

City of Elk Grove

Southeast Industrial Area

Transportation Master Plan

Adopted
2-9-2022

Contents

1. Executive Summary.....	2
1.1 Purpose	2
1.2 Project Characteristics	2
1.3 Findings	2
2. Introduction	3
2.1 Background Study	3
2.2 Location.....	3
2.3 Topography	3
2.4 Land Use and Zoning.....	4
3. Onsite Circulation.....	6
3.1 Typical Sections.....	6
3.2 Proposed Land Use Exhibits	7
4. Intersections / Signalization Configuration.....	9
4.1 Interim Facilities.....	9
4.2 Ultimate Facilities	10
5. Conclusion.....	11

Appendices *(Under Separate Cover)*

A: *Transportation Impact Study for the Elk Grove Sphere of Influence Amendment and Multi-Sport Complex* (March 2017)

B: Fehr and Peers Memorandum titled *Elk Grove Multi-Sports Complex VMT Analysis and Transportation Management Plan Review* dated June 30, 2020

C: Kimley-Horn Memorandum titled *Traffic Assessment NSIXD – Elk Grove, CA* dated July 21, 2021

1. Executive Summary

1.1 Purpose

The purpose of this Transportation Master Plan is to identify onsite circulation elements including onsite roadway alignments, identification of onsite typical sections, and outline the proposed intersection improvements for the Southeast Industrial Area. This report is part of an overall high-level infrastructure analysis for the plan area.

This onsite Transportation Plan is based on the Transportation Impact Study prepared by Fehr & Peers, dated March 2017, which was included in the Environmental Impact Report for the Multi-Sport Park Complex project and the Fehr and Peers Memorandum titled *Elk Grove Multi-Sports Complex VMT Analysis and Transportation Management Plan Review* dated June 30, 2020. The Memorandum, found in Appendix B, compares the land use scenarios analyzed in the original Transportation Impact Study with the City's final land use plan included in this Transportation Master Plan. This Plan has been updated based upon the findings of the Kimley-Horn report *Traffic Assessment NSIXD – Elk Grove, CA* dated July 21, 2021, and provided in Appendix C, which considered minor revisions to the roadway alignments and intersections.

1.2 Project Characteristics

The plan area encompasses approximately 571-acres and includes a varied mix of land uses from light and heavy industrial to commercial and open space. In addition, this plan area fronts onto Grant Line Road, part of the Capital Southeast Connector Project. The two fronting intersections at Waterman Road / Grant Line Road and Mosher Road / Grant Line Road have been analyzed in the Transportation Impact Study. The Waterman Road and Grant Line Road intersection is planned to be the primary access to the plan area while the Mosher Road / Grant Line Road intersection will serve as the secondary point of access.

The proposed land uses in the plan area is expected to bring a wide range of vehicle types including passenger vehicles tractor trailers. Some employees may also travel as pedestrians and cyclists from the neighborhoods to the north of the plan area.

1.3 Findings

The onsite circulation plan incorporates the recommendations of the Transportation Impact Study and the Fehr and Peers Memorandum. Figure 3-3 shows the proposed onsite circulation layout.

2. Introduction

The City of Elk Grove (City) is pursuing the development of an industrial park along the south side of Grant Line Road at the intersection with Waterman Road. In June 2021, an approximately 382-acre portion of the area was annexed into the City; the balance of the 571-acre Plan Area may be annexed in a later phase. One of the Local Agency Formation Commission (LAFCo) conditions to annex the area is the preparation of this Transportation Master Plan.

2.1 Background Study

In 2014 the City acquired a 100-acre parcel south of Grant Line Road near the intersection of Waterman Road. In 2015 the City began the process to annex the property into the City and prepared supporting studies and environmental documents required by LAFCo. Included in the environmental analysis is a detailed Transportation Impact Study that analyzed both onsite and offsite traffic related impacts caused by the proposed development. In 2020, due to revisions to the preferred land use within the Plan Area the City commissioned a Technical Memorandum to analyze any potential impacts these changes may have. See Appendix B for the Memorandum.

This Transportation Master Plan utilizes background information from the Transportation Impact Study and the Technical Memoranda to inform the onsite circulation needs at build out of the plan area.

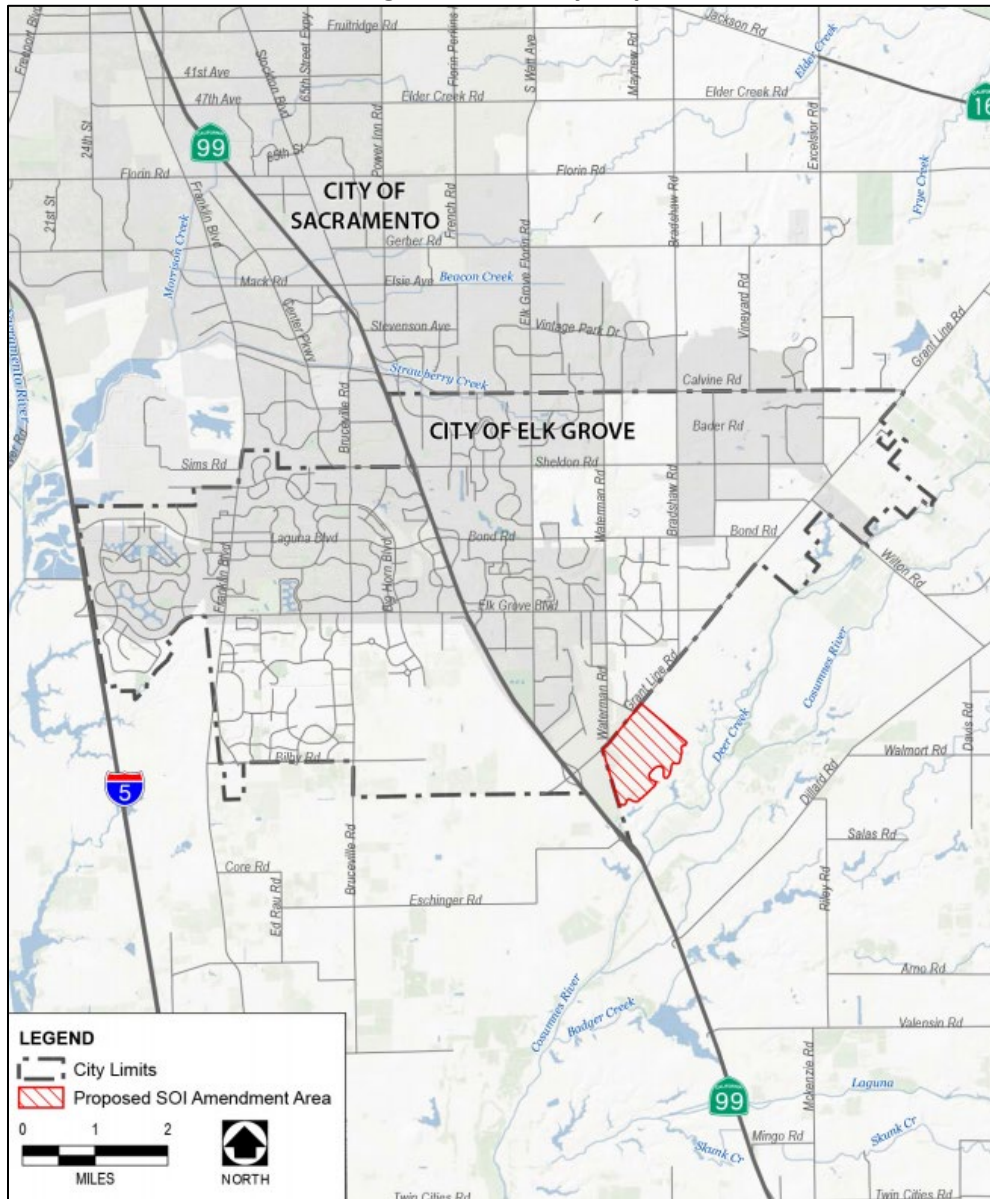
2.2 Location

The Project is located along the south side of Grant Line Road just east of the Union Pacific Railroad tracks (Fresno Subdivision), immediately adjacent to the existing City limits (Figure 2-1). The Project encompasses approximately 571-acres and is located within the City's General Plan East Study Area, meaning that it is planned by the City for future annexation.

2.3 Topography

The site has historically been used for agriculture. The topography varies from 55 feet to 49 feet and falls east to west.

Figure 2 1: Vicinity Map



2.4 Land Use and Zoning

The Land Use Plan (Figure 2-2) illustrates the planned distribution of land uses within the Plan Area. Table 2-1 provides a summary of these land uses. The focus of the Project is on the development of an industrial business park with opportunity for conditional development of a multi-sports park complex.

Figure 2-2: Land Use Plan

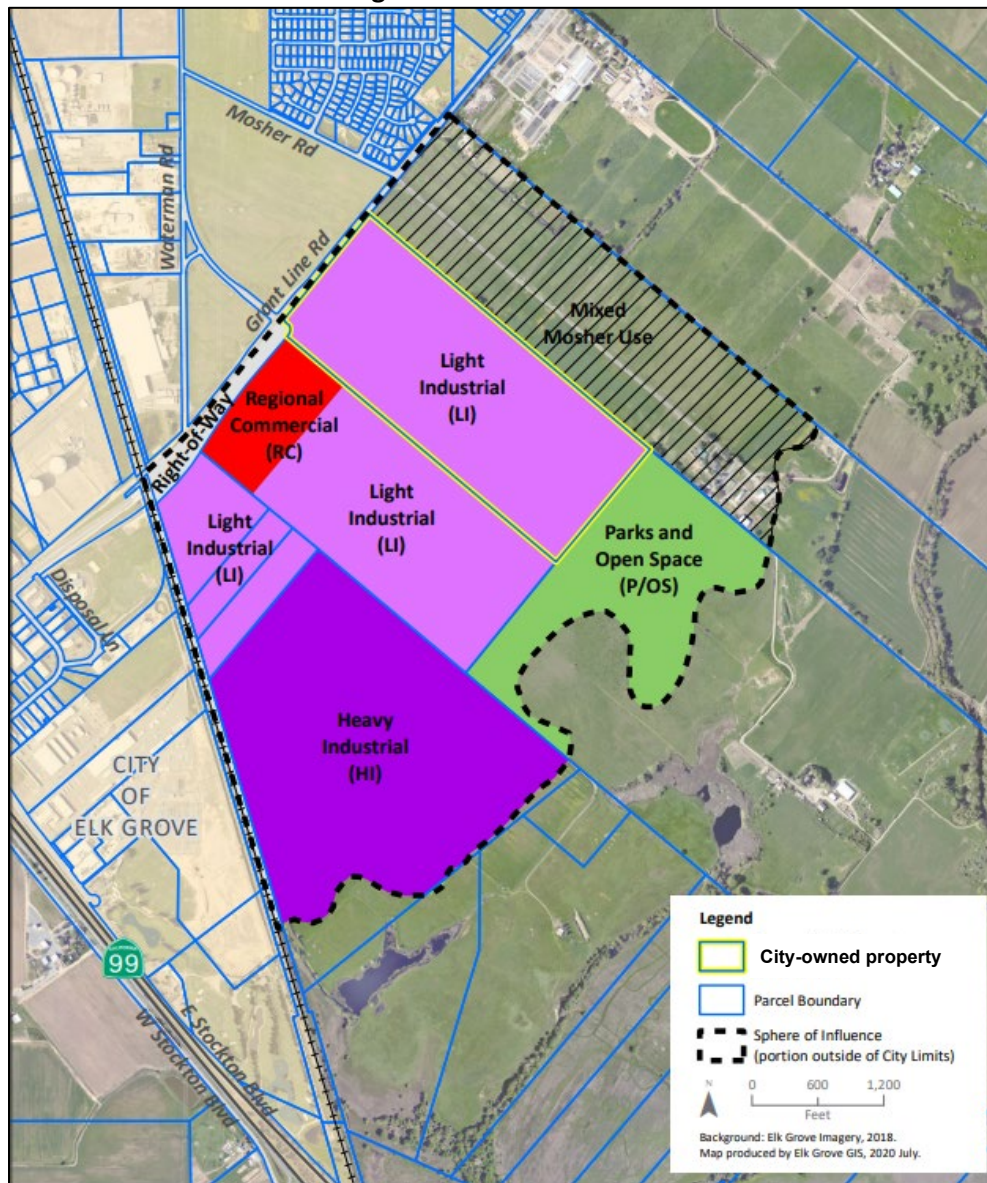


Table 2-1: Land Uses in the Project Area

Land Use/Zoning	Acres
Parks and Open Space (P/OS)	64
Mixed Use (MU)	118
Light Industrial (LI)	212
Heavy Industrial (HI)	158
Regional Commercial (RC)	20
Total	571±

3. Onsite Circulation

Onsite circulation generally follows Figure 17 from the Transportation Impact Study. The onsite roadway segments are laid out to provide necessary access to individual underlying property owners as well as discrete land uses. The onsite circulation utilizes two main intersections to access the plan area. The first is Waterman Road and Grant Line Road and the second access point is Mosher Road and Grant Line Road. Non-vehicular circulation includes class 2 bikeway facilities throughout the plan area and a proposed trail connection to the northwest that will utilize the existing Grant Line Road overcrossing at the Railroad tracks to allow for pedestrian and bike connections to pass below Grant Line Road and connect to Waterman Court.

3.1 Typical Sections

The Transportation Impact Study and Technical Memorandum indicates that there are a few onsite segments that warrant an Arterial class facility based on projected buildout traffic volumes. See Figure 3-1 for Typical Arterial Section. The average daily volume that an arterial section can accommodate is 36,000 vehicles per day. This section is planned for roadway segments 5, 6 and 7. The balance of the plan area will be served by a Typical Commercial Collector Section – See Figure 3-2. A commercial collector can accommodate 18,000 vehicles per day. This section includes a two-way left turn lane throughout to better facilitate future driveway locations. Both the sections include Class II Bikeway facilities and separated and attached sidewalks for non-vehicular circulation.

Figure 3-1 Typical Arterial Section (Street Type A)

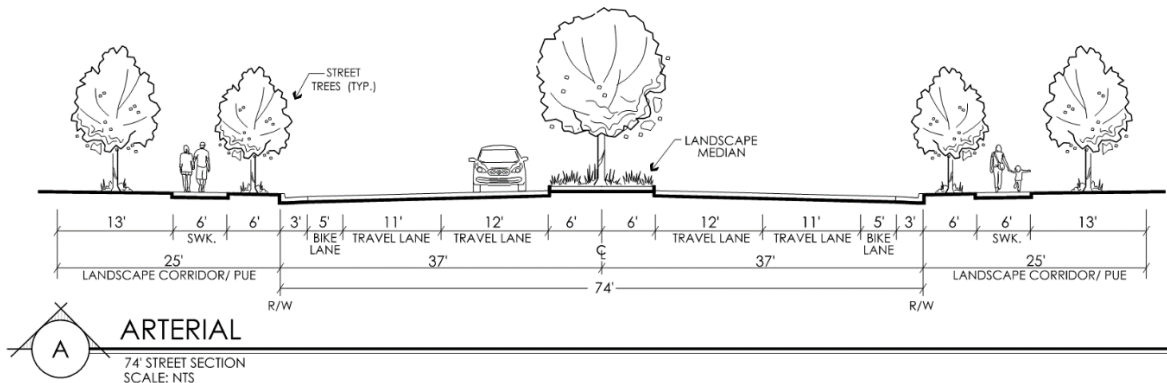
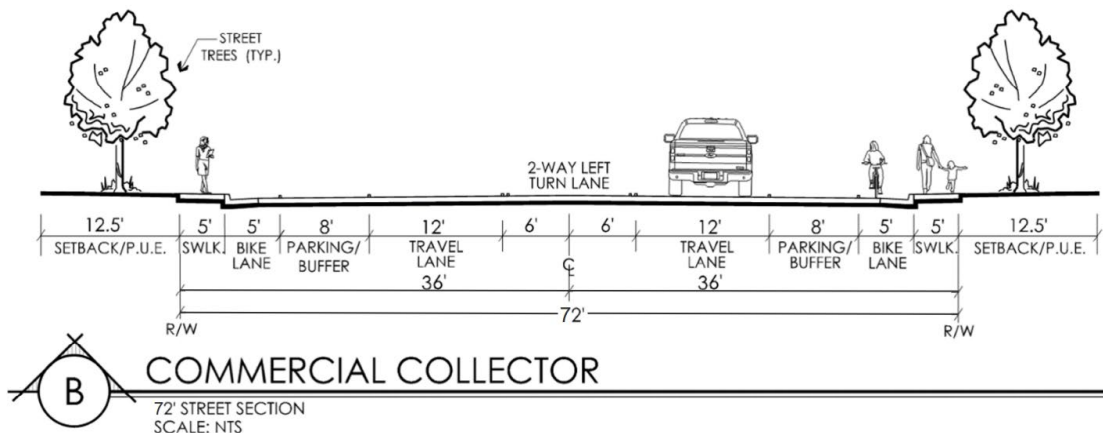


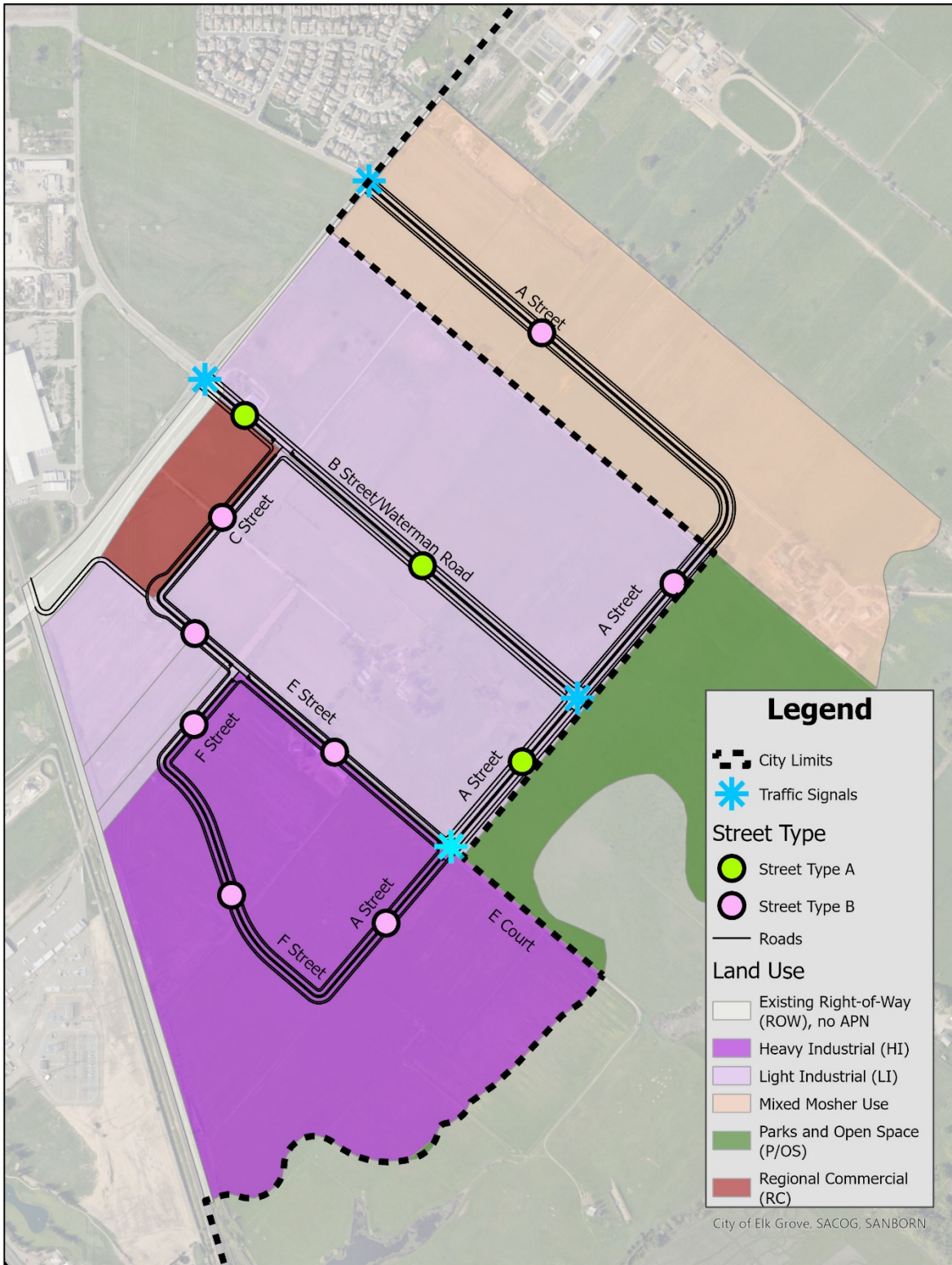
Figure 3-2 Typical Commercial Collector Section (Street Type B)



3.2 Proposed Land Use Exhibits

Following the Transportation Impact Study and the Technical Memorandum, the onsite circulation and segment configuration has been laid out for the proposed land use plan. Figure 3-3 shows the proposed land uses, unique segment identifiers, cross sections for each segment and the location of the proposed Intersection and signal improvements.

Figure 3-3 Land Use Circulation Exhibit



4. Intersections / Signalization Configuration

4.1 Interim Facilities

As depicted in Figure 3-3 there is an existing signalized intersection at Waterman Road and Grant Line Road (S1) and a proposed signalized intersection at Mosher Road and Grant Line Road (S2). The Transportation Impact Study and Technical Memorandum identifies interim improvements at each of these intersections necessary to accommodate the full onsite buildout of the plans area. Those Interim facilities are detailed below. Typical with City policy it is assumed that as development occurs within the plan area these intersections will be analyzed to determine the appropriate level of improvement necessary.

S1 – Waterman Road / Grant Line Road Interim Intersection Configuration

- Three left-turn lanes, one through lane, and one right-turn lane on the northbound approach.
- Two left-turn lane, one through lane, and one right-turn lanes on the southbound approach.
- Two left-turn lanes, four through lanes, and two right-turn lanes on the eastbound approach.
- Two left-turn lanes, four through lanes, and one right-turn lane on the westbound approach.

S2 – Mosher Road / Grant Line Road Interim Intersection Configuration

- One left-turn lane, one through lane, and one right-turn lane on the northbound approach.
- One left-turn lane, one through lane, and one right-turn lane on the southbound approach.
- One left-turn lane, two through lanes, and one right-turn lane on the eastbound approach.
- One left-turn lane, two through lanes, and one right-turn lane on the westbound approach.

The City is currently working on Grant Line Road widening project, WTR002, that is proposing to build some of the eastbound and west bound Grant Line Road improvements identified above. Figures 4-1 and 4-2 show the proposed improvements being constructed by the City of Elk Grove at the Waterman Road / Grant Line Road and Mosher Road / Grant Line Road intersections.

Figure 4-1 Waterman Road / Grant Line Road Interim Improvement

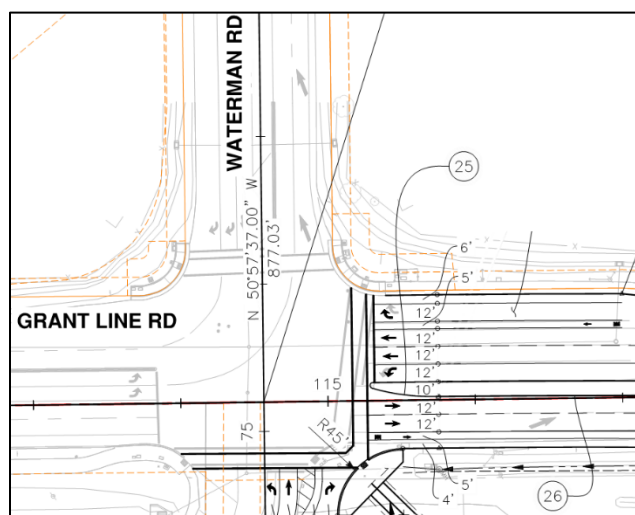
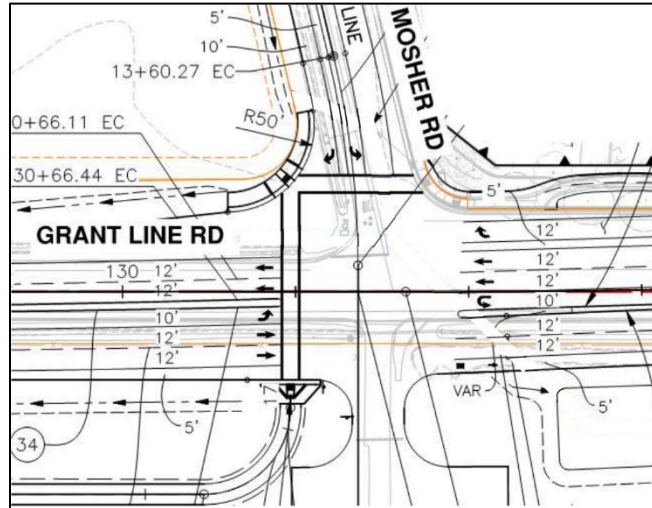


Figure 4-2 Mosher Road / Grant Line Road Interim Improvement



4.2 Ultimate Facilities

The Transportation Impact Study and the Technical Memorandum identifies the ultimate intersection configuration needed to support the build out of the plan area and includes build out levels in the City of Elk Grove in the 2036 forecast year. As mentioned above, and consistent with City policy, it is anticipated that these ultimate intersection improvements may be phased to meet the increased traffic volumes and associated impacts as the plan area builds out.

S1 – Waterman Road / Grant Line Road Ultimate Intersection Configuration

- Three left-turn lanes, one through lane, and one right-turn lane on the northbound approach.
- Two left-turn lanes, one through lane, and one right-turn lane on the southbound approach.
- Two left-turn lanes, four through lanes, and two right-turn lanes on the eastbound approach.
- Two left-turn lane, four through lanes, and one right-turn lane on the westbound approach.

S2 – Mosher Road / Grant Line Road Ultimate Intersection Configuration

- One left-turn lane, one through lane, and one right-turn lane on the northbound approach.
- One left-turn lane, one through lane, and one right-turn lane on the southbound approach.
- One left-turn lane, three through lanes, and one right-turn lane on the eastbound approach.
- One left-turn lane, three through lanes, and one right-turn lane on the westbound approach.

The Transportation Impact Study also identifies two internal signalized intersections that are anticipated at project buildout. These are identified on Figure 3-3 as intersection improvements S3 and S4.

5. Conclusion

This Transportation Master Plan utilizes the plan area Transportation Impact Study and subsequent Technical Memorandum to layout the onsite circulation elements for the final proposed land use. The recommended roadway segments and intersection traffic controls in this plan are designed to accommodate the cumulative buildout travel demand forecast models peak hour and roadway segment traffic volumes. This plan also incorporates pedestrian and shared bike way facilities to provide efficient movement and safe travel spaces for all modes of transportation.