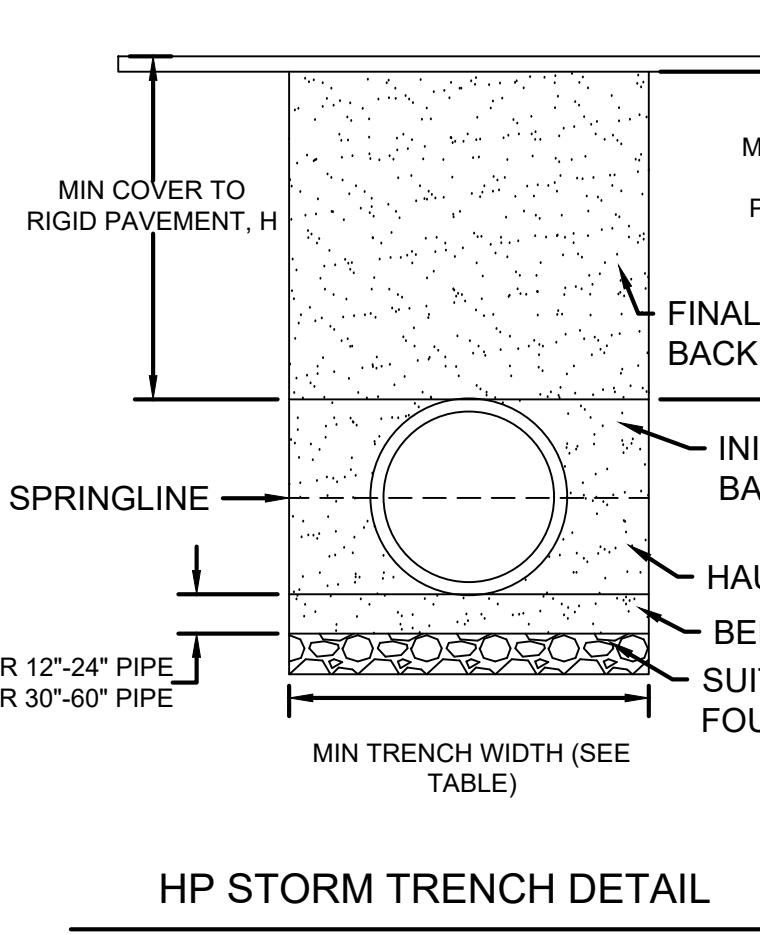


TYPICAL CONCRETE DRAINAGE PIPE TRENCH DETAIL

(36"-72" RCP) AND (42"-96" RCPA)

N.T.S.



HP STORM TRENCH DETAIL

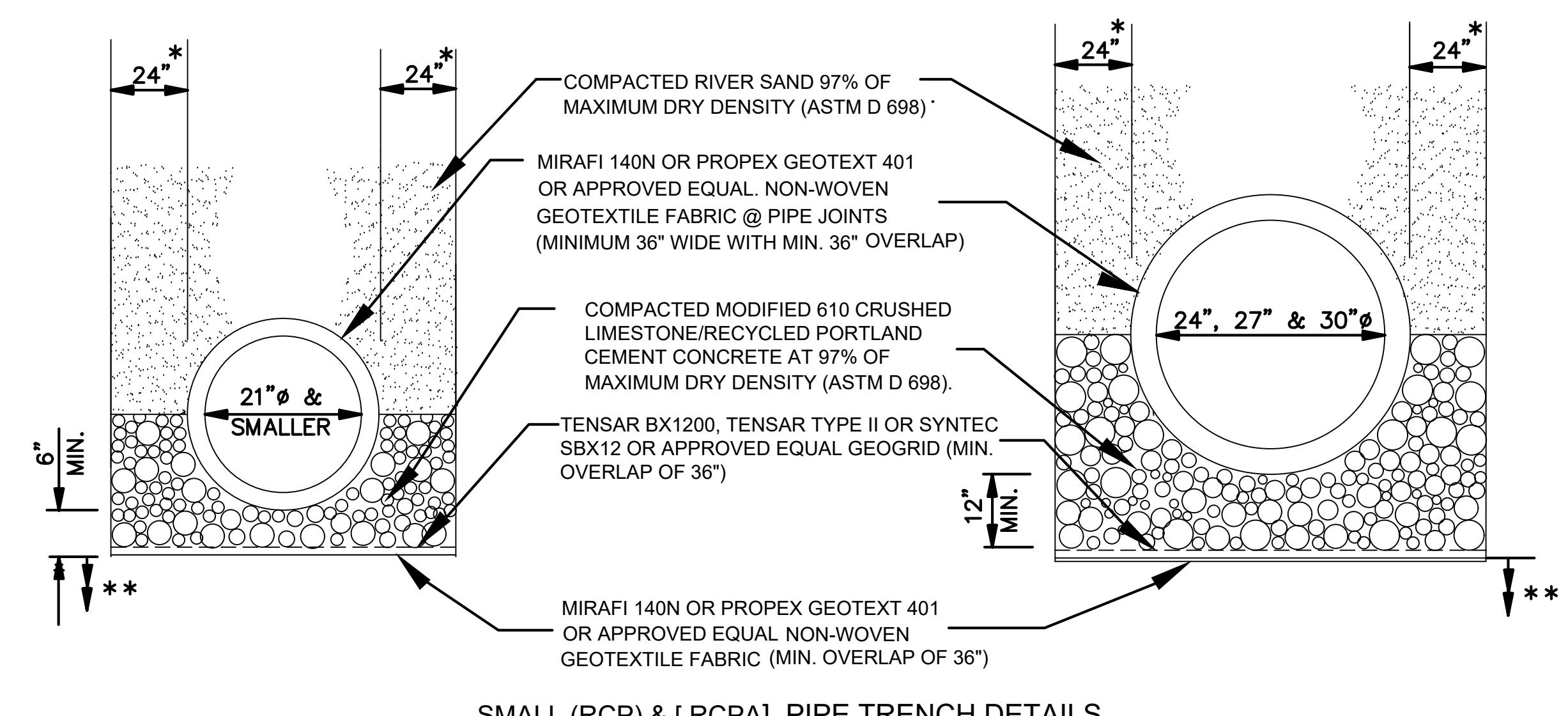
RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITIONS	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD)*
12"-48"	12"	48"
60"	24"	60"

VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER



SMALL (RCP) & (RCPA) PIPE TRENCH DETAILS

N.T.S.

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

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

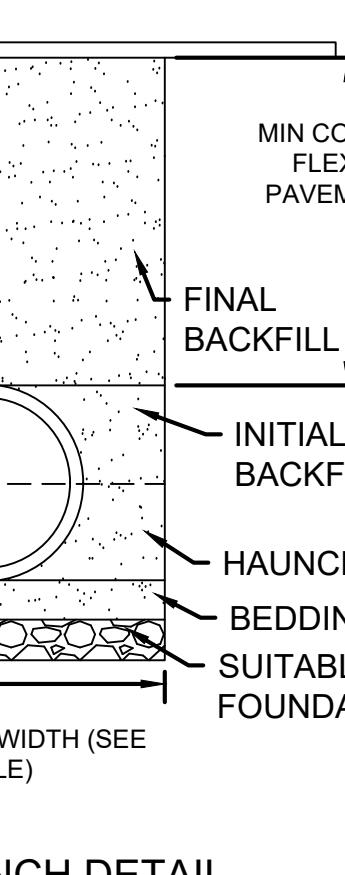
NOTES:

- 1. SIDE BEDDING WIDTH MAY BE REDUCED WITH ST BERNARD'S PARISH PROJECT ENGINEER'S APPROVAL.
- 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 ST BERNARD 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.

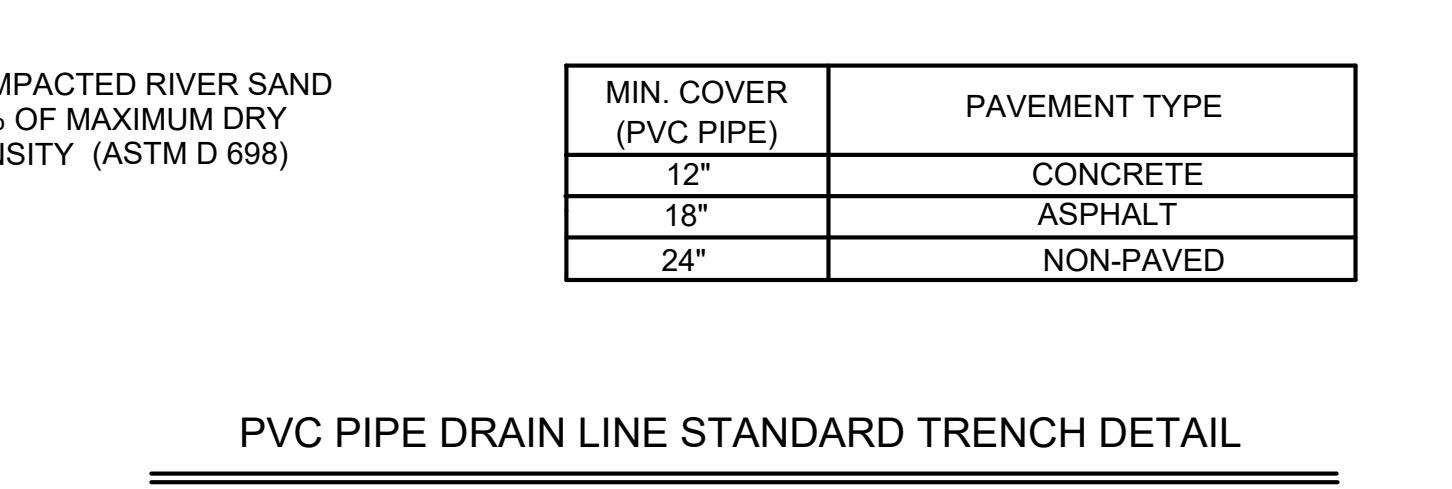
LEGEND:
(1) BEDDING LAYER
(RCP) REINFORCED CONCRETE CIRCULAR (ROUND) PIPE.
[RCPA] REINFORCED CONCRETE ARCH PIPE

57 LIMESTONE		
U.S. SIEVE	METRIC SIEVE	PERCENT PASSING
1/2"	37.5 mm	100
1"	25 mm	95-100
1/2"	12.5 mm	25-60
#4	4.75 mm	0-10
#8	2.36 mm	0-5

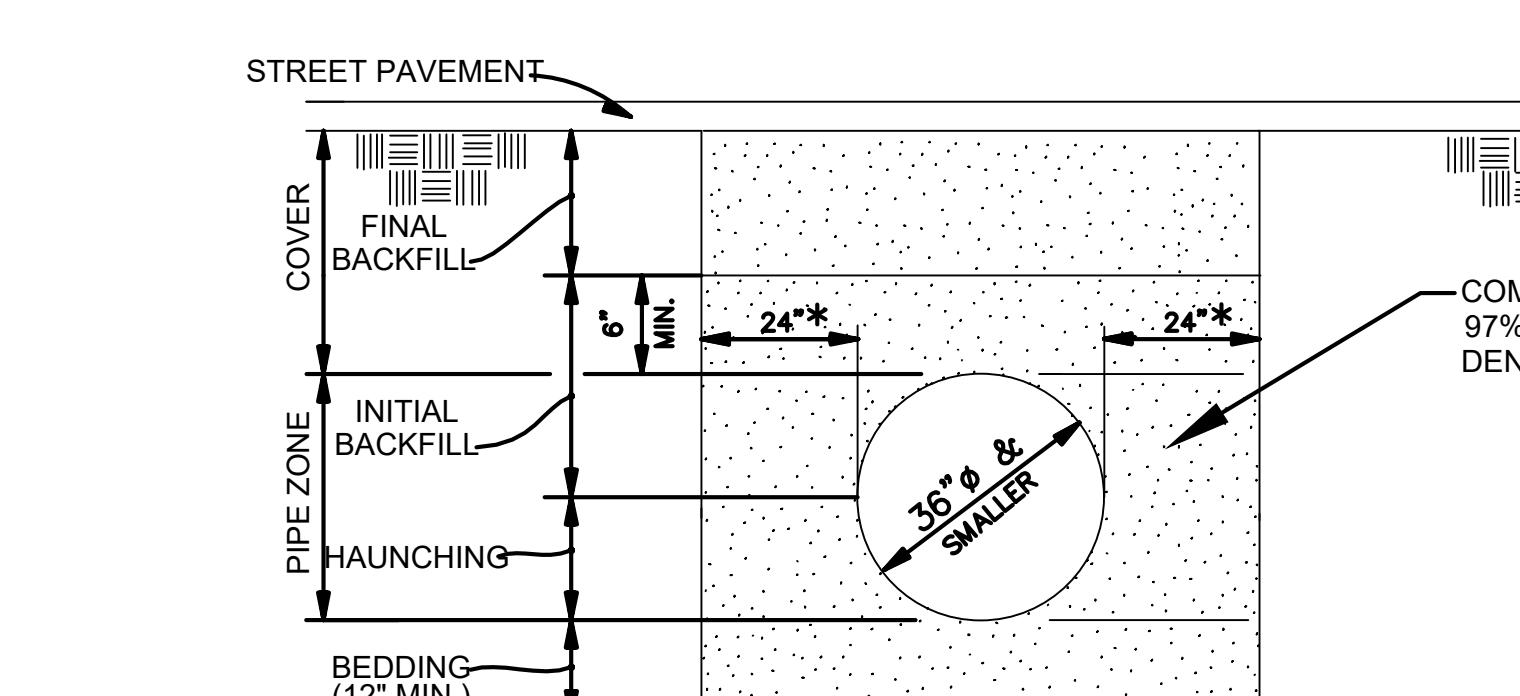
MODIFIED 610 LIMESTONE		
U.S. SIEVE	METRIC SIEVE	PERCENT PASSING
1/2"	37.5 mm	100
1"	25 mm	90-100
1/2"	19 mm	70-100
1/2"	12.5 mm	60-90
1/8"	9.5 mm	50-80
#4	4.75 mm	35-65
#40	425 μ m	12-32
#200	75 μ m	5-12



PVC PIPE DRAIN LINE STANDARD TRENCH DETAIL



PVC PIPE DRAIN LINE STANDARD TRENCH DETAIL
FOR A-2000, CORR-21, AND ULTRA CORR PVC PIPE (ASTM F-794 AND ASTM D2321) N.T.S.



DATE DRAWN BY
SCALE:
FILENAME:
S:\Public Works Shared\St. Bernard Standard Details

ST. BERNARD PARISH GOVERNMENT
STANDARD DETAIL PLANS
DRAIN LINE BEDDING AND BACKFILL DETAILS

APPROVED BY
DRAWING NUMBER
SD - 8
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