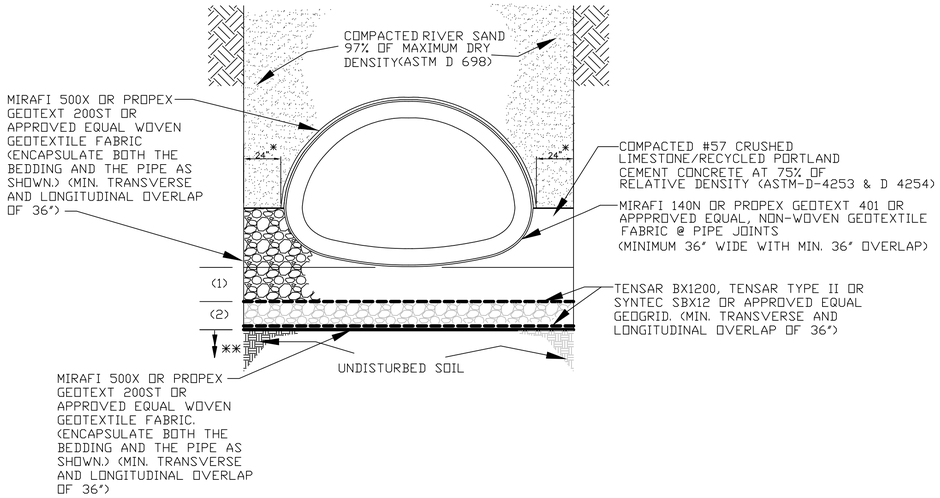
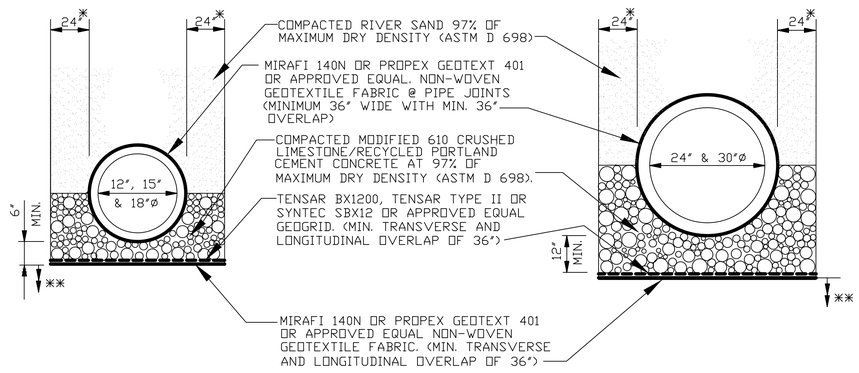


TYPICAL CONCRETE DRAINAGE PIPE TRENCH DETAIL

(36"-72" RCP) AND [42"-96" RCPA]
N.T.S.



SMALL (RCP) & [RCPA] PIPE TRENCH DETAILS

N.T.S.

(RCP) & [RCPA] MINIMUM *** BEDDING THICKNESS (in.)

		UNDISTURBED SUBGRADE NET ALLOWABLE SOIL BEARING CAPACITY (psf.)				
		300-400	401-500	501-600	601-700	>700
PIPE SIZE (RCP) (RCPA)	BEDING LAYER					
(36" & 42") [42" & 48"]	(1)	20"	18"	16"	14"	12"
	(2)	8"	8"	8"	8"	8"
TOTAL THICKNESS		28"	26"	24"	22"	20"
(48" & 54") [54" & 60"]	(1)	22"	20"	18"	14"	12"
	(2)	10"	10"	10"	10"	10"
TOTAL THICKNESS		32"	30"	28"	24"	22"
(60" & 72") [72",84"& 96"]	(1)	34"	30"	26"	16"	14"
	(2)	10"	10"	10"	10"	10"
TOTAL THICKNESS		44"	40"	36"	26"	24"

PIPE BEDDING LIMESTONE

57 LIMESTONE		
U.S. SIEVE	METRIC SIEVE	PERCENT PASSING
1½"	37.5 mm	100
1"	25 mm	95-100
½"	12.5 mm	25-60
#4	4.75 mm	0-10
#8	2.36 mm	0-5

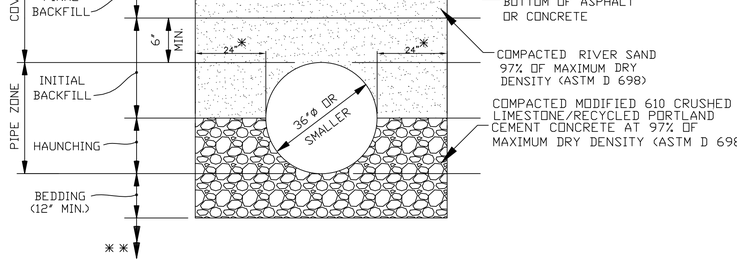
MODIFIED 610 LIMESTONE		
U.S. SIEVE	METRIC SIEVE	PERCENT PASSING
1½"	37.5 mm	100
1"	25 mm	90-100
¾"	19 mm	70-100
½"	12.5 mm	60-90
⅜"	9.5 mm	50-80
#4	4.75 mm	35-65
#40	425 μ m	12-32
#200	75 μ m	5-12

LEGEND:

(1) BEDDING LAYER

(RCP) REINFORCED CONCRETE CIRCULAR (ROUND) PIPE.

[RCPA] REINFORCED CONCRETE ARCH PIPE



PVC PIPE DRAIN LINE STANDARD TRENCH DETAIL

Approved PVC Pipes

- PVC SDR 35, ASTM D3034, ASTM D2321 (PIPE STIFFNESS = 46 PSI) (4"-15")
- PVC SDR 26, ASTM D3034, ASTM D2321 (PIPE STIFFNESS = 115 PSI) (4"-15")
- PVC PS46, ASTM F679, ASTM D2321 (PIPE STIFFNESS = 46 PSI) (18"-36")
- PVC PS115, ASTM F679, ASTM D2321 (PIPE STIFFNESS = 115 PSI) (18"-36")

MIN. COVER (PVC PIPE)	PAVEMENT TYPE
12"	CONCRETE
18"	ASPHALT
24"	NON-PAVED

FLEXIBLE PIPE MINIMUM COVER NOTES

- ADDITIONAL PRECAUTIONS MAY BE REQUIRED ON JOBSITES, TO PREVENT STRUCTURAL DAMAGE TO THE PIPE, WHERE CONSTRUCTION TRAFFIC IN EXCESS OF DESIGN LOAD WILL BE PRESENT. ADDITIONAL COMPACTED SOIL SHOULD BE MOUNDED OVER THE PIPE TO CREATE A SAFE COVER. THIS MOUND CAN THEN BE GRADED AT THE END OF CONSTRUCTION WHEN HEAVY TRAFFIC IS NO LONGER PRESENT.
- TO PREVENT FLOTATION, THE CONTRACTOR SHOULD BE MINDFUL OF THE NORMALWATER TABLE LEVEL AND RAIN EVENTS, GROUNDWATER OR RUNOFF WATER IN THE TRENCH DURING PIPE INSTALLATION. ADEQUATE DEWATERING IS REQUIRED IN THESE SITUATIONS.

NOTES:

*1. SIDE BEDDING WIDTH MAY BE REDUCED WITH JEFFERSON PARISH PROJECT ENGINEER'S APPROVAL. (FOR FLEXIBLE PIPES, THIS REDUCED WIDTH SHALL NOT BE LESS THAN 12" FOR PIPES SIZES 21" AND SMALLER, AND NOT LESS THAN 18" FOR PIPES SIZES 24"-36".)

2. THE DEPARTMENT OF ENGINEERING RESERVES THE RIGHT TO MODIFY PIPE BEDDING REQUIREMENTS IN ACCORDANCE WITH EXISTING FIELD CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

3. TRENCH SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. THE PARISH OR ITS REPRESENTATIVES RESERVE THE RIGHT TO REQUIRE THE CONTRACTOR TO MODIFY ANY PORTIONS OF SHORING SYSTEM DEEMED UNSAFE, BUT THE FINAL RESPONSIBILITY FOR THE WORKER'S SAFETY REMAINS WITH THE CONTRACTOR. TRENCH DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST OSHA STANDARDS AND REQUIREMENTS.

4. TIMBER SHEETING, IF USED, MUST REMAIN IN PLACE AND BE CUT OFF A MINIMUM OF 3 FEET BELOW FINISHED GRADE.

5. ALL CONCRETE PIPE SHALL BE A.S.T.M. C-76 (RCP) AND A.S.T.M. C-506 [RCPA], CLASS III, WALL B, REINFORCED CONCRETE PIPE WITH TYPE 2 JOINTS.

6. THE CONTRACTOR MUST REVIEW ALL DETAILS AND CHARTS INCLUDED ON THIS STANDARD DRAWING SHEET PRIOR TO BIDDING. FOR PIPES 36" AND LARGER, THE TRENCH DESIGN AND BEDDING THICKNESSES WILL VARY DEPENDING ON THE "UNDISTURBED SUBGRADE NET ALLOWABLE SOIL BEARING CAPACITY" VALUE. THE "DESCRIPTION SECTION" OF "TECHNICAL SPECIFICATIONS" FOR "CULVERTS AND STORM DRAINS" MUST REFERENCE THIS JEFFERSON PARISH STANDARD DRAWING AND MUST PROVIDE THE ""UNDISTURBED SUBGRADE NET ALLOWABLE SOIL BEARING CAPACITY". VALUE.

**7 WHERE GROUND WATER OR AN UNSTABLE TRENCH BOTTOM EXISTS, THE TRENCH BOTTOM SHALL BE STABILIZED (ASTM D2321) TO PROVIDE A WORKING PLATFORM. REMOVE MUCK OR OTHER SOFT MATERIAL, TREE ROOTS, AND/OR ANY OTHER UNDESIRABLE MATERIAL FROM THE TRENCH BOTTOM TO A DEPTH NECESSARY TO ESTABLISH A FIRM FOUNDATION.

***8. GEOTECHNICAL REPORT'S RECOMMENDATIONS FOR PIPE BEDDING, IF MORE STRINGENT, SHALL SUPERSEDE THESE MINIMUM THICKNESSES.

9. (WITH JEFFERSON PARISH APPROVAL) IF EXCESSIVE GROUND WATER IS PRESENT IN THE TRENCH, THE CONTRACTOR MAY USE "57 LIMESTONE" INSTEAD OF THE "MODIFIED 610 LIMESTONE". IN THIS CASE BOTH THE 57 LIMESTONE AND THE PIPE SHALL BE ENCAPSULATED WITH "MIRAFI 500X OR PROPEX GEOTEXT 200ST OR APPROVED EQUAL", WOVEN GEOTEXTILE FABRIC.

JEFFERSON PARISH
DEPARTMENT OF ENGINEERING

DRAWING TITLE
TYPICAL (RCP), (RCPA) & (PVC) PIPE TRENCH DETAILS

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