

## NOTES

## TYPICAL MICRO-TRENCH SECTION

1. MICRO-TRENCHING SHALL ONLY BE USED TO INSTALL TELECOMMUNICATION CONDUITS.
2. MICRO-TRENCHING SHALL NOT BE ALLOWED IN CONCRETE PAVED STREETS, NOR SIDEWALKS, CURBS AND GUTTERS.
3. MICRO-TRENCH ALIGNMENTS SHALL CONSIST OF RUNS PARALLEL TO THE CENTERLINE OF THE STREET. STREET CROSSINGS MAY BE PERMITTED UPON THE CITY ENGINEER'S DISCRETION, PROVIDED THE ALIGNMENT IS PERPENDICULAR TO THE STREET CENTERLINE TO THE EXTENT POSSIBLE. MICRO TRENCH SHALL BE PLACED A MINIMUM OF 24" FROM THE OUTSIDE OF ANY EXISTING UNDERGROUND UTILITY.
4. THE EDGE OF THE MICRO-TRENCH SHALL BE AGAINST THE EXISTING FACE OF THE GUTTER.
5. THE CONDUIT SHALL BE INSTALLED SO THAT THE TOP OF THE CONDUIT BANK IS AT A MAXIMUM DEPTH OF 20-INCHES BELOW THE EXISTING AC PAVEMENT SURFACE AND AT LEAST 1-INCH BELOW THE BOTTOM OF THE PAVEMENT STRUCTURAL SECTION.
6. CONDUIT BANK REQUIRES (1) 12AWG HIGH STRENGTH (MIN. BREAK LOAD 452#) COPPER-CLAD STEEL W/30MIL HDPE ORANGE INSULATION FOR LOCATE/TRACER WIRE.
7. ALL MICRO-TRENCHES SHALL BE BACKFILLED WITH 2 SACK CEMENT SAND SLURRY 2500 PSI. (MEDIUM TO DARK RED COLOR) TO SUB GRADE BY THE END OF THE WORK DAY.  
 FOR FINAL REINSTATEMENT, USE ELEPHANT ARMOR ASPHALT REPAIR, LINE PUMPED INTO THE TOP 3-INCHES OF THE MICRO-TRENCH. WHEN THE CAP LIMIT IS WITHIN 2- FEET OR LESS FROM THE GUTTER FACE, CURB, SLAB OR SURFACE. THE CAP LIMIT SHALL EXTEND TO THAT ITEM. ADDITIONAL GRIND AND OVERLAY MAY BE REQUIRED AT THE CITY'S DISCRETION BASED ON STREET CLASSIFICATION, LANE LINE AND BIKE LANE LOCATIONS.
  - A. PAVEMENT SHALL BE LEVEL WITH ADJACENT ROADWAY ELEVATIONS AND SHALL PROVIDE A SMOOTH SURFACE PER GREENBOOK SECTION 302-5 AND IS SUBJECT TO ACCEPTANCE BY THE INSPECTOR.
  - B. PAVEMENT MARKINGS SHALL BE RESTORED IN KIND.
8. ONLY ONE MICRO-TRENCH PER SIDE OF THE STREET IS ALLOWED. ADDITIONAL MICRO-TRENCHES MAY BE CONSIDERED AT THE DISCRETION OF THE CITY ENGINEER.
9. 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 CITY ENGINEER. THE USE OF HYDRO-JETTING IS NOT PERMITTED. VOIDS RESULTING FROM TRENCHLESS METHODS SHALL BE BACKFILLED WITH APPROVED CONTROLLED LOW-STRENGTH MATERIAL (CLSM) CONSISTING OF FINE AGGREGATE, FLUIDIZING AGENT, PORTLAND CEMENT AND WATER. FILL SHALL BE PREPARED USING A VOLUMETRIC MIXER.
10. THE MICRO-TRENCH SHALL BE CONSTRUCTED WITH CONTINUOUS UNIFORM STRAIGHT AND NEAT EDGES.
11. CONSTRUCTION INSTALLATION METHODS PARTICULARLY SUITABLE FOR MICRO-TRENCHING SHALL INCLUDE:
  - A. MICRO-TRENCHER CAPABLE OF MEETING TARGET DEPTH AND WIDTH IN A SINGLE PASS WITH AN INTEGRAL HOOD AND ASSOCIATED VACUUM SYSTEM. SELECTION OF CUTTING WHEEL SHALL BE SUCH THAT IT MINIMIZES DAMAGE TO THE ADJACENT AC SURFACE. TRENCHER MUST BE STREET LEGAL WITH THE USE OF A FILTER SYSTEM FOR DUSTLESS EXCAVATION.
  - B. CITY RECOMMENDS EQUIPMENT RATE OF 350HP OR GREATER, SHALL COLLECT EXCAVATED MATERIAL ONBOARD WITH TWO POINTS OF SUCTION FOR SPOILS.
  - C. MOBILE CONCRETE/SLURRY PLACEMENT WITH AN ON-BOARD VIBRATOR, NARROW THROUGH TO MATCH MICRO-TRENCH WIDTH.

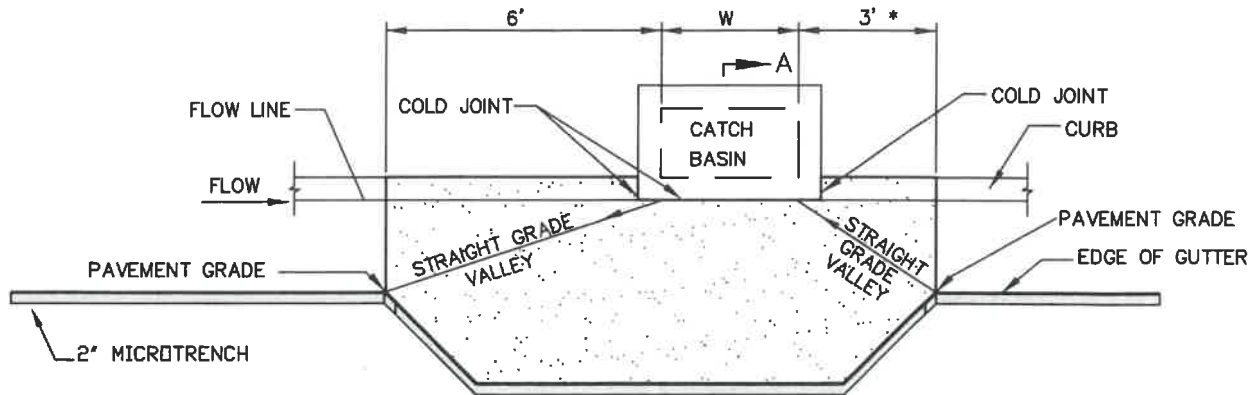


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|---------------------------------------|--|------------|
| APPROVED BY:                          |  | 7-18-24    |
|                                       |  | DATE       |
| KHOI DO, CITY ENGINEER                |  | RCE: 62809 |
| RECOMMENDED BY:                       |  | 7/16/24    |
|                                       |  | DATE       |
| BRYAN LIRLEY, ASSISTANT CITY ENGINEER |  | RCE: 70990 |

CITY OF ONTARIO

MICRO-TRENCHING

STANDARD  
DRAWING  
NUMBER  
**1308**  
SHEET 1 OF 2



LOCAL DEPRESSION - FOR CATCH BASIN INLET MICRO TRENCH  
SEE STANDARD DRAWING 3005

**NOTES**

TYPICAL MICRO-TRENCH SECTION

- 13. GST ELEPHANT ARMOR DOT INDUSTRIAL GRADE MORTAR IS A SINGLE COMPONENT, CEMENTITIOUS, FIBER REINFORCED, ULTRA-FAST SETTING CONCRETE REPAIR AND OVERLAY MORTAR THAT CAN BE PLACED WITH A TROWEL, TEXTURED ROLLER OR OTHER TYPES OF HIGH VOLUME APPLICATION TOOLS.
- 14. WHEN CATCH BASIN IS PRESENT, TRENCH PARALLEL TO EDGE OF GUTTER, CUTTING AT A 45 DEGREE ANGLE TO FORM AROUND CATCH BASIN GRADE.

**TABLE A. MICROTRENCH DEPTH PER STREET CLASSIFICATION**

| STREET CLASSIFICATION                     | REFERENCE STANDARD DRAWING NUMBER | DEPTH FROM TOP OF LAST INSTALLED CONDUIT |
|---|-----------------------------------|--|
| ALLEY                                     | 1111                              | 12'                                      |
| LOCAL STREET                              | 1051, 1052                        | 12'                                      |
| LOCAL INDUSTRIAL STREET/ COLLECTOR STREET | 1053, 1054                        | 16'                                      |
| MINOR ARTERIAL/ OTHER PRINCIPAL ROUTES    | 1055, 1056, 1057                  | 16'                                      |
| OTHER PRINCIPAL ARTERIAL/ TRUCK ROUTES    | 1058, 1059, 1060, 1061            | 20'                                      |



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**CITY OF ONTARIO**

**MICRO-TRENCHING  
 CATCH BASIN INLET**

STANDARD  
 DRAWING  
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**1308**  
 SHEET 2 OF 2