



| REQUIRED TRENCH WIDTH | | |
|-----------------------|-------------------------------|-------------------------------|
| PIPE SIZE (INCHES) | MINIMUM TRENCH WIDTH (INCHES) | MAXIMUM TRENCH WIDTH (INCHES) |
| <18 | PIPE OD + 12 | PIPE OD + 30 |
| 18 to 23 | PIPE OD + 12 | PIPE OD + 36 |
| 24 to 32 | PIPE OD + 24 | PIPE OD + 36 |

MAXIMUM TRENCH WIDTH NOTES:
 A. LARGER TRENCH WIDTH ALLOWED TO ACCOMMODATE BUTT FUSION EQUIPMENT AT FUSION LOCATIONS.

- NO. DESCRIPTION:**
1. HDPE EMBEDMENT MATERIAL – FINE AGGREGATE #57 WASHED STONE.
 2. BACKFILL - COMPACT BACKFILL PER ASTM D 698 AND AASHTO T-99 AS MODIFIED BY NCDOT TO 95% MAXIMUM DENSITY WITHIN A ROAD RIGHT-OF-WAY. FINAL 12" OF SUBGRADE SHALL BE COMPACTED TO 100%. 85% MAXIMUM DRY DENSITY REQUIRED OUTSIDE ROAD R/W.
 3. WARNING TAPE - 6" WIDE WARNING TAPE INSTALLED DIRECTLY ABOVE HDPE EMBEDMENT MATERIAL AND 24" BELOW FINISH GRADE.
 4. TRACER WIRE - CONTINUOUS AWG #12 GAUGE SOLID COPPER TRACER WIRE WITH 30 MILS THICK BLUE HDPE INSULATION AT THE BOTTOM OF THE EMBEDMENT LAYER. DO NOT ATTACH TRACER WIRE TO PIPE.

- NOTES:**
- A. WHERE PIPE IS INSTALLED DEEPER THAN 15', INSTALL ADDITIONAL TRACER WIRE AT A DEPTH OF 4' BELOW FINISH GRADE.
 - B. EMBEDMENT SHOULD BE PLACED IN LIFTS, NOT EXCEEDING 6" IN THICKNESS, AND THEN TAMPED. TAMPING SHOULD BE ACCOMPLISHED WITH A MECHANICAL TAMPER.
 - C. A MAXIMUM OF 100' OF OPEN TRENCH WILL BE ALLOWED AT ANY TIME, UNLESS APPROVED BY THE ENGINEER.
 - D. PERFORM CONDUCTIVITY TEST ON THE TRACER WIRE AT FINAL INSPECTION. CONTRACTOR TO TEST ON A DAILY BASIS.

CHARLOTTE WATER
 A CITY OF CHARLOTTE DEPARTMENT
 STANDARD DETAILS
 WATER

EMBEDMENT AND BACKFILL
 FOR HDPE PIPE

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|-------------------|
| NO SCALE |
| VERSION 1.0 |
| DATE 04/2024 |
| DETAIL 10.13.4 |