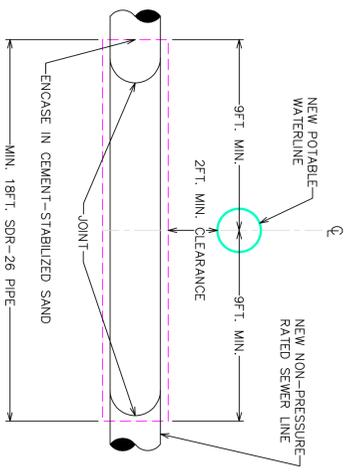
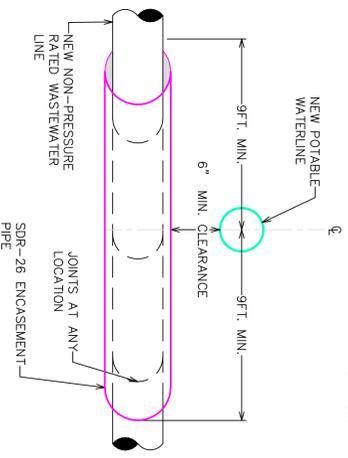


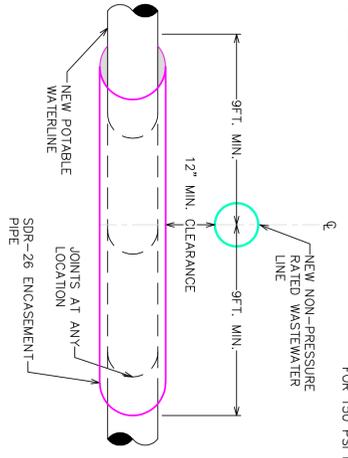
CASE NO.	SITUATION	OTHER	PIPE ON TOP	CLEARANCE		WATER PIPE	SEWER PIPE	OTHER REQUIREMENTS	TCEQ REF.
				VERTICAL	HORIZONTAL				
1	NEW EXIST. NON-PRESSURE OR PRESSURE	CONFIRMED NO LEAKAGE	WATER	2 FT	4 FT	NONE	NONE	DO NOT DISTURB BEDDING/BACKFILL OF EXIST. SEWER	290.44 (e) (5) (A) (I)
2	NEW EXIST. PRESSURE-RATED	CANNOT CONFIRM LEAKAGE	WATER	2 FT	4 FT	NONE	REPLACE WITH 150 PSI PIPE		290.44 (e) (5) (A) (II)
3	NEW NEW SEWER/FORCE MAIN		WATER	2 FT	4 FT	NONE	150 PSI PIPE		290.44 (e) (5) (A) (III)
4	EXIST. NEW (NON-PRESSURE)		WATER	2 FT	4 FT	NONE	150 PSI PIPE		217.53 (d) (I)
CROSSING LINES									
5	NEW EXIST. NON-PRESSURE-RATED SEWER	NO LEAKAGE IN SEWER	WATER	2 FT	N/A	CENTER 18' SEGMENT	NONE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (I)
5A	SAME	SEWER LEAKING OR DISTURBED	WATER	2 FT	N/A	CENTER 18' SEGMENT	REPLACE W/18" OF 150 PSI PIPE	SAME	
6	NEW EXIST. PRESSURE-RATED	NO LEAKAGE IN SEWER	WATER	6 IN	N/A	CENTER 18' SEGMENT	NONE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (II)
6A	SAME	SEWER LEAKING	WATER	6 IN	N/A	CENTER 18' SEGMENT	REPLACE W/18" OF 150 PSI PIPE	SAME	
7	NEW NEW NON-PRESSURE-RATED		WATER	2 FT	N/A	CENTER 18' SEGMENT	SDR 26 PIPE ENBED IN CEMENT-STABILIZED SAND	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (III)
7A	SAME	(LESS THAN 18' PIPE SEGMENTS)	WATER	2 FT	N/A	CENTER 18' SEGMENT	CENTER 18" OF 150 PSI PIPE		290.44 (e) (5) (B) (IV)
7B	SAME	(LESS THAN 18' PIPE SEGMENTS)	WATER	6 IN	N/A	NONE	CENTER 18" OF SDR 26 PIPE		290.44 (e) (5) (B) (V)
7C	SAME	(LESS THAN 18' PIPE SEGMENTS)	SEWER	1 FT	N/A	ENCASE IN 18" MIN. OF SDR-26 PIPE	NONE	WATER & SEWER MUST PASS PRESSURE & LEAKAGE TEST PER AWWA C600	290.44 (e) (5) (B) (VI)
8	NEW NEW PRESSURE-RATED		WATER	6 IN	N/A	CENTER 18' SEGMENT	150 PSI PIPE ENBED IN CEMENT-STABILIZED SAND	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	290.44 (e) (5) (B) (V)
9	EXIST. NEW (NON PRESSURE)		WATER	2 FT	N/A	NONE	CENTER 18' SEGMENT, 150 PSI PIPE OR SDR 26 PIPE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	217.53 (d) (2)
10	EXIST. NEW (NON PRESSURE)		WATER	6 IN	N/A	NONE	CENTER 18' SEGMENT, 150 PSI PIPE ENBED IN OR 150 PSI PIPE	WHEN POSSIBLE, CENTER BETWEEN EXIST. JOINTS OF SEWER	217.53 (d) (3)
11	EXIST OR NEW MANHOLE (NEW OR EXIST)		N/A	N/A	< 9 FT	ENCASE IN 18" MIN. 150 PSI PIPE	N/A		217.53 (d) (4)



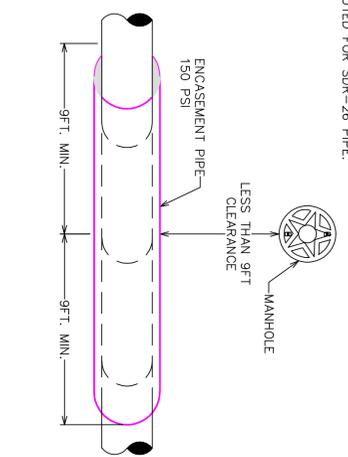
CASE 7
NEW WATER LINE OVER NEW SDR-26 SEWER LINE



CASE 7b
NEW WATER LINE OVER NEW ENCASED SEWER LINE



CASE 7c
NEW ENCASED POTABLE WATERLINE UNDER A NEW WASTE WATER LINE



CASE II
MANHOLE CLEARANCE

- NOTES:
- ENCASMENT SHALL MEET THE FOLLOWING REQUIREMENTS:
 - SDR-26 OR 150 PSI PRESSURE CLASS PIPE AS NOTED IN TABLE
 - MINIMUM 18 FEET LONG
 - DIAMETER OF ENCASEMENT PIPE-DIAMETER OF CARRIER PIPE+2 NOMINAL PIPE
 - SIZES MINIMUM (EXAMPLE: 8" CARRIER NEEDS 12" ENCASEMENT)
 - SPACE AROUND CARRIER PIPE SHALL BE SUPPORTED AT MINIMUM STEEL INTERVALS WITH SPACERS, OR FILLED TO SPRING LINE WITH WASHED SAND
 - ENCASMENT PIPE SHALL BE CENTERED ON THE CROSSING
 - BOTH ENDS TO BE SEALED WITH CEMENT GROUT OR A MANUFACTURED WATER-TIGHT SEAL.
 - CEMENT-STABILIZED SAND ENCASMENT SHALL MEET THE FOLLOWING:
 - MINIMUM 2.5 BAGS OF CEMENT PER CY OF MIXTURE
 - MINIMUM EMBEDMENT THICKNESS IS TO BE AS FOLLOWS: 6" ABOVE; 4" BELOW; AND 6" ON THE SIDES OF THE PIPE.
 - EMBEDMENT SHALL EXTEND A MINIMUM OF 12" BEYOND PIPE JOINTS ON EACH SIDE.
 - SDR 26 SEWER PIPE MEETS THE T.C.E.Q. STIFFNESS REQUIREMENT OF 115 PSI AT 5% DEFLECTION.
 - WHERE LEAKAGE/NO-LEAKAGE OF EXISTING SEWERS MUST BE DETERMINED, IT SHALL BE BY A LICENSED TEXAS PROFESSIONAL ENGINEER.
 - 18" MINIMUM LENGTH PIPE OR ENCASMENT SEGMENTS MUST BE CENTERED ON THE CROSSING (JOINTS 9' FROM THE CROSSING).
 - THIS TABLE AND NOTES ARE INTENDED TO COMPLY WITH T.C.E.Q. CHAPTER 290 (WATER DATED SEPTEMBER 2000, AND DRAFT CHAPTER 217 (SEWER) RULE LOG 99100-317-WT).
 - THE DISTRICT DOES NOT ALLOW THE OPTION OF DUCTILE IRON OR STEEL WATER CARRIER PIPE IN LIEU OF ENCASMENT PIPE, WHICH THE T.C.E.Q. ALLOWS IN SOME SITUATIONS.
 - WHERE ENCASMENT PIPE IS SPECIFIED, CLEARANCES ARE MEASURED FROM THE ENCASMENT PIPE, NOT THE CARRIER PIPE.
 - PIPE, NOT THE CARRIER PIPE, 6905 OR -18 MINIMUM WILL MEET THE T.C.E.Q. REQUIREMENTS FOR 150 PSI PIPE. THIS PIPE MAY BE SUBSTITUTED FOR SDR-26 PIPE.



CITY OF TEMPLE ENGINEERING DEPARTMENT
 SERVICE CENTER 3210 E. AVE. H, BLD. A TEMPLE, TX 76501
 FILE: SUBDIVENTRY.dwg APPROVED BY: MICHAEL C. NEWMAN, P.E. DRAWN BY: CHRIS PEAL OSAB APPROVED DATE: 1 OCTOBER 2008 SCALE: N.T.S.

WATER & WASTEWATER CROSSING DETAIL

MODIFICATIONS TO THE CITY OF TEMPLE STANDARD DETAIL SHEETS ARE NOT ALLOWED. ANY EXCEPTIONS TO STANDARD DETAILS SHALL BE MADE ON SEPARATE SHEETS AND SUBMITTED FOR REVIEW WITH THE PLANS. ALL EXCEPTIONS SHALL CLEARLY NOTE THE SECTIONS AND DETAILS THEY WILL REPLACE. FAILURE TO NOTE EXCEPTIONS WILL VOID SUCH CHANGES AND THE CITY OF TEMPLE STANDARD DETAILS SHALL GOVERN. AN ENGINEER USING STANDARD DETAILS PUBLISHED BY THE CITY OF TEMPLE IS RESPONSIBLE FOR SEALING THE DOCUMENTS IN ACCORDANCE WITH THE RULES OF THE STATE OF TEXAS PROFESSIONAL ENGINEERS REGISTRATION BOARD.