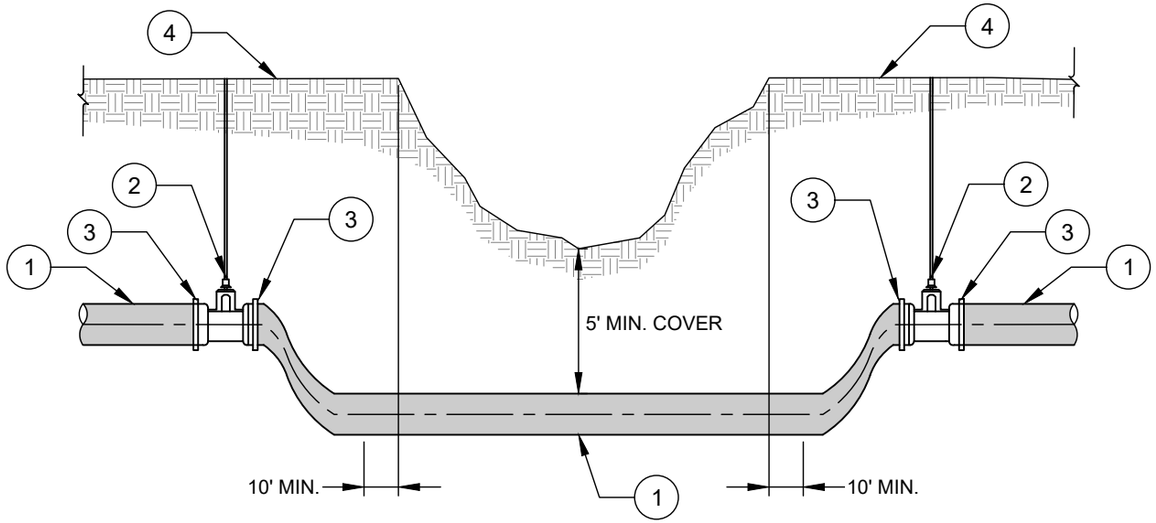
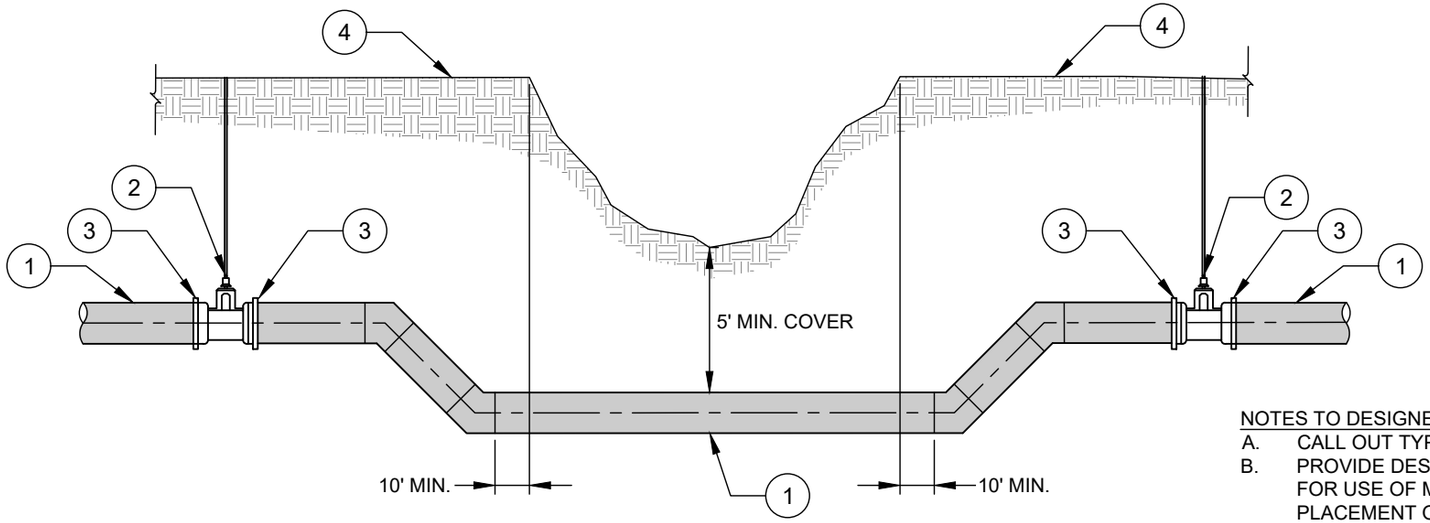


CREEK CROSSING BY DIRECTIONAL DRILL



CREEK CROSSING WITH FITTINGS
OPEN CUT OR CONVENTIONAL BORE

NO.	DESCRIPTION:
1.	HDPE WATER MAIN CARRIER PIPE.
2.	VALVE.
3.	MALE HDPE RESTRAINED JOINT ADAPTER WITH STEEL PIPE STIFFENER.
4.	TOP OF BANK.

NOTES:

A. FITTINGS SHALL MEET THE REQUIREMENTS OF AWWA C906.

B. MECHANICAL FITTINGS USED WITH HDPE PIPE SHALL BE SPECIFICALLY DESIGNED FOR USE WITH HDPE PIPE.

C. STAINLESS STEEL INTERNAL STIFFENERS SHALL BE INSTALLED IN THE END OF THE HDPE PIPE WHEN HDPE PIPE IS INSERTED INTO THE BELL END OF NON-HDPE PIPE, VALVE, FITTING, OR INTO THE HUB OF A BOLTED COUPLING.

D. ALLOWABLE TENSILE LOAD FOR PIPE MAY NOT BE EXCEEDED WHEN PULLING CARRIER PIPE THROUGH HORIZONTAL DIRECTIONAL DRILL (HDD). PROVIDE SEALED CALCULATIONS.

E. LOCATE VALVES IN ACCESSIBLE LOCATION AT TOP OF BANK WITHIN 100 TO 1,000 LINEAR FEET OF TOP OF BANK ON BOTH SIDES OF CENTERLINE OF CREEK.

NOTES TO DESIGNER

A. CALL OUT TYPE OF VALVE ON PLANS.

B. PROVIDE DESIGN CALCULATIONS PER ASTM F1962, STANDARD GUIDE FOR USE OF MAXI-HORIZONTAL DIRECTIONAL DRILLING FOR PLACEMENT OF PE PIPE OR CONDUIT UNDER OBSTACLES, INCLUDING RIVER CROSSINGS. PROVIDE SEALED CALCULATIONS FOR PULLBACK FORCE, TENSILE STRESS, EXTERNAL PRESSURE, BENDING STRESS, THERMAL STRESSES AND STRAINS, AND TORSION STRESS.

C. PROVIDE PE SEALED FLOTATION DESIGN CALCULATIONS COMPLYING WITH THE MINIMUM REQUIREMENTS OF CHAPTER 6 SECTION 3 OF "THE HANDBOOK OF POLYETHYLENE PIPE" REVISION 3 OR LATER BY PPI.

D. VALVES SHOULD BE PLACED IN AN ACCESSIBLE MAINTAINED AREAS.

CHARLOTTE WATER

CHARLOTTE WATER
A CITY OF CHARLOTTE DEPARTMENT
STANDARD DETAILS
WATER

HDPE CREEK CROSSING

NO SCALE

VERSION
1.0

DATE
04/2024

DETAIL
10.13.6