

MAXIMUM ALLOWABLE DEPTH OF TRENCH (IN FEET)

REINFORCED CONCRETE PIPE (RCP)

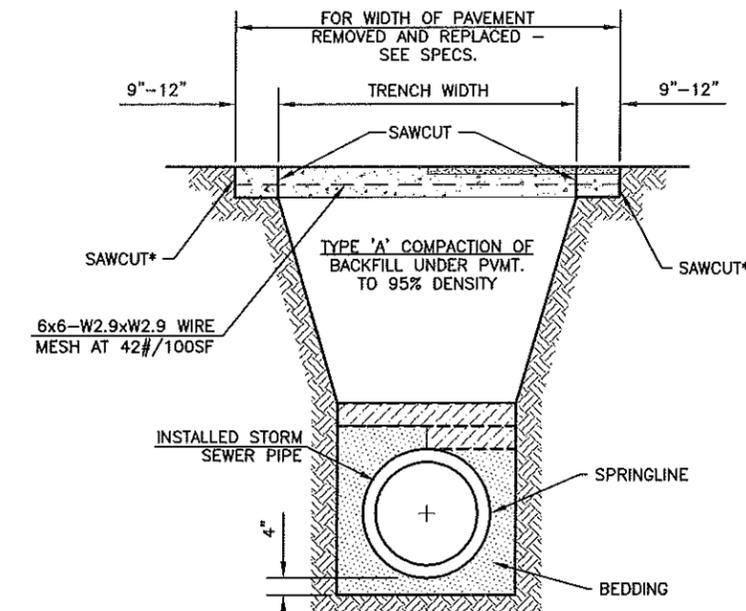
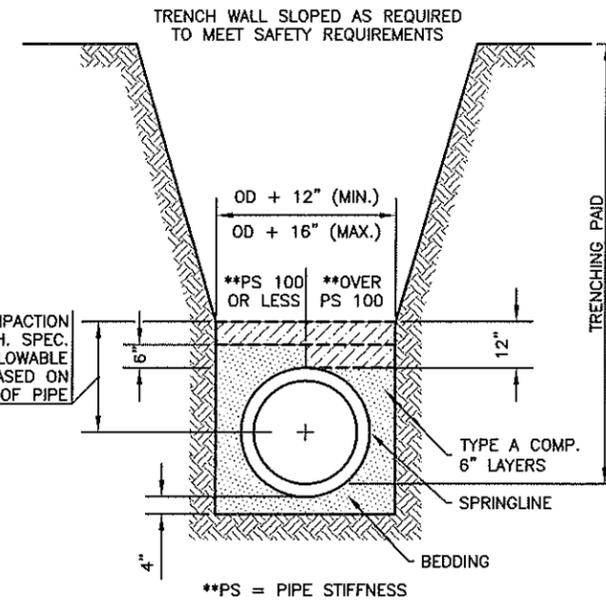
ASTM PIPE CLASS	PIPE DIAMETER (INCHES)				
	12, 15, 18, 21	24, 27, 30, 36	42, 48, 54	60, 66, 72	78, 84
II	8	11	12	15	17
III	11	14	16	18	21
IV	20	22	23	25	27

CORRUGATED STEEL PIPE (CSP), ALUMINIZED STEEL TYPE 2

PIPE DIAMETER (INCHES)	HEIGHT OF COVER ABOVE TOP OF PIPE (FEET) (H-20 LOADING)							
	CSP				CSPA			
	1 - 10		11 - 15		16 - 20		2 - 9	
	2.66x.5	3x1	2.66x.5	3x1	2.66x.5	3x1	2.66x.5	3x1
12	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
15	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
18	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
21	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
24	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
27	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
30	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
33	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
36	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.	16 ga.
42	14 ga.	16 ga.	14 ga.	16 ga.	14 ga.	16 ga.	14 ga.	16 ga.
48	14 ga.	16 ga.	14 ga.	16 ga.	14 ga.	16 ga.	14 ga.	16 ga.
54	12 ga.	14 ga.	12 ga.	14 ga.	12 ga.	14 ga.	12 ga.	14 ga.
60	10 ga.	14 ga.	10 ga.	14 ga.	10 ga.	14 ga.	10 ga.	14 ga.
66	10 ga.	14 ga.	10 ga.	14 ga.	10 ga.	14 ga.	10 ga.	14 ga.
72	10 ga.	14 ga.	10 ga.	14 ga.	10 ga.	14 ga.	10 ga.	14 ga.
78	14 ga.	14 ga.	14 ga.	14 ga.	14 ga.	14 ga.	14 ga.	14 ga.
84	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.
90	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.
96	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.	12 ga.

END AREA (SF)	DIMENSIONS; SPAN x RISE	1 - 2	2 - 9
2.66x.5	3x1	2.66x.5	3x1
1.1	17x13	16 ga.	16 ga.
1.6	21x15	16 ga.	16 ga.
2.2	24x18	16 ga.	16 ga.
2.8	28x20	16 ga.	16 ga.
4.4	35x24	14 ga.	14 ga.
6.4	42x29	14 ga.	14 ga.
8.7	49x33	12 ga.	12 ga.
11.4	57x38	12 ga.	12 ga.
14.3	64x43	12 ga.	14 ga.
17.6	71x47	10 ga.	14 ga.
21.3	73x51	14 ga.	14 ga.
25.3	81x59	14 ga.	14 ga.
	32.1	87x63	14 ga.
	37.0	95x67	12 ga.
	42.4	103x71	12 ga.
	48.0	112x75	12 ga.

TYPE 'A' COMPACTION SEE STD. TECH. SPEC. FOR ALLOWABLE MATERIALS BASED ON TYPE OF PIPE



INSTALLATION OF SEWER UNDER EXISTING PAVEMENT

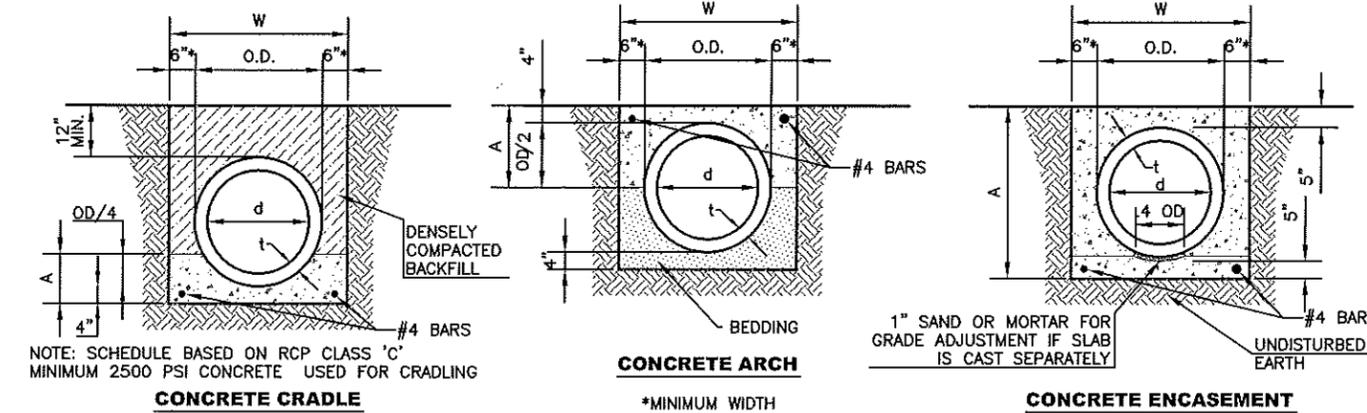
PAVEMENT SHALL BE SAWED AND REMOVED WITHOUT DAMAGE TO ADJACENT PAVEMENT.

PAVEMENT PLACEMENT SCHEDULE

SCHEDULE TO BE USED UNLESS OTHERWISE NOTED ON PLANS.

ORIGINAL SURFACE	NEW PAVEMENT
CONCRETE	8" REINFORCED CONCRETE 4,000psi
BRICK OVER CONCRETE	7" REINFORCED CONC.BASE 4,000psi PLUS ONE-COURSE RELAID BRICK.
ASPHALT	MATCH EXISTING PAVEMENT THICKNESS WITH A MINIMUM OF 6" HOT-MIX ASPHALTIC CONCRETE.
ASPHALT OVER CONCRETE	7" REINFORCED CONCRETE BASE 4000 psi PLUS 2" HOT MIX ASPHALTIC CONCRETE. 7" REINFORCED CONCRETE BASE SHALL BE JOINED TO ADJACENT PAVEMENT. SEE "FULL PANEL REPAIR & UTILITY CUTS FOR CONCRETE PAVEMENT" DETAIL AS SHOWN ON MISCELLANEOUS DETAILS I (DT-017). THE WEARING SURFACE WILL CONFORM TO CITY/COUNTY STANDARD SPECIFICATIONS.
BRICK OVER BRICK/SUBGRADE	7" HOT-MIX ASPHALTIC CONCRETE PLUS ONE-COURSE RE-LAID BRICK.

PAVEMENT SHALL BE SAWED AND REMOVED WITHOUT DAMAGE TO ADJACENT PAVEMENT.



NOTE: SCHEDULE BASED ON RCP CLASS 'C' MINIMUM 2500 PSI CONCRETE USED FOR CRADLING

CONCRETE CRADLE

CONCRETE ARCH

CONCRETE ENCASEMENT

d	t	O.D.	W	CRADLE		ARCH		ENCASE.	
				IN.	CY/FT	IN.	CY/FT	IN.	CY/FT
15	2.25	19.5	31.5	8.9	.057	13.8	.073	29.5	.162
18	2.50	23.0	34.0	9.8	.067	15.5	.086	33.0	.190
21	2.75	26.5	38.5	10.6	.077	17.3	.100	36.5	.220
24	3.00	30.0	42.0	11.5	.089	19.0	.114	40.0	.250
27	3.25	33.5	45.5	12.4	.100	20.8	.129	43.5	.282
30	3.50	37.0	49.0	13.3	.113	22.5	.145	47.0	.316
33	3.75	40.5	52.5	14.1	.126	24.3	.162	50.5	.351
36	4.00	44.0	56.0	15.0	.140	26.0	.179	54.0	.387
42	4.50	51.0	63.0	16.8	.169	29.5	.215	61.0	.463
48	5.00	58.0	70.0	18.5	.200	33.0	.254	68.0	.545
54	5.50	65.0	77.0	20.3	.234	36.5	.296	75.0	.632
60	6.00	72.0	84.0	22.0	.270	40.0	.341	82.0	.724

SCHEDULE FOR CONCRETE CRADLE, CONCRETE ARCH, AND CONCRETE ENCASEMENT FOR STORM SEWERS

STANDARDS FOR SETTING LINE AND GRADE FOR SEWER CONSTRUCTION:

- STAKES, SPIKES, SHINERS, OR CROSSES SET BY TRANSIT AT THE SURFACE ON AN OFFSET FROM THE SEWER CENTER LINE.
- STAKES ARE TO BE SET IN THE TRENCH BOTTOM ON THE SEWER LINE AS THE ROUGH GRADE FOR SEWER IS COMPLETED.
- ELEVATIONS GIVEN TO THE FINISHED TRENCH GRADE AND SEWER INVERT, WHILE SEWER LAYING PROGRESSES.

STANDARD METHODS FOR TRANSFERRING LINE AND GRADE TO SEWER TRENCH BOTTOM:

- ELECTRONIC LASER EQUIPMENT-STAKING SHALL BE AT 25' INTERVALS FOR THE FIRST 100' AND EVERY 100' THEREAFTER UNTIL THE NEXT MANHOLE IS REACHED.
- BATTER BOARDS AND BATTER BOARD SUPPORTS-STAKING SHALL BE EVERY 25'.

NO.	DATE	REVISION	BY	APP'D
2	March 2013	Mod. Pvmnt. Place. Sch. & Bedding Armt.	DHS	SB
1	Feb. 2008	Mod.Pvmnt.Sch. and Cradle, Arch. & Encose	DHS	SB

DRAWN BY: *rm/mc*
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STANDARD DETAILS

STORM SEWER DETAILS (DT-008)

DATE: Month_Year
SHEET: X of X
PROJ: X-XXXXXX