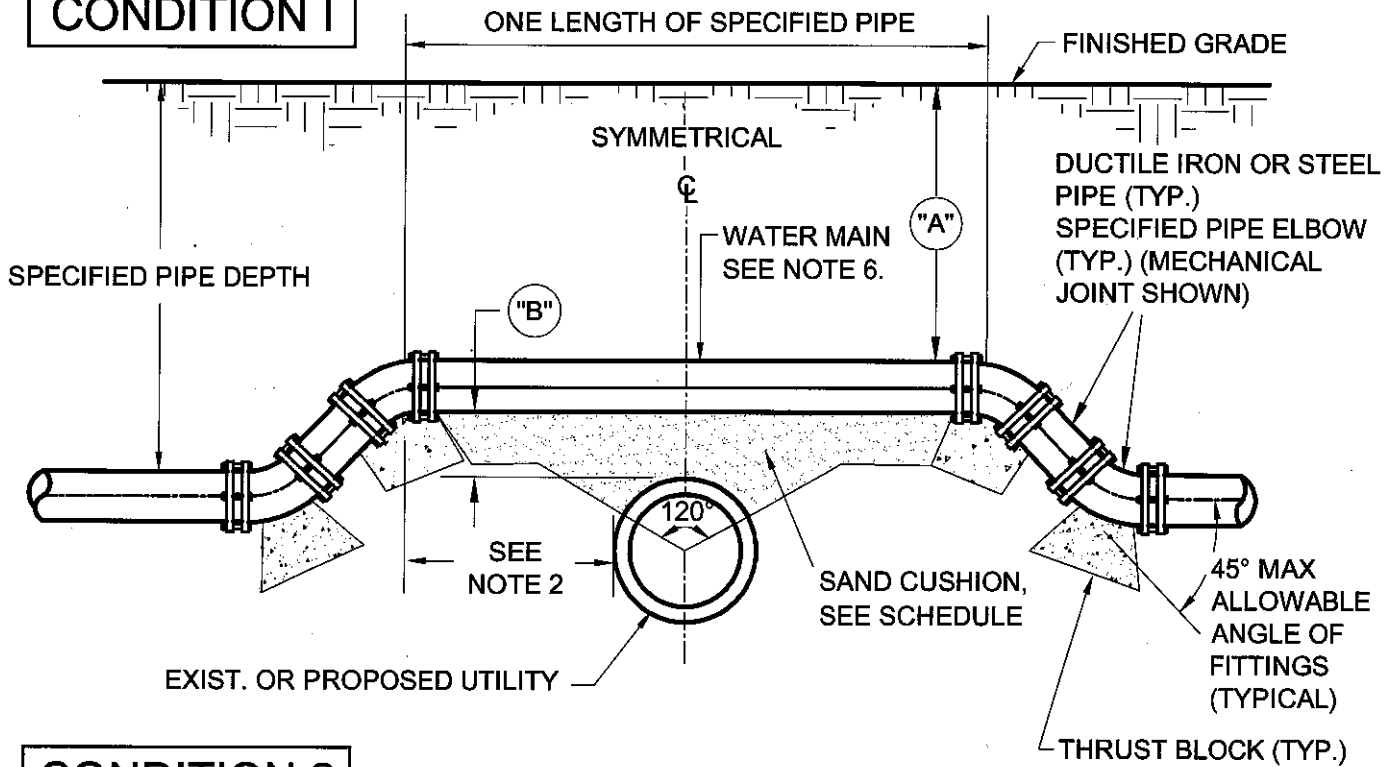
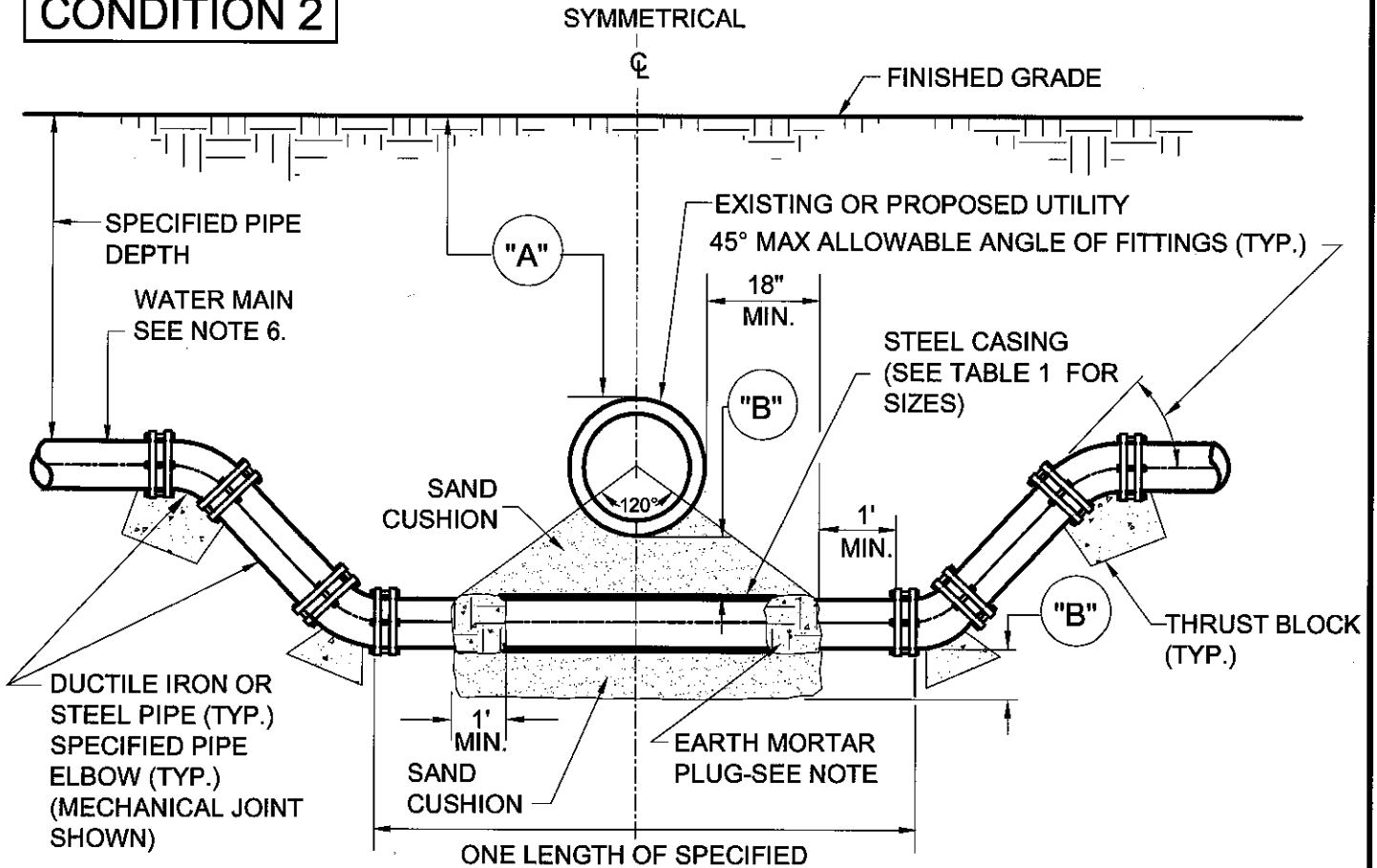


# CONDITION 1



# CONDITION 2



CITY OF SAN BUENAVENTURA

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

## UTILITY CROSSING

STD. DET. NO.

008

APPROVED BY:

*[Signature]*  
WATER GENERAL MANAGER

APPROVED BY:

*[Signature]*  
CITY ENGINEER R.C.E. 37064

DATE 7-7-16



SHEET  
1 of 2

**NOTES: (CONDITIONS I AND II)**

1. SEE CITY STANDARD DETAIL 001 - GENERAL WATER NOTES.
2. IF DIMENSION "A" IS LESS THAN 30", IT SHALL BE APPROVED BY THE CITY ENGINEER AND CASING PIPE SHALL BE INSTALLED PER CONDITION II.
3. FOR SEWER REFER TO CITY STANDARD DETAIL 002 FOR SEPARATION.
4. MAXIMUM ALLOWABLE PIPE JOINT DEFLECTION SHALL BE PER PIPE MANUFACTURERS RECOMMENDATIONS.
5. IF RETURN TO DESIGNED PIPE DEPTH BY DEFLECTION (ROPING) CANNOT BE ACCOMPLISHED WITHIN 2 STANDARD PIPE LENGTHS, PIPE FITTINGS AND APPURTENANCES WILL BE REQUIRED UNLESS OTHERWISE NOTED OR DIRECTED BY CITY ENGINEER.
6. ALL PIPE JOINTS 22-1/2° OR GREATER SHALL BE THRUST BLOCK PROTECTED PER CITY STANDARD 006.
7. MEGALUGS OR TENSION RODS AND ANCHORS SHALL BE INSTALLED PER CITY STANDARDS 006 AND 007. REQUIRED FROM BOTTOM TO TOP FITTING FOR CONDITION I AND CONDITION II.
8. ALL PIPE FOR UTILITY CROSSING SHALL BE DUCTILE IRON OR CEMENT LINED AND COATED, STEEL WELDED PIPE.
9. AIR VACUUM RELEASE ASSEMBLY TO BE INSTALLED PER STD. DET. 016 AT HIGH POINTS IN THE PIPING SYSTEM OR AS DETERMINED BY CITY ENGINEER.
10. BLOW OFF TO BE INSTALLED PER STD. DETAIL 015 AS DETERMINED BY CITY ENGINEER.
11. EARTH PLUG SHALL BE MADE OF 1 PART CEMENT AND 3 PARTS EARTH AND SHALL PENETRATE THE ENDS OF THE CASING SURROUNDING THE WATER MAIN TO A DEPTH OF 1 FOOT.
12. ANY CROSSING LESS THAN 30", AS APPROVED BY CITY ENGINEER, SHALL REQUIRE SLURRY BACKFILL

TABLE I		
WATER MAIN	CASING-INSIDE DIAMETER	WALL THICKNESS
6 INCHES	12 INCHES	1/4 INCHES
8 INCHES	14 INCHES	1/4 INCHES
10 INCHES	16 INCHES	3/8 INCHES
12 INCHES	18 INCHES	3/8 INCHES
14 INCHES	20 INCHES	3/8 INCHES
LARGER THAN 14"	REQUIRES CITY ENGINEER'S APPROVAL	

SAND CUSHION SCHEDULE- DIMENSION "B"		
PIPE DEPTH	LESS THAN 3"	(B) DIMENSION SHALL BE A MINIMUM OF 12 INCHES
(A)	MORE THAN 3"	(B) DIMENSION SHALL BE A MINIMUM OF 6 INCHES

<b>CITY OF SAN BUENAVENTURA</b>		PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
<b>UTILITY CROSSING</b>		STD. DET. NO. <b>008</b>
APPROVED BY:  WATER GENERAL MANAGER	APPROVED BY:  CITY ENGINEER R.C.E. 37064	DATE <b>7-7-16</b> SHEET 2 of 2