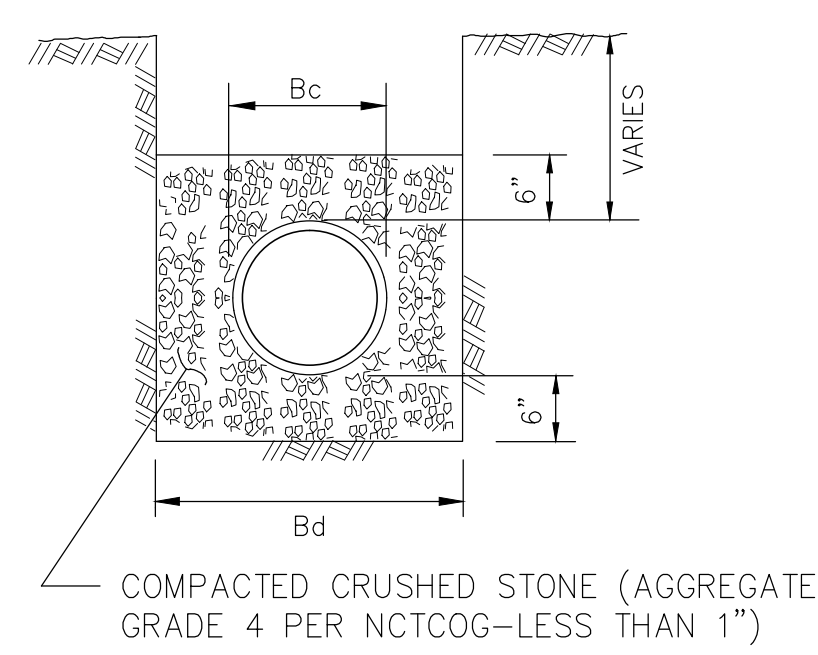


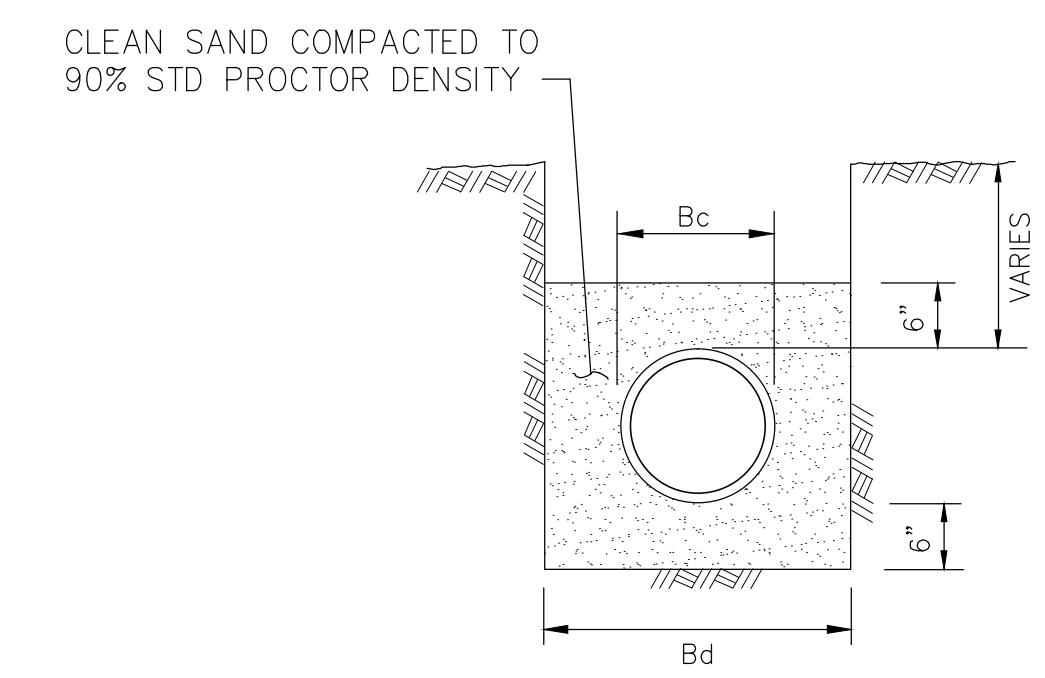
1 BORING & CASING GENERAL NOTES

- ENCASEMENT PIPE SPECIFICATION:
SMOOTH STEEL PIPE, MINIMUM WALL THICKNESS OF 1/4", WITH BITUMINOUS COATING. ALL ENCASEMENT PIPE SHALL BE NEW AND HAVE A MINIMUM YIELD STRENGTH OF 35,000 P.S.I.
- CARRIER PIPE TO BE MADE UP OUTSIDE THE ENCASEMENT PIPE AND PUSHED THROUGH THE ENCASEMENT PIPE AND SUPPORTED WITH CASING SPACERS.
- DRY MECHANICAL BORES SHALL BE USED FOR BORES WITH ENCASEMENT PIPE.
- ALL VOIDS BETWEEN BORE WALL AND ENCASEMENT PIPES (CARRIER PIPE IF NO ENCASEMENT IS USED) SHALL BE FILLED WITH GROUT PER ASTM C 476.
- WHERE CIRCUMSTANCES NECESSITATE THE EXCAVATION OF A BORE PIT OR TRENCH CLOSER TO THE EDGE OF PAVEMENT THAN SET FORTH ON THIS SHEET, GUARD FENCE OR OTHER APPROVED PROTECTIVE DEVICES WILL BE INSTALLED FOR THE PROTECTION OF THE TRAVELING PUBLIC.
- CONCRETE SHALL BE 2000 P.S.I.
- THE MINIMUM INSIDE DIAMETER OF THE ENCASEMENT PIPE SHALL BE 18".
- UTILITIES CAN BE INSTALLED BY OPEN CUT METHODS PRIOR TO SUBGRADE STABILIZATION. UTILITIES SHALL BE INSTALLED BY BORE AND CASING METHOD AFTER SUBGRADE STABILIZATION.



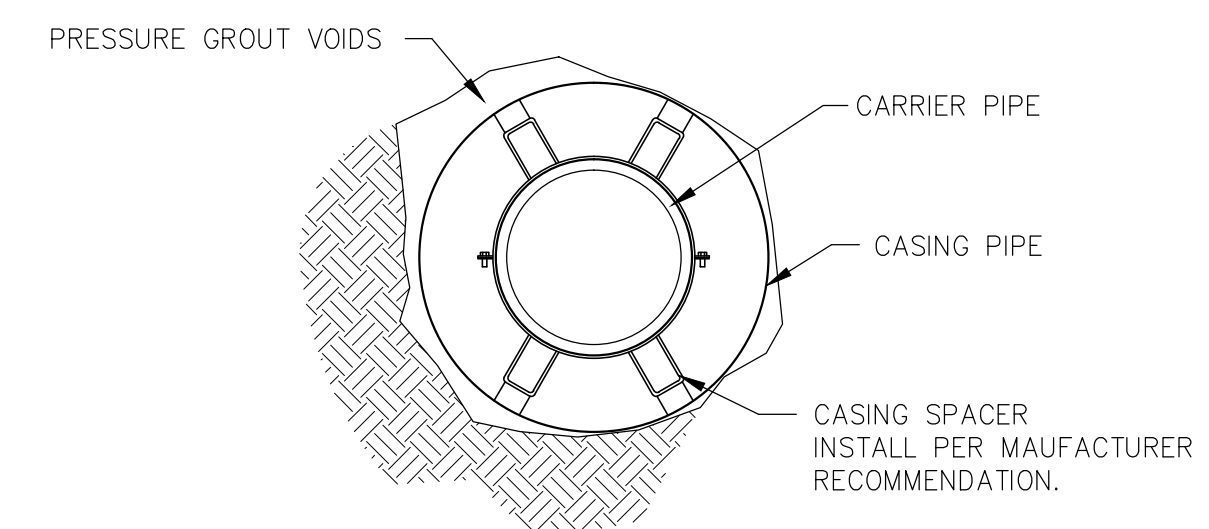
- COMPACTED CRUSHED STONE (AGGREGATE GRADE 4 PER NCTCOG-LESS THAN 1")
- NOTES:
- Bc = OUTSIDE DIAMETER OF PIPE
 - Bd = TRENCH WIDTH - MINIMUM 12" GREATER THAN Bc
 - LOCATOR/METAL TAPE TO BE INSTALLED IN TRENCH 12"-18" BELOW SURFACE.

2 SEWER LINE EMBEDMENT



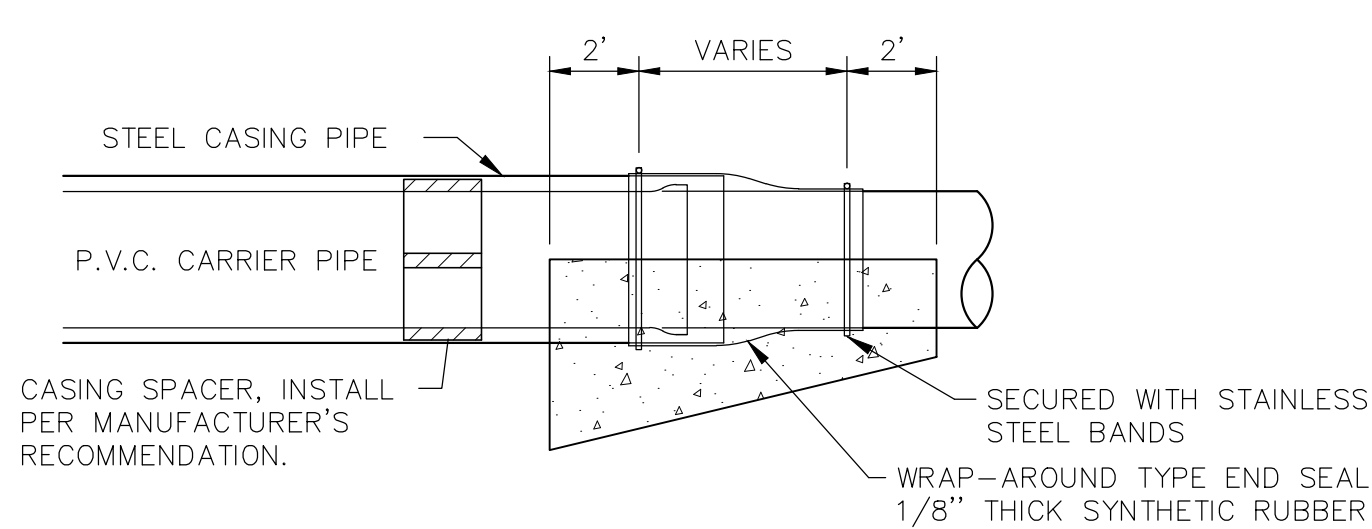
- CLEAN SAND COMPACTED TO 90% STD PROCTOR DENSITY
- NOTES:
- Bc = OUTSIDE DIAMETER OF PIPE
 - Bd = TRENCH WIDTH - MINIMUM 12" GREATER THAN Bc
 - LOCATOR/METAL TAPE TO BE INSTALLED IN TRENCH 12"-18" BELOW SURFACE.

3 WATERLINE EMBEDMENT



- NOTES:
- CARRIER PIPE SHALL BE INSTALLED IN CASING PIPE WITH CASING SPACERS STRAPPED TO CARRIER PIPE. (PIPE BELLS SHALL NOT REST ON STEEL CASING PIPE)
 - CASING SPACERS, INCLUDING PARTS SHALL BE PVC PLASTIC AND/OR 304 STAINLESS STEEL TO BE MANUFACTURED BY: PIPELINE SEAL AND INSULATOR, INC. OR APPROVED EQUAL.

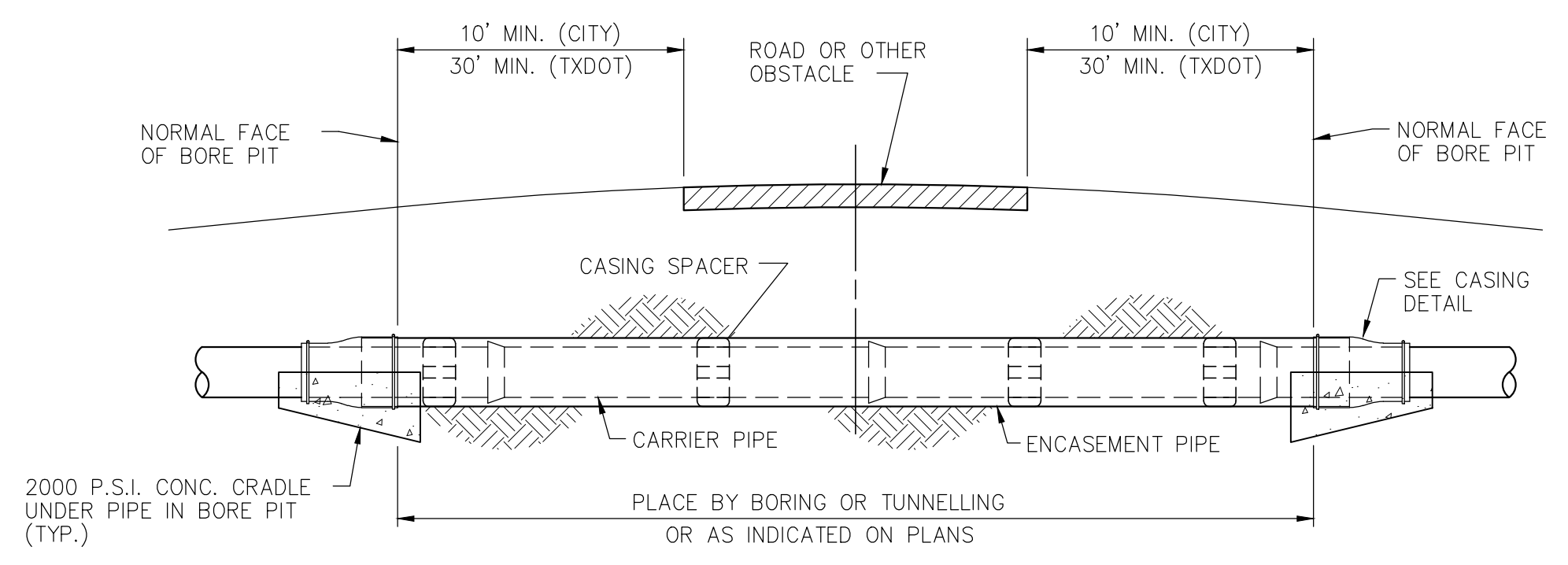
PIPE SECTION



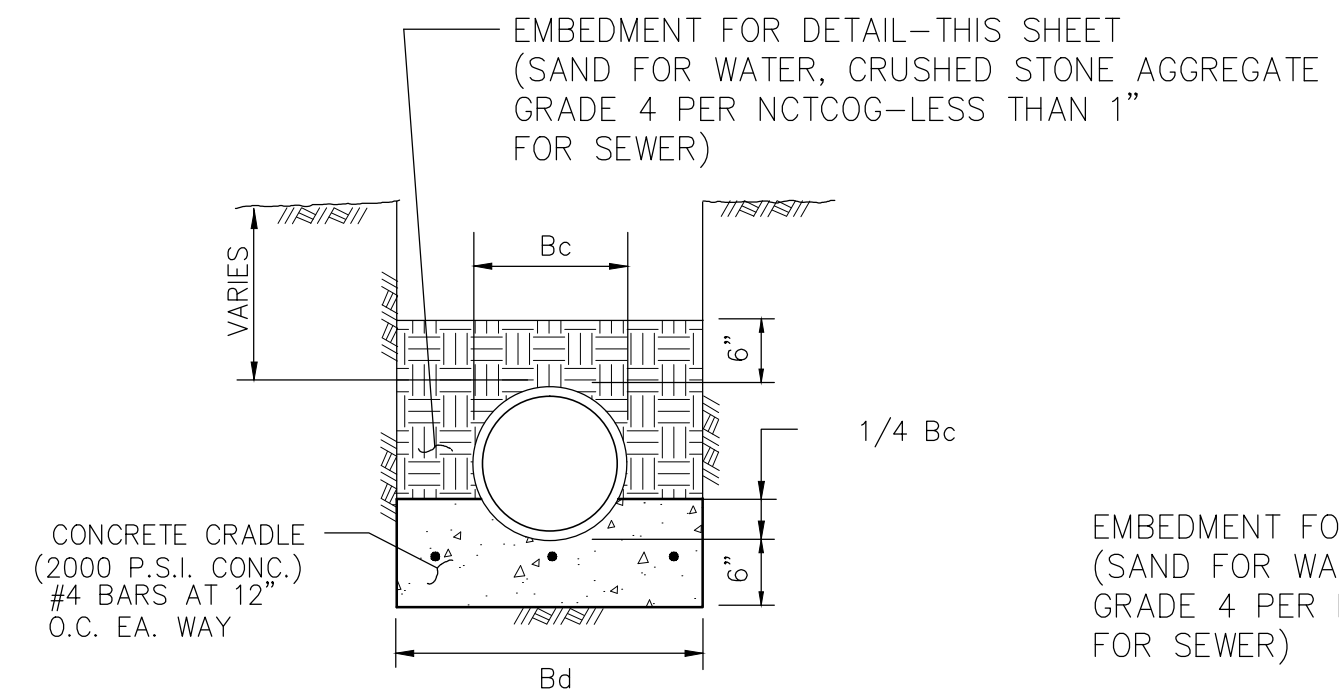
- NOTES:
- WRAP-AROUND END SEAL TO BE Model AW, AS MANUFACTURED BY ADVANCED PRODUCTS & SYSTEMS, INC. OR APPROVED EQUAL

END SEAL

4 CASING DETAIL

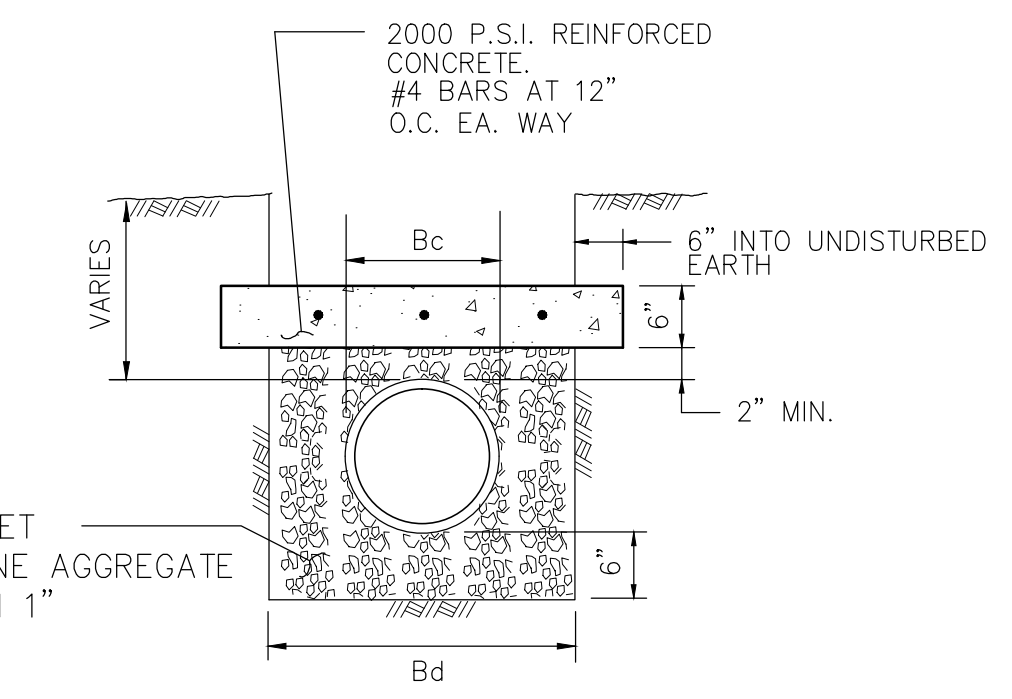


7 BORED & CASED CROSSING



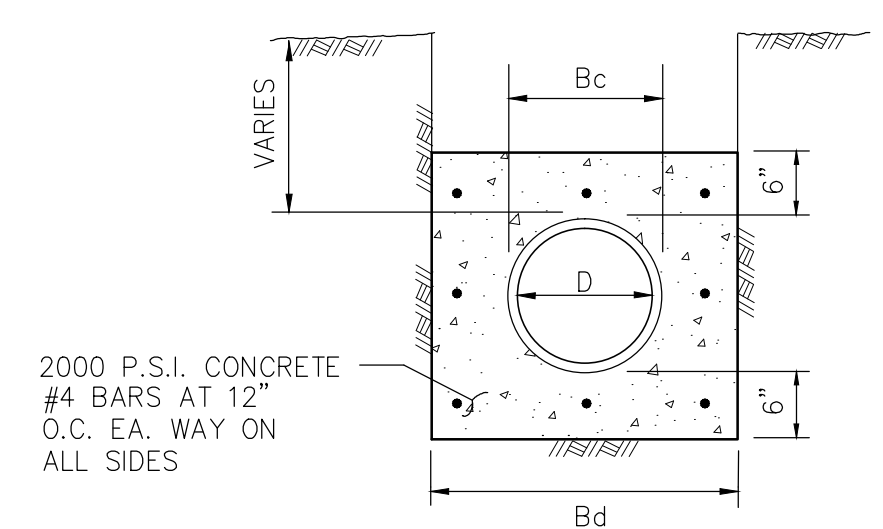
- NOTES:
- Bc = OUTSIDE DIAMETER OF PIPE
 - Bd = TRENCH WIDTH - MINIMUM 12" GREATER THAN Bc

5 CONCRETE CRADLE



- NOTES:
- Bc = OUTSIDE DIAMETER OF PIPE
 - Bd = TRENCH WIDTH - MINIMUM 12" GREATER THAN Bc

6 CONCRETE CAP



- NOTES:
- Bc = OUTSIDE DIAMETER OF PIPE
 - Bd = TRENCH WIDTH - MINIMUM 12" GREATER THAN Bc

8 CONCRETE ENCASEMENT

NOTE: THIS IS SHT. SD-16 OF THE STANDARD CONSTRUCTION DETAILS, ORDINANCE NO. 2013-51 EFFECTIVE DATE: JANUARY 1, 2014

CITY OF MIDLOTHIAN, TEXAS
DEPARTMENT OF ENGINEERING,
UTILITIES, AND PUBLIC WORKS

STANDARD CONSTRUCTION DETAILS
GENERAL REQUIREMENTS

EMBEDMENT, BORING, &
CASING DETAILS

NO.	REVISION:	DATE:	SHEET:
			SD-16

