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Standards Update Transmittal

Reference Number: 2023-02

Standards: Standard Drawing, ST-46

Update:

1. New Standard Drawing:

a. ST-46 MICRO-TRENCHING, create a new standard drawing for micro-trenching.

Effect of Update:

1. New standard to allow the installation of telecommunication conduits via micro-trenching method.

Request for Update Initiated By: Standards Review Committee 7/27/2022

Update Reviewed for Conformity and Consistency to Standards:

Showb Ahrary 1/26/2023 | 8:56 AM PST

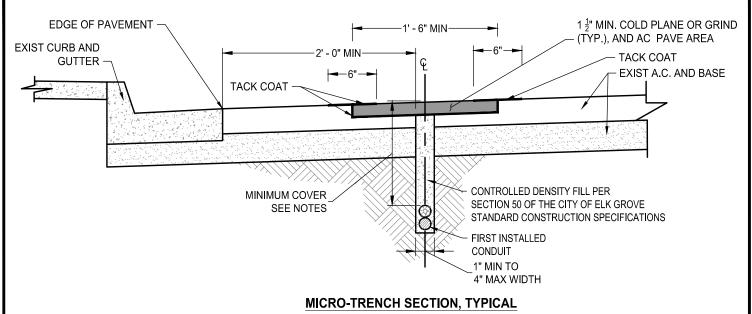
Date Date

Update to Standards Approved:

Jeffrey R. Werner

1/30/2023 | 3:40 PM PST

Date



NOT TO SCALE

NOTES:

1. MINIMUM COVER

STREET TYPE

RESIDENTIAL AND COLLECTOR

ARTERIAL AND THOROUGHFARE

DEPTH 1' - 3" 1' - 6"

- 2. ALL CONDUITS MUST BE ANCHORED OR SECURED TO THE BOTTOM OF THE TRENCH TO MAINTAIN MINIMUM COVER.
- 3. SAND BACKFILL SHALL NOT BE ALLOWED WITHIN THE MINIMUM COVER LIMITS.

GENERAL:

- MICRO-TRENCHING SHALL ONLY BE USED TO INSTALL FIBER OPTIC CABLE.
- MICRO-TRENCHING SHALL NOT BE ALLOWED IN CONCRETE PAVED AREAS.
- 3. MICRO-TRENCH SHALL BE CONSTRUCTED WITH CONTINUOUS STRAIGHT AND NEAT EDGES.
- 4. MICRO-TRENCH ALIGNMENTS SHALL CONSIST OF RUNS PARALLEL TO THE CENTERLINE OF THE STREET.
- 5. STREET CROSSINGS SHALL BE PERPENDICULAR TO THE STREET CENTERLINE. THE CAPPING LIMITS ON TRENCHES PERPENDICULAR TO THE STREET CENTERLINE SHALL BE A MINIMUM OF 3 FEET IN WIDTH.
- 6. ALL MICRO-TRENCHES SHALL BE COMPLETELY BACKFILLED TO FINISH GRADE BY THE END OF THE WORK DAY.
- 7. COMMENCEMENT OF SURFACE PREPARATION SUCH AS GRINDING FOR ASPHALT CONCRETE PAVING REPLACEMENT WILL OCCUR NO SOONER THAN 48 HOURS AFTER BACKFILL OF TRENCH. FIELD CONDITIONS MAY NECESSITATE A LONGER WAIT AS DETERMINED BY THE ENGINEER.

- 8. AS SOON AS BACKFILL HAS CURED, NOT TO EXCEED 30 CALENDAR DAYS, ASPHALT CONCRETE SHALL BE GROUND AND CAPPED AS FOLLOWS:
 - A. WHERE ANGULAR CROSSING OR ANY LENGTH-WISE CUTS OF A BIKE LANE OCCUR BY MICRO-TRENCHING, THE CAPPING LIMITS SHALL EXTEND THE FULL WIDTH OF THE BIKE LANE. PERPENDICULAR CROSSINGS MAY RECEIVE TYPICAL CAPPING WIDTH PER NOTE ABOVE. PAVEMENT MARKINGS SHALL BE RESTORED IN KIND.
- B. EXISTING AC AND BACKFILL SHALL BE GROUND DOWN 1½-INCHES, FOR A WIDTH OF 18-INCHES BUT NO LESS THAN 6-INCHES FROM BOTH EDGES OF THE MICRO-TRENCH AND RESURFACED WITH CONCRETE ASPHALT. WHEN THE CAP LIMIT IS WITHIN 2-FEET OR LESS FROM THE GUTTER FACE, CURB, SLAB OR STRUCTURE, THE CAP LIMIT SHALL EXTEND TO THAT ITEM.
- C. TACK COAT ALL EDGES WITH SS-1H EMULSIFIED.
- CONNECTION TO SERVICE LATERALS, JUNCTION BOXES, ETC., SHALL BE DONE SUCH THAT CURB AND GUTTER IS NOT DISTURBED, SETTLED OR DAMAGED. REMOVAL LIMITS OF SIDEWALK SHALL FOLLOW APPLICABLE STANDARDS AND REQUIREMENTS AS APPROVED BY THE ENGINEER.
- 10. THE USE OF HYDRO-JETTING IS NOT PERMITTED. TRENCHLESS METHODS SHALL NOT CREATE A VOID TWO TIMES GREATER THAN CONDUIT. VOID SHALL BE COMPACTED AND BACKFILLED WITH CONTROLLED DENSITY FILL PER SECTION 50 OF THE CITY OF ELK GROVE STANDARD CONSTRUCTION SPECIFICATIONS.

DATE 01-30-202	3	O SCALE	CITY OF ELK GROVE - PUBLIC WORKS	APPROVED BY: 01-30-2023	
REVISION BY	APPROVED	DATE		CITY ENGINEER DATE	
			MICRO-TRENCHING	OF ELK GAD	DRAWING NUMBER
				LIFOR NIT	ST- 46