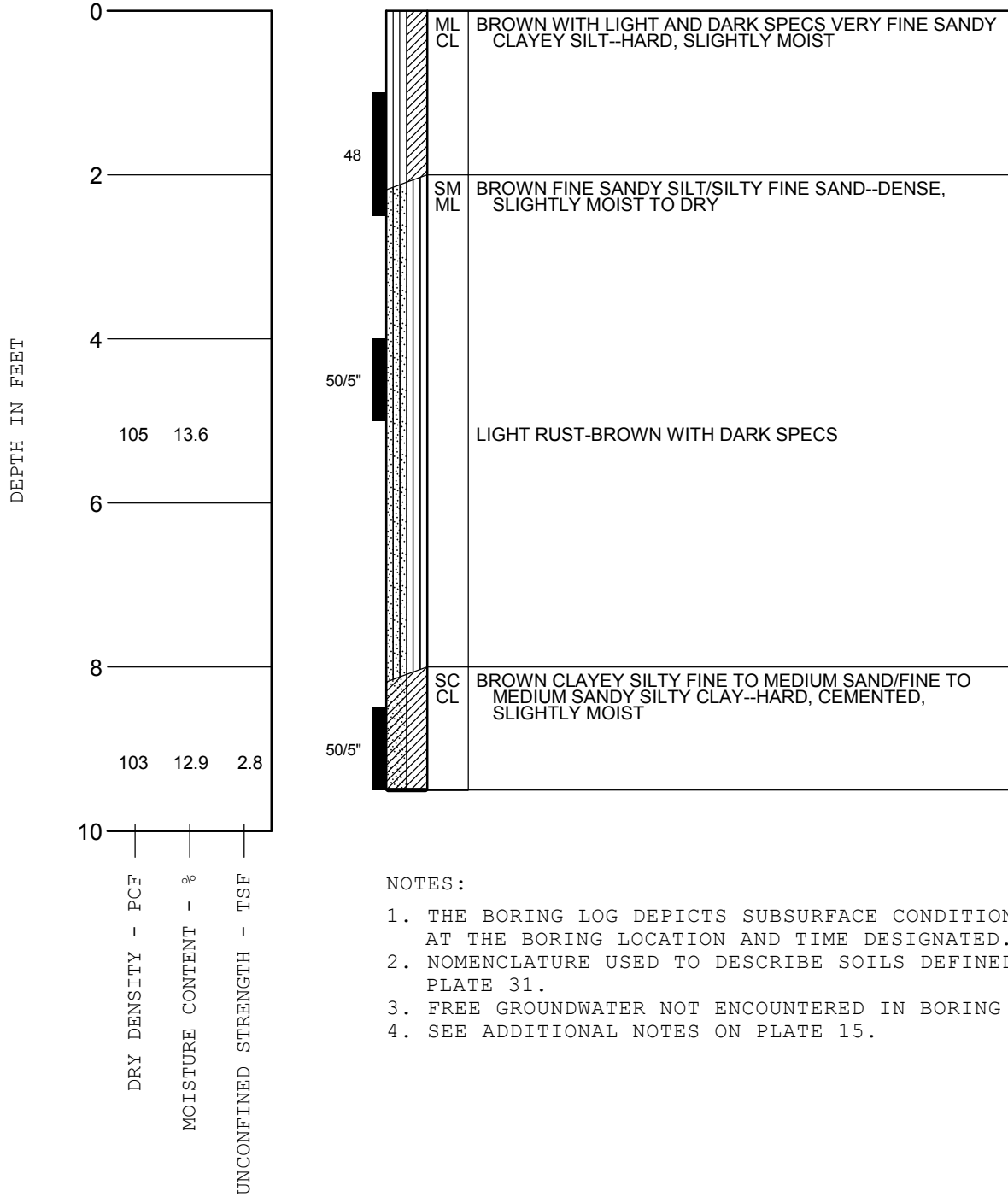


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 22

# BORING 8

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 8.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

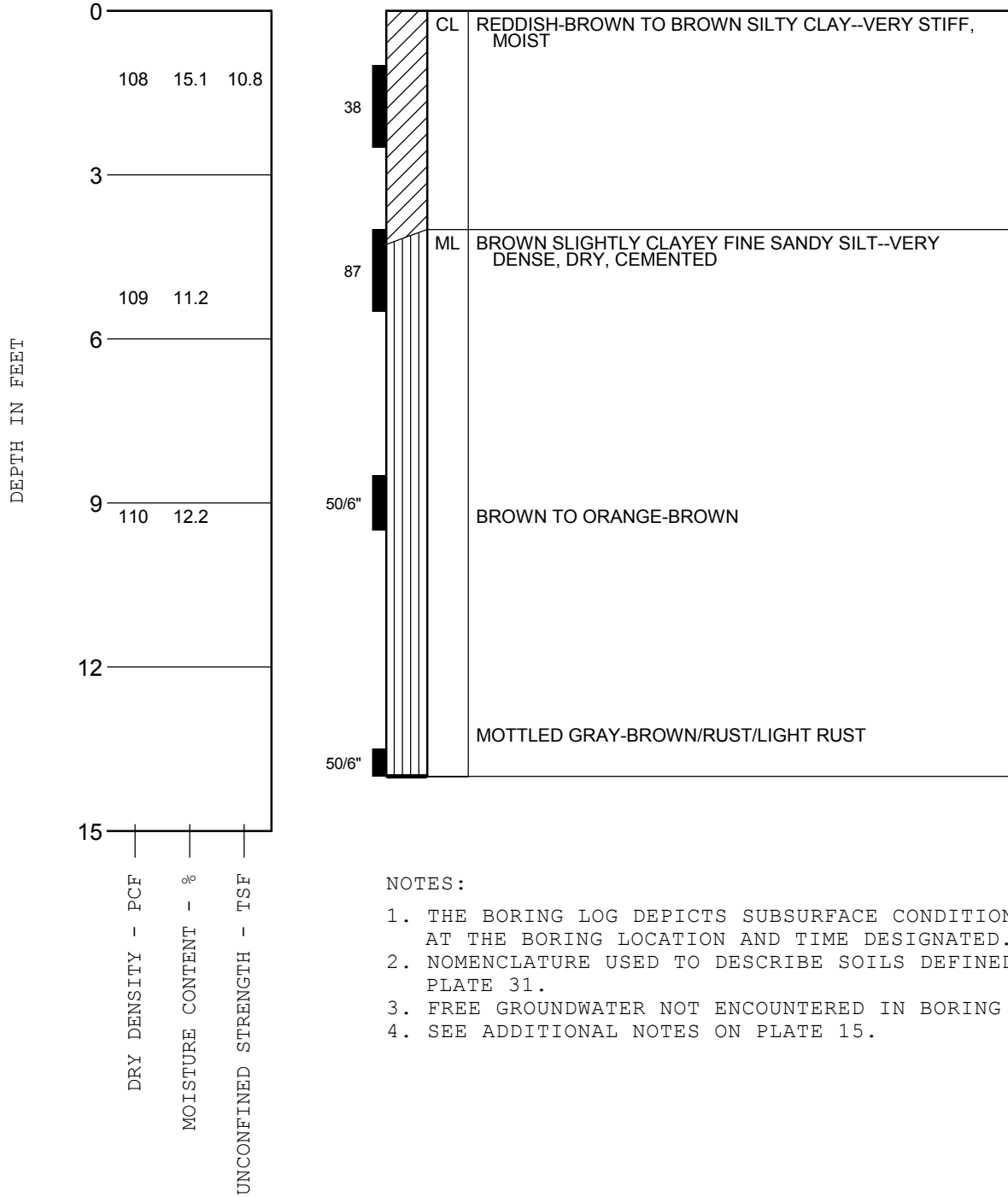


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 23

# BORING 9

DRILLED: 9/10/03



**NOTES:**

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 9.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

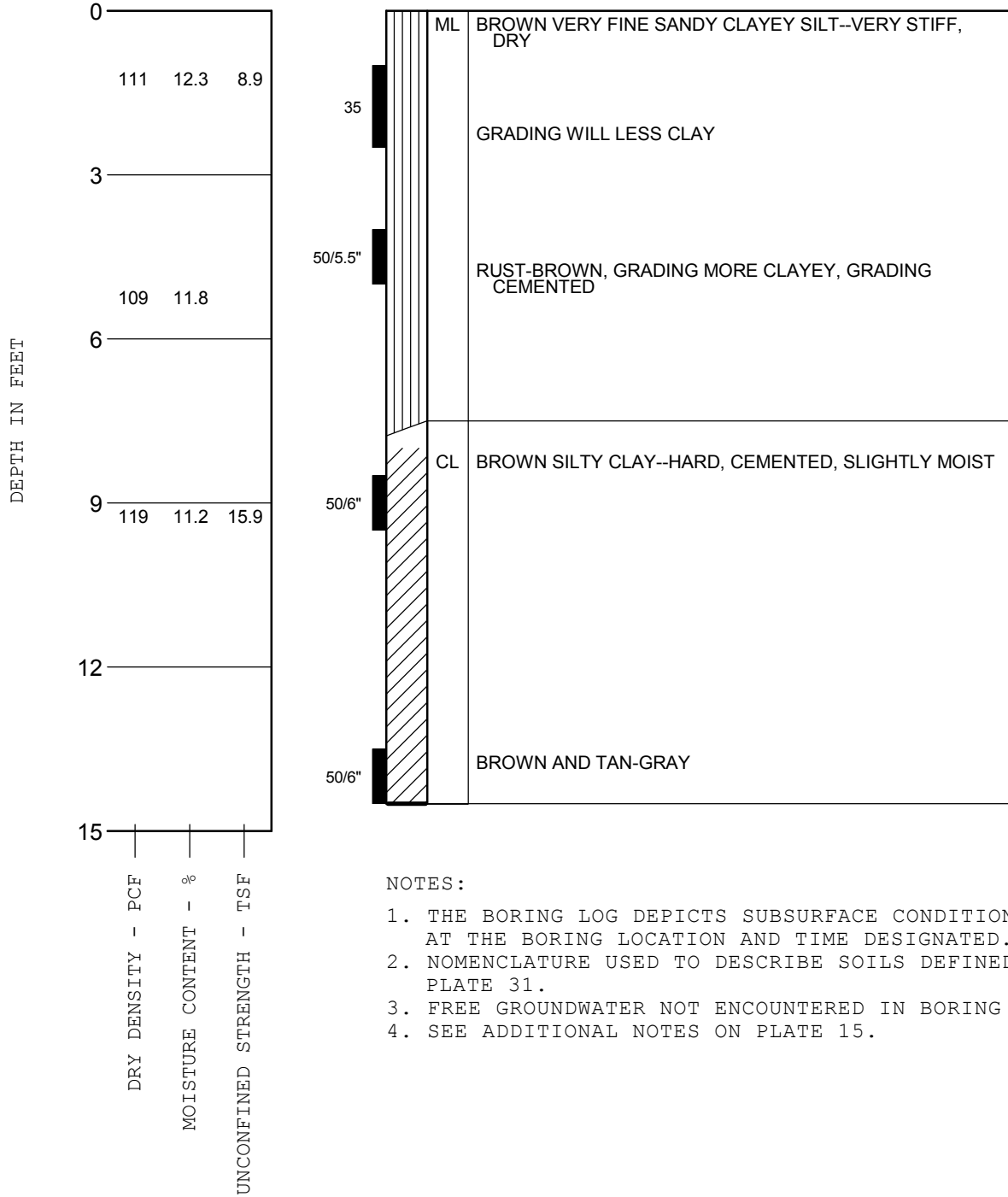


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 24

# BORING 10

DRILLED: 9/10/03



**NOTES:**

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 10.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

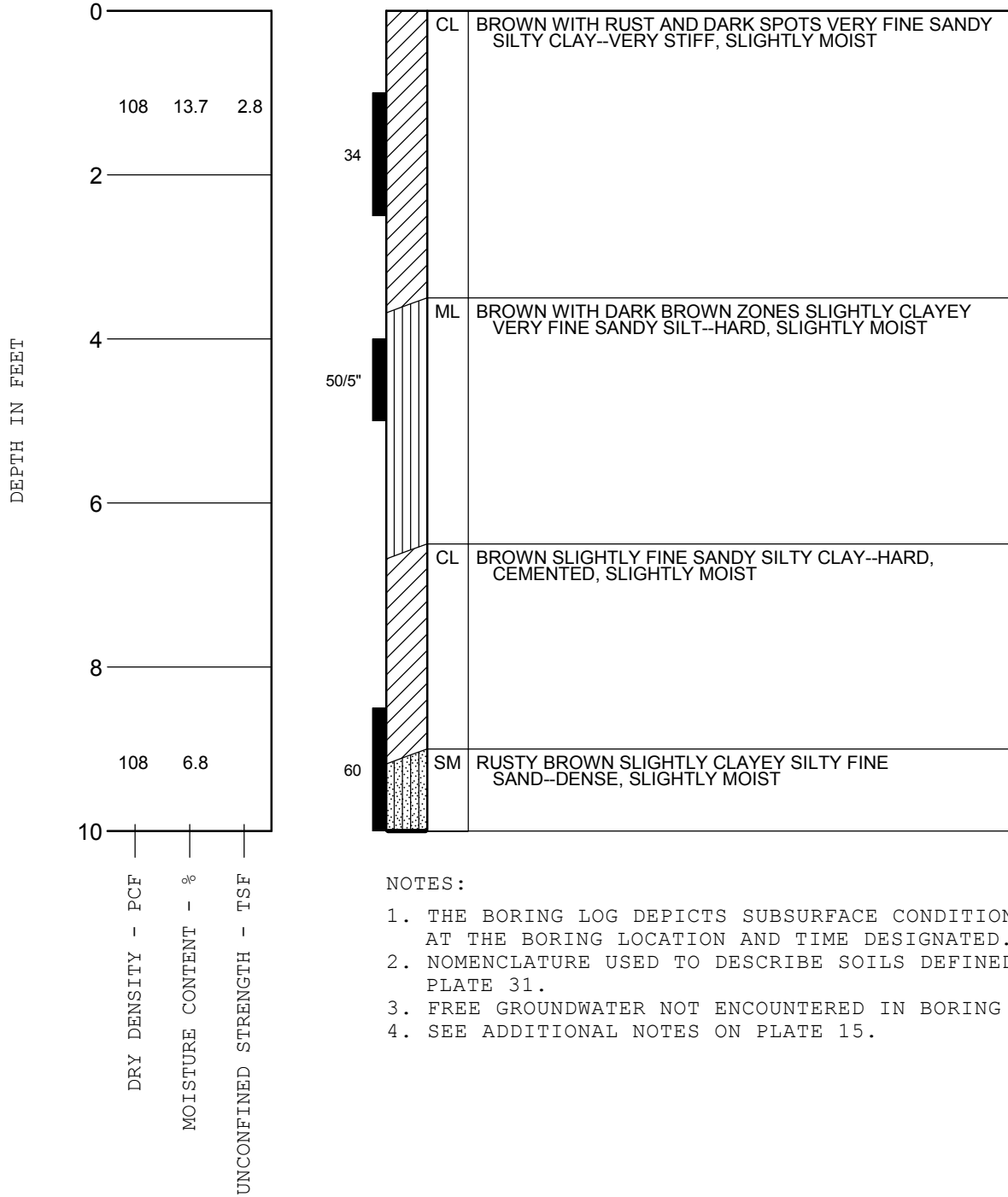


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 25

# BORING 11

DRILLED: 9/10/03



**NOTES:**

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 11.
4. SEE ADDITIONAL NOTES ON PLATE 15.

**LOG OF BORING**

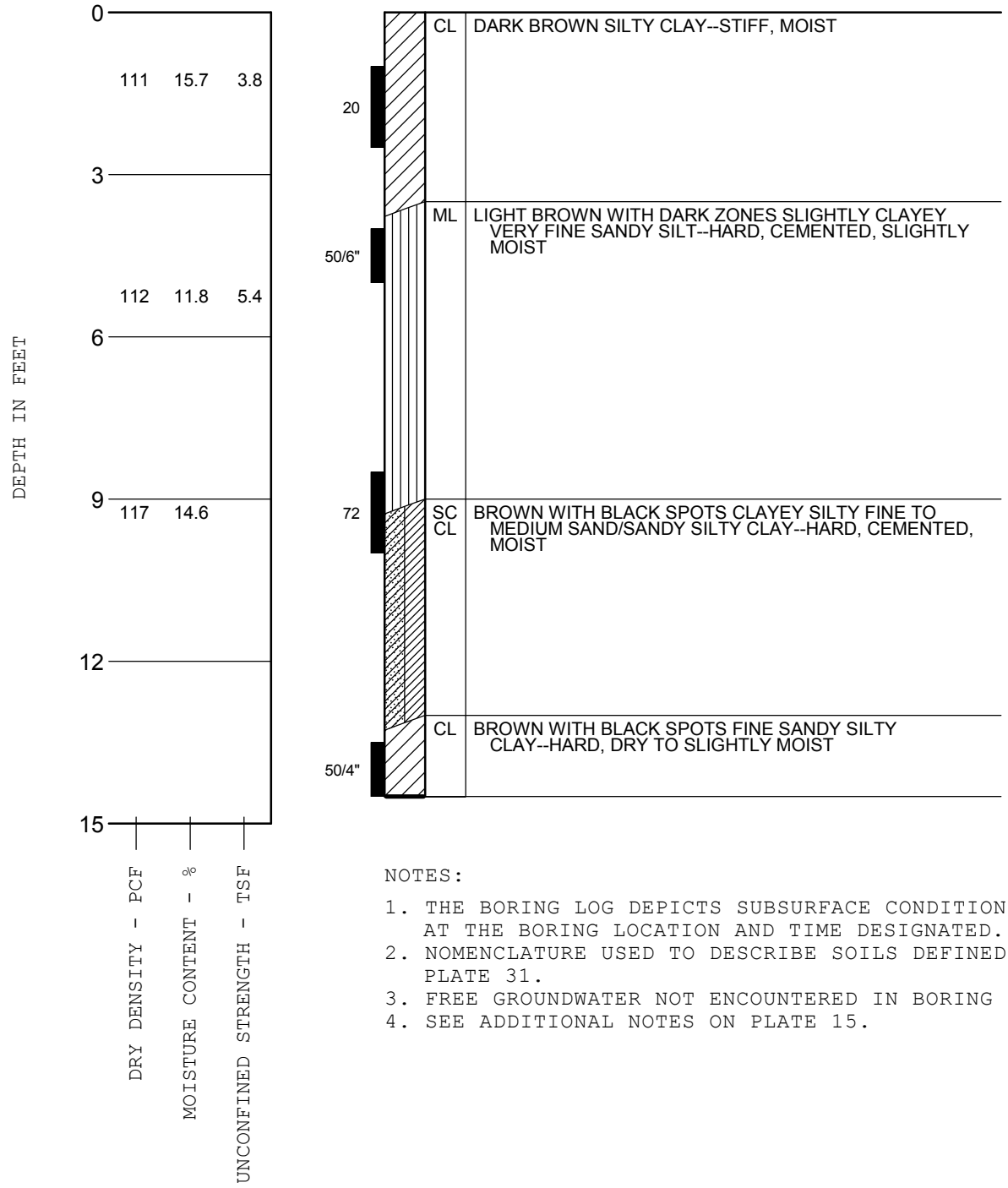


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 26

# BORING 12

DRILLED: 9/10/03



**NOTES:**

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 12.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING



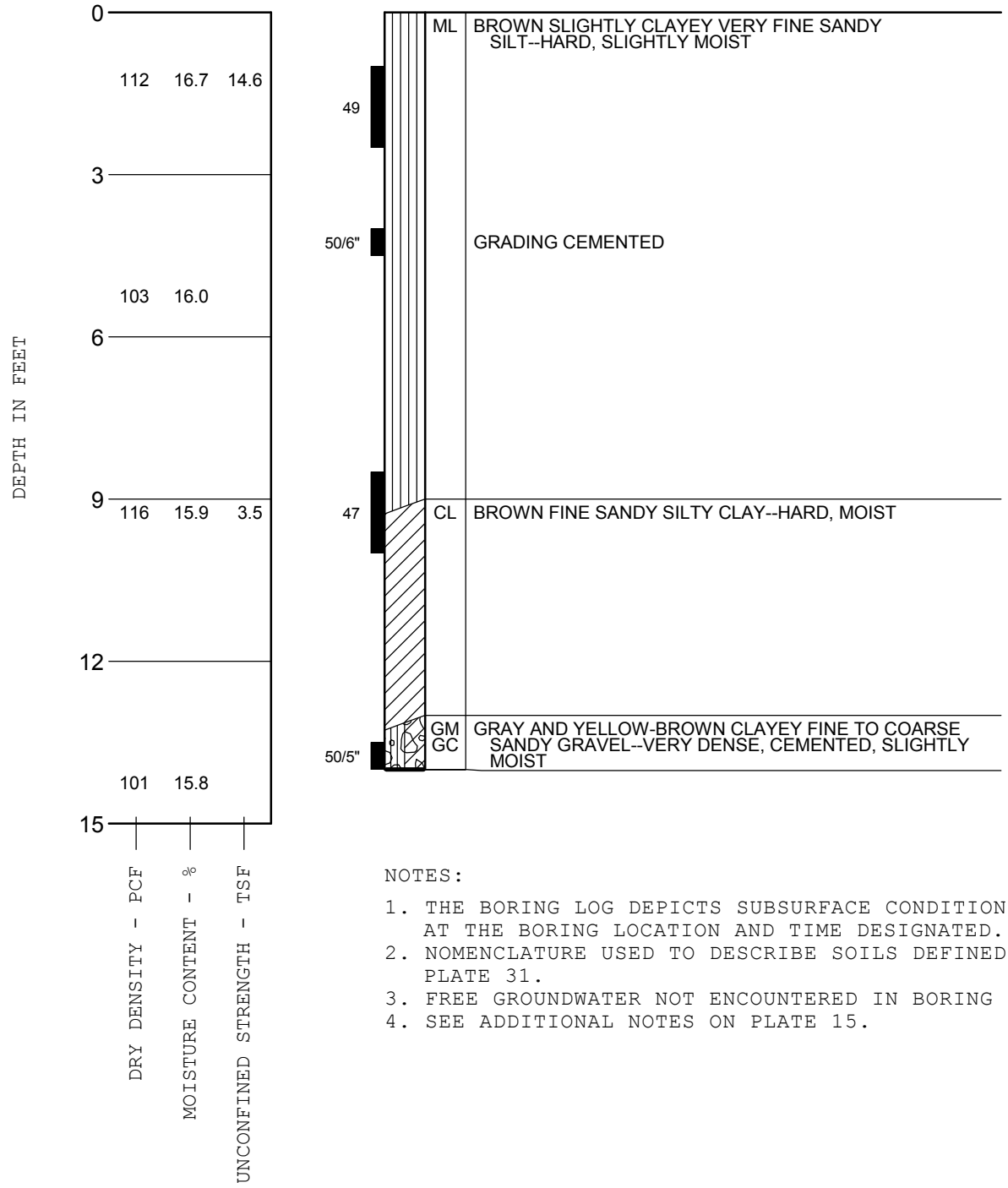


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 27

# BORING 13

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 13.
4. SEE ADDITIONAL NOTES ON PLATE 15.

## LOG OF BORING

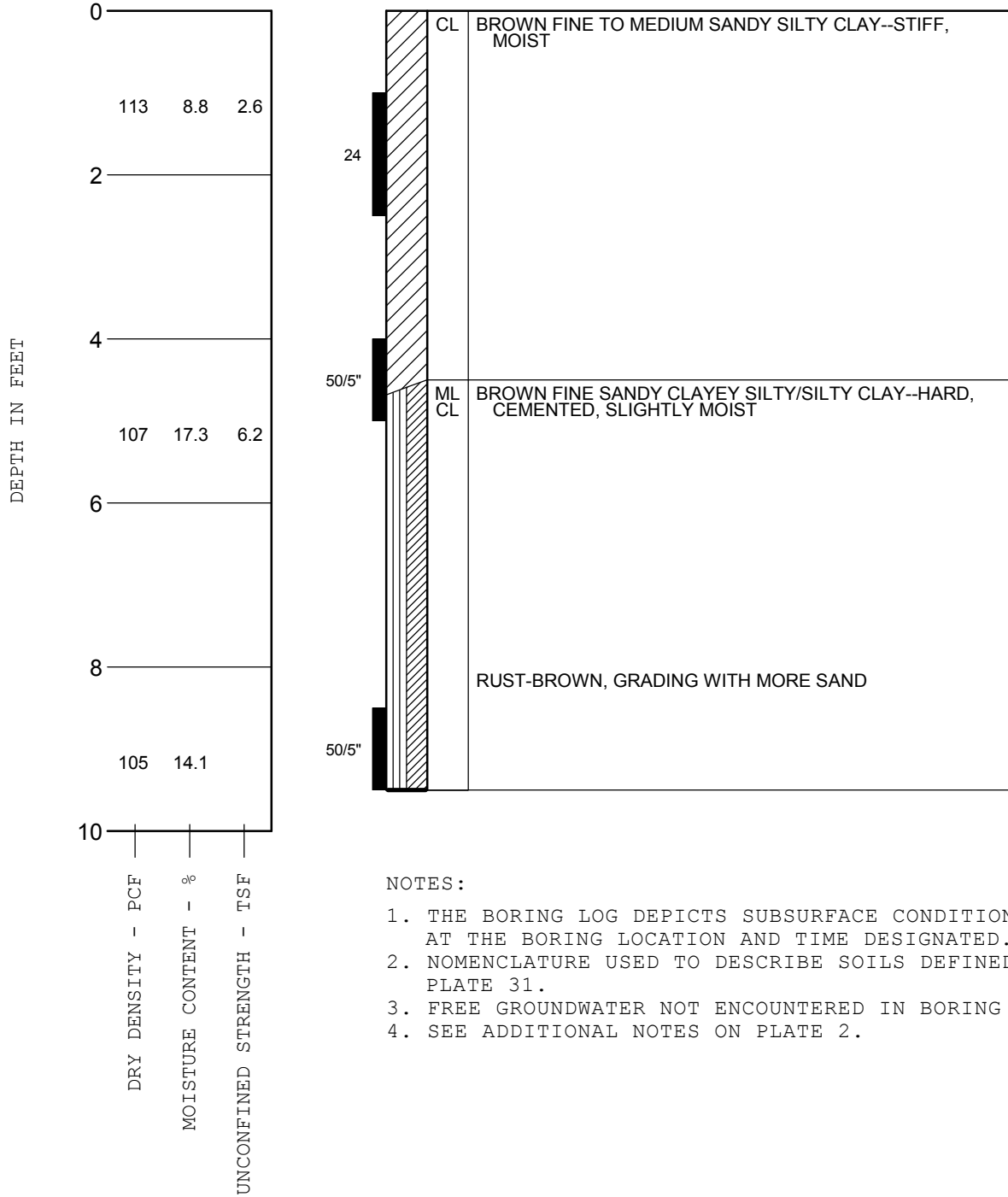


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 28

# BORING 14

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 14.
4. SEE ADDITIONAL NOTES ON PLATE 2.

## LOG OF BORING

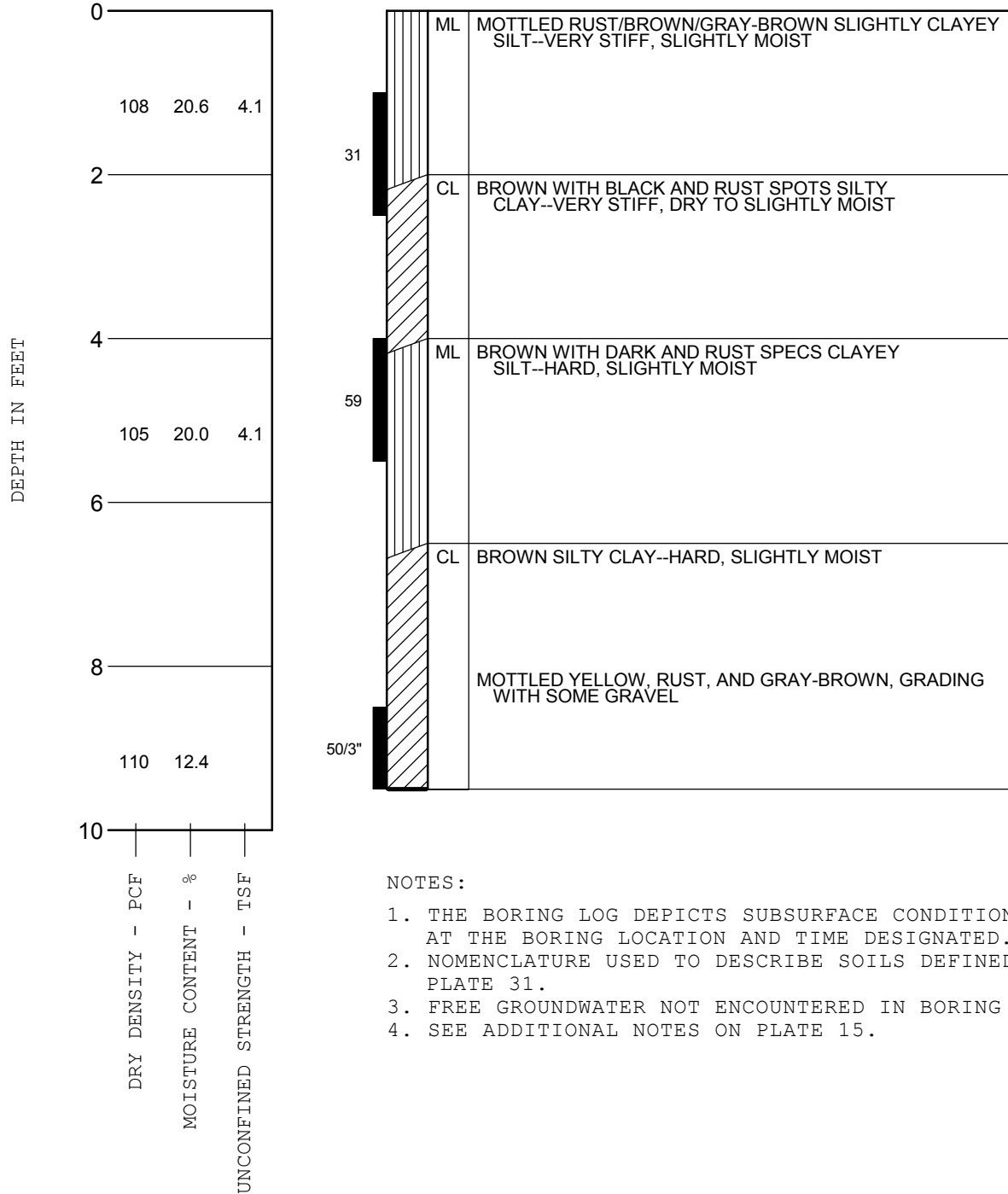


PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 29

# BORING 15

DRILLED: 9/10/03



**NOTES:**

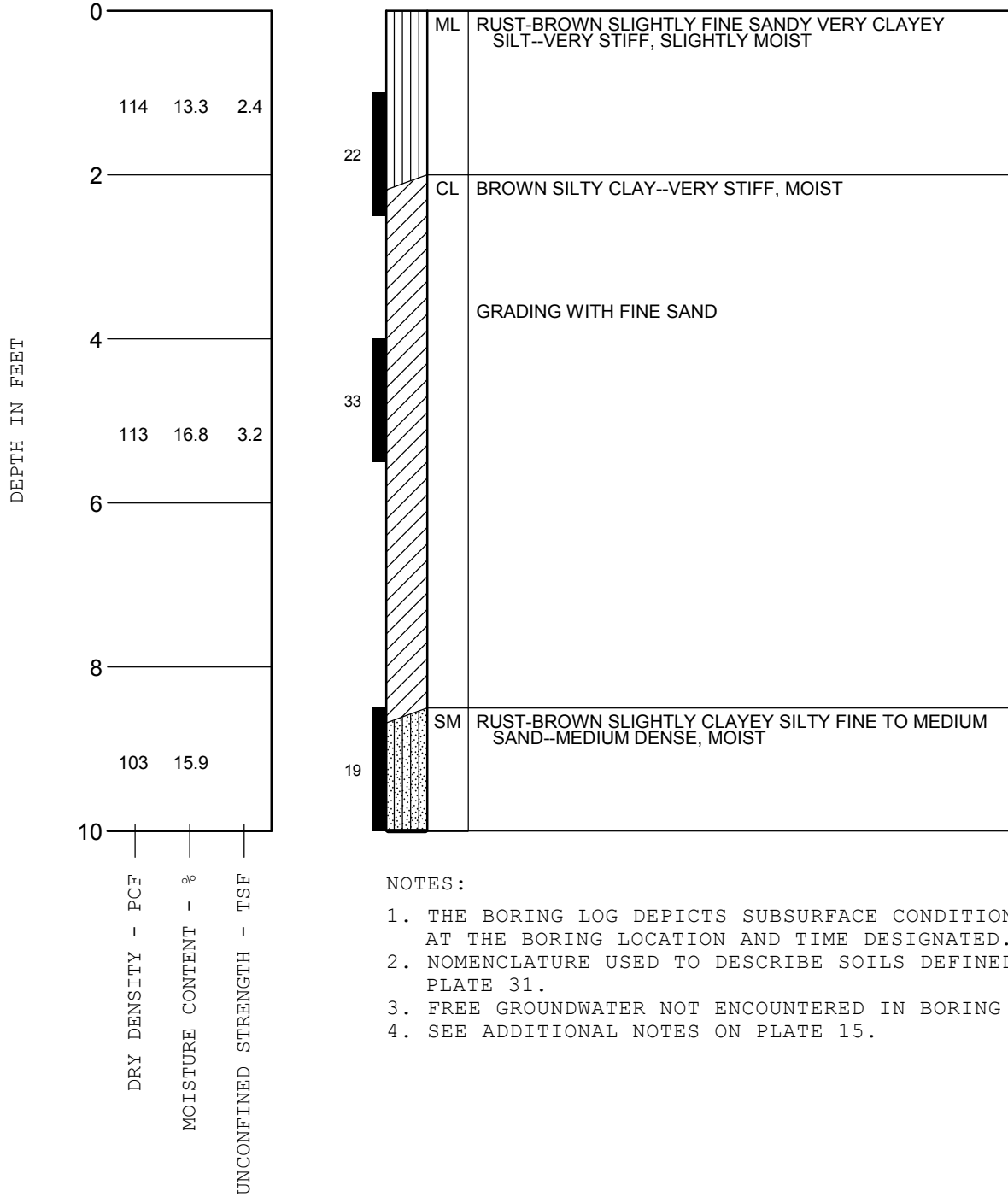
1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 15.
4. SEE ADDITIONAL NOTES ON PLATE 15.

PROJECT NUMBER: 2462-001  
 DRAWN BY: JCB  
 DATE: 1/14/04

PLATE NUMBER: 30

# BORING 16

DRILLED: 9/10/03



NOTES:

1. THE BORING LOG DEPICTS SUBSURFACE CONDITIONS ONLY AT THE BORING LOCATION AND TIME DESIGNATED.
2. NOMENCLATURE USED TO DESCRIBE SOILS DEFINED ON PLATE 31.
3. FREE GROUNDWATER NOT ENCOUNTERED IN BORING 16.
4. SEE ADDITIONAL NOTES ON PLATE 15.

LOG OF BORING

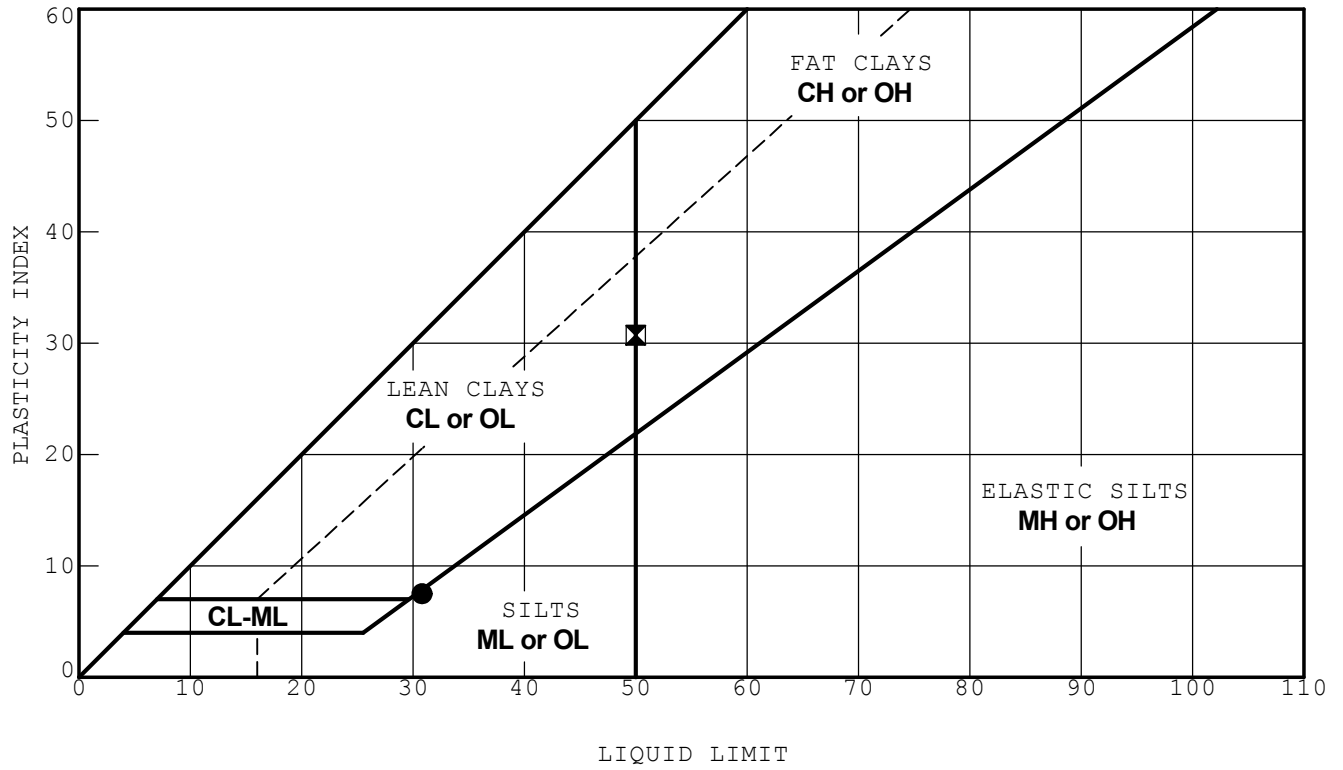


PROJECT NUMBER: 2462-001  
 PLATE NUMBER: 31

GRAPH	SYMBOL	DESCRIPTION	MAJOR DIVISIONS		
	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES	CLEAN GRAVELS WITH LESS THAN 5% FINES	GRAVEL AND GRAVELLY SOILS	COARSE GRAINED SOILS MORE THAN 50% LARGER THAN NO. 200 SIEVE
	GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES			
	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	GRAVELS WITH MORE THAN 12% FINES	MORE THAN 50% OF COARSE FRACTION <u>RETAINED</u> ON NO. 4 SIEVE	
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES			
	SW	WELL GRADED SANDS, GRAVELLY SANDS	CLEAN SANDS WITH LESS THAN 5% FINES	SANDS AND SANDY SOILS	
	SP	POORLY GRADED SANDS, GRAVELLY SANDS			
	SM	SILTY SANDS, SAND-SILT MIXTURES	SANDS WITH MORE THAN 12% FINES	MORE THAN 50% OF COARSE FRACTION <u>PASSING</u> NO. 4 SIEVE	
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES			
	ML	INORGANIC SILTS, ROCK FLOUR, OR CLAYEY SILTS WITH SLIGHT PLASTICITY	LIQUID LIMIT <u>LESS</u> THAN 50	SILTS AND CLAYS	
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS			
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY			
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTS, ELASTIC SILTS	LIQUID LIMIT <u>GREATER</u> THAN 50	SILTS AND CLAYS	
	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS			
OH	ORGANIC CLAYS AND ORGANIC SILTS OF MEDIUM TO HIGH PLASTICITY				
	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENT	HIGHLY ORGANIC SOILS		

UNIFIED SOIL CLASSIFICATION SYSTEM





CLASSIFICATION TEST RESULTS						
SYMBOL	SAMPLE LOCATION	DEPTH FEET	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL CLASSIFICATION
●	BORING 11	0.5	31	23	8	ML
⊠	BORING 5	1.0	50	19	31	CH

**ATTERBERG LIMIT DATA**



**RESISTANCE VALUE TEST  
CALIFORNIA TEST METHOD 301G**

PROJECT NUMBER: 2462-001

**Sample Location:** S1

**Depth:** 6"-12"

**Material Description:** Dark brown clayey silt

TEST NUMBER	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	EXUDATION PRESSURE (PSI)	EXPANSION PRESSURE (PSF)	RESISTANCE VALUE
1	108	17.2	162	35	2
2	112	15.2	275	78	4
3	114	14.2	350	113	12

Resistance value at 300 psi exudation pressure = 6

**RESISTANCE VALUE DATA**

**CALIFORNIA TEST METHOD NO. 373**

James Hardie Distribution Center

Project No. 2462-001

**Sample Location:** S3

**Depth:** 6"-12"

**Material Description:** Brown clayey sandy silt

**Additives:** High calcium quicklime and portland cement as shown

Sample No.	Additive Amounts	Dry Density (pcf)	Moisture Content (%)	Maximum Dry Density/ Optimum Moisture Content	Unconfined Compressive Strength
A	5% lime	105.0	18.3	105pcf @ 18.3%	162 psi
B	5% lime	105.1	20.3		133 psi
C	5% lime	106.9	16.3		155 psi
D	3% lime 4% cement	107.4	18.3		232 psi
E	3% lime 5% cement	108.4	18.3		237 psi

**TREATED SOIL COMPRESSIVE STRENGTH DATA**



**ORGANIC CONTENT**  
**ASTM D2974/ASTM F1647/LOI**

Sample No./ Depth	Description	Moisture Content (%)	Organic Content (%)
SA-1 0-12"	Gray clayey fine sandy silt with gravel	11.5	9.1
SA-2 0-12"	Light brown fine sandy silt	4.3	5.4
SA-3 0-11"	Light brown fine sandy silt with fruit pits and charcoal dust	14.6	6.9
SA-4 3"-12"	Gray and brown and black fine sandy clayey silt with gravel and charcoal dust	11.2	4.5
SA-5 2"-12"	Gray and brown and black fine sandy clayey silt with gravel and charcoal	11.8	3.7
SA-6 0-10"	Black and brown clayey fine sandy silt with gravel, charcoal and charcoal dust	14.9	10.7

**ORGANIC CONTENT DATA**

Waterman and Brinkman Logistics Center  
**ELK GROVE CREEK FLOOD MITIGATION  
DRAINAGE REPORT**

CITY OF ELK GROVE, SACRAMENTO COUNTY, CALIFORNIA

PREPARED BY:



MCR ENGINEERING, INC.  
1242 Dupont Court  
Manteca, California 95336  
(209) 239-6229

PREPARED FOR:

Buzz Oates Construction



PREPARED UNDER THE DIRECTION OF:



February 17<sup>th</sup>, 2021

# **Table of Contents**

<b>Executive Summary</b> .....	<b>4</b>
<b>Project Description &amp; Overview</b> .....	<b>5</b>
<b>Site Information</b> .....	<b>6</b>
General Requirements Overview .....	6
Software Tools .....	6
Flood Hazard Zone .....	6
Elk Grove Creek Overview .....	7
Existing Models Overview .....	8
<b>Proposed Mitigation Measures</b> .....	<b>8</b>
Topographic Survey Findings.....	8
Onsite Flood Control Basin.....	8
<b>Hydrology Analysis</b> .....	<b>11</b>
General Methodology Overview.....	11
SacCalc Master Model Modifications .....	11
Watershed Modifications .....	12
SacCalc Modification Flow Chart .....	12
Proposed Development Hydrograph.....	15
HEC-RAS Master Model Modifications .....	17
Geometric Model .....	17
Unsteady Flow Model .....	20
<b>Elk Grove Creek Hydraulic Analysis Results</b> .....	<b>21</b>

## **List of Tables**

Table 1 - Basin Volumes .....	19
Table 2 - HEC-RAS & SacCalc Tributaries .....	20
Table 3 - 100-Year Storm Peak Water Surface Elevations & Flows .....	21

## **List of Figures**

Figure 1 - Proposed Master Site Plan.....	5
Figure 2 - FEMA Flood Map of Site .....	7
Figure 3 - Elk Grove Creek Watershed .....	7
Figure 4 – Existing Berm located on Elk Grove Creek.....	8
Figure 5 - Flood Control Basin Plan.....	9
Figure 6 - Flood Control Basin Section .....	10
Figure 7 - Flood Control Basin Outfall Detail .....	10
Figure 8 – Baseline SacCalc Model (Project-L41690).....	13
Figure 9 – Modified SacCalc Model by West Yost (Project-L41694) .....	13
Figure 10 - SacCalc Modified Post Project .....	14
Figure 11 - Proposed SacCalc Tributary Plan .....	15
Figure 12 - Waterman DMA Exhibit.....	16

Figure 13 - Brinkman DMA Exhibit.....	16
Figure 14 - Onsite SacCalc Model .....	17
Figure 15 - Onsite 100-Year Hydrograph .....	17
Figure 16 - HEC-RAS Model Sections (By West Yost).....	18
Figure 17 - HEC-RAS Section Station 4.95.....	19
Figure 18 - Lateral Structure (Trapezoidal Weir) Section .....	20
Figure 19 - Compiled Hydrograph & Stage RS:4.95 .....	22
Figure 20 - Flood Control Basin Hydrograph.....	23

## List of Appendix

### **Appendix A – West Yost’s Technical Memorandum**

### **Appendix B – FEMA Flood Maps**

### **Appendix C – SacCalc Models**

Pre-Project Elk Grove Creek Watershed (West Yost)

Post-Project Elk Grove Creek Watershed (MCR)

Onsite Post-Project Waterman & Brinkman

### **Appendix D – HEC-RAS Models (100-Year)**

Pre-Project Creek Tabular Results

Post-Project Mitigated Tabular Results

Pre-Project Profile

Post-Project Mitigated Profile

## **Executive Summary**

This report is designed to accompany and be a continuation of the Onsite Drainage Report prepared for the Waterman & Brinkman Logistics Center. As previously mentioned approximately 5-acres at the northwest corner of the site is considered a human-made wetland, identified in both the FEMA Special Hazard Area and the 100-year Flood Plain as determined by the City of Elk Grove's Storm Drain Master Plan. Those determinations require that any new development mitigate its impacts of placing the fill in the floodplain that will be necessary to raise the building above the Base Flood Elevation. This report aims to provide support that the proposed onsite flood control basin is sufficient to mitigate the effects of developing the two industrial sites and placing fill on the existing flood plain.

The proposed mitigation for placing fill in the floodplain on the development is a 3.49-acre detention basin at the most downstream portion of the project on Elk Grove Creek. The basin will be explicitly dedicated to creek flood flows through an overflow weir connecting to Elk Grove Creek. As seen in the Onsite Drainage Report the onsite development has incorporated an underground detention basin to meet hydromodification. This results in a controlled discharge into Elk Grove Creek during the 100-year flood event, with a peak flow reduced to 9.74 cfs. The onsite hydromodification measures implemented reduce and delay the onsite developments post construction runoff. See *Hydrology Analysis* for further discussion of the onsite discharges effect on Elk Grove Creeks peak discharge.

This basin and discharge concept was previously identified in a 2011 study conducted by West Yost's and Associates as an acceptable mitigation measure for the site. This report expands upon West Yost analysis, to create an accurate creek model for the proposed project. The results of the proposed models show proposed flood control basin reduces the Elk Grove Creek 100-year flood elevation by approximately 0.20' in comparison to the existing model created by West Yost.

# Project Description & Overview

This report is focused on the proposed Flood Control Detention Basin, located on the Brinkman Project. Below is the developer and engineer contact information and general overview of the project.

## Contact Information

Description	Development Project Manager	Civil Engineer
Company:	Buzz Oats Construction	MCR Engineering
Contact:	Logan James	Dan Eavenson
Phone:	(916) 379-3800	(209) 239-6229
Email:	Logan.James@buzzoats.com	Dan@mcreng.com
Street Address	555 Capitol Mall, STE. 900	1242 Dupont Ct
City/State/Zip	Sacramento, CA 95814	Manteca, CA 95336

## Brinkman Projection Information

APN(s)	134-0100-084 & 134-0100-085
Street Address	9195 Brinkman Ct
City/State/Zip	Elk Grove, CA, 95624
Building Identification	Building A



Figure 1 - Proposed Master Site Plan

## **Site Information**

Refer to the Onsite Drainage Report for information regarding project location, zoning, planning, existing conditions, and existing infrastructure.

## **General Requirements Overview**

The following regulatory documents govern the design of the project's storm drainage:

- The City of Elk Grove Storm Drainage Master Plan (SDMP), West Yost, 2011
- The City of Elk Grove Capital Improvement Program (CIP), City of Elk Grove, June 2019
- The City of Elk Grove Improvement Standards Manual, City of Elk Grove, October 2018
- The City of Elk Grove Standard Drawings, City of Elk Grove, January 2020
- Volume 2 of the Sacramento City/County Drainage Manual, Sacramento County, 1996
- Elk Grove Municipal Code Chapter 15 & Sections 16.50 & 23.42.040
- Sacramento Region Stormwater Quality Design Manual, October 2019
- Sacramento Stormwater Quality Partnership Hydromodification Management Plan, Revised December 2017

## **Software Tools**

The following software is used in the projects onsite stormwater design:

- Microsoft Excel, Microsoft 365 Apps Version 2101
- SAHM, Sacramento Area Hydrology Model, Version Data 2020/4/6, Clear Creek Solutions
- SacCalc, Version 1.1.0.25, David Ford Consulting Engineers, 9/30/2011
- AutoCAD Civil3D, Autodesk, 2021
- SSA, Autodesk Storm and Sanitary Analysis, Autodesk, 2021
- HEC-RAS, Version 5.0.7, USACE, Current

These software's were used to determine different portions of the project. SacCalc was used for all hydrology. SacCalc results were then entered into Autodesk's Storm and Sanitary Analysis to determine the onsite 100-year hydrograph, refer to the Onsite Drainage Report for Details. The SacCalc hydrographs and the proposed onsite 100-year hydrograph were imported into HEC-Ras to accurately model Elk Grove Creek.

## **Flood Hazard Zone**

According to FEMA documents for the area, the site falls within FIRM Panel 06067C0338H. Making up a portion of FEMA cross-sections T and U. Approximately 5 acres of the site falls within the previously determined Special Flood Hazard Area along Elk Grove Creek. Specifically, portions of the Parcel fall within the Floodway and Zone AE. Copies of FIRM Panel 06067C0338H and relevant portions of FIS 06067C are included in Appendix B. The floodplain onsite is shown below.





Figure 2 - FEMA Flood Map of Site

### **Elk Grove Creek Overview**

Elk Grove Creek is a tributary of Laguna Creek, the largest watershed in Elk Grove. The magenta boundary in the figure below delineates Elk Grove Creek's drainage area from the Elk Grove SDMP. The drainage area upstream of the project location on Elk Grove Creek is approximately 1.97 square miles or 1,260 acres.

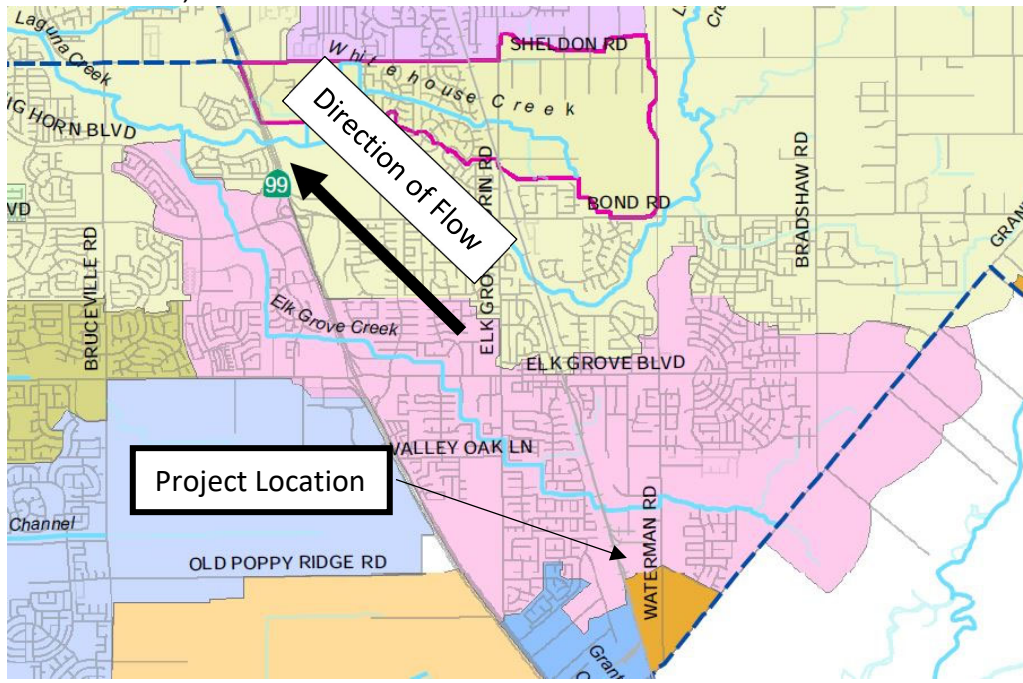


Figure 3 - Elk Grove Creek Watershed



## **Existing Models Overview**

In 2011 West Yost and Associates conducted a technical study to present preliminary design alternatives to Buzz Oates for Flood Control Design of a previous project called South County Business Park (SCBP). This study modified the baseline SacCalc and HEC-RAS models from the City of Elk Grove's Storm Drain Master Plan, to accurately detail the proposed developments impact more accurately on Elk Grove Creek. West Yost's technical memorandum is included in Appendix A for reference.

With this report, MCR conducted an expanded analysis based on changes to the previous development and the proposed site plans for Waterman & Brinkman Logistics Center. The SacCalc and HEC-RAS models created by West Yost were used as the basis for our project's flood control design.

## **Proposed Mitigation Measures**

### **Topographic Survey Findings**

In surveying the site, MCR located an existing berm located between the creek and the onsite floodplain. This berm was not discovered in both the master plan topography and the 2011 topographic survey. This berm has an elevation of approximately 44.5'-46'; near or above the flood elevation of 45'. During a 100-year event the berm would likely prevent water from entering the onsite flood plain, resulting in increased river stages upstream. As a conservative measure this finding was not used when creating the pre-project conditions; however, the berm was modeled for the applicable post-project river sections.



*Figure 4 – Existing Berm located on Elk Grove Creek*

### **Onsite Flood Control Basin**

To mitigate the effects of filling the existing onsite floodplain & the existing berm reducing the rivers cross sectional conveyance area, the proposed development will install a flood control detention basin, identified by the Sacramento County Drainage Manual as the most effective means of reducing peak flows. This detention basin will be dedicated to creek flows only, with a

weir placed on the northernmost end adjacent to the creek to allow for peak creek flows to enter the basin. Below is an exhibit, taken from the Civil Site Plan, of the proposed basin on the project site.

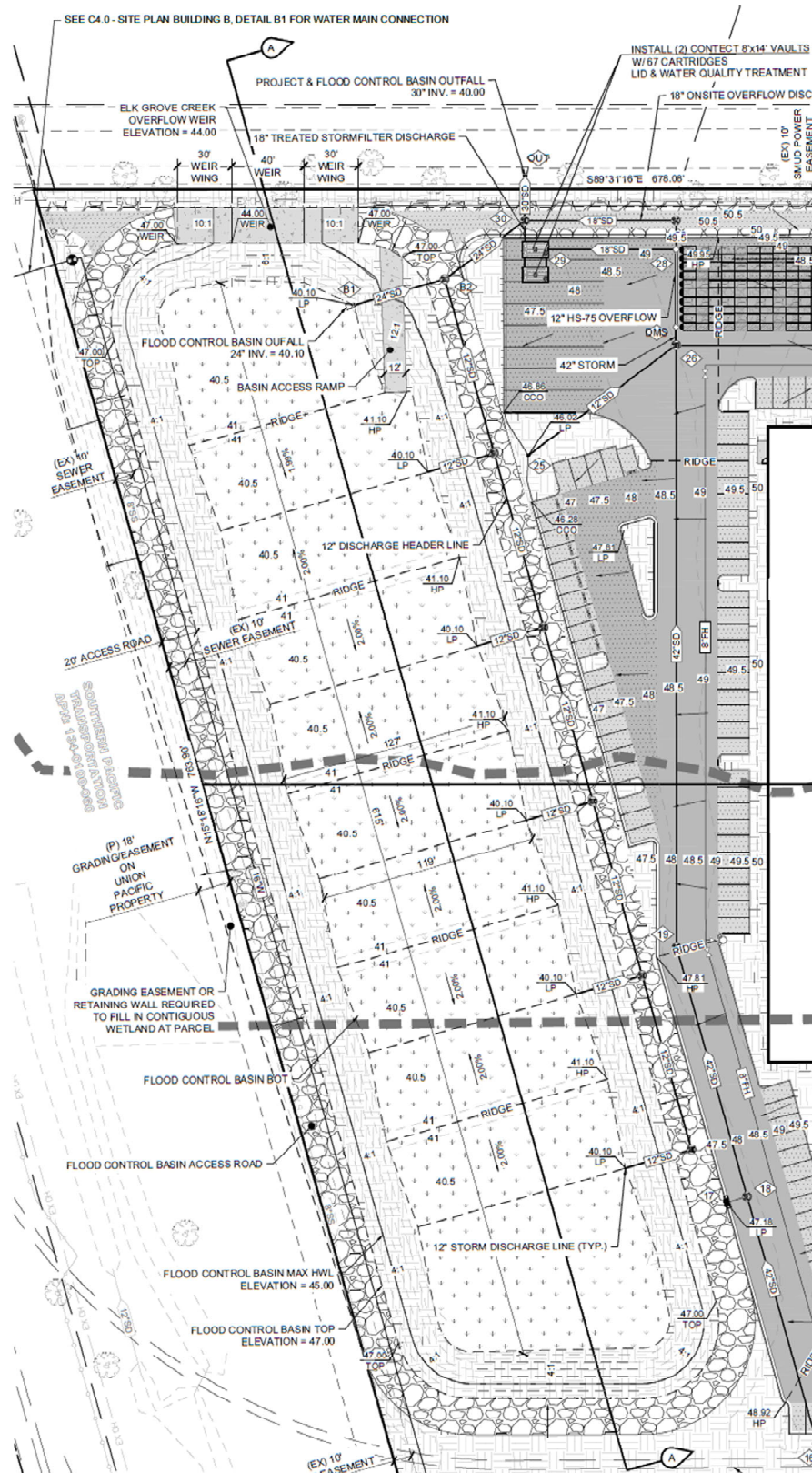


Figure 5 - Flood Control Basin Plan



The proposed basin bottom is approximately 615 ft long and 120 feet wide. The total basin area, including the access road, occupies 3.49 acres of land. Creek peak flows will be discharge into the basin via a 40' weir placed at along the northernmost edge. The proposed basin will provide approximately 8.92 acre-feet of storage below the 100-year flood elevation of 45.0. The basin will be sloped at 2% per city standard, resulting in a bottom depth varying from 40.10 to 41.10. To meet freeboard requirements the top of the basin elevation will be 47.00 with a 20' wide access road located around the basin.

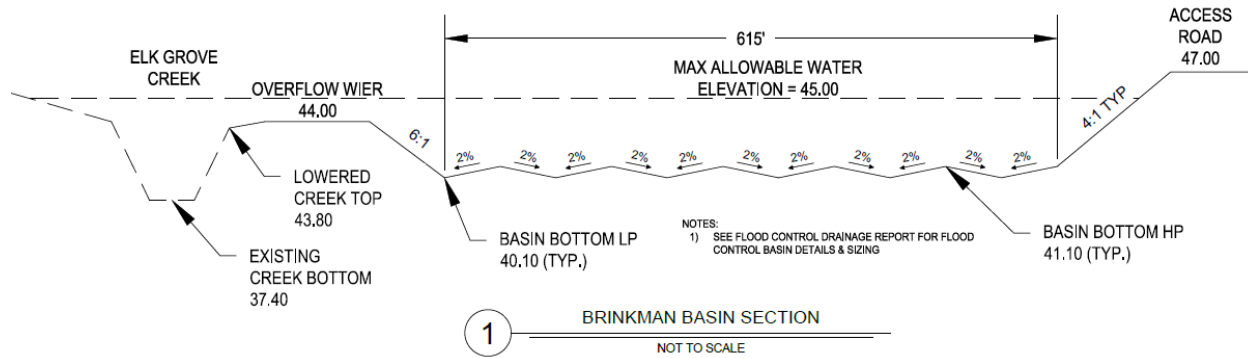


Figure 6 - Flood Control Basin Section

The basin will drain back into the creek, after the storm event, through a shared 30" outfall located above the creeks ordinary high-water elevation of 40.00. See the onsite drainage report for details regarding the proposed developments detention and treatment system. To prevent flows from backing into the system the following check valves/flap gates will be installed:

1. The 30" creek outfall, to prevent creek flows from entering the system.
2. Both onsite 18" discharge pipes, to prevent flows from entering the onsite system.
3. The 24" flood control discharge pipe, to prevent flows from entering the flood control basin.

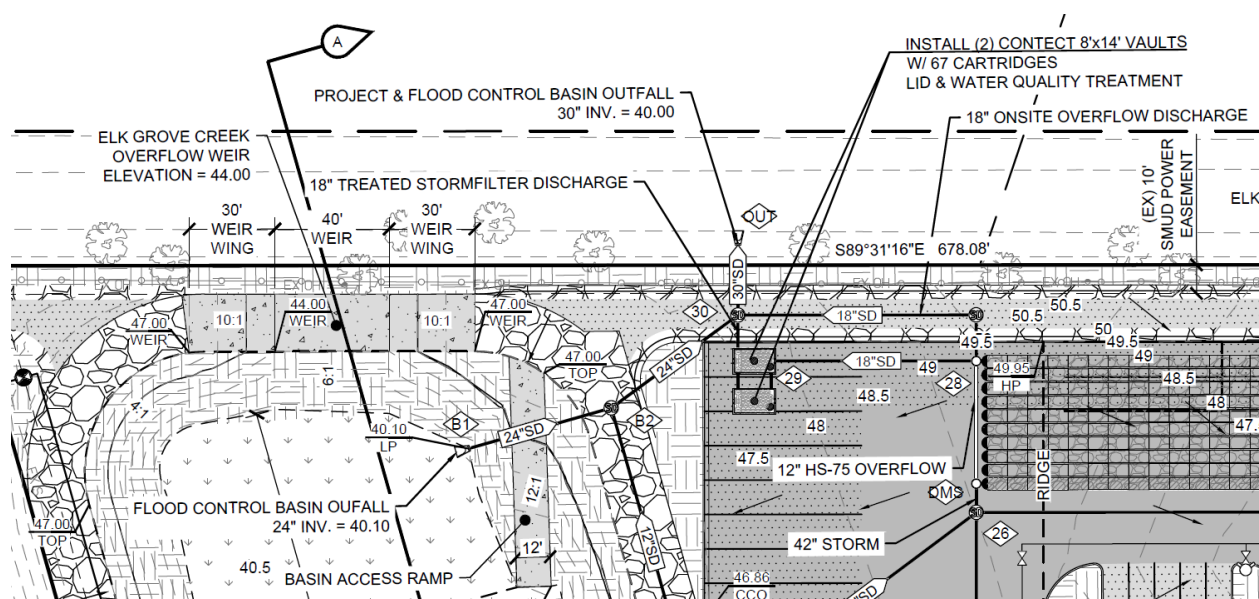


Figure 7 - Flood Control Basin Outfall Detail

## **Hydrology Analysis**

### General Methodology Overview

The hydraulic modeling for the proposed developments impacts on Elk Grove Creek was performed by the following process. The existing SacCalc Master Model, created by West Yost, was updated to represent the proposed development changes. See *SacCalc Master Model Modifications* for a description of the changes to the SacCalc Master Model. The hydrographs produced by SacCalc were used for all tributaries, except for the Waterman & Brinkman Logistics Center. The Waterman & Brinkman Logistic Center hydrograph was modeled by the following process:

1. Individual tributaries were modeled in SacCalc for all drain inlets.
  - a. SacCalc was ran based on industrial land use and individual hydrographs were created.
2. The proposed developments storm drain system was modeled in Autodesk's SSA and the hydrographs produced by SacCalc were import for each inlet.
  - a. The SSA model was ran and an output hydrograph was created for the proposed development.
  - b. The produced hydrograph is the most accurate assesment of the projects impacts on Elk Grove creek, see the *Onsite Drainage Report* for further details.

The updated SacCalc hydrographs & proposed onsite SSA hydrograph were imported into HEC-RAS so an unsteady flow analysis could be performed. The updated analysis will be herein referred to as the Brinkman post-project unsteady flow analysis, see *HEC-RAS Master Model Modifications* for more details.

The master HEC-RAS geometric model, created by West Yost, was updated to represent the proposed mitigation measures. The updated model will be herein referred to as the Brinkman post-project geometric model, see *HEC-RAS Master Model Modifications* for more details.

The Brinkman post-project unsteady flow analysis was conducted for the Brinkman post-project geometric model. The Brinkman post-project results were compared with the pre-project condition to ensure that the proposed development improvements mitigated the impacts on the 100-year flood plain.

### **SacCalc Master Model Modifications**

The hydrologic modeling for the Elk Grove Creek watershed was performed with Sacramento County's program, SacCalc. The SacCalc model was used to calculate design flows using the Sacramento Method as required by Volume 2 of the Sacramento City/County Drainage Manual. The SacCalc model is designed to run various events but for the purpose of this report, only the 100-year 24-hour event will be discussed.

The model was originally created for the City of Elk Grove Storm Drain Master Plan. The model was modified by West Yost with *Hydraulic Analysis for South County Business Park Technical Memorandum*, dated October 17<sup>th</sup>, 2011. With the development of the Brinkman & Waterman Logistics Center MCR has further updated the model to reflect the most accurate design.

## Watershed Modifications

The baseline for the existing hydrologic analysis was a SacCalc model used in the Storm Drain Master Plan. The model was refined by West Yost to break Tributary L41690 into 4 watersheds (L41691, L41692, L41693, L41694). MCR has further broke Subwatershed L41694 into two additional watersheds (L2000, L10000). L2000 is composed of the proposed Brinkman & Waterman development, while L10000 is the remainder. L10000 has no ability to discharge directly into Elk Grove Creek, since it is bounded on the North by the Brinkman parcel; therefore, it was assumed that the watershed will discharge to the parcels frontage on Waterman Road. This discharge is added to junction L43746 in the SacCalc Model. This is a conservative assumption since it will result in a delayed discharge of L10000; therefore, increasing the peak flowrate in Elk Grove Creek. To summarize a flow chart has been created and 3 figures showing the SacCalc model phases are shown below. Lastly a plan view identifying the proposed watershed nodes and their parcel boundaries has been created, see *Figure 11 - Proposed SacCalc Tributary Plan*.

## SacCalc Modification Flow Chart

- L41690 (Below Subcatagorized by West Yost)
  - L41691
  - L41692
  - L41693
  - L41694 (54 acre site, below subcatagorized by MCR)
    - L2000 (30 acre site containing Brinkman & Waterman)
      - Onsite Hydrograph Modeled through importing SacCalc Inlet Hydrographs into SSA to accurately model the system. Refer to the Onsite Drainage Report.
    - L10000 (Remaining 24 acres)
      - Modeled through SacCalc by adding a channel that discharges into junction L43746.
      - The channel futher delays the projects peak flow, conservatively increasing the Elk Grove Creeks peak discharge.

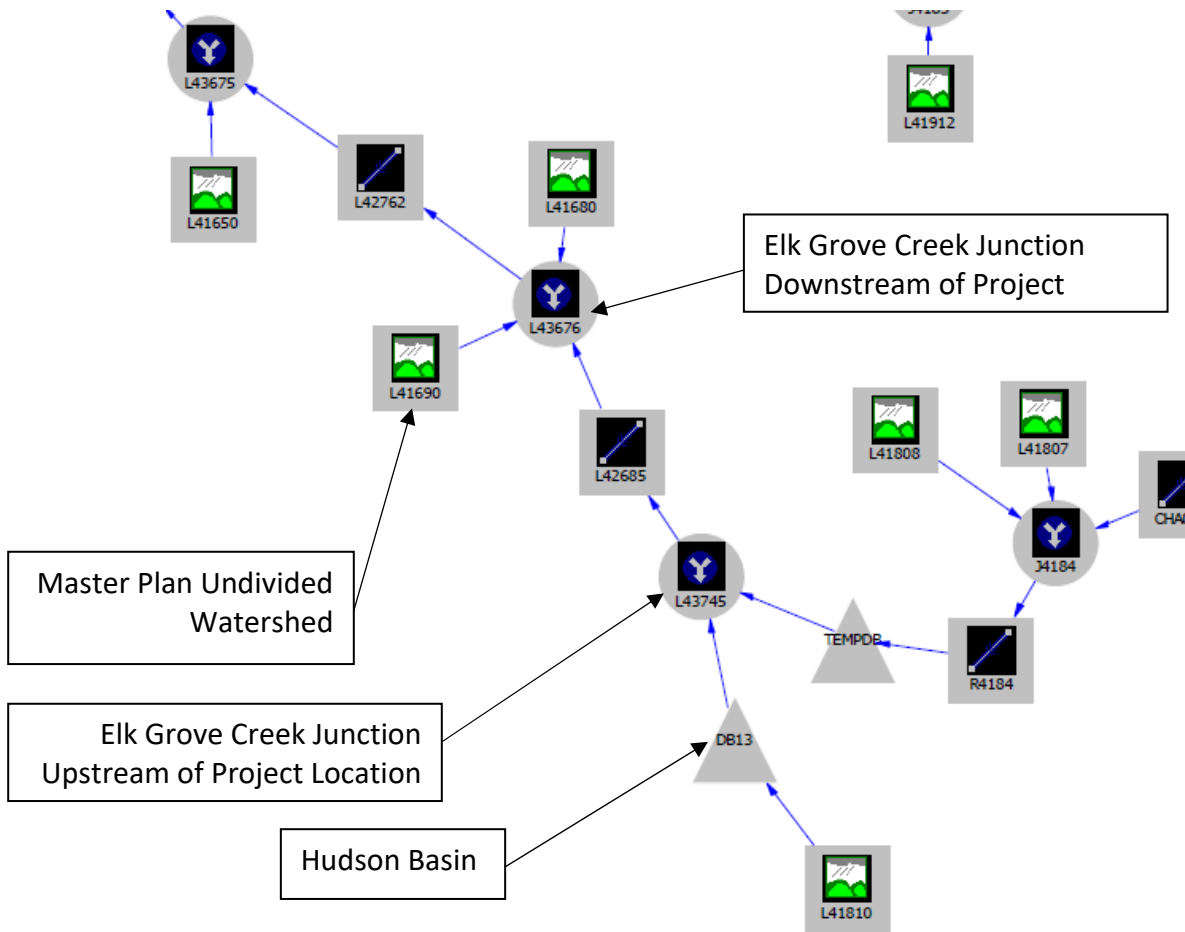


Figure 8 – Baseline SacCalc Model (Project-L41690)

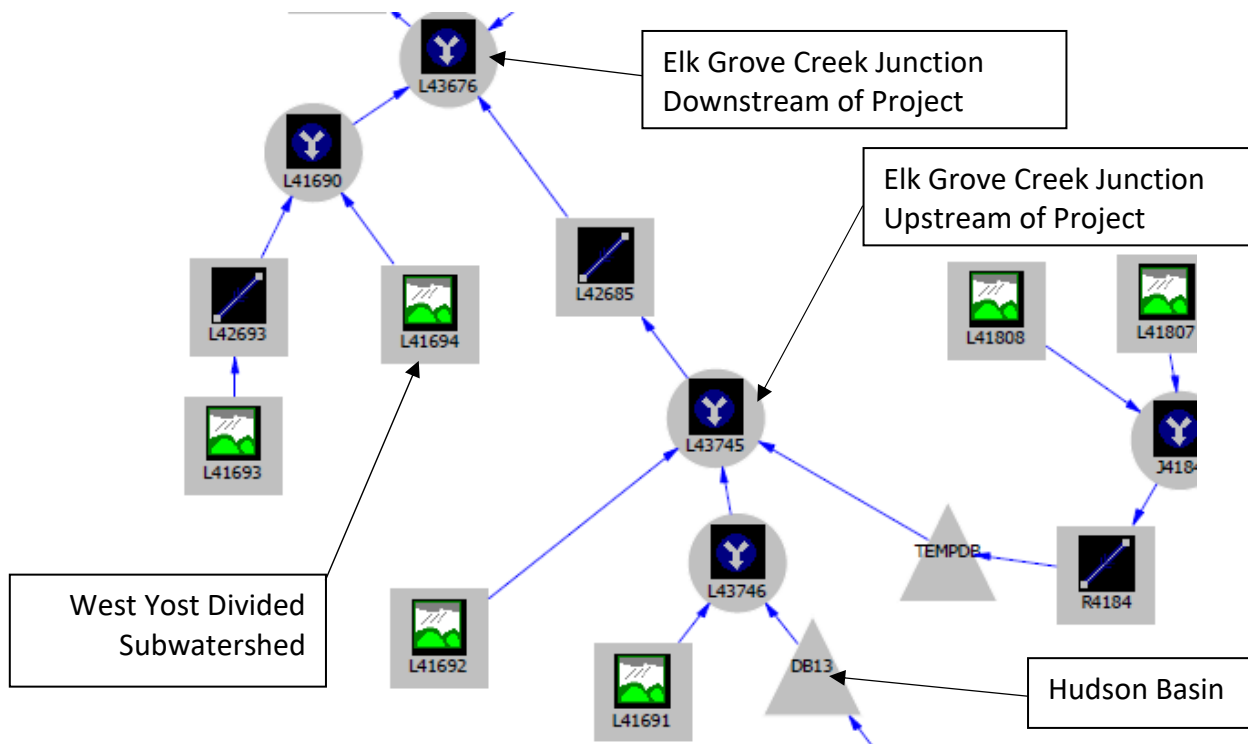


Figure 9 – Modified SacCalc Model by West Yost (Project-L41694)

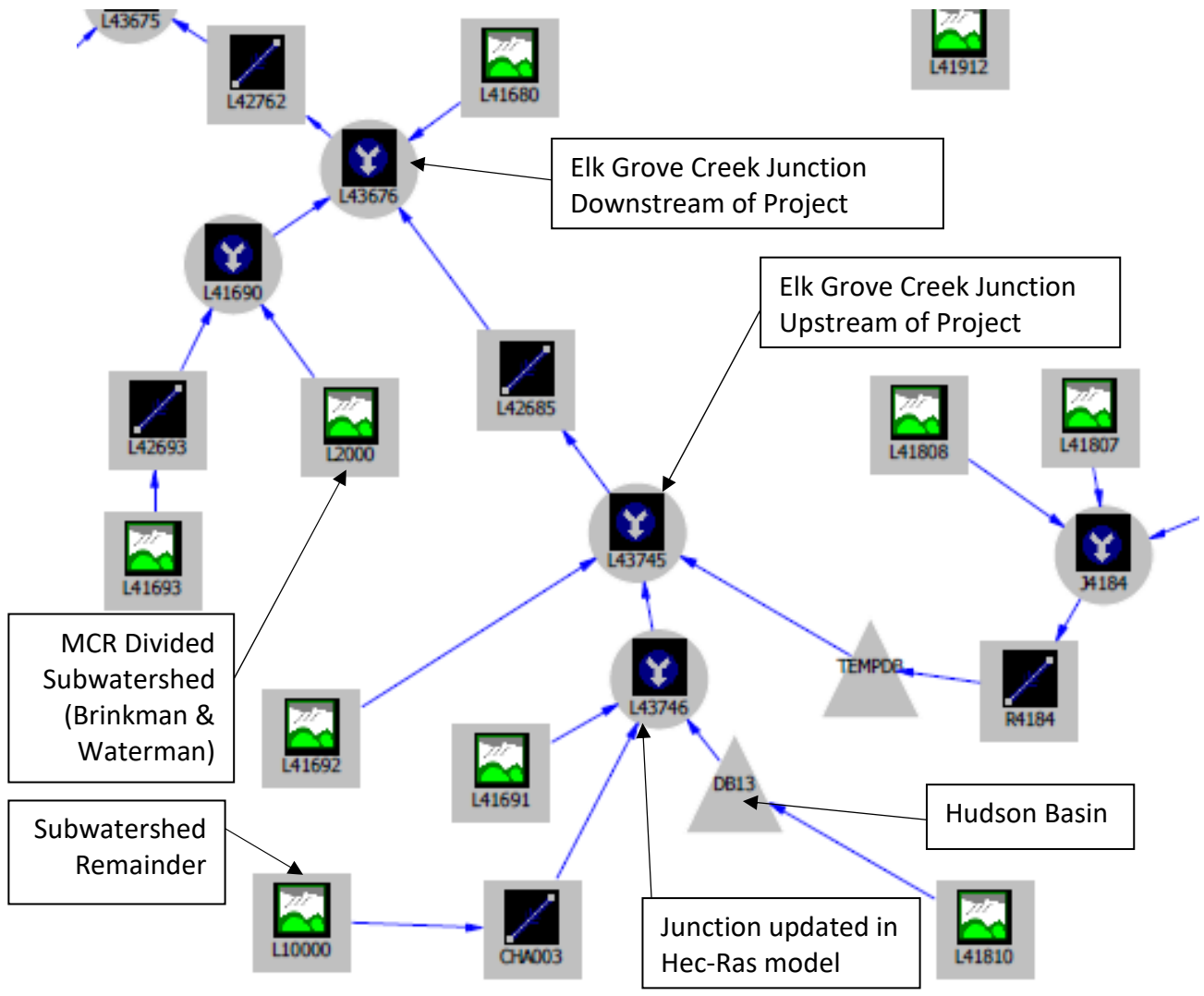


Figure 10 - SacCalc Modified Post Project



Figure 11 - Proposed SacCalc Tributary Plan

### **Proposed Development Hydrograph**

As stated in the *General Methodology Overview* the Brinkman & Waterman hydrograph was created by the following process:

Individual drainage management areas (DMA's) were created for each drain inlet. The proposed DMA's were then modeled in SacCalc and inlet hydrographs were produced. The inlet hydrographs were imported into the Autodesk Storm and Sanitary Analysis (SSA) model and an onsite project discharge hydrograph was created. The onsite project discharge hydrograph produced a peak flowrate of 9.74 cfs from 12.17 hours to 12.75 hours, for a total duration of 35 minutes. The existing undeveloped hydrograph produced a peak flow of 46.18 cfs at time 12.32 hours. See below for the Waterman & Brinkman DMA exhibits, SacCalc Model, & onsite project discharge hydrograph. See *Waterman & Brinkman Logistics Center Onsite Drainage Report* for more details.



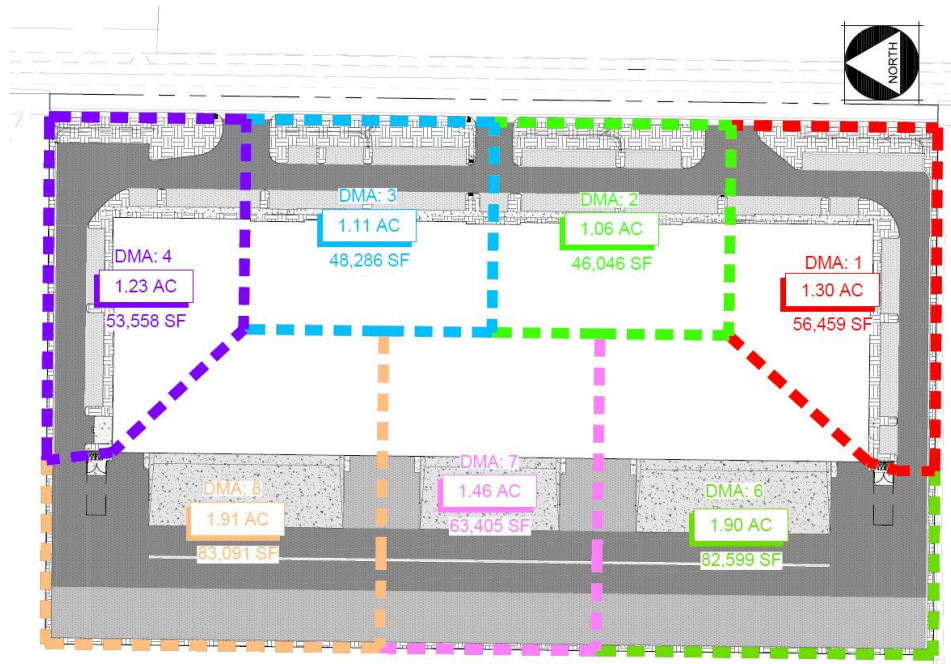


Figure 12 - Waterman DMA Exhibit

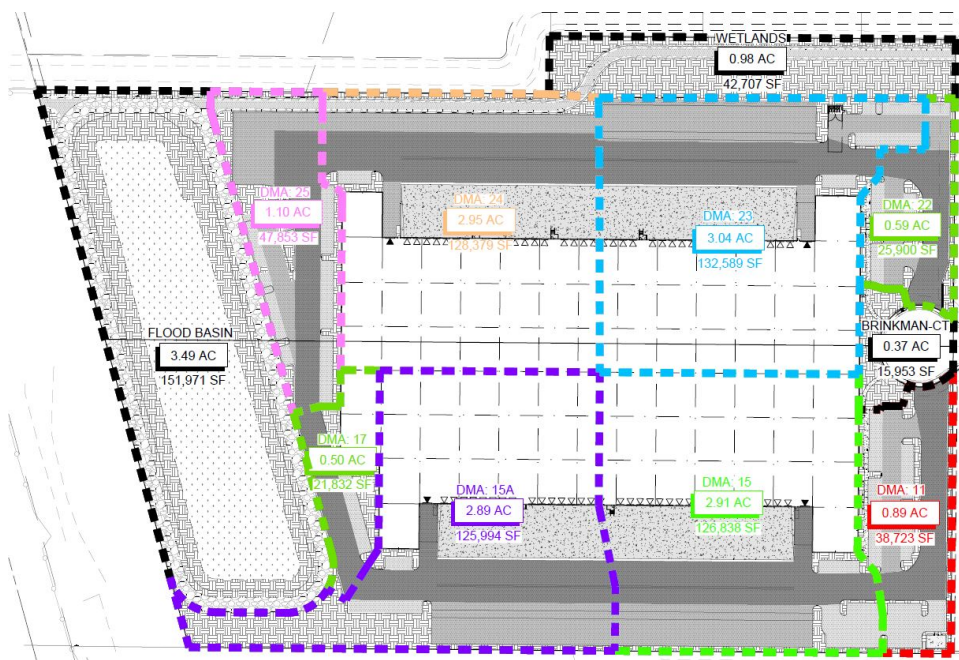


Figure 13 - Brinkman DMA Exhibit

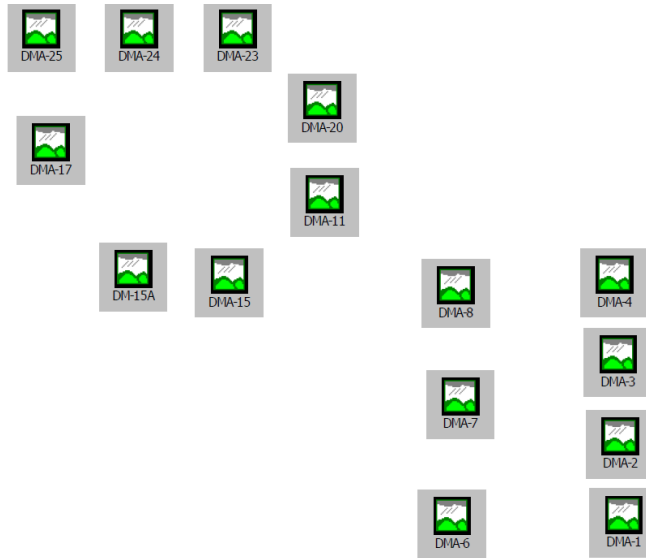


Figure 14 - Onsite SacCalc Model

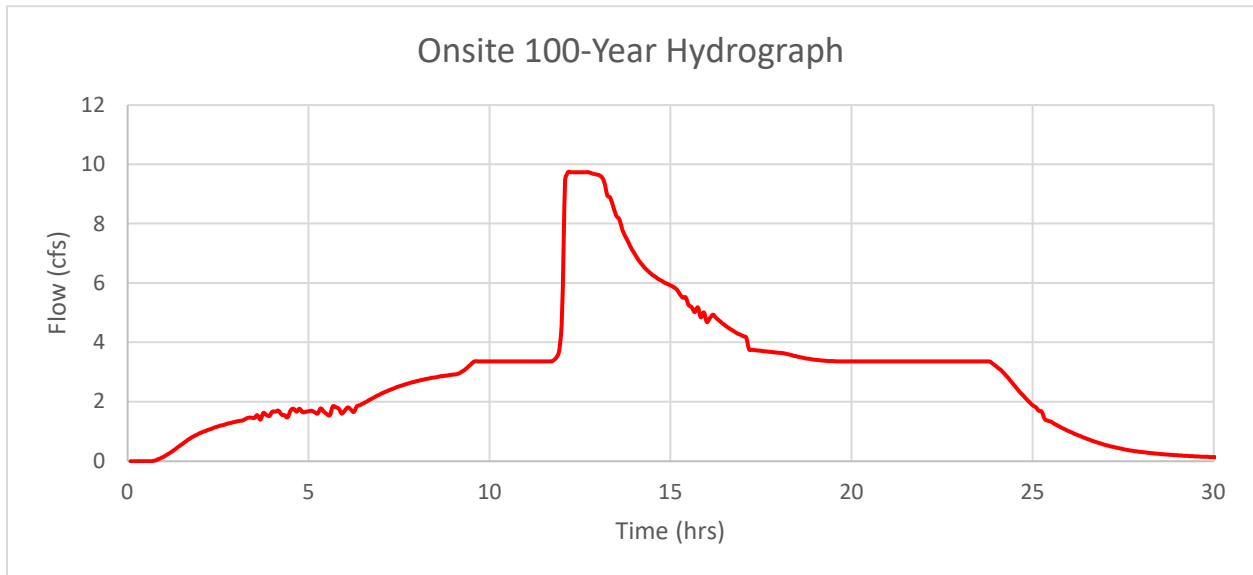


Figure 15 - Onsite 100-Year Hydrograph

## **HEC-RAS Master Model Modifications**

### Geometric Model

The SDMP HEC-RAS model was refined by West Yost to include the following changes:

1. Between stations 4.9 & 5.229 eight additional sections were added.
  - a. Sections added by West Yost (4.923, 4.95, 4.983, 5.025, 5.044, 5.097, 5.12, 5.163)
2. The bottom of the channel was updated to represent the existing concrete lining at the bottom of the channel.
  - a. A manning's n coefficient of 0.015 was used for design.

The described geometric model, created by West Yost, was used as the baseline geometric model for the project, labeled “OrigGeomWholeSurvey2008\_EX”. The HEC-RAS cross-sections along the project site are as follows:

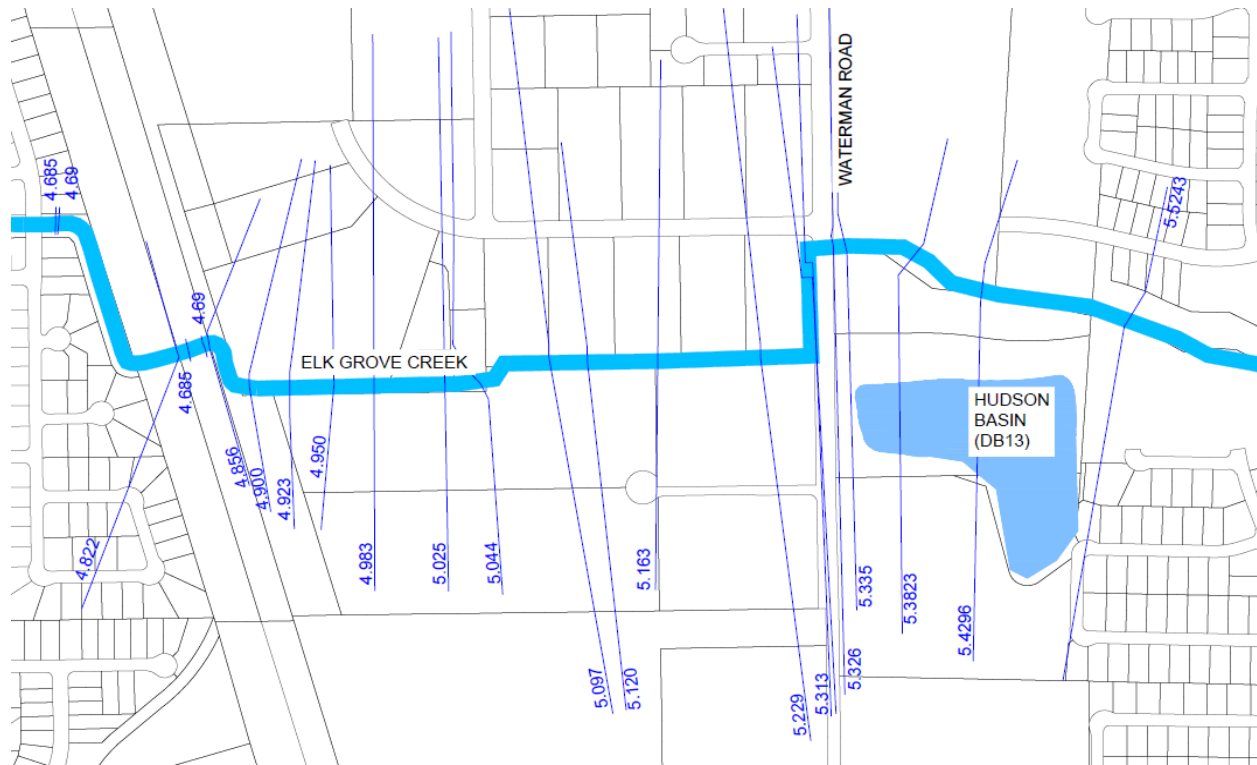


Figure 16 - HEC-RAS Model Sections (By West Yost)

The proposed geometric model, labeled “OrigGeomWholeSurvey2008\_Brinkman”, was created from the previously described “OrigGeomWholeSurvey2008\_EX”. The following changes were made by MCR to accurately model the system.

1. Since an existing burm was located in the field survey, sections 4.923-5.163 were modified by adding a vertical “Blocked Obstruction”.
  - a. This a conservative approach removes the “existing” onsite flood plain and reduces the rivers cross sectional area of flow by as much as possible.
  - b. The “blocked obstruction” was only added to the proposed Brinkman Geometric model; the existing geometric model & results still include the onsite floodplain conveyance area.
  - c. See below for a figure showing the river section at station 4.95.
2. The proposed flood control basin was added as a storage area with incremental volumes taken from the Civil 3d model.
  - a. See below for a table of the incremental basin volumes.
3. Lastly a lateral structure, a trapezoidal weir, was added to station 4.93 to connect the proposed flood control basin with the Elk Grove Creek.
  - a. The proposed weir base is 40’ wide at elevation 44.00
  - b. The proposed weir wings are 30’ wide and range from elevation 44.00 to 47.00.
  - c. See below for a figure displaying the weir section.

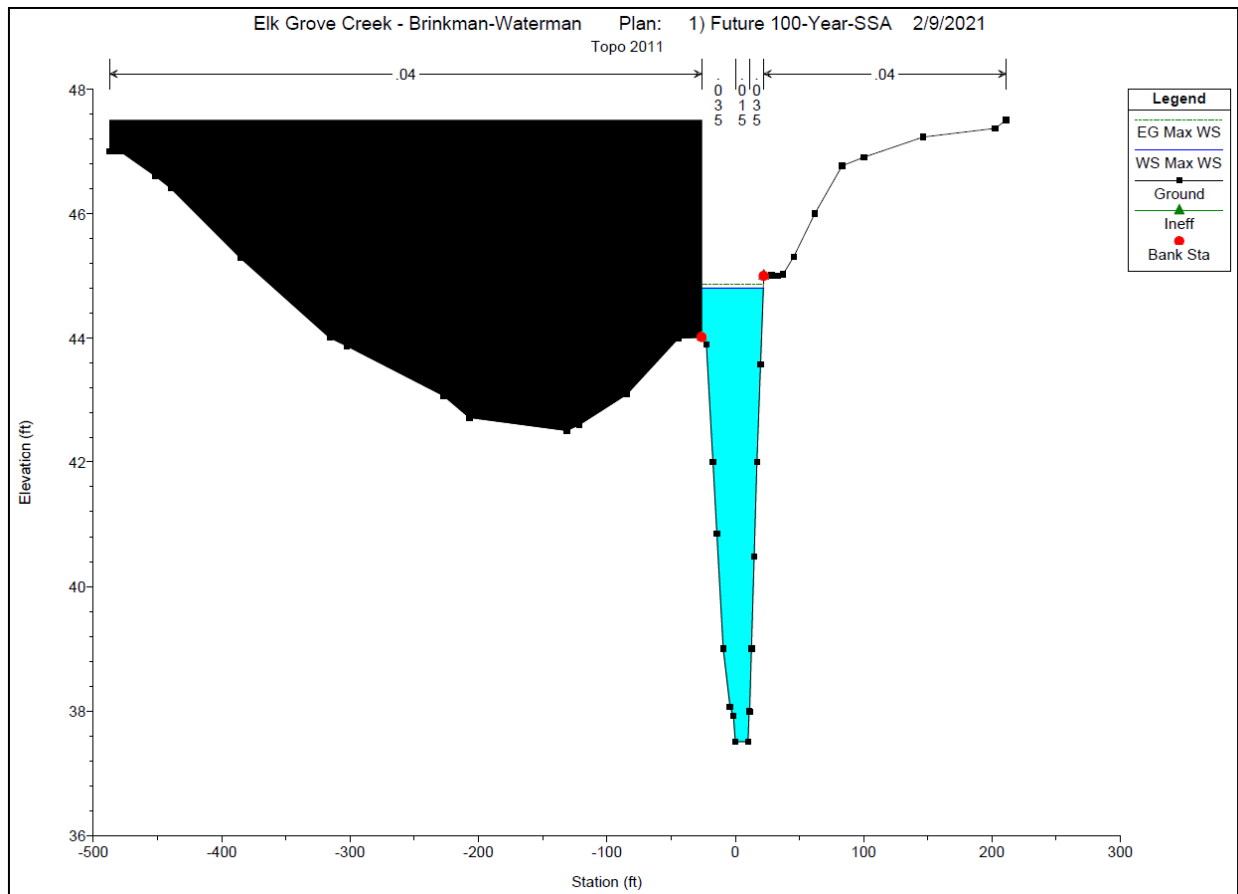


Figure 17 - HEC-RAS Section Station 4.95

Table 1 - Basin Volumes

Elevation (NGVD29)	Basin Volume (acre-ft)
40.0	0.00
40.5	0.21
41.0	0.90
41.5	1.81
42.0	2.74
42.5	3.72
43.0	4.73
43.5	5.77
44.0	6.86
44.5	7.99
45.0	9.16
45.5	10.36
46.0	11.61

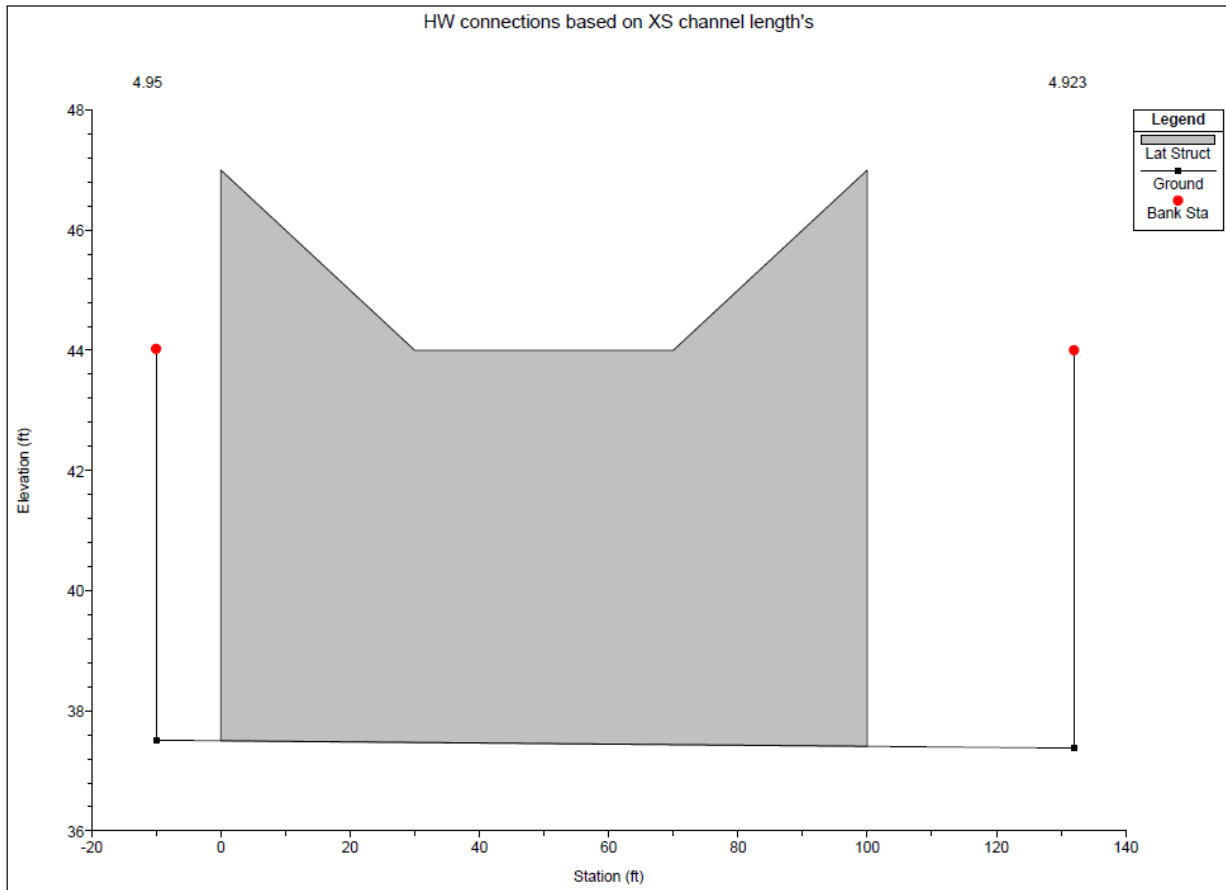


Figure 18 - Lateral Structure (Trapezoidal Weir) Section

### Unsteady Flow Model

The existing unsteady flow model used for the pre-project condition was created by West Yost and is named “Exist 100-Year”. This model uses the imported hydrographs from SacCalc to create an unsteady flow model. The proposed unsteady flow model “MCR 100-Year” was created from the “Existing 100-Year” unsteady model with the following modifications. The HEC-RAS station 5.335, SacCalc Junction L43746, was updated to the proposed SacCalc hydrograph which includes the tributary L10000. This results in a greater flowrate upstream of the project than the preconstruction condition; however, this is a more accurate model. Additionally HEC-RAS station 4.95 was replaced with the onsite SSA generated hydrograph named “L2000-SSA”. The SacCalc identification nodes and corresponding HEC-RAS stations have been noted in the table below.

Table 2 - HEC-RAS & SacCalc Tributaries

HEC-RAS Station	5.52	5.335	5.229	5.097	4.95	4.9	4.822
SacCalc Identification	TEMPDB	L43746	L41692	L41680	L2000	L41693	L41650

<b>Description</b>	Beginning of Analysis from SDMP Model. Regulates 100-Year peak flowrate to 513 cfs.	A junction including the Hudson Basin & 23 Acre Parcel.	Waterman Self-Storage & Sac County Water Treatment Facility	Industrial Park North of Elk Grove Creek	Project Parcel – Post-Project Without 24-Acre Parcel	Alon Asphalt Company	Low-Density Residential Subdivision West of Railroad
<b>Post-Project Modifications</b>	N/A	Added Sub watershed L10000.	N/A	N/A	Added SSA created Hydrograph	N/A	N/A

## **Elk Grove Creek Hydraulic Analysis Results**

The results shown below validate that the flood control basin successfully mitigates the following: filling the existing floodplain, the existing berm, the post-development runoff, and relocating SacCalc Watershed L10000 upstream of the project to junction L43746. See *Table 3 - 100-Year Storm Peak Water Surface Elevations & Flows* for a comparison of the existing vs post-project river stages and flows. The flood control basin has decreased all river stages both upstream and downstream of the proposed development.

River station 4.95, just downstream of the Brinkman & Waterman flood control weir, is the best station to display the mitigation effects on the Elk Grove Creek. At river station 4.95 peak stage has been reduced by 0.20', at the time of the peak stage the flowrate was also reduced by 21 cfs. The peak flowrate however, was increased by 30 cfs. This increase is due to watershed L10000 being relocated upstream, prior to the effects of mitigation.

At River station 5.097, just upstream of the Brinkman & Waterman development, the maximum stage has been decreased by 0.11', at the time of the peak stage the flowrate was increased by 25 cfs. The peak flowrate was increased by 16 cfs. This increase is also due to watershed L10000 being relocated upstream, prior to the effects of mitigation.

During the 100-year event the maximum water surface elevation in the flood control basin is 44.81. This corresponds to a volume of 8.48 acre-ft in the basin. With the maximum basin volume being 8.92 acre-ft, at an elevation of 45.00, the basins capacity reaches 95% during the event.

Below is a table displaying the pre vs post conditions of the creek, a compiled hydrograph displaying the rivers performance during the event, and lastly a hydrograph showing the flood control basin's performance during the event.

*Table 3 - 100-Year Storm Peak Water Surface Elevations & Flows*

Peak Water Surface Elevation (feet)-NGVD29	Flowrate During Peak Stage (cfs)	Peak Flowrate (cfs)
--	----------------------------------	---------------------

HEC-RAS Station	Existing Max Stage	Post-Project Max Stage	Existing Flow (cfs)	Post-Project Flow (cfs)	Existing Max Flow (cfs)	Post-Project Max Flow (cfs)
5.229	45.57	45.52	472	493	479	493
5.163	45.34	45.26	471	495	480	495
5.12	45.25	45.16	470	495	480	495
5.097	45.21	45.1	470	495	479	495
5.044	45.08	44.95	486	467	499	519
5.025	45.04	44.91	486	466	497	519
4.95	45.02	44.82	486	465	489	519
4.923	45.01	44.79	497	470	499	473
4.9	45.00	44.8	497	470	497	472
4.856	44.91	44.67	499	473	500	472
4.852	44.64	44.38	499	462	500	472
4.847	43.92	43.74	498	461	500	472
4.822	44.12	43.92	499	462	500	473
4.785	44.10	43.9	549	511	550	523
4.69	44.06	43.86	548	511	551	525
4.685	43.98	43.78	548	511	551	525
4.665	42.68	42.68	528	494	551	525

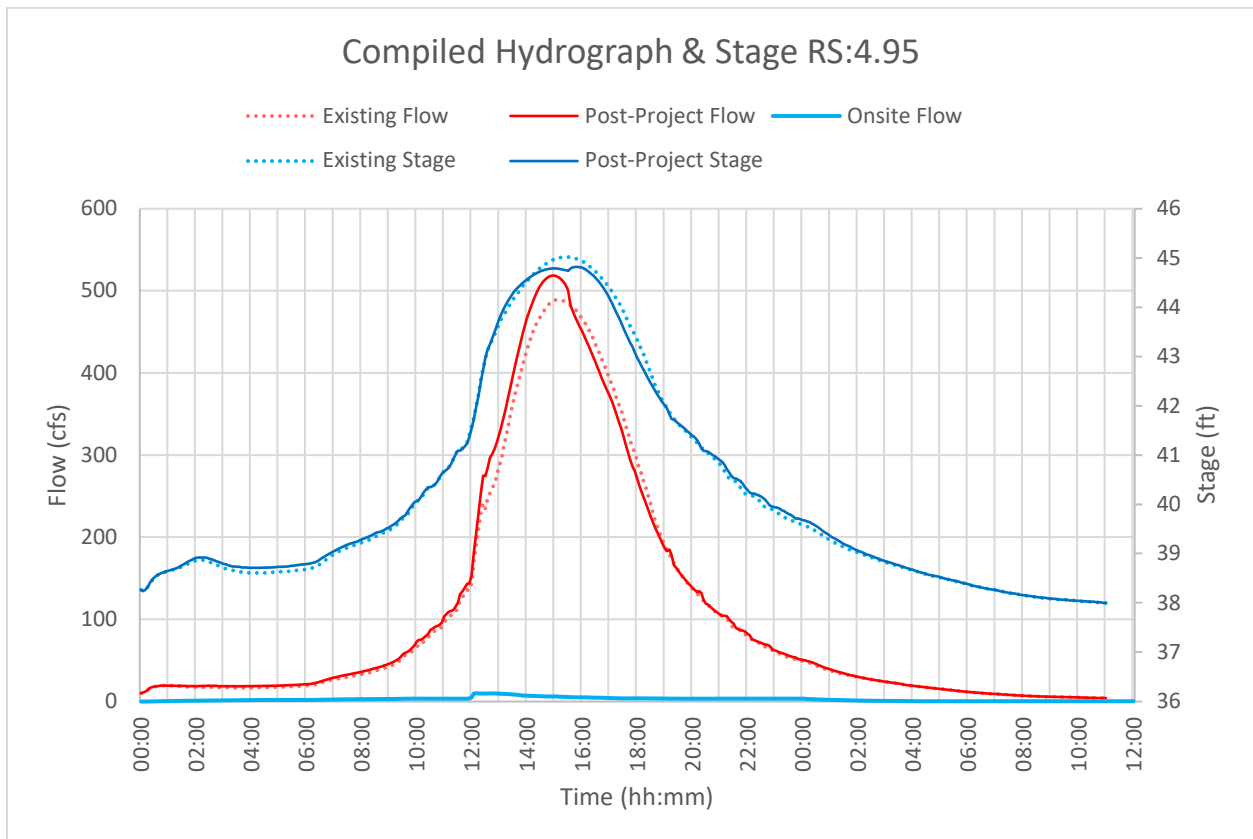


Figure 19 - Compiled Hydrograph & Stage RS:4.95

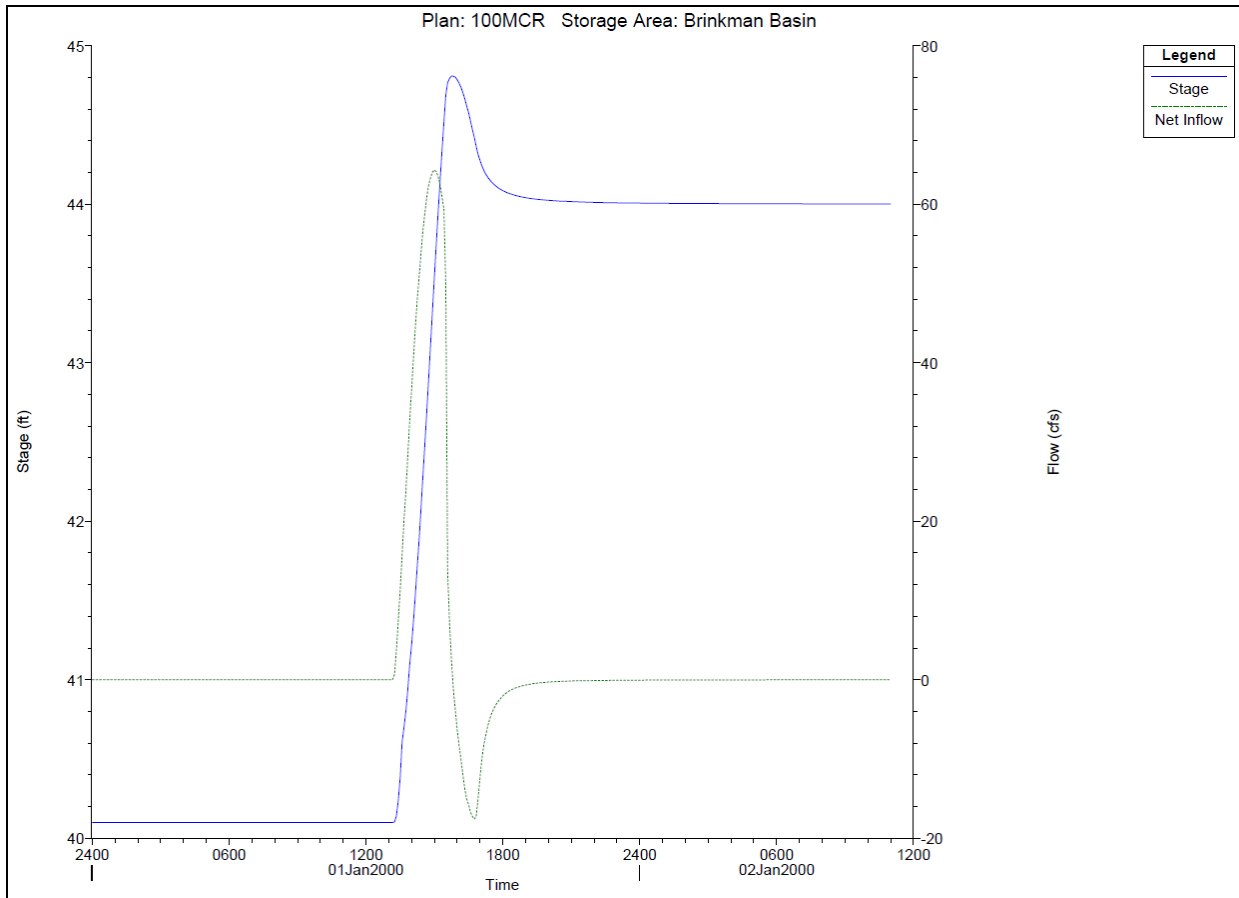


Figure 20 - Flood Control Basin Hydrograph



## **Appendix A – West Yost’s Technical Memorandum**



## TECHNICAL MEMORANDUM

DATE: October 17, 2011 Project No.: 475-00-11-01

TO: Kent Baker, Baker-Williams Engineering Group

FROM: Mark Kubik, R.C.E. #50963

SUBJECT: Hydraulic Analysis for South County Business Park

### **BACKGROUND**

The South County Business Park is located along Waterman Road in the City of Elk Grove (See Figure 1). A portion of the business park is undeveloped, but is proposed for future industrial development. This future development area covers approximately 58 acres. Elk Grove Creek runs along the north boundary of the future development area, and according to studies prepared by Federal Emergency Management Agency (FEMA) and the City of Elk Grove (City's), a portion of the site lies within the creek's 100-year floodplain. To develop this portion of the property, it will be necessary to place fill in the floodplain, which could cause an increase in flows and water surface elevations in the creek. Development of the site could also increase the runoff draining from the site into the creek, which could have additional impacts. West Yost Associates (West Yost) performed a hydrologic and hydraulic study to determine the potential impacts of the project and to define the improvements required to mitigate those impacts. This technical memorandum (memorandum) describes the study and presents the results.

### **APPROACH**

The general tasks performed by West Yost for this study are described below. More detailed descriptions for the tasks are provided later in this memorandum.

1. Establish Existing Conditions - For this task, we calculated flood flows and water surface elevations in Elk Grove Creek under existing conditions in the vicinity of the project. Flood flows and water surface elevations in the creek were calculated for the 2-, 10-, and 100-year storms. The 100-year floodplain was delineated on the project site.
2. Determine Potential Project Impacts - The potential impacts of the project on flows and water surface elevations in Elk Grove Creek were assessed. The effects of increased flood flows from the site and the placement of fill in the floodplain were evaluated. Post-project flows and water surface elevations were calculated in the creek for the 2-, 10-, and 100-year storms and compared against existing conditions.

3. Evaluate Mitigation Measures - Mitigation measures for the potential hydraulic impacts of the project were then identified and evaluated. The mitigation measures were focused on providing flood detention to reduce flows in the creek. For each mitigation alternative, flows and water surface elevations in the creek were calculated for the 2-, 10-, and 100-year.

## EXISTING CONDITIONS

West Yost performed hydrologic and hydraulic modeling to calculate flood flows and water surface elevations in Elk Grove Creek under existing conditions. We started with the hydrologic and hydraulic modeling previously prepared for the City of Elk Grove's Storm Drainage Master Plan and refined the models to add more detail in the vicinity of the project. The City's master plan models were revised as follows:

- In the hydrologic model that is used to calculate flows into the creek (SacCalc), the project site is located within a watershed that covers a much larger area than just the project site. We subdivided this watershed into multiple subsheds to better represent the inflows into the creek in the vicinity of the project. The watershed limits in the vicinity of the project are shown on Figure 1.
- The hydraulic model that is used to calculate water surface elevations in the creek (HEC-RAS) was refined using detailed topographic mapping that was available for the project site. In the vicinity of the project, we used the detailed topographic data to refine the existing cross sections in the hydraulic model. We also added seven cross sections along the creek adjacent to the project site. This allowed for a more accurate assessment of the potential impacts of placing fill in the floodplain on the project site. The cross section locations in the vicinity of the project are shown on Figure 1.
- In the hydraulic model, Manning's n values in the reach adjacent to project were revised to better represent the existing channel conditions. The channel bottom in this reach is concrete; therefore, the Manning's n value for the channel bottom was set to 0.015.

Using the refined models, flood flows and water surface elevations in the creek were calculated for the 2-, 10-, and 100-year storms. The peak flows and water surface elevations at key locations are presented on Tables 1, 2, and 3. The results from the hydraulic model indicate that peak 2-year and 10-year water surface elevations in the creek are contained within the banks of the creek along the limits of the project. However, the peak 100-year water surface elevations in the creek are predicted to overtop the south bank of the creek along the western portion of the project site. The resulting flooding on the project site would reach a maximum depth of 2.8 feet and would cover approximately 5.4 acres. This confirms the findings by FEMA and the City's master planning effort, which also indicate that a portion of the project site lies within the 100-year floodplain. The limit of the 100-year floodplain on the project is shown on Figure 1.

## POTENTIAL PROJECT IMPACTS

The potential hydrologic and hydraulic impacts of developing the project site were evaluated by revising the existing hydrologic and hydraulic models as follows:

- In the SacCalc hydrologic model, the subshed representing the project site was revised to represent fully developed conditions based on industrial land-use.
- The HEC-RAS hydraulic model was updated to represent the fill within the floodplain on the project site. The hydraulic model was also updated to include the developed condition inflow from the project site as calculated with the hydrologic model.

The results of the hydrologic modeling indicate that development of the project would significantly increase the peak flood flows from the project site. For example, the 100-year peak flow from the site is predicted to increase from 58 cubic feet per second (cfs) to 112 cfs, an increase of approximately 93 percent. However, the increase in peak flow from the site would not translate into a commensurate increase in peak flow in the creek. This is because the peak flow from the site is predicted to occur several hours before the peak flow in the creek. As a result, the model results indicate that the 100-year peak flow in Elk Grove Creek just downstream from the project would increase from 500 cfs to 512 cfs, a 2.4 percent increase.

Along with the increases in peak flows, there would also be increases in the peak water surface elevations in the creek due to the combined effect of the increased flows from the site and lost floodplain storage/conveyance due to the fill placed on the site. The peak 100-year water surface elevations in the creek adjacent to the project would be increased from 0.12 feet to 0.19 feet. The increases in water surface elevations would extend upstream past Waterman Road. At Waterman Road, the predicted increase in the peak 100-year water surface elevation is 0.12 feet. Downstream of the project, the increases in 100-year water surface elevations tend to be smaller, generally 0.06 feet or less, but they extend all the way downstream to the confluence with Laguna Creek. Because there are already potential flooding problems along the creek downstream of the project, any increase would be considered unacceptable. Peak flows and water surface elevations at key locations along the creek are presented on Tables 1, 2, and 3.

## MITIGATION MEASURES

Alternative measures were evaluated for mitigating the potential impacts of the project on flood flows and water surface elevations in Elk Grove Creek. Three mitigation alternatives were considered.

### Alternative 1A – On-Site Detention Option A

For Alternative 1A, an on-site detention basin would be constructed to provide flood control mitigation for the project. The exact location of the basin is flexible, but it would need to be located somewhere along the northern boundary of the project, adjacent to the Elk Grove Creek. Runoff from the site would be directed into the detention basin prior to being discharged into the creek. A pipe outlet would discharge runoff from the detention basin into the creek when water surface elevations in the creek are relatively low. When water surface elevations in the creek are high, runoff from the site would be stored in the detention basin. An overflow weir would be constructed between the basin and the creek.

The post-project HEC-RAS model was used to evaluate the required detention basin size to fully mitigate for the potential flood impacts of the project. Results from the model for the 100-year storm event indicate that the detention basin for Alternative 1 must provide 16.4 acre-feet of storage. The water storage elevation in the basin would be 45.3 feet (NGVD29). An overflow weir with a length of 50 feet at an elevation of 45.0 (NGVD29) would be constructed between the basin and the creek. An 18-inch outfall pipe with a flap gate would be constructed from the basin to the creek to drain the storage volume from the basin when the water surface elevation in the creek is low. The exact layout of the basin would not be determined until the time of development, but it is estimated that the area required for the basin would be about 3.6 acres. This assumes a bottom elevation of 39.0 feet (NGVD29), a top elevation of 46.3 feet (NGVD29), a bottom area of 2.2 acres, side slopes of 3 to 1 (horizontal to vertical) and a 25 foot access strip along the top of bank.

The resulting peak water surface elevations and flows in the creek for Alternative 1A are presented on Tables 1, 2, and 3. As shown on these tables, this alternative would reduce downstream flood flows and water surface elevations to existing conditions levels or less. Upstream of the project, the results predict a slight increase in water surface elevations for the 100-year storm. However, the increases reach a maximum of 0.02 feet and are considered negligible.

The detention basin could also be configured to provide stormwater quality treatment in addition to flood control detention. Based on the Stormwater Quality Design Manual for the Sacramento and South Placer Regions, May 2007, a treatment volume separate from the flood control volume of 3.5 acre-feet is required. This is based on a site area of 58.2 acres, 85 percent imperviousness, and a 48-hour drawdown time. Providing stormwater quality treatment in the basin would increase the approximate area for the basin from 3.6 acres to 4.3 acres.

### **Alternative 1B – On-Site Detention Option B**

Alternative 1B would also include an on-site detention basin located at the northern end of the project site. However, for this alternative, runoff from the project site would be discharged directly to the creek rather than to the detention basin. To mitigate for project impacts, peak flows in the creek would be diverted to the detention basin over a weir during flood events. This alternative requires less storage volume than Alternative 1A because the flood storage of the basin is reserved until water surface elevations in the creek reach flood levels. For this alternative, the detention basin would be located at the northeast corner upstream of the floodplain fill area. An 18-inch pipe outlet with a flap gate would discharge runoff from the detention basin into the creek when water surface elevations in the creek are relatively low.

The post-project HEC-RAS model was used to evaluate the required detention basin size to fully mitigate for the potential flood impacts of the project. Results from the model for the 100-year storm event indicate that the detention basin for Alternative 1B must provide 11.3 acre-feet of storage. The peak water storage elevation in the basin would be 45.3 feet (NGVD29). An overflow weir with a length of 30 feet at an elevation of 43.1 (NGVD29) would be constructed between the basin and the creek. An 18-inch outfall pipe with a flap gate would be constructed from the basin to the creek to drain the storage volume from the basin when the water surface elevation in the creek recedes. The exact layout of the basin would not be determined until the time of development, but it is estimated that the area required for the basin would be about 2.7 acres. The resulting peak water surface elevations and flows in the creek for Alternative 1B are presented on Tables 1, 2, and 3. As



shown on these tables, this alternative would reduce downstream flood flows and water surface elevations to existing conditions levels or less. There are a couple of locations where the water surface elevation is predicted to increase by 0.01 feet for the 2-year storm event. These increases are considered negligible.

It may be possible to provide stormwater quality treatment in the basin by only discharging low flows to the basin and high flows directly to the creek. However, it is likely some efficiency would be lost with this approach and adding stormwater quality treatment to the basin would increase the required storage volume by more than the 3.5 acre-feet needed for Alternative 1A. It may be more desirable to provide stormwater quality treatment with low impact development techniques incorporated into the landscape features of the project.

### **Alternative 2 – Off-Site Detention**

For Alternative 2, flood mitigation is provided by expanding the storage volume in an existing off-site detention basin located upstream of the project, just east of Waterman Road. This detention basin, referred to as the Hudson Basin (see Figure 1), was constructed to provide stormwater quality treatment and flood control detention for an existing development project nearby. The basin is also planned for expansion to provide flood control for the additional development proposed within the watershed as a part of the East Elk Grove Specific Plan. For this study, modeling was performed to determine the additional volume required in the basin to mitigate for development of the South County Business Park.

Some adjustments to the City's HEC-RAS model were required before Alternative 2 could be assessed. As a part of their East Area Storm Drainage Master Plan, the City had a hydrologic model created for the upper portion of the Elk Grove Creek watershed, east of Waterman Road. That model was based on fully developed conditions in the watershed. As a part of the subsequent City-wide master plan, the City had modeling prepared for the entire Elk Grove Creek watershed for both existing and fully developed conditions. For this analysis of existing conditions, rather than create new models to represent the area upstream of Waterman Road, the fully developed models from East Area study were used and artificial detention was added to reduce the peak flows down to the existing condition peak flow rates that had been established by the drainage study for the East Elk Grove Specific Plan. The Hudson Basin was included in the model, but the basin configuration as modeled does not match the existing basin configuration. This may have been in part because the Hudson Basin was expanded after its original construction and the City's latest master plan model was created prior to the expansion.

For this study, the as-built plans for the existing Hudson Basin were obtained and the detention basin was added to the HEC-RAS model. Flow rates from the remainder of the watershed upstream of Waterman Road were adjusted such that the peak flows at Waterman Road matched the existing condition peak flows from the master plan models. This approach was adequate to determine the approximate detention volume to mitigate for the development of the South County Business Park. If this alternative is considered for implementation, additional modeling should be performed to more accurately represent existing conditions in the watershed upstream of Waterman Road.

Modeling results for Alternative 2 for the 100-year storm indicate that the Hudson Basin storage volume must be increased by 10.3 acre-feet. The peak water storage elevation would be 45.5 feet (NGVD29). This would require the basin to be expanded by approximately 1.7 acres. No changes to the existing outlet for the basin would be required. The resulting peak water surface elevations and flows in the creek for Alternative 2 are presented on Tables 1, 2, and 3. As shown on these tables, this alternative would reduce downstream flood flows and water surface elevations to existing conditions levels or less.

Stormwater quality treatment would be required on-site. This could be provided with an on-site detention basin that provides 3.5 acre-feet of storage, or with low impact development techniques incorporated into the landscape features of the project.

The City currently owns sufficient right-of-way to expand the detention basin to its full planned size based on the drainage study for the East Elk Grove Specific Plan. No area is available within that right-of-way for providing any additional volume. According to City staff, the owner of the land around the basin has indicated that they will not sell additional land to the City to expand the basin further. As a result, the feasibility of this alternative is uncertain at best.

## **SUMMARY AND RECOMMENDATIONS**

Alternative 1B is recommended as the preferred project to provide flood mitigation for the South County Business Park. Alternative 1A is less efficient and requires a greater storage volume than Alternative 1B. Although Alternative 2 requires a similar storage volume as Alternative 1B, the feasibility of obtaining additional area to expand the Hudson Basin is uncertain at best.

**Table 1. Peak Water Surface Elevations and Flows for the 2-Year Storm**

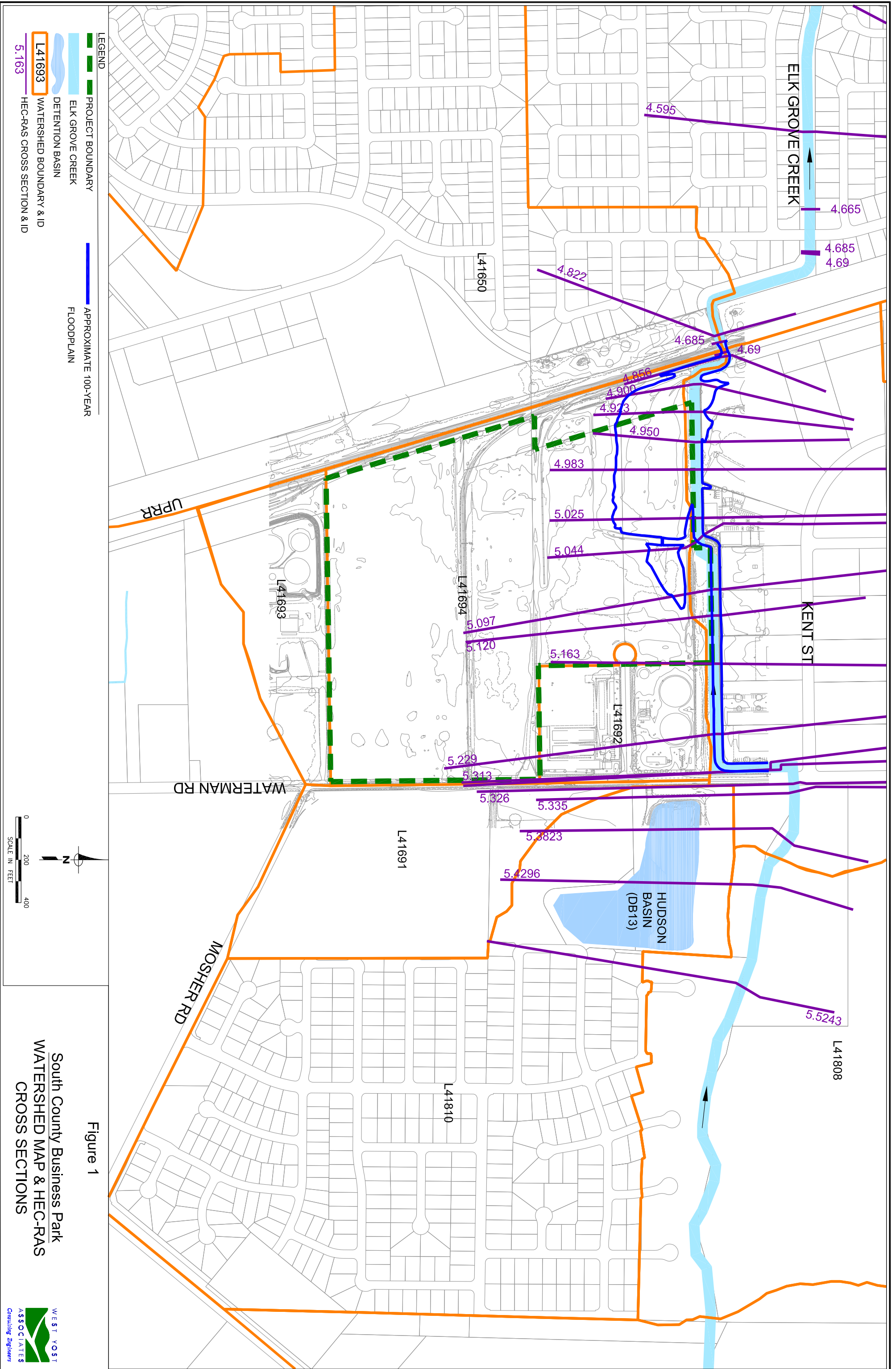
HEC-RAS Station	Peak Water Surface Elevation, feet (NGVD29)					Peak Flow, cubic feet per second				
	Exist.	Post-Project w/o Mit.	Alt 1A	Alt 1B	Alt 2	Exist.	Post-Project w/o Mit.	Alt 1A	Alt 1B	Alt 2
5.229	42.34	42.34	42.31	42.34	42.25	155	155	155	155	148
5.163	42.03	42.03	42.00	42.03	41.94	156	156	156	156	149
5.12	41.92	41.93	41.89	41.93	41.83	156	156	156	156	149
5.097	41.86	41.87	41.82	41.86	41.77	156	156	156	156	149
5.044	41.68	41.69	41.64	41.69	41.59	164	164	163	164	156
5.025	41.62	41.62	41.57	41.62	41.52	164	163	163	163	156
4.95	41.49	41.51	41.44	41.50	41.41	163	163	163	164	156
4.923	41.44	41.46	41.40	41.46	41.36	166	168	163	168	160
4.9	41.41	41.43	41.37	41.43	41.33	166	168	163	168	160
4.856	41.29	41.31	41.25	41.30	41.21	168	169	163	169	161
4.852	41.06	41.08	41.02	41.07	40.98	168	169	164	169	161
4.847	39.75	39.70	39.64	39.70	39.59	168	169	164	169	161
4.822	39.77	39.73	39.67	39.73	39.62	168	169	164	169	161
4.785	39.72	39.68	39.62	39.68	39.58	178	180	175	180	172
4.69	39.63	39.58	39.52	39.58	39.47	178	180	175	180	172
4.685	39.59	39.54	39.47	39.53	39.43	178	180	175	180	172
4.665	39.28	39.21	39.16	39.21	39.11	178	180	175	180	172



**Table 2. Peak Water Surface Elevations and Flows for the 10-Year Storm**

HEC-RAS Station	Peak Water Surface Elevation, feet (NGVD29)					Peak Flow, cubic feet per second				
	Exist.	Post-Project w/o Mit.	Alt 1A	Alt 1B	Alt 2	Exist.	Post-Project w/o Mit.	Alt 1A	Alt 1B	Alt 2
5.229	43.98	43.99	43.95	43.88	43.87	301	301	301	303	292
5.163	43.71	43.73	43.67	43.58	43.60	302	302	302	305	293
5.12	43.62	43.64	43.58	43.50	43.51	302	302	302	290	294
5.097	43.57	43.59	43.52	43.45	43.46	302	302	303	290	295
5.044	43.43	43.45	43.37	43.31	43.31	315	315	318	304	310
5.025	43.38	43.40	43.32	43.26	43.26	315	316	319	305	311
4.95	43.28	43.30	43.22	43.16	43.17	322	320	323	306	313
4.923	43.23	43.26	43.18	43.12	43.12	334	328	326	314	321
4.9	43.20	43.23	43.15	43.08	43.08	339	333	329	316	323
4.856	43.08	43.11	43.02	42.95	42.96	344	343	336	327	326
4.852	42.80	42.83	42.75	42.68	42.70	345	343	336	328	326
4.847	41.66	41.68	41.57	41.65	41.49	345	343	337	328	326
4.822	41.80	41.82	41.72	41.78	41.67	344	343	336	327	326
4.785	41.77	41.79	41.69	41.76	41.64	361	360	355	342	346
4.69	41.72	41.73	41.63	41.70	41.57	359	356	349	341	344
4.685	41.66	41.67	41.56	41.64	41.50	359	356	349	341	344
4.665	41.23	41.23	41.13	41.22	41.06	359	356	349	341	344

<b>Table 3. Peak Water Surface Elevations and Flows for the 100-Year Storm</b>										
HEC-RAS Station	Peak Water Surface Elevation, feet (NGVD29)					Peak Flow, cubic feet per second				
	Exist.	Post-Project w/o Mit.	Alt 1A	Alt 1B	Alt 2	Exist.	Post-Project w/o Mit.	Alt 1A	Alt 1B	Alt 2
5.229	45.57	45.73	45.58	45.54	45.52	479	475	482	470	454
5.163	45.34	45.52	45.34	45.32	45.30	480	476	484	470	455
5.12	45.25	45.43	45.27	45.23	45.22	480	476	471	463	455
5.097	45.21	45.39	45.22	45.19	45.18	479	479	471	463	455
5.044	45.08	45.26	45.09	45.06	45.05	499	499	490	483	477
5.025	45.04	45.23	45.05	45.02	45.01	497	498	490	483	476
4.95	45.02	45.16	44.97	44.95	44.94	489	497	490	482	476
4.923	45.01	45.13	44.94	44.91	44.90	499	509	489	492	487
4.9	45.00	45.14	44.95	44.92	44.91	497	508	489	491	487
4.856	44.91	45.02	44.82	44.79	44.78	500	512	493	493	489
4.852	44.64	44.71	44.51	44.47	44.47	500	512	493	493	489
4.847	43.92	43.93	43.79	43.70	43.73	500	512	493	493	489
4.822	44.12	44.14	44.00	43.92	43.93	500	513	493	493	489
4.785	44.10	44.12	43.98	43.90	43.92	550	545	527	526	523
4.69	44.06	44.08	43.94	43.86	43.88	551	546	528	527	524
4.685	43.98	44.00	43.86	43.77	43.79	551	546	528	527	524
4.665	42.68	42.74	42.67	42.59	42.63	551	546	528	527	524



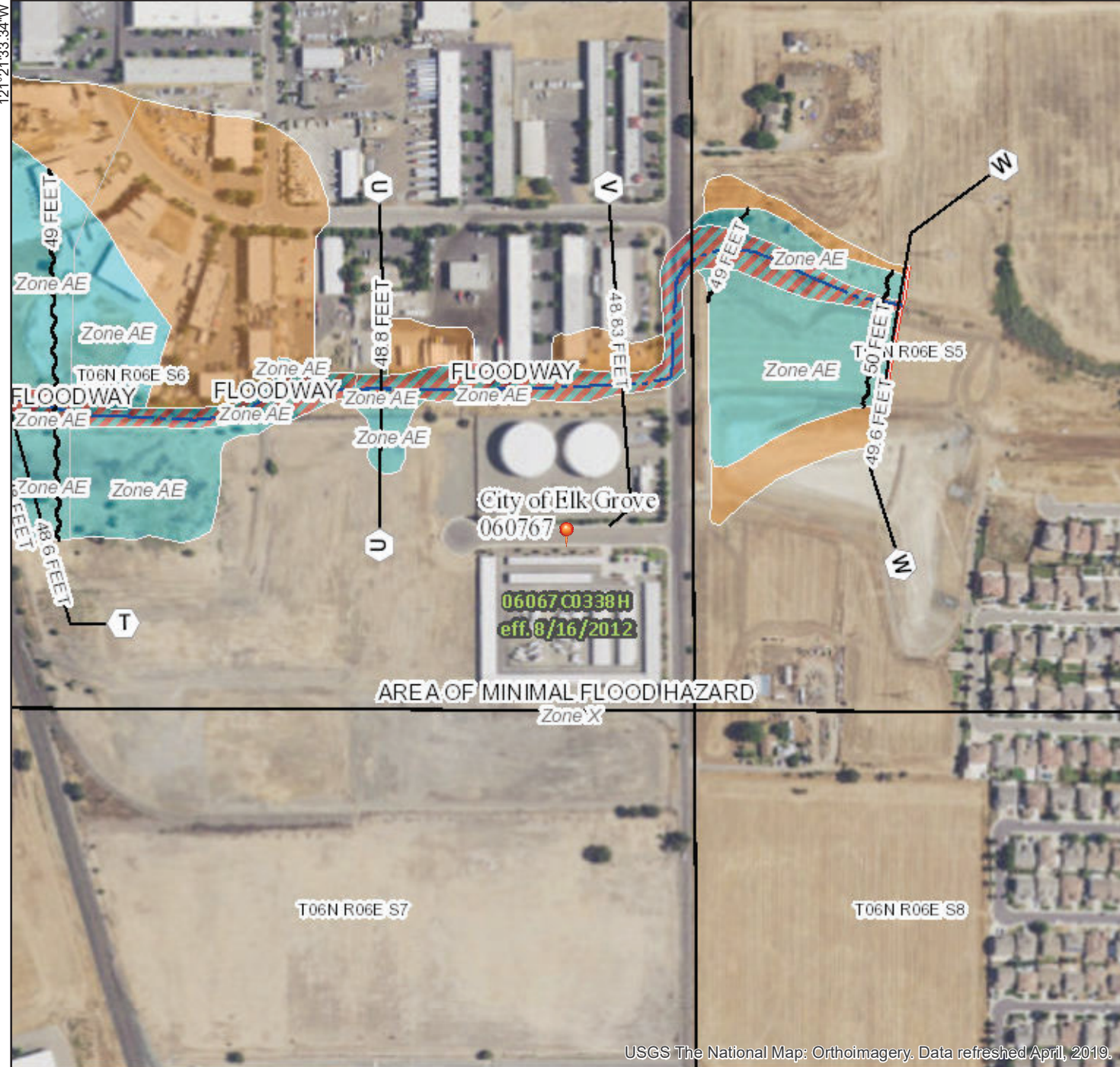
## **Appendix B – FEMA Flood Maps**



# National Flood Hazard Layer FIRMette



38°23'58.72"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- |                             |  |  |
|-----------------------------|--|--|
| SPECIAL FLOOD HAZARD AREAS  |  | Without Base Flood Elevation (BFE)<br><i>Zone A, V, A99</i>  |
|                             |  | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>   |
|                             |  | Regulatory Floodway  |
| OTHER AREAS OF FLOOD HAZARD |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
|                             |  | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>  |
|                             |  | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>  |
|                             |  | Area with Flood Risk due to Levee <i>Zone D</i>  |
| OTHER AREAS                 |  | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>   |
|                             |  | Effective LOMRs  |
| GENERAL STRUCTURES          |  | Area of Undetermined Flood Hazard <i>Zone D</i>  |
|                             |  | Channel, Culvert, or Storm Sewer   |
| OTHER FEATURES              |  | Levee, Dike, or Floodwall  |
|                             |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation  |
| MAP PANELS                  |  | 17.5   |
|                             |  | Coastal Transect   |
|                             |  | Base Flood Elevation Line (BFE)  |
|                             |  | Limit of Study   |
|                             |  | Jurisdiction Boundary  |
|                             |  | Coastal Transect Baseline  |
|                             |  | Profile Baseline   |
|                             |  | Hydrographic Feature   |
|                             |  | Digital Data Available   |
|                             |  | No Digital Data Available  |
|                             |  | Unmapped   |



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/9/2020 at 8:58:42 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

USGS The National Map: Orthoimagery. Data refreshed April, 2019.

0 250 500 1,000 1,500 2,000 Feet 1:6,000 38°23'30.52"N

121°21'33.34"W

121°20'55.88"W

**Table 2: Flooding Sources Included in this FIS Report (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Elder Creek	City of Sacramento, Sacramento County	Confluence with Morrison Creek	0.4 miles upstream of Jackson Road	18020163	12.2	*	Y	AE	*
Elk Grove Creek	City of Elk Grove	Confluence with Laguna Creek	0.9 miles upstream of Waterman Road	18020163	5.4	*	Y	AE	*
Florin Creek	City of Sacramento, Sacramento County	Confluence with Elder Creek	Florin Perkins Road	18020163	4.8	*	Y	AE	*
Georgiana Slough	Sacramento County	Confluence with North Fork Mokelumne River	Divergence from Sacramento River	18020163 18040012	12.3	*	N	AE	*
Gerber Creek	Sacramento County	Confluence with Elder Creek	0.6 miles upstream of Gerber Road No.1 Crossing	18020163	4.5	*	N	AE	*
Grizzly Slough	Sacramento County	Confluence with Dry Creek near Galt	*	18040013	0.9	*	N	AE	*
Hinkle Creek	City of Folsom	Confluence with American River	0.08 miles upstream of Shadow Brooke Drive	18020111	2.6	*	Y	AE	*
Humbug Creek	City of Folsom	Confluence with Willow Creek	0.4 miles upstream of Oak Avenue Parkway	18020111	2.2	*	Y	AE	*

\*Data Not Available

**Table 10: Summary of Discharges (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharges (cfs)			
			10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Dry Creek (Near Galt)	At USGS Gage No. 11329500 (Dry Creek near Galt, California)	324	*	*	36,200	49,557
	2.3 miles upstream of Clay Station Road	290	*	*	33,238	45,502
	*	24.0	155	245	315	425
Dry Creek (North Branch)	*	115.0	4,725	9,000	11,500	19,250
Elder Creek	At Morrison Creek	22.32	1,225	2,015	2,240	3,565 <sup>1</sup>
	At State Highway 99	14.97	950	1,390	1,585	1,975 <sup>1</sup>
	At Elk Grove – Florin Road	12.45	845	1,230	1,425	1,880 <sup>1</sup>
	At Central California Traction Company Railroad	7.51	490	775	900	1,160 <sup>1</sup>
	At Elder Creek Road	2.73	425	620	705	910 <sup>1</sup>
Elk Grove Creek	At Laguna Creek	7.74	655	920	1,020	1,390
	At Southern Pacific Railroad	4.70	275	365	405	560
Florin Creek	At Elder Creek	4.52	420	870	1,005	1,830
	At Power Inn Road	2.55	335	970	1,130	2,070
	At Southern Pacific Railroad	1.90	275	550	690	1,540
	At Florin-Perkins Road	1.80	150	200	220	300
Gerber Creek	At Elder Creek	4.4	480	685	765	990
	At Central California Traction Company Railroad	4.01	435	625	700	915
	At approximately 400 feet upstream of Vineyard Road	1.29	215	325	370	485

<sup>1</sup>Basin 0.2-percent annual chance flow does not include American River 0.2-percent annual change overflow

\*Data Not Available

**Table 13: Summary of Hydrologic and Hydraulic Analyses (continued)**

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Elder Creek	Confluence with Morrison Creek	0.4 miles upstream of Jackson Road	*	*	*	AE w/ Floodway	
Elk Grove Creek	Confluence with Laguna Creek	0.09 miles upstream of Jackson Road	*	*	*	AE w/ Floodway	
Florin Creek	Confluence with Elder Creek	Florin Perkins Road	*	*	*	AE w/ Floodway	
Georgiana Slough	Confluence with North Fork Mokelumne River	Divergence from Sacramento River	Pearson Type III distribution	*	*	AE	US Water Resource Council guidelines used and then graphically developed based on shape of curves
Gerber Creek	Confluence with Elder Creek	0.6 miles upstream of Gerber Road No.1 Crossing	*	*	*	AE	
Grizzly Slough	Confluence with Dry Creek near Galt	*	*	*	*	AE	
Hinkle Creek	Confluence with American River	0.08 miles upstream of Shadow Brooke Drive	*	HEC-2	*	AE w/ Floodway	
Humbug Creek	Confluence with Willow Creek	0.4 miles upstream of Oak Avenue Parkway	HEC-1	HEC-2	*	AE w/ Floodway	
Laguna Creek	Confluence with Morrison Creek	Just upstream of Sunrise Boulevard	*	HEC-2, NETWORK, HEC-RAS	*	AE w/ Floodway	

\*Data Not Available



**Table 14: Roughness Coefficients**

Flooding Source	Channel “n”	Overbank “n”
American River	0.030-0.055	0.035-0.100
Arcade Creek	0.030-0.100	0.030-0.080
Arcade Creek South Branch	0.014-0.060	0.040-0.100
Brooktree Creek	0.014-0.060	0.040-0.100
Carmichael Creek	0.014-0.060	0.040-0.100
Chicken Ranch Slough	0.014-0.060	0.030-0.100
Cosumnes River	0.014-0.060	0.040-0.100
Cosumnes River Above Dillard Road	0.028-0.0737	0.041-0.058
Cosumnes River Overflow North of Lambert Road	0.014-0.060	0.040-0.100
Coyle Creek	0.014-0.060	0.040-0.100
Cripple Creek	0.014-0.060	0.040-0.100
Dry Creek	0.035-0.070	0.040-0.050
Dry Creek (near Galt)	0.014-0.060	0.040-0.100
Dry Creek (North Branch)	0.014-0.060	0.040-0.100
Elder Creek	0.0225-0.060	0.030-0.080
Elk Grove Creek	0.025-0.060	0.030-0.080
Florin Creek	0.025-0.060	0.030-0.080
Georgiana Slough	0.014-0.060	0.040-0.100
Gerber Creek	0.025-0.060	0.030-0.080
Hinkle Creek	0.080	0.080
Humbug Creek	0.050	0.060-0.080
Laguna Creek	0.025-0.060	0.030-0.080
Laguna Creek Tributary No. 1	0.025-0.060	0.030-0.080
Linda Creek	0.014-0.060	0.040-0.100
Linda Creek South Branch	0.050	0.080
Lower Magpie Creek	0.014-0.060	0.030-0.100
Magpie Creek	0.014-0.060	0.040-0.100
Magpie Creek Diversion	0.014-0.060	0.030-0.100
Mariposa Creek	0.014-0.060	0.040-0.100
Mokelumne River	0.040-0.100	0.040-0.110
Morrison Creek	0.025-0.060	0.030-0.080

**Table 24: Floodway Data (continued)**

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/ SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	2,519	140	610	1.7	29.7	29.7	30.6	0.9
B	3,411	178	829	1.3	30.2	30.2	31.0	0.8
C	4,710	*	1,637	0.7	30.4	30.4	31.1	0.7
D	5,560	160	563	1.9	30.7	30.7	31.3	0.6
E	12,852	72	309	2.6	38.2	38.2	38.3	0.1
F	14,008	69	315	3.0	38.8	38.8	38.9	0.1
G	14,927	*	621	1.5	39.3	39.3	40.2	0.9
H	15,866	78	373	2.5	39.5	39.5	40.5	1.0
I	16,833	59	331	2.8	40.1	40.1	41.0	0.9
J	18,036	79	398	1.9	40.6	40.6	41.3	0.7
K	18,876	81	432	1.8	40.8	40.8	41.5	0.7
L	19,853	68	344	2.3	40.9	40.9	41.5	0.6
M	20,898	57	286	2.7	41.8	41.8	42.1	0.3
N	21,896	71	336	2.3	42.4	42.4	42.6	0.2
O	22,498	70	366	1.3	42.6	42.6	42.8	0.2
P	23,142	70	314	1.5	42.6	42.6	42.8	0.2
Q	23,538	58	239	2.0	42.7	42.7	42.9	0.2
R	24,262	55	209	2.3	42.9	42.9	43.1	0.2
S	25,460	47	171	2.8	43.3	43.3	43.4	0.1
T	25,872	46	280	1.7	48.6	48.6	48.6	0.0
U	26,912	38	232	1.7	48.7	48.7	48.7	0.0
V	27,609	38	197	2.1	48.7	48.7	48.8	0.1
W	28,628	27	51	7.9	49.6	49.6	50.6	1.0

<sup>1</sup>Feet above confluence with Laguna Creek

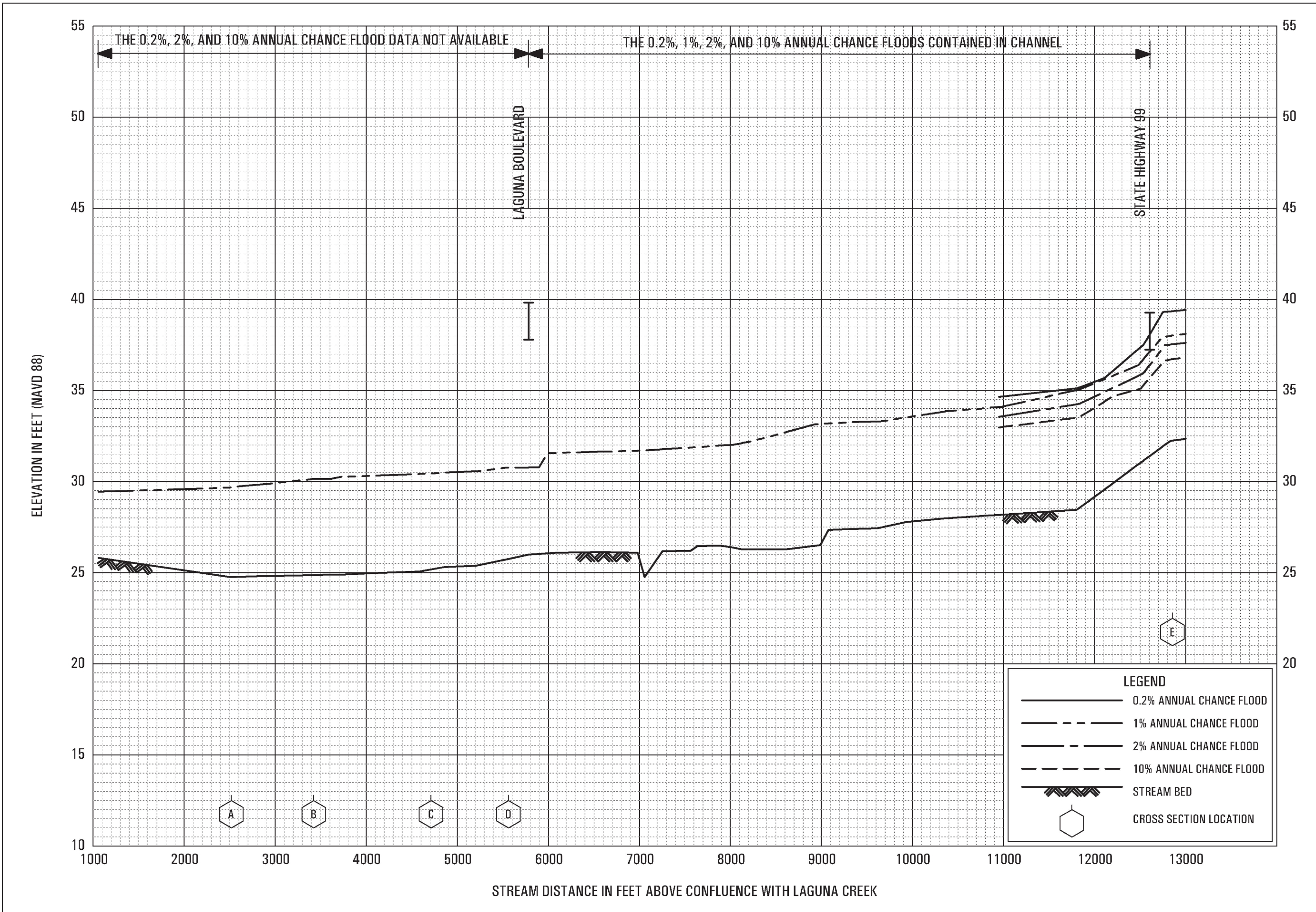
\*Data Not Available

**TABLE 24**

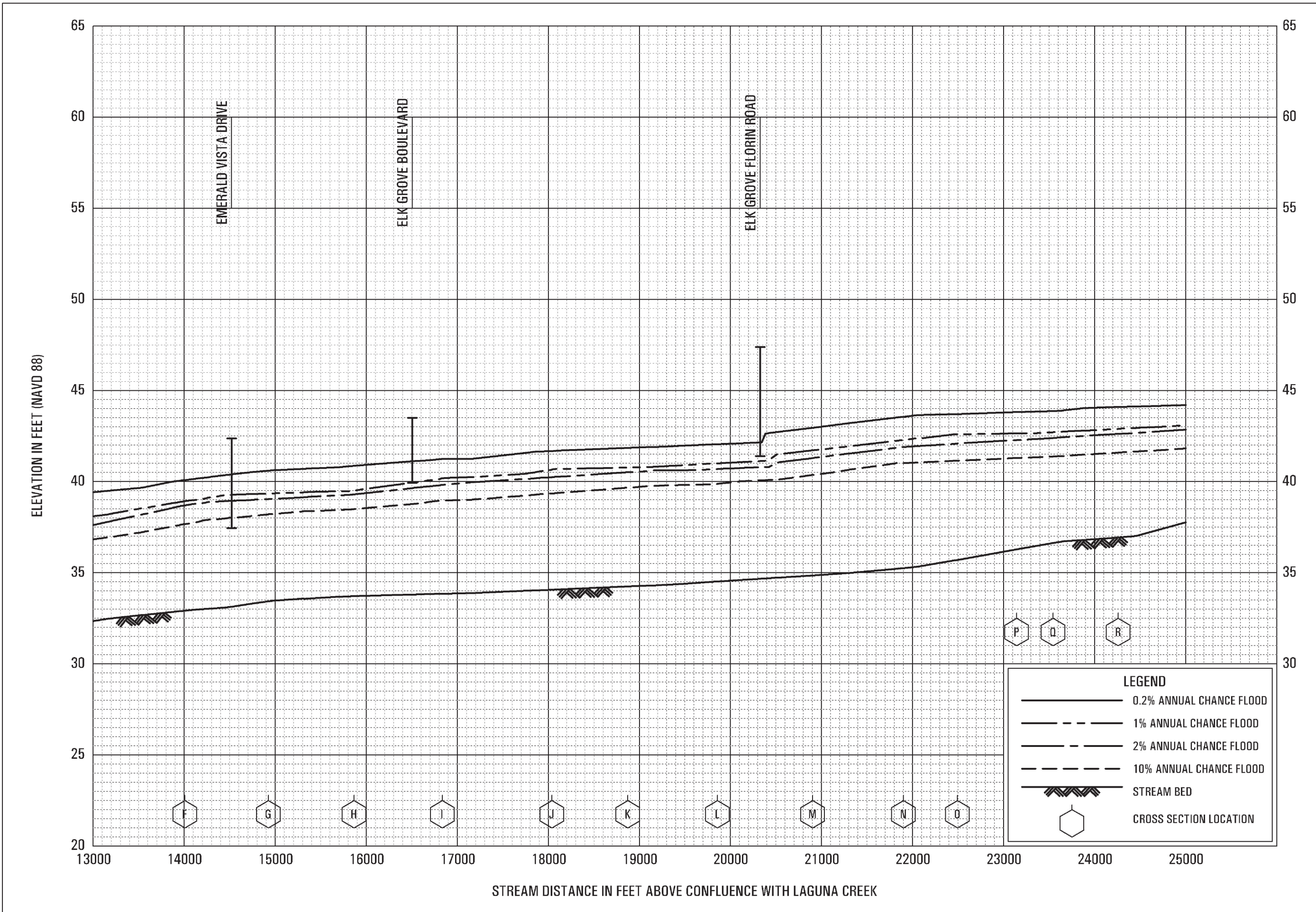
**FEDERAL EMERGENCY MANAGEMENT AGENCY  
SACRAMENTO COUNTY, CALIFORNIA  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

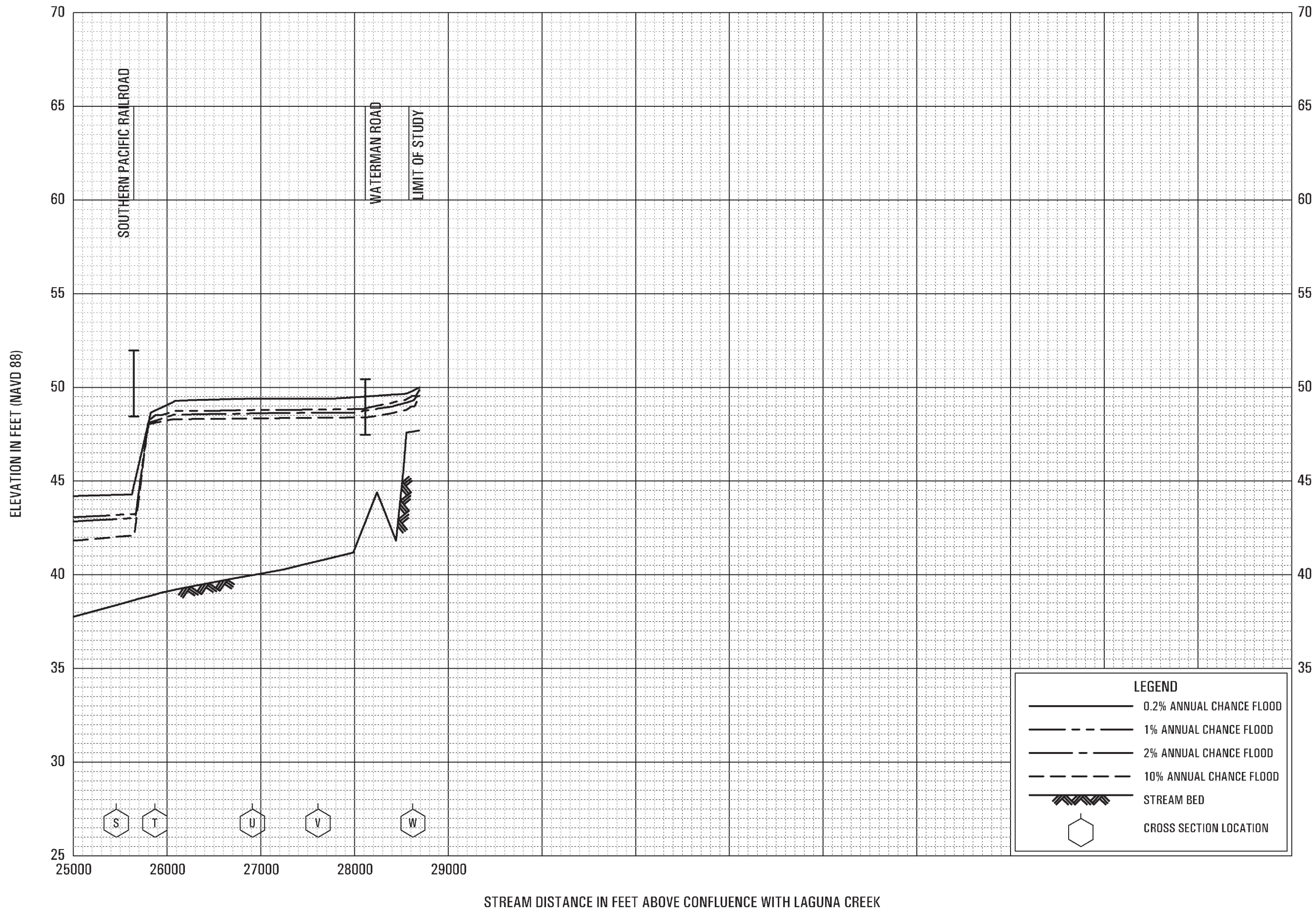
**FLOODING SOURCE: ELK GROVE CREEK**











**FLOOD PROFILES**

**ELK GROVE CREEK**

**FEDERAL EMERGENCY MANAGEMENT AGENCY  
SACRAMENTO COUNTY, CA  
AND INCORPORATED AREAS**

## **Appendix C SacCalc Models**

## **Pre-Project Elk Grove Creek Watershed (West Yost)**

### Sacramento Hydrologic Calculator Report

February 17, 2021 11:53

Project Title: Elk Grove Creek watershed and channel analysis (Existing conditions 2006) Method: Sacramento County HEC-1 method

Comments: The data from this model originally was part of the Laguna Creek overall model. Elk Grove Creek was separated from the main model to avoid run time errors due to the large number of watersheds. This model provides flow data for the steady flow RAS model of Elk Grove Creek and input boundary conditions to the HEC-RAS model for unsteady flow routing of Laguna Creek. Starting point model was from the Laguna Creek Analysis study by DFCE in fall of 2005 (LagunaCreek\_Existing 2005.scale) Date: 4/9/2020

Prepared by: DFCE/MCR

#### Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
L41680	111.21	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41694	58.23	47	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41650	143.53	47	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41640	317.79	45	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41740	43.65	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41660	232.66	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41630	78.19	45	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41620	150.6	46	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41580	136.41	42	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41560	108.66	40	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41590	199.05	40	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41550	228.33	38	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41490	132.18	38	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41440	243.61	35	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41450	168.23	37	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41430	120.48	35	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41420	158.56	30	Basin "n"	-	Computed	-	Computed	-	Computed	-
L21150	392.13	10	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41801	111.272	64	Basin "n"	-	Specified	.056	Computed	-	Computed	-
L41802	31.866	60	Basin "n"	-	Specified	.056	Computed	-	Specified	15
L41803	37.173	62	Basin "n"	-	Specified	.056	Computed	-	Specified	15
L41804	119.338	62	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41805	47.623	58	Basin "n"	-	Specified	.056	Computed	-	Specified	15
L41806	96.605	54	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41807	64.635	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41808	102.476	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41809	295.339	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41810	102.23	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41811	109.168	66	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41910	166.64	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41911	211.85	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41912	162.05	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41691	23.34	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41692	10.07	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41693	12.56	49	Basin "n"	-	Computed	-	Computed	-	Computed	-



Basin "n" Method Data for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)																		
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*	
L41680	2643.	1392.	0.0028	Undeveloped	0	0	0							0					0	5.15	0.85	20.14	
				Developed	9.99	8.86	65.72							0.03						0.48	0	0	0
L41694	1900	1200	0.0025	Undeveloped																	100		
				Developed																		0	
L41650	4051.	2087.	0.0012	Undeveloped	0	0	0						0	0					0			23.71	35.66
				Developed	15.09	0.32	25.76							33.55	9.13					0.31			0
L41640	4593.	1813.	0.0003	Undeveloped	0	0				0				0					0			126.78	0.87
				Developed	50.28	3.01					0.67				135.83					0.35			0
L41740	2318.	1176.	0.0016	Undeveloped	0							0								7.3	26.28	8.48	
				Developed	1.56								0.03									0	0
L41660	5213.	3614.	0.0011	Undeveloped	0	0	0	0		0	0	0	0			0	0	0	0	0.1	18.26	10.39	
				Developed	38.41	22.84	33.42	5.75		0.94	2.84	12.65	76.97			6.99		0.34	2.76	0	0	0	0
L41630	2348.	1842.	0.0030	Undeveloped	0			0		0		0	0	0					0			10.31	0.33
				Developed	12.24			5.49		3.76		1.65	43.75	0.23					0.43				0
L41620	2258.	1835.	0.0017	Undeveloped	0	0		0		0		0	0					0			62.93	0.1	
				Developed	20.68	9.69		3.12		2.57		2.22	44.39						4.9				0
L41580	4480.	2246.	0.0028	Undeveloped	0	0		0		0	0	0	0					0			53.59	2.09	
				Developed	22.27	24.68		2.61		4.17	0.42	0.18	26.17						0.23				0
L41560	2657.	2042.	0.001	Undeveloped	0	0				0			0								3.7	0.41	
				Developed	22.26	3.42				0.45			78.41										0
L41590	6625.	3573.	0.0007	Undeveloped	0	0	0	0													37.91	9.77	
				Developed	35.59	44.45	2.05	8.17					61.1										0
L41550	5198.	2657.	0.0006	Undeveloped	0	0	0	0		0		0	0					0			15.26	6.22	
				Developed	39.06	14.93	2.35	3.81		0.47		0.28	143.51						2.44				0
L41490	2923.	2095.	0.0017	Undeveloped	0	0	0	0		0			0				0	0	0		4.76	3.94	
				Developed	33.71	61.13	4.25	6.75		8.25			8				0.81	0.23	0.33				0
L41440	3374.	2139.	0.0002	Undeveloped	0	0		0				0	0					0	0		23.42	38.12	
				Developed	43.26	10.6		8.67					84.03	19.08				7.76	8.69				0
L41450	3853.	2385.	0.002	Undeveloped	0	0	0	0		0			0				0	0			10.06	37.05	
				Developed	39.44	64.62	0.57	3.21		0.03			11.1				0.77		1.38				0
L41430	2084.	1402.	0.0009	Undeveloped	0	0		0		0											7.78	52.36	
				Developed	15.95	43.72		0.27		0.41													0
L41420	3536.	1863.	0.0008	Undeveloped	0	0				0		0						0	1		37.51	40.83	
				Developed	19.95	11.77				45.12		1.04							1.33	0	0	0	0
L21150	4013.	3432.	0.0012	Undeveloped	0					273.28											114.85		
				Developed	4					0												0	
L41801	3359	1720	.00144	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41802	1182	650	0.00169	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41803	2612	1310	0.0023	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41804	3675	1900	0.0016	Undeveloped																	100		
				Developed																			0
L41805	2777	1420	.0023	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41806	4188	2150	.00143	Undeveloped							0		0				0			23			
				Developed								7		50				20			0		
L41807	2636	1360	.00152	Undeveloped							0		0				0			7			
				Developed								37		46			10				0		
L41808	3781	1920	0.00138	Undeveloped			0				0									25			
				Developed			15					60										0	
L41809	5250	2700	0.0015	Undeveloped										0						96			
				Developed											4						0		
L41810	3300	1900	.0009	Undeveloped							0									13			
				Developed								87									0		
L41811	3150	2200	0.0019	Undeveloped																100			
				Developed																	0		
L41910	2856	1461	.002	Undeveloped	0	0					0	0					0	25.7	19.66	5.27			
				Developed	24.9	7							31.69	44.91				7.53	0	0	0		
L41911	5582	2489	.0004	Undeveloped	0				0		0	0		0		0			20.55	4.45			
				Developed	40.99				0.65			11.32	79.91			37.17	1.97	14.82			0	0	
L41912	4729	2951	.0008	Undeveloped	0					0	0	0	0	0					17.3	7.73			
				Developed	29.3							14.46	26.77	0.07	66.19			0.22			0	0	
L41691	1900	1260	.0009	Undeveloped	0															22.34			



Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
L41680	B																		
	C		4.42	53.42												2.3	0.85	16.43	
	D	9.99	4.44	12.3						0.03					0.48	2.85		3.7	
L41694	B																		
	C																		
	D																100		
L41650	B																		
	C	0.04		22.08					21.25	0.6							16.34	16.09	
	D	15.05	0.32	3.68					12.3	8.53					0.31		7.37	19.57	
L41640	B																		
	C		2.89					0.67		98.61					0.35		40.79	0.27	
	D	50.28	0.12							37.22							85.99	0.6	
L41740	B																		
	C															5.4	20.91	5.76	
	D	1.56							0.03							1.9	5.37	2.72	
L41660	B																		
	C	0.05	1.94	7.99	1.82				1.35	15.35		6.92			2.75	0.1	6.17	3.42	
	D	38.36	20.9	25.43	3.93		0.94	2.84	11.3	61.63		0.07		0.34			12.09	6.97	
L41630	B																		
	C									0.7					0.24		1.45		
	D	12.24			5.49		3.76		1.65	43.05	0.23				0.19		8.86	0.33	
L41620	B																		
	C		0.37							10.35					4.52		31.04		
	D	20.68	9.32		3.12		2.31		2.22	34.04					0.38		31.89	0.1	
L41580	B																		
	C																		
	D	22.27	24.68		2.61		4.17	0.42	0.18	26.17					0.23		53.59	2.09	
L41560	B																		
	C									26.72							0.01		
	D	22.26	3.42				0.45			51.69							3.7	0.41	
L41590	B																		
	C		10.19	2.05						26.05							6.49	4.6	
	D	35.59	34.26		8.17					35.05							31.42	5.18	
L41550	B																		
	C		1.3						0.28	28.16					1.89			3.77	
	D	39.06	13.63	2.35	3.81		0.47			115.35					0.55		15.26	2.45	
L41490	B																		
	C	0.22	24.46				0.01			0.07				0.02	0.22		0.15	3.85	
	D	33.49	36.67	4.25	6.75		8.24			7.93			0.81	0.22	0.11		4.61	0.1	
L41440	B																		
	C		6.14		6.66					39.44				1.08	6.39		6.05	11.73	
	D	43.26	4.45		2.01					44.58	19.08			6.67	2.3		17.38	26.39	
L41450	B																		
	C	0.28	45.84	0.57	3.14		0.03			2.89			0.25		1.35		6.73	33.3	
	D	39.16	18.78		0.07					8.21			0.53		0.03		3.33	3.74	
L41430	B																		
	C		34.66		0.26		0.41										4.44	27.54	
	D	15.95	9.05		0.01												3.33	24.83	
L41420	B																		
	C		8.73				40.65		0.67					0.94	1		11.25	24.11	
	D	19.95	3.04				4.47		0.38					0.39			26.26	16.72	
L21150	B																		
	C																		
	D	4					273.28										114.85		
L41801	B																		
	C																		
	D													100					
L41802	B																		
	C																		
	D													100					
	B																		
	C																		

L41803	C																			
	D										100									
L41804	B																			
	D																	100		
L41805	B																			
	D										100									
L41806	B																			
	C																			
	D							7	50				20						23	
L41807	B																			
	C																			
	D							37	46				10						7	
L41808	B																			
	C																			
	D			15				60												25
L41809	B																			
	C																			
	D								4											96
L41810	B																			
	C																			
	D							87												13
L41811	B																			
	C																			
	D																			100
L41910	B																			
	C			1.83				27.25	40.1				6.68	25.3	9.81	2.24				
	D	24.9	5.16					4.43	4.81				0.85	0.4	9.85	3.03				
L41911	B																			
	C	1.6				0.65		11.32	66.11		18.59		1.97	14.65			12.9	2.51		
	D	39.39							13.81		18.58			0.18			7.65	1.94		
L41912	B																			
	C							14.46	21.33	0.07	55.52						14.9	7.72		
	D	29.3							5.45		10.67			0.22			2.4	0.01		
L41691	B																			
	C																			
	D	1																		22.34
L41692	B																			
	C																			
	D			10.07																
L41693	B																			
	C																			
	D			100																

Refer to the help file for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

## Hydrograph Routing – Muskingum–Cunge (Standard)

Routing ID	Route From	Route To	Channel Type	Length (ft)	Slope (ft/ft)	Width or Diameter (ft)	Side Slope (H:V)	Mannings "n"
L42661	J4174	J4186	Pipe	2453	0.0015	7		0.015
L42667	J4186	L43665	Trapezoidal	1500	0.0005	10	1.5:1	0.012
L42652	L43665	L42653	Trapezoidal	1100	0.0006	10	3:1	0.012
L42653	L42652	L43636	Trapezoidal	1500	0.0006	10	1.5:1	0.012
R41801	L41801	J4181	Trapezoidal	1225	0.0016	5	5:1	0.07
R41811	L41811	J4181	Trapezoidal	2100	0.0016	5	3:1	0.07
R4181	J4181	J4182	Trapezoidal	1120	0.0016	5	5:1	0.07
R4183	J4182	J4183	Trapezoidal	4445	0.0016	5	5:1	0.07
CHA001	J4183	J4184	Trapezoidal	525	0.0016	5	5:1	0.07
R4184	J4184	TEMPDB	Trapezoidal	2625	0.0016	5	5:1	0.07
CHA002	L41804	J4181	Trapezoidal	980	0.0016	5	5:1	0.07
L42693	L41693	L41690	Trapezoidal	1730	0.003	1	1:1	0.07

Hydrograph Routing – Modified Puls (Storage)

Routing ID	Route From	Route To	No. Steps	Initial Flow (cfs)	Storage-Discharge Relationship											
					Volume (acre-ft)	0	9	12	14	28	43	69	90	120	128	195
L42685	L43745	L43676	5	0	Volume (acre-ft)	0	9	12	14	28	43	69	90	120	128	195
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42762	L43676	L43675	5	0	Volume (acre-ft)	0	7.4	23.87	43.19	60.85	85.35	110.85	164.83			
					Flow (cfs)	0	100	320	500	590	650	800	1400			
L42666	L43675	L43637	5	0	Volume (acre-ft)	0	8.4	10.7	15	17.4	19.5	25.1	36.9	48	87.8	96.2
					Flow (cfs)	0	300	400	600	700	800	1000	1200	1400	1600	1700
L42625	L43635	L43625	5	0	Volume (acre-ft)	0	8.7	10.6	12.5	17	22.5	28.8	36.8	49.3	56.2	76
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42595	L43625	L43565	5	0	Volume (acre-ft)	0	16.7	20.6	27.9	35.4	50.3	63.4	77.8	81.4	86.8	92.1
					Flow (cfs)	0	300	400	600	800	1000	1200	1400	1500	1600	1700
L42565	L43565	L43545	5	0	Volume (acre-ft)	0	18.2	22.8	27.3	36.9	57	85.4	117.5	165.8	185.3	198.6
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42455	L43545	L43485	4	0	Volume (acre-ft)	0	4.9	6	7	9	11.8	14.3	17.2	21	23.1	26
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42445	L43485	L43475	5	0	Volume (acre-ft)	0	13.3	15.9	18.2	22.6	26.6	30.4	34.2	37.8	39.5	41.2
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42435	L43475	L43435	5	0	Volume (acre-ft)	0	22	28	35	42	48	52	59	62	65	69
					Flow (cfs)	0	300	500	700	900	1100	1200	1400	1500	1600	1700
L42425	L43435	L43415	5	0	Volume (acre-ft)	0	82	85	87	99	111	122	143	161	166	172
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700

Detention Basin Data

Detention Basin	Initial Condition		Pond Storage Relation										Outlet Data				
													Elev. (ft)	Area (sq ft)	Q Coef.	Exponent	
DB10	Elevation (ft)	41.3	Elevation (ft)	39.3	41.3	44	46.6	47.6					39.8	.78	0.6	0.5	
			Volume (ac-ft)	0	2.11	10.6	17.8	20.8					41.3	6	2.5	1.5	
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														
DE002	Volume (ac-ft)	0	Volume (ac-ft)	0	10.1	19.9	29.3	44.8	47.7	49.2				-	-	-	-
			Discharge (cfs)	0	15	200	300	400	529	637					-	-	-
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														
DB13	Elevation (ft)	41.3	Elevation (ft)	39.3	41.3	44	46.6	47.6					39.8	.78	0.6	0.5	
			Volume (ac-ft)	0	2.11	10.6	17.8	20.8					41.3	6	2.5	1.5	
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														
TEMPDB	Elevation (ft)	41.8	Elevation (ft)	39.3	41.3	44	46.6	47.6					39.8	.78	.6	0.5	
			Volume (ac-ft)	0	2.11	10.6	20	25					41.3	6	2.5	1.5	
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														

## **Post-Project Elk Grove Creek Watershed (MCR)**



**Sacramento Hydrologic Calculator Report**

February 17, 2021 11:56

Project Title: Elk Grove Creek watershed and channel analysis - Brinkman Post-Project Method: Sacramento County HEC-1 method

The data from this model originally was part of the Laguna Creek overall model. Elk Grove Creek was separated from the main model to avoid run time errors due to the large number of watersheds. This model provides flow data for the steady flow RAS model of Elk Grove Creek and input boundary conditions to the HEC-RAS model for unsteady flow routing of Laguna Creek. Starting point model was from the Laguna Creek Analysis study by DFCE in fall of 2005 (LagunaCreek\_Existing 2005.scale) Post Project Flows - for South County Business Park

Date: 4/9/2020

Prepared by: DFCE/MCR

replaced with SSA model hydrograph "L2000-SSA"

Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
L41680	111.21	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L2000	29.66	47	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41650	143.53	47	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41640	317.79	45	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41740	43.65	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41660	232.66	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41630	78.19	45	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41620	150.6	46	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41580	136.41	42	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41560	108.66	40	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41590	199.05	40	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41550	228.33	38	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41490	132.18	38	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41440	243.61	35	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41450	168.23	37	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41430	120.48	35	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41420	158.56	30	Basin "n"	-	Computed	-	Computed	-	Computed	-
L21150	392.13	10	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41801	111.272	64	Basin "n"	-	Specified	.056	Computed	-	Computed	-
L41802	31.866	60	Basin "n"	-	Specified	.056	Computed	-	Specified	15
L41803	37.173	62	Basin "n"	-	Specified	.056	Computed	-	Specified	15
L41804	119.338	62	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41805	47.623	58	Basin "n"	-	Specified	.056	Computed	-	Specified	15
L41806	96.605	54	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41807	64.635	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41808	102.476	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41809	295.339	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41810	102.23	52	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41811	109.168	66	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41910	166.64	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41911	211.85	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41912	162.05	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41691	23.34	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41692	10.07	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
L41693	12.56	49	Basin "n"	-	Computed	-	Computed	-	Computed	-
L10000	24.46	50	Basin "n"	-	Computed	-	Computed	-	Computed	-

Basin "n" Method Data for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)																	
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
L41680	2643.	1392.	0.0028	Undeveloped	0	0	0							0					0	5.15	0.85	20.14
				Developed	9.99	8.86	65.72							0.03						0.48	0	0
L2000	1900	1200	0.0025	Undeveloped			0															
				Developed			100															
L41650	4051.	2087.	0.0012	Undeveloped	0	0	0					0	0					0			23.71	35.66
				Developed	15.09	0.32	25.76						33.55	9.13					0.31			0
L41640	4593.	1813.	0.0003	Undeveloped	0	0				0			0					0			126.78	0.87
				Developed	50.28	3.01				0.67				135.83					0.35			0
L41740	2318.	1176.	0.0016	Undeveloped	0							0							7.3	26.28	8.48	
				Developed	1.56								0.03								0	0
L41660	5213.	3614.	0.0011	Undeveloped	0	0	0	0		0	0	0	0			0	0	0	0.1	18.26	10.39	
				Developed	38.41	22.84	33.42	5.75		0.94	2.84	12.65	76.97			6.99		0.34	2.76	0	0	0
L41630	2348.	1842.	0.0030	Undeveloped	0			0		0		0	0	0				0			10.31	0.33
				Developed	12.24			5.49		3.76		1.65	43.75	0.23					0.43			0
L41620	2258.	1835.	0.0017	Undeveloped	0	0		0		0		0	0				0			62.93	0.1	
				Developed	20.68	9.69		3.12		2.57		2.22	44.39						4.9			0
L41580	4480.	2246.	0.0028	Undeveloped	0	0		0		0	0	0	0				0			53.59	2.09	
				Developed	22.27	24.68		2.61		4.17	0.42	0.18	26.17						0.23			0
L41560	2657.	2042.	0.001	Undeveloped	0	0				0			0							3.7	0.41	
				Developed	22.26	3.42				0.45			78.41									0
L41590	6625.	3573.	0.0007	Undeveloped	0	0	0	0												37.91	9.77	
				Developed	35.59	44.45	2.05	8.17					61.1									0
L41550	5198.	2657.	0.0006	Undeveloped	0	0	0	0		0		0	0				0			15.26	6.22	
				Developed	39.06	14.93	2.35	3.81		0.47		0.28	143.51						2.44			0
L41490	2923.	2095.	0.0017	Undeveloped	0	0	0	0		0			0			0	0	0	4.76	3.94		
				Developed	33.71	61.13	4.25	6.75		8.25			8				0.81	0.23	0.33		0	0
L41440	3374.	2139.	0.0002	Undeveloped	0	0		0				0	0				0	0		23.42	38.12	
				Developed	43.26	10.6		8.67					84.03	19.08				7.76	8.69		0	0
L41450	3853.	2385.	0.002	Undeveloped	0	0	0	0		0			0			0	0		10.06	37.05		
				Developed	39.44	64.62	0.57	3.21		0.03			11.1				0.77		1.38		0	0
L41430	2084.	1402.	0.0009	Undeveloped	0	0				0									7.78	52.36		
				Developed	15.95	43.72		0.27		0.41											0	0
L41420	3536.	1863.	0.0008	Undeveloped	0	0				0		0					0	1	37.51	40.83		
				Developed	19.95	11.77				45.12		1.04							1.33	0	0	0
L21150	4013.	3432.	0.0012	Undeveloped	0					273.28										114.85		
				Developed	4					0											0	
L41801	3359	1720	.00144	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41802	1182	650	0.00169	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41803	2612	1310	0.0023	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41804	3675	1900	0.0016	Undeveloped																100		
				Developed																	0	
L41805	2777	1420	.0023	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L41806	4188	2150	.00143	Undeveloped							0		0				0			23		
				Developed								7		50					20			0
L41807	2636	1360	.00152	Undeveloped							0		0				0			7		
				Developed								37		46					10			0
L41808	3781	1920	0.00138	Undeveloped			0				0									25		
				Developed			15						60									0
L41809	5250	2700	0.0015	Undeveloped										0						96		
				Developed												4						0
L41810	3300	1900	.0009	Undeveloped							0									13		
				Developed								87										0
L41811	3150	2200	0.0019	Undeveloped																100		
				Developed																	0	
L41910	2856	1461	.002	Undeveloped	0	0					0	0					0	25.7	19.66	5.27		
				Developed	24.9	7							31.69	44.91					7.53	0	0	0
L41911	5582	2489	.0004	Undeveloped	0				0		0	0			0	0			20.55	4.45		
				Developed	40.99				0.65			11.32	79.91			37.17	1.97	14.82			0	0
L41912	4729	2951	.0008	Undeveloped	0					0	0	0	0						17.3	7.73		
				Developed	29.3							14.46	26.77	0.07	66.19			0.22			0	0
L41691	1900	1260	.0009	Undeveloped	0														22.34			

				Developed	1														0	
L41692	830	415	.0009	Undeveloped																
				Developed			10.07													
L41693	1460	670	0.0009	Undeveloped																
				Developed			100													
L10000	1000	20	.0009	Undeveloped																
				Developed			100													

Refer to the Drainage manual for Land Use Impervious Area Percent  
 \*Dense Oaks, Shrubs, Vines

Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
L41680	B																		
	C		4.42	53.42												2.3	0.85	16.43	
	D	9.99	4.44	12.3						0.03					0.48	2.85		3.7	
L2000	B																		
	C																		
	D		100																
L41650	B																		
	C	0.04		22.08					21.25	0.6							16.34	16.09	
	D	15.05	0.32	3.68					12.3	8.53					0.31		7.37	19.57	
L41640	B																		
	C		2.89					0.67		98.61					0.35		40.79	0.27	
	D	50.28	0.12							37.22							85.99	0.6	
L41740	B																		
	C															5.4	20.91	5.76	
	D	1.56							0.03							1.9	5.37	2.72	
L41660	B																		
	C	0.05	1.94	7.99	1.82				1.35	15.35		6.92			2.75	0.1	6.17	3.42	
	D	38.36	20.9	25.43	3.93		0.94	2.84	11.3	61.63		0.07		0.34			12.09	6.97	
L41630	B																		
	C									0.7					0.24		1.45		
	D	12.24			5.49		3.76		1.65	43.05	0.23				0.19		8.86	0.33	
L41620	B																		
	C		0.37					0.26		10.35					4.52		31.04		
	D	20.68	9.32		3.12		2.31		2.22	34.04					0.38		31.89	0.1	
L41580	B																		
	C																		
	D	22.27	24.68		2.61		4.17	0.42	0.18	26.17					0.23		53.59	2.09	
L41560	B																		
	C									26.72							0.01		
	D	22.26	3.42				0.45			51.69							3.7	0.41	
L41590	B																		
	C		10.19	2.05						26.05							6.49	4.6	
	D	35.59	34.26		8.17					35.05							31.42	5.18	
L41550	B																		
	C		1.3						0.28	28.16					1.89			3.77	
	D	39.06	13.63	2.35	3.81		0.47			115.35					0.55		15.26	2.45	
L41490	B																		
	C	0.22	24.46				0.01			0.07				0.02	0.22		0.15	3.85	
	D	33.49	36.67	4.25	6.75		8.24			7.93			0.81	0.22	0.11		4.61	0.1	
L41440	B																		
	C		6.14		6.66					39.44				1.08	6.39		6.05	11.73	
	D	43.26	4.45		2.01					44.58	19.08			6.67	2.3		17.38	26.39	
L41450	B																		
	C	0.28	45.84	0.57	3.14		0.03			2.89			0.25		1.35		6.73	33.3	
	D	39.16	18.78		0.07					8.21			0.53		0.03		3.33	3.74	
L41430	B																		
	C		34.66		0.26		0.41										4.44	27.54	
	D	15.95	9.05		0.01												3.33	24.83	
L41420	B																		
	C		8.73				40.65		0.67					0.94	1		11.25	24.11	
	D	19.95	3.04				4.47		0.38					0.39			26.26	16.72	
L21150	B																		
	C																		
	D	4					273.28										114.85		
L41801	B																		
	C																		
	D													100					
L41802	B																		
	C																		
	D													100					
	B																		

L41803	C																			
	D											100								
L41804	B																			
	C																			
L41805	D																			
	B																			
L41806	C																			
	D								7		50					20			23	
L41807	B																			
	C																			
L41808	D								37		46					10			7	
	B																			
L41809	C																			
	D			15					60										25	
L41810	B																			
	C																			
L41811	D																			100
	B																			
L41910	C		1.83						27.25		40.1					6.68	25.3	9.81		2.24
	D	24.9	5.16						4.43		4.81					0.85	0.4	9.85		3.03
L41911	B																			
	C	1.6						0.65	11.32		66.11		18.59		1.97	14.65		12.9		2.51
L41912	D	39.39									13.81		18.58			0.18		7.65		1.94
	B																			
L41912	C								14.46		21.33		0.07	55.52				14.9		7.72
	D	29.3									5.45		10.67			0.22		2.4		0.01
L41691	B																			
	C																			
L41692	D	1																		22.34
	B																			
L41693	C																			
	D																			100
L10000	B																			
	C																			
L10000	D																			100

Refer to the help file for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

## Hydrograph Routing – Muskingum–Cunge (Standard)

Routing ID	Route From	Route To	Channel Type	Length (ft)	Slope (ft/ft)	Width or Diameter (ft)	Side Slope (H:V)	Mannings "n"
L42661	J4174	J4186	Pipe	2453	0.0015	7		0.015
L42667	J4186	L43665	Trapezoidal	1500	0.0005	10	1.5:1	0.012
L42652	L43665	L42653	Trapezoidal	1100	0.0006	10	3:1	0.012
L42653	L42652	L43636	Trapezoidal	1500	0.0006	10	1.5:1	0.012
R41801	L41801	J4181	Trapezoidal	1225	0.0016	5	5:1	0.07
R41811	L41811	J4181	Trapezoidal	2100	0.0016	5	3:1	0.07
R4181	J4181	J4182	Trapezoidal	1120	0.0016	5	5:1	0.07
R4183	J4182	J4183	Trapezoidal	4445	0.0016	5	5:1	0.07
CHA001	J4183	J4184	Trapezoidal	525	0.0016	5	5:1	0.07
R4184	J4184	TEMPDB	Trapezoidal	2625	0.0016	5	5:1	0.07
CHA002	L41804	J4181	Trapezoidal	980	0.0016	5	5:1	0.07
L42693	L41693	L41690	Trapezoidal	1730	0.003	1	1:1	0.07
CHA003	L10000	L43746	Pipe	1330	0.0016	.5	5:1	0.13

Hydrograph Routing – Modified Puls (Storage)

Routing ID	Route From	Route To	No. Steps	Initial Flow (cfs)	Storage-Discharge Relationship											
					Volume (acre-ft)	0	9	12	14	28	43	69	90	120	128	195
L42685	L43745	L43676	5	0	Volume (acre-ft)	0	9	12	14	28	43	69	90	120	128	195
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42762	L43676	L43675	5	0	Volume (acre-ft)	0	7.4	23.87	43.19	60.85	85.35	110.85	164.83			
					Flow (cfs)	0	100	320	500	590	650	800	1400			
L42666	L43675	L43637	5	0	Volume (acre-ft)	0	8.4	10.7	15	17.4	19.5	25.1	36.9	48	87.8	96.2
					Flow (cfs)	0	300	400	600	700	800	1000	1200	1400	1600	1700
L42625	L43635	L43625	5	0	Volume (acre-ft)	0	8.7	10.6	12.5	17	22.5	28.8	36.8	49.3	56.2	76
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42595	L43625	L43565	5	0	Volume (acre-ft)	0	16.7	20.6	27.9	35.4	50.3	63.4	77.8	81.4	86.8	92.1
					Flow (cfs)	0	300	400	600	800	1000	1200	1400	1500	1600	1700
L42565	L43565	L43545	5	0	Volume (acre-ft)	0	18.2	22.8	27.3	36.9	57	85.4	117.5	165.8	185.3	198.6
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42455	L43545	L43485	4	0	Volume (acre-ft)	0	4.9	6	7	9	11.8	14.3	17.2	21	23.1	26
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42445	L43485	L43475	5	0	Volume (acre-ft)	0	13.3	15.9	18.2	22.6	26.6	30.4	34.2	37.8	39.5	41.2
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700
L42435	L43475	L43435	5	0	Volume (acre-ft)	0	22	28	35	42	48	52	59	62	65	69
					Flow (cfs)	0	300	500	700	900	1100	1200	1400	1500	1600	1700
L42425	L43435	L43415	5	0	Volume (acre-ft)	0	82	85	87	99	111	122	143	161	166	172
					Flow (cfs)	0	300	400	500	700	900	1100	1300	1500	1600	1700

Detention Basin Data

Detention Basin	Initial Condition		Pond Storage Relation										Outlet Data				
													Elev. (ft)	Area (sq ft)	Q Coef.	Exponent	
DB10	Elevation (ft)	41.3	Elevation (ft)	39.3	41.3	44	46.6	47.6					39.8	.78	0.6	0.5	
			Volume (ac-ft)	0	2.11	10.6	17.8	20.8					41.3	6	2.5	1.5	
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														
DE002	Volume (ac-ft)	0	Volume (ac-ft)	0	10.1	19.9	29.3	44.8	47.7	49.2				-	-	-	-
			Discharge (cfs)	0	15	200	300	400	529	637					-	-	-
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														
DB13	Elevation (ft)	41.3	Elevation (ft)	39.3	41.3	44	46.6	47.6					39.8	.78	0.6	0.5	
			Volume (ac-ft)	0	2.11	10.6	17.8	20.8					41.3	6	2.5	1.5	
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														
TEMPDB	Elevation (ft)	41.8	Elevation (ft)	39.3	41.3	44	46.6	47.6					39.8	.78	.6	0.5	
			Volume (ac-ft)	0	2.11	10.6	20	25					41.3	6	2.5	1.5	
	Pump Data																
	Pump Hydrograph Name		Pump Discharge (cfs)					Pump 1	Pump 2	Pump 3	Pump 4	Pump 5					
			Elevation at which Pump Turns On (ft)														
			Elevation at which Pump Turns Off (ft)														



## **Onsite Post-Project Waterman & Brinkman Watershed**

## Sacramento Hydrologic Calculator Report

February 11, 2021 17:41

Project Title: Brinkman &amp; Waterman Developed

Method: Sacramento County HEC-1 method

Comments: Hydrographs for the developed Waterman and Brinkman Sites

Date: 2/2/2021

Prepared by: MCR

## Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
DMA-1	1.3	50	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-2	1.06	50.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-3	1.11	50.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-4	1.23	50.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-6	1.9	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-7	1.46	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-8	1.91	47.8	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-11	0.89	48.2	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-15	2.91	46	Basin "n"	-	Computed	-	Computed	-	Computed	-
DM-15A	2.89	45.5	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-17	0.5	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-25	1.1	48	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-24	2.95	45.8	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-23	3.04	45.8	Basin "n"	-	Computed	-	Computed	-	Computed	-
DMA-20	0.59	48	Basin "n"	-	Computed	-	Computed	-	Computed	-

Basin "n" Method Data for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)															
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2
DMA-1	433	128	0.0061	Undeveloped			0													
				Developed			100													
DMA-2	361	104	0.009	Undeveloped			0													
				Developed			100													
DMA-3	374	96	0.0093	Undeveloped			0													
				Developed			100													
DMA-4	466	225	0.006	Undeveloped			0													
				Developed			100													
DMA-6	348	14	0.015	Undeveloped			0													
				Developed			100													
DMA-7	322	5	0.017	Undeveloped			0													
				Developed			100													
DMA-8	347	14	0.015	Undeveloped			0													
				Developed			100													
DMA-11	386	137	0.01	Undeveloped			0													
				Developed			100													
DMA-15	480	40	0.0098	Undeveloped			0													
				Developed			100													
DM-15A	469	50	0.0044	Undeveloped			0													
				Developed			100													
DMA-17	251	98	0.0096	Undeveloped			0													
				Developed			100													
DMA-25	344	132	0.011	Undeveloped			0													
				Developed			100													
DMA-24	473	44	.0028	Undeveloped			0													
				Developed			100													
DMA-23	491	54	0.01	Undeveloped			0													
				Developed			100													
DMA-20	272	92	0.012	Undeveloped			0													
				Developed			100													

Refer to the Drainage manual for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
DMA-1	B																		
	C																		
	D			100															
DMA-2	B																		
	C																		
	D			100															
DMA-3	B																		
	C																		
	D			100															
DMA-4	B																		
	C																		
	D			100															
DMA-6	B																		
	C																		
	D			100															
DMA-7	B																		
	C																		
	D			100															
DMA-8	B																		
	C																		
	D			100															
DMA-11	B																		
	C																		
	D			100															
DMA-15	B																		
	C																		
	D			100															
DM-15A	B																		
	C																		
	D			100															
DMA-17	B																		
	C																		
	D			100															
DMA-25	B																		
	C																		
	D			100															
DMA-24	B																		
	C																		
	D			100															
DMA-23	B																		
	C																		
	D			100															
DMA-20	B																		
	C																		
	D			100															

Refer to the help file for Land Use Impervious Area Percent

\*Dense Oaks, Shrubs, Vines

## **Appendix D– HEC-RAS Models (100-Year)**

***Pre-Project Tabular Results***

HEC-RAS Plan: 100EX Locations: User Defined Profile: Max WS

River	Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Elk Grove Creek	Upper	5.229	Max WS	471.86	38.90	45.57		45.69	0.001046	2.81	167.96	35.37	0.23
Elk Grove Creek	Upper	5.163	Max WS	471.12	38.57	45.34		45.44	0.000389	2.52	186.66	39.94	0.21
Elk Grove Creek	Upper	5.120	Max WS	470.24	38.59	45.25		45.35	0.000378	2.47	190.73	41.62	0.20
Elk Grove Creek	Upper	5.097	Max WS	469.88	38.59	45.21		45.30	0.000391	2.44	194.28	141.08	0.20
Elk Grove Creek	Upper	5.044	Max WS	486.36	38.49	45.08		45.18	0.000414	2.53	192.20	209.16	0.21
Elk Grove Creek	Upper	5.025	Max WS	485.87	38.35	45.04		45.13	0.000469	2.49	195.30	404.19	0.22
Elk Grove Creek	Upper	4.95	Max WS	485.82	37.51	45.02		45.03	0.000066	1.06	798.41	406.81	0.09
Elk Grove Creek	Upper	4.923	Max WS	496.63	37.38	45.01		45.02	0.000090	1.08	741.66	391.91	0.09
Elk Grove Creek	Upper	4.9	Max WS	496.59	37.33	45.00		45.01	0.000073	1.21	737.71	420.07	0.09
Elk Grove Creek	Upper	4.856	Max WS	499.08	37.40	44.91		44.98	0.000433	2.19	318.98	260.55	0.21
Elk Grove Creek	Upper	4.852	Max WS	499.05	36.50	44.64	41.56	45.03	0.004271	4.98	100.14	29.71	0.36
Elk Grove Creek	Upper	4.847	Max WS	498.37	36.50	43.92		44.43	0.006907	5.72	87.10	24.12	0.45
Elk Grove Creek	Upper	4.822	Max WS	498.53	36.00	44.13		44.16	0.000097	1.46	347.57	169.83	0.11
Elk Grove Creek	Upper	4.785	Max WS	548.50	35.89	44.10		44.13	0.000091	1.38	398.58	77.62	0.11
Elk Grove Creek	Upper	4.69	Max WS	548.47	35.59	44.07		44.09	0.000079	1.31	419.02	79.46	0.10
Elk Grove Creek	Upper	4.685	Max WS	548.25	35.49	43.98	38.36	44.10	0.000697	2.83	193.58	76.27	0.18
Elk Grove Creek	Upper	4.665	Max WS	528.27	35.49	42.68		42.85	0.001160	3.25	162.53	64.67	0.22

***Post-Project Mitigated Tabular Results***

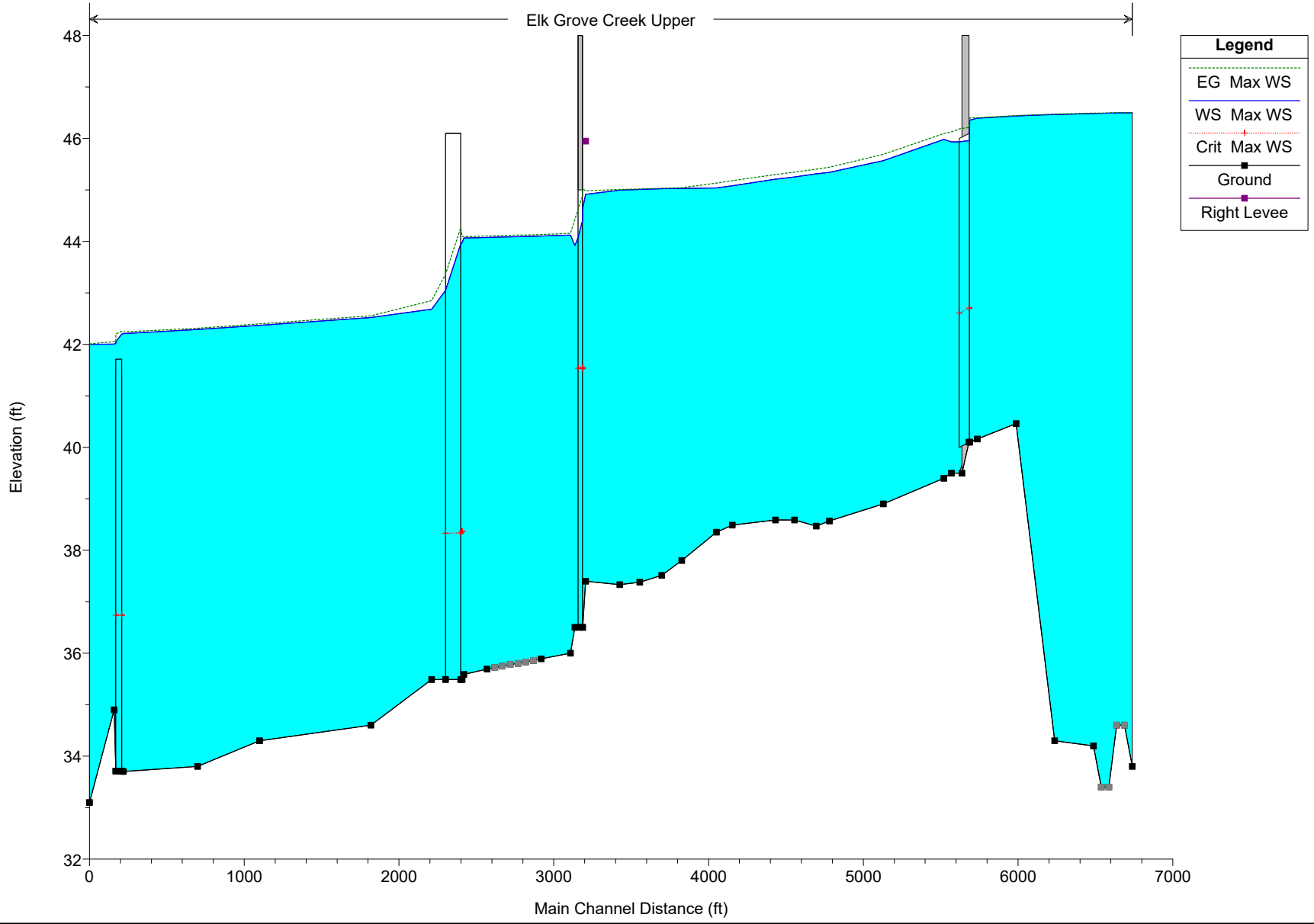


HEC-RAS Plan: 100MCR Locations: User Defined Profile: Max WS

River	Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Elk Grove Creek	Upper	5.229	Max WS	493.15	38.90	45.52		45.66	0.001175	2.97	166.24	35.22	0.24
Elk Grove Creek	Upper	5.163	Max WS	495.22	38.57	45.26		45.37	0.000451	2.70	183.38	39.64	0.22
Elk Grove Creek	Upper	5.120	Max WS	495.21	38.59	45.16		45.27	0.000443	2.65	186.78	41.20	0.22
Elk Grove Creek	Upper	5.097	Max WS	495.21	38.59	45.10		45.21	0.000440	2.63	188.09	41.85	0.22
Elk Grove Creek	Upper	5.044	Max WS	467.08	38.49	44.95		45.05	0.000409	2.50	186.70	42.67	0.21
Elk Grove Creek	Upper	5.025	Max WS	466.42	38.35	44.91		45.00	0.000460	2.47	189.12	47.68	0.22
Elk Grove Creek	Upper	4.95	Max WS	464.86	37.51	44.82		44.89	0.000268	2.07	224.79	47.98	0.17
Elk Grove Creek	Upper	4.923	Max WS	470.40	37.38	44.79		44.85	0.000307	1.99	235.85	57.97	0.17
Elk Grove Creek	Upper	4.9	Max WS	470.45	37.33	44.80		44.81	0.000083	1.26	656.16	395.07	0.10
Elk Grove Creek	Upper	4.856	Max WS	472.50	37.40	44.67		44.77	0.000597	2.57	183.88	193.25	0.24
Elk Grove Creek	Upper	4.852	Max WS	462.48	36.50	44.38	41.39	44.75	0.004256	4.83	95.78	27.72	0.36
Elk Grove Creek	Upper	4.847	Max WS	461.20	36.50	43.74		44.21	0.006672	5.49	84.01	22.72	0.44
Elk Grove Creek	Upper	4.822	Max WS	461.54	36.00	43.92		43.95	0.000093	1.40	329.63	123.67	0.11
Elk Grove Creek	Upper	4.785	Max WS	511.48	35.89	43.90		43.93	0.000088	1.34	383.09	76.19	0.10
Elk Grove Creek	Upper	4.69	Max WS	511.39	35.59	43.86		43.89	0.000076	1.27	403.26	78.05	0.10
Elk Grove Creek	Upper	4.685	Max WS	511.01	35.49	43.78	38.21	43.90	0.000657	2.70	188.96	74.55	0.17
Elk Grove Creek	Upper	4.665	Max WS	494.16	35.49	42.68		42.82	0.001018	3.04	162.39	64.62	0.21

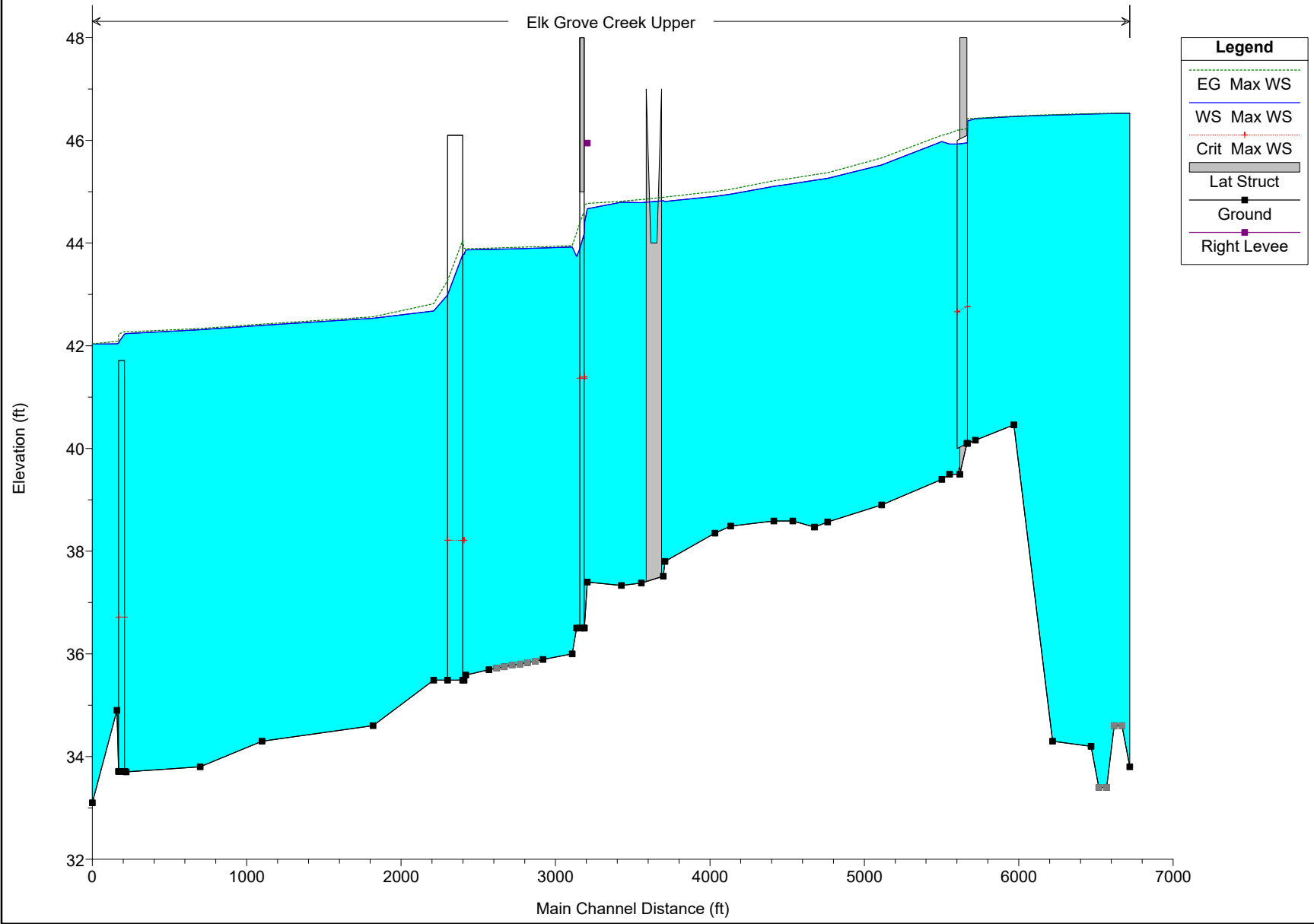
***Pre-Project Profile***

Elk Grove Creek - Brinkman-Waterman Plan: Exist Geom and Exist 100-Year 2/17/2021



***Post-Project Mitigated Profile***

Elk Grove Creek - Brinkman-Waterman Plan: MCR Geom and MCR 100-Year 2/17/2021



# **APPENDIX L**

## **ENVIRONMENTAL NOISE ASSESSMENT**



# Environmental Noise Assessment

## Waterman Brinkman Logistics Center

City of Elk Grove, California

January 20, 2021

Project #200903

Prepared for:



**Raney Planning and Management**

1501 Sports Drive, Suite A  
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**Table of Contents**

**INTRODUCTION .....1**

**ENVIRONMENTAL SETTING.....1**  
*BACKGROUND INFORMATION ON NOISE ..... 1*

**EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS.....6**  
*EXISTING NOISE RECEPTORS..... 6*  
*EXISTING GENERAL AMBIENT NOISE LEVELS ..... 6*

EVALUATION OF PROJECT-GENERATED NOISE AT RESIDENTIAL RECEPTORS ..... 7

**CONSTRUCTION NOISE ENVIRONMENT .....11**

**REGULATORY CONTEXT.....13**  
*FEDERAL..... 13*  
*STATE ..... 13*  
*LOCAL..... 13*

**IMPACTS AND MITIGATION MEASURES .....15**  
*THRESHOLDS OF SIGNIFICANCE ..... 15*  
*PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES ..... 16*

**REFERENCES .....19**

**Appendices**

- Appendix A: Acoustical Terminology
- Appendix B: Field Noise Measurement Data

**List of Figures**

Figure 1: Site Plan..... 2

Figure 2: Noise Measurement Sites and Receptor Locations ..... 3

Figure 3: Average (Leq) Noise Contours ..... 9

Figure 4: Maximum (Lmax) Noise Contours ..... 10



**List of Tables**

Table 1: Typical Noise Levels..... 4  
 Table 2: Summary of Existing Background Noise Measurement Data ..... 7  
 Table 3: Construction Equipment Noise ..... 11  
 Table 4: Vibration Levels for Various Construction Equipment..... 12  
 Table 5: Performance Standards for Typical Stationary Noise Sources..... 13  
 Table 6: Effects of Vibration on People and Buildings..... 14  
 Table 7: Significance of Changes in Noise Exposure ..... 16



## INTRODUCTION

The Waterman Brinkman Logistics Center project proposes the development of two warehouses. Buildings A and B consist of 252,547 s.f. on 19.9 acres and 171,140 s.f. on 9.95 acres, respectively. The proposed buildings are located on two vacant parcels west of Waterman Road and south of Brinkman Court in the City of Elk Grove, California.

**Figure 1** shows the project site plan. **Figure 2** shows an aerial photo of the project site.

## ENVIRONMENTAL SETTING

### BACKGROUND INFORMATION ON NOISE

#### *Fundamentals of Acoustics*

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



# Waterman Brinkman Logistics Center

City of Elk Grove, California

Figure 1

Project Site Plan







# Waterman Brinkman Logistics Center

City of Elk Grove, California

Figure 2

Noise Measurement Sites

### Legend

 Noise Measurement - Long Term



Projection: State Plane (California Zone 2) / NAD83 / meters  
Rev. Date: 11/09/2020



The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level ( $L_{eq}$ ), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptor,  $L_{dn}$ , and shows very good correlation with community response to noise.

The day/night average level (DNL or  $L_{dn}$ ) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because  $L_{dn}$  represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

**Table 1** lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

**TABLE 1: TYPICAL NOISE LEVELS**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

### ***Effects of Noise on People***

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.



## EXISTING AND FUTURE NOISE AND VIBRATION ENVIRONMENTS

### EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. Surrounding land uses include commercial development to the north, IN Self Storage and the East Elk Grove Water Treatment Plant to the east, industrial development to south and southwest. UPRR tracks extend in the north-south direction to the west of the Project site. West of the UPRR tracks is a stretch of vacant land, single-family residences, and Jennie McConnell Park. To the east of the Project site, across Waterman Road, lies vacant land, single-family residences, and the Hudson Detention Basin

### EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined by the local roadway network, including Interstate 80 to the south.

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at two locations on the project site, as well as short-term noise level measurements at three locations along the project border.

The noise measurement location is shown on **Figure 2**. A summary of the noise level measurement survey results are provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meter was programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted  $L_{max}$ , represents the highest noise level measured. The average value, denoted  $L_{eq}$ , represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted  $L_{50}$ , represents the sound level exceeded 50 percent of the time during the monitoring period.

A Larson Davis Laboratories (LDL) Model 812 precision integrating sound level meter was used for the ambient noise level measurement survey. The meter was calibrated before and after use with a B&K Model 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

**TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA**

Site	Date	Average Measured Hourly Noise Levels, dBA						
		L <sub>dn</sub>	Daytime (7:00 am - 10:00 pm)			Nighttime (10:00 pm – 7:00 am)		
			Leq	L <sub>50</sub>	L <sub>max</sub>	Leq	L <sub>50</sub>	L <sub>max</sub>
LT-1 (Receptors to East)	11/09/20 – 11/10/20	75	73	66	88	68	52	85
LT-2 (Receptor to West)	11/09/20 – 11/10/20	68	60	44	77	62	49	76

Source: Saxelby Acoustics – 2020

### EVALUATION OF PROJECT-GENERATED NOISE AT RESIDENTIAL RECEPTORS

The primary non-transportation noise sources associated with the proposed project are on-site parking lot circulation and the proposed loading docks. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer’s provided data and Saxelby Acoustics data from similar operations.

**Parking Lot:**

Based on similar size projects, Saxelby Acoustics estimated that a maximum of 600 auto trips and 240 truck trips may occur in the peak hour on the project site. These volumes were used to assess parking lot noise during daytime (7:00 a.m. to 10:00 p.m.) hours. During nighttime hours, it was assumed that 150 auto trips and 60 truck trips may occur on the project site. Parking lot movement for cars is predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet. Saxelby Acoustics data.

**Loading Docks:**

To determine typical loading dock noise levels associated with the proposed loading docks, noise level measurement data from the Clearlake Wal-Mart store was used. The noise level measurements were conducted at a distance of 100 feet from the center of the two-bay loading dock and circulation area. The noise level data from the Clearlake Walmart was adjusted to account for the greater number of loading docks of the proposed project. This analysis assumes that during (7:00 a.m. to 10:00 p.m.) hours, all 64 loading docks at Building A and all 30 loading docks at Building B could operate simultaneously in a busy hour. During nighttime (10:00 p.m. to 7:00 a.m.), it is assumed that 25% of the loading docks would be active at each building.



Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for parking lot activity, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation.

**Figures 3 and 4** show the predicted daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) Project noise level contours in terms of the average ( $L_{eq}$ ) noise descriptor.

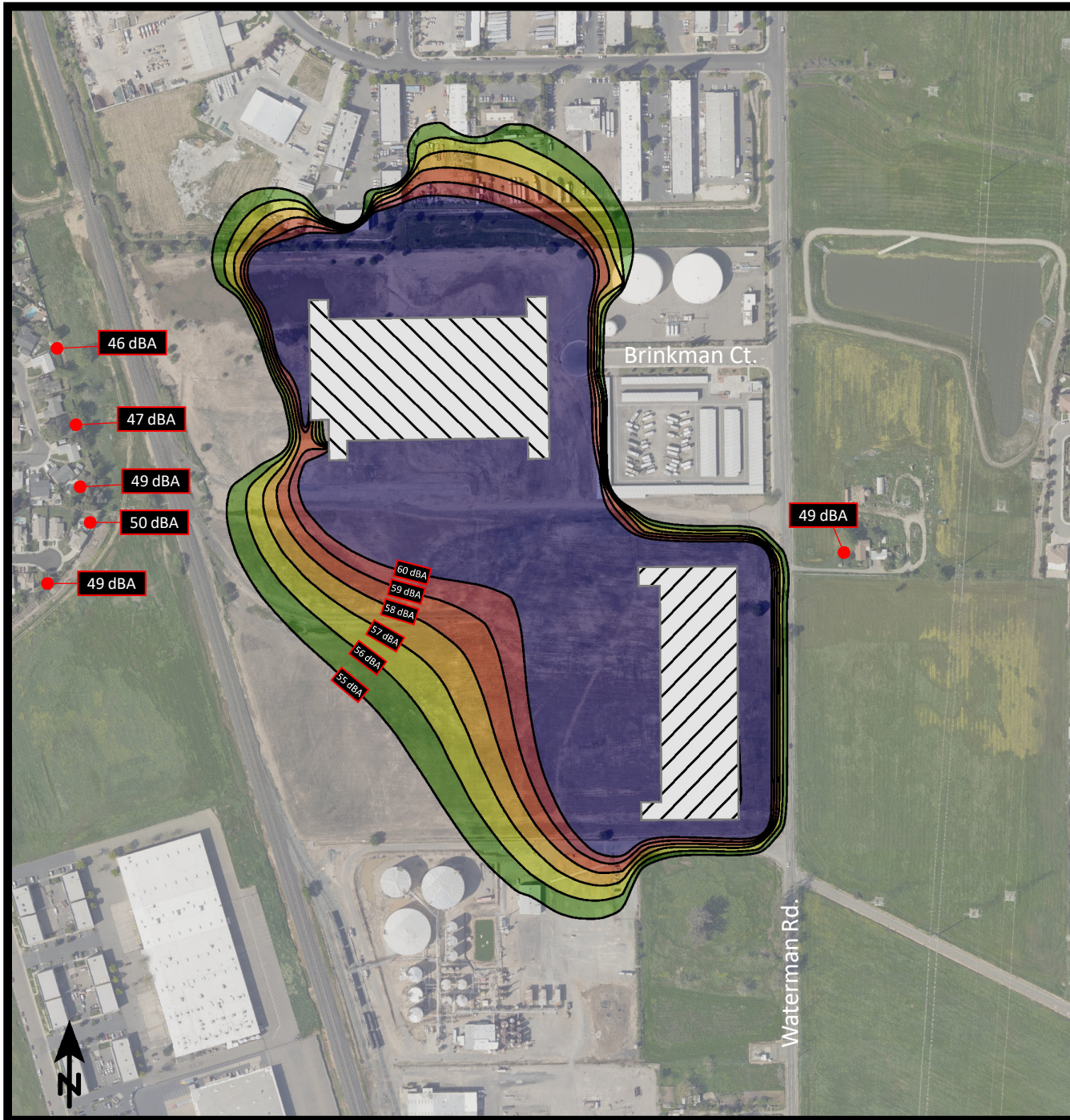


# Waterman Brinkman Logistics Center

City of Elk Grove, California

Figure 3








Project Daytime Noise Contours  
(dBA  $L_{eq}$ )



### Signs and symbols

 Proposed Building

### Levels in dB(A)

	<= 55
	55 - 56
	56 - 57
	57 - 58
	58 - 59
	59 - 60
	> 60

1 : 5000

0 25 50 100 150 200 m

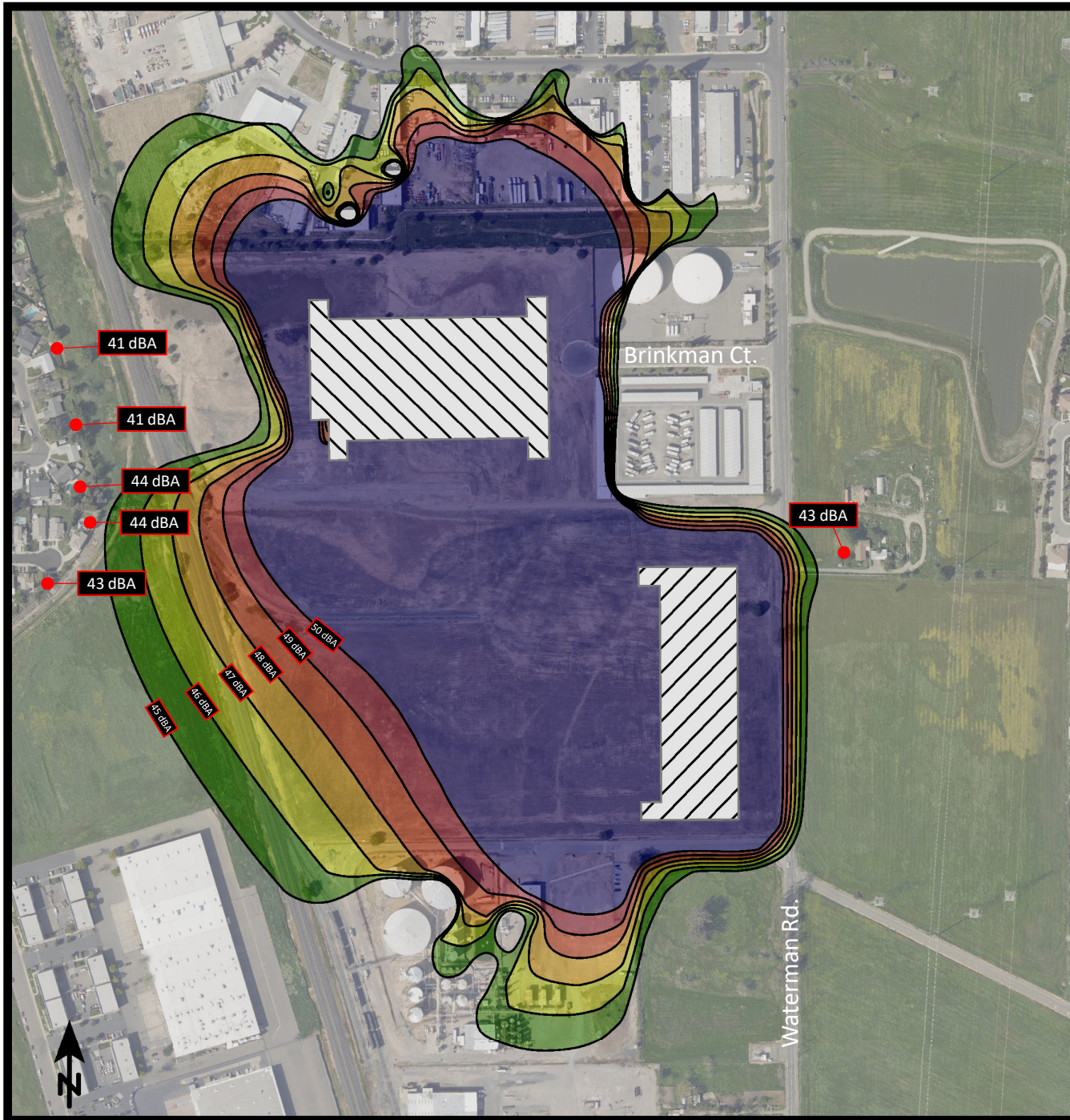


# Waterman Brinkman Logistics Center

City of Elk Grove, California

Figure 4








Project Nighttime Noise Contours  
(dBA  $L_{eq}$ )



### Signs and symbols

 Proposed Building

### Levels in dB(A)

	<= 45
	45 - 46
	46 - 47
	47 - 48
	48 - 49
	49 - 50
	> 50

1 : 5000

0 25 50 100 150 200 m

### Construction Noise Environment

During the construction of the proposed project, noise from construction activities would temporarily add to the noise environment in the project vicinity. As shown in **Table 3**, typical activities involved in construction would generate maximum noise levels ranging from 72 to 84 dBA at a distance of 100 feet.

**TABLE 3: CONSTRUCTION EQUIPMENT NOISE**

Type of Equipment	Predicted Noise Levels, Lmax dB				Distances to Noise Contours (feet)	
	Noise Level At 25'	Noise Level at 50'	Noise Level at 100'	Noise Level at 300'	70 dB Lmax contour	65 dB Lmax contour
Backhoe	84	78	72	62	126	223
Compactor	89	83	77	67	223	397
Compressor (air)	84	78	72	62	126	223
Concrete Saw	96	90	84	74	500	889
Dozer	88	82	76	66	199	354
Dump Truck	82	76	70	60	100	177
Excavator	87	81	75	65	177	315
Generator	87	81	75	65	177	315
Horizontal Boring Jack	88	82	76	66	199	354
Jackhammer	94	89	83	73	446	792
Pneumatic Tools	91	85	79	69	281	500

Source: *Roadway Construction Noise Model User's Guide*. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

**Construction Vibration Environment**

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 4** shows the typical vibration levels produced by construction equipment.

**TABLE 4: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT**

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Horizontal Boring	0.089	0.031	0.011
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210	0.074	0.026

Source: *Transit Noise and Vibration Impact Assessment Guidelines*. Federal Transit Administration. May 2006.



## REGULATORY CONTEXT

### FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

### STATE

There are no state regulations related to noise that apply to the Proposed Project.

### LOCAL

#### *City of Elk Grove General Plan*

The Elk Grove General Plan Noise Element Table 8-4 establishes standards for daytime and nighttime noise levels. The standards are reproduced in **Table 5** below:

**TABLE 5: PERFORMANCE STANDARDS FOR TYPICAL STATIONARY NOISE SOURCES**

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Typical Noise Sources – Hourly $L_{eq}$ , dB	55	45
Noise Sources Which Are Tonal, Impulsive, Repetitive, or Consist Primarily of Speech or Music – Hourly $L_{eq}$ , dB	50	40

#### *Criteria for Acceptable Vibration*

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities (ppv) in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration

events. **Table 6**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

**Table 6** indicates that the threshold for architectural damage to structures is 0.20 in/sec ppv. A threshold of 0.20 in/sec ppv is considered to be a reasonable threshold for short-term construction projects. The City of Elk Grove General Plan Noise Element Policy N-1-9 establishes 0.2 in/sec ppv as the threshold at which additional vibration impact assessment reduction measures may be required.

**TABLE 6: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS**

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of “architectural” damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of “architectural” damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize “architectural” damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: *Transportation Related Earthborne Vibrations*. Caltrans. TAV-02-01-R9601. February 20, 2002.

## IMPACTS AND MITIGATION MEASURES

### THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-c]).

Would the project:

- a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b. Generate excessive groundborne vibration or groundborne noise levels?
- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

### ***Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases***

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it “increases substantially the ambient noise levels for adjoining areas.” Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions. **Table 7** is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that



they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the  $L_{dn}$ .

**TABLE 7: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE**

Ambient Noise Level Without Project, $L_{dn}$	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

It should be noted that the City of Elk Grove General Plan Noise Element formally establishes the **Table 7** criteria as the CEQA thresholds for evaluating noise impacts.

#### PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

**IMPACT 1:        WOULD THE PROJECT GENERATE A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?**

##### **Construction Noise**

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in **Table 3**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA  $L_{max}$  at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours. The nearest noise-sensitive receptors are located approximately 600 feet to the west, across the UPRR tracks and 400 feet to the east, across Waterman Road. As noted in **Table 3**, construction noise levels would be in the range of 60-74 dBA  $L_{max}$  at 300 feet. These levels are less than existing maximum ambient noise levels measured levels of 77-88 dBA  $L_{max}$  as shown in **Table 2**.

The project also includes construction of a water line under the UPRR line. Per best-engineering practice and as required by Elk Grove Water District, the applicant will be looping the existing water main in Waterman Rd. to the existing water main that is west of the project parcel, across the existing rail road. This will require the applicant to jack and bore in order to get the water piping under the rail road. The approximate alignment of the pipe would be located between the northwest corner of the site and east of Falcon Hill Court. Jack and bore construction typically involves the following steps:

- Dig a sending and a receiving pit to the required depth.
- Place a jack and bore machine into the sending pit.
- Use the machine to cut a hole through the ground and push the new sewer pipe in place.
- Remove the jack and bore machine.
- Connect the new pipe to the existing water line.

- Cover open pits with steel plates—or secure the pits with fencing—at the end of each day as needed while work is in progress.
- Conduct quality control inspections.
- Complete permanent pavement or ground restoration of pits after work passes inspections.

Based upon the **Table 3** data, noise levels associated with tunnel boring and jacking is estimated to be 82 dBA at 50 feet. It is expected that the majority of noise from the operation would occur on the project site at the sending pit. This would place the construction activity at a distance of approximately 300 feet from the nearest noise-sensitive receptors located to the west. At 300 feet, jack and bore noise levels are estimated to be 66 dBA  $L_{max}$ . This is less than the measured existing daytime noise levels of 77 dBA  $L_{max}$  adjacent to these receptors, as measured at Site LT-2 (**Table 2**).

Construction activities are conditionally exempt from the Noise Ordinance during certain hours. Section 6.32.100(E) of the City of Elk Grove Municipal code exempts construction from the City's noise standards between the hours of 7:00 a.m. and 7:00 p.m. when located in close proximity to residential uses.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered **potentially significant**.

### ***Non-Transportation Noise***

The proposed project is predicted to generate maximum non-transportation daytime noise of 50 dBA  $L_{eq}$ , and nighttime noise of 44 dBA  $L_{eq}$ , at the nearest existing sensitive receptors. Ambient noise measurements indicate that existing daytime noise levels are approximately 62-73 dBA  $L_{eq}$  at these sensitive uses due to existing traffic and railroad noise. Therefore, operation of the proposed project is not predicted to generate noise levels exceeding existing ambient noise levels, or the City of Elk Grove exterior noise standard and no additional noise control measures would be required.

### Mitigation Measure

**MM-1** The City shall establish the following requirement:

- Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to between the daytime hours of 7 AM and 7 PM daily when located in close proximity to residential uses.
- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- When not in use, motorized construction equipment shall not be left idling for more than 5 minutes.

- Stationary equipment (power generators, compressors, etc.) shall be located at the furthest practical distance from nearby noise-sensitive land uses or sufficiently shielded to reduce noise-related impacts.

*Timing/Implementation:* Implemented prior to approval of grading and/or building permits

*Enforcement/Monitoring:* City of Elk Grove Community Development Services Department  
Implementation of mitigation measure 1 would help to reduce construction-generated noise levels. With mitigation, this impact would be considered **less-than-significant**.

**IMPACT 2:        WOULD THE PROJECT GENERATE EXCESSIVE GROUND BORNE VIBRATION OR GROUND BORNE NOISE LEVELS?**

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 4** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

This is a **less-than-significant** impact and no mitigation is required.

**IMPACT 3:        FOR A PROJECT LOCATED WITHIN THE VICINITY OF A PRIVATE AIRSTRIP OR AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS?**

There are no airports in the project vicinity. Therefore, this impact is not applicable to the proposed project.

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## Appendix A: Acoustical Terminology

<b>Acoustics</b>	The science of sound.
<b>Ambient Noise</b>	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
<b>ASTC</b>	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Attenuation</b>	The reduction of an acoustic signal.
<b>A-Weighting</b>	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
<b>Decibel or dB</b>	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
<b>CNEL</b>	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
<b>DNL</b>	See definition of Ldn.
<b>IIC</b>	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Frequency</b>	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
<b>Ldn</b>	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
<b>Leq</b>	Equivalent or energy-averaged sound level.
<b>Lmax</b>	The highest root-mean-square (RMS) sound level measured over a given period of time.
<b>L(n)</b>	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
<b>Loudness</b>	A subjective term for the sensation of the magnitude of sound.
<b>NIC</b>	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
<b>NNIC</b>	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
<b>Noise</b>	Unwanted sound.
<b>NRC</b>	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
<b>RT60</b>	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
<b>Sabin</b>	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
<b>SEL</b>	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
<b>SPC</b>	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
<b>STC</b>	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Threshold of Hearing</b>	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
<b>Threshold of Pain</b>	Approximately 120 dB above the threshold of hearing.
<b>Impulsive</b>	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
<b>Simple Tone</b>	Any sound which can be judged as audible as a single pitch or set of single pitches.

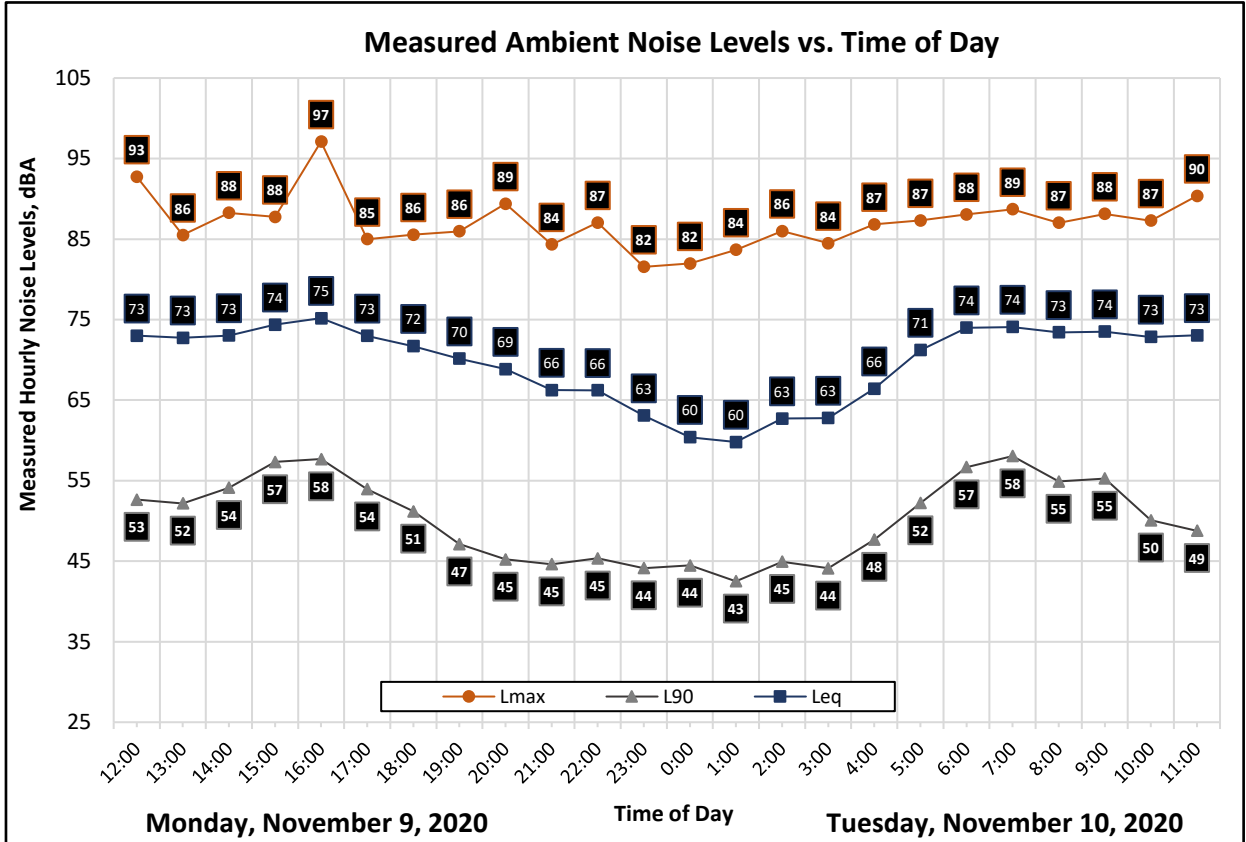


**Appendix B1: Continuous Noise Monitoring Results**

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Monday, November 9, 2020	12:00	73	93	68	53
Monday, November 9, 2020	13:00	73	86	68	52
Monday, November 9, 2020	14:00	73	88	68	54
Monday, November 9, 2020	15:00	74	88	71	57
Monday, November 9, 2020	16:00	75	97	72	58
Monday, November 9, 2020	17:00	73	85	69	54
Monday, November 9, 2020	18:00	72	86	64	51
Monday, November 9, 2020	19:00	70	86	60	47
Monday, November 9, 2020	20:00	69	89	56	45
Monday, November 9, 2020	21:00	66	84	51	45
Monday, November 9, 2020	22:00	66	87	51	45
Monday, November 9, 2020	23:00	63	82	48	44
Tuesday, November 10, 2020	0:00	60	82	47	44
Tuesday, November 10, 2020	1:00	60	84	46	43
Tuesday, November 10, 2020	2:00	63	86	49	45
Tuesday, November 10, 2020	3:00	63	84	47	44
Tuesday, November 10, 2020	4:00	66	87	52	48
Tuesday, November 10, 2020	5:00	71	87	59	52
Tuesday, November 10, 2020	6:00	74	88	67	57
Tuesday, November 10, 2020	7:00	74	89	67	58
Tuesday, November 10, 2020	8:00	73	87	68	55
Tuesday, November 10, 2020	9:00	74	88	68	55
Tuesday, November 10, 2020	10:00	73	87	67	50
Tuesday, November 10, 2020	11:00	73	90	67	49

Statistics	L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Day Average	73	88	66	52
Night Average	68	85	52	47
Day Low	66	84	51	45
Day High	75	97	72	58
Night Low	60	82	46	43
Night High	74	88	67	57
L <sub>dn</sub>	75	Day %	84	
CNEL	76	Night %	16	

Site: LT-1  
 Project: Waterman Brinkman Logistics Center  
 Location: Eastern Project Boundary  
 Coordinates: 38.3941863°, -121.3530489°  
 Meter: LDL 812-1  
 Calibrator: CAL200



**Appendix B2: Continuous Noise Monitoring Results**

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Monday, November 9, 2020	13:00	59	80	39	36
Monday, November 9, 2020	14:00	45	67	42	38
Monday, November 9, 2020	15:00	59	83	43	38
Monday, November 9, 2020	16:00	60	82	43	38
Monday, November 9, 2020	17:00	58	75	41	40
Monday, November 9, 2020	18:00	63	82	40	39
Monday, November 9, 2020	19:00	64	85	42	39
Monday, November 9, 2020	20:00	46	64	44	42
Monday, November 9, 2020	21:00	64	83	43	41
Monday, November 9, 2020	22:00	66	85	45	41
Monday, November 9, 2020	23:00	60	77	45	40
Tuesday, November 10, 2020	0:00	61	83	46	44
Tuesday, November 10, 2020	1:00	58	78	47	44
Tuesday, November 10, 2020	2:00	48	55	48	46
Tuesday, November 10, 2020	3:00	64	84	49	46
Tuesday, November 10, 2020	4:00	52	63	51	49
Tuesday, November 10, 2020	5:00	53	63	52	51
Tuesday, November 10, 2020	6:00	67	92	56	53
Tuesday, November 10, 2020	7:00	64	82	59	57
Tuesday, November 10, 2020	8:00	57	76	55	49
Tuesday, November 10, 2020	9:00	48	72	45	42
Tuesday, November 10, 2020	10:00	64	86	43	41
Tuesday, November 10, 2020	11:00	45	61	42	41
Tuesday, November 10, 2020	12:00	54	76	42	40

Statistics	Leq	Lmax	L50	L90
Day Average	60	77	44	41
Night Average	62	76	49	46
Day Low	45	61	39	36
Day High	64	86	59	57
Night Low	48	55	45	40
Night High	67	92	56	53
Ldn	68	Day %		52
CNEL	69	Night %		48

Site: LT-2  
 Project: Waterman Brinkman Logistics Center  
 Location: West of Project Boundary  
 Coordinates: 38.3944029°, -121.3598041°  
 Meter: LDL 820-2  
 Calibrator: CAL200

