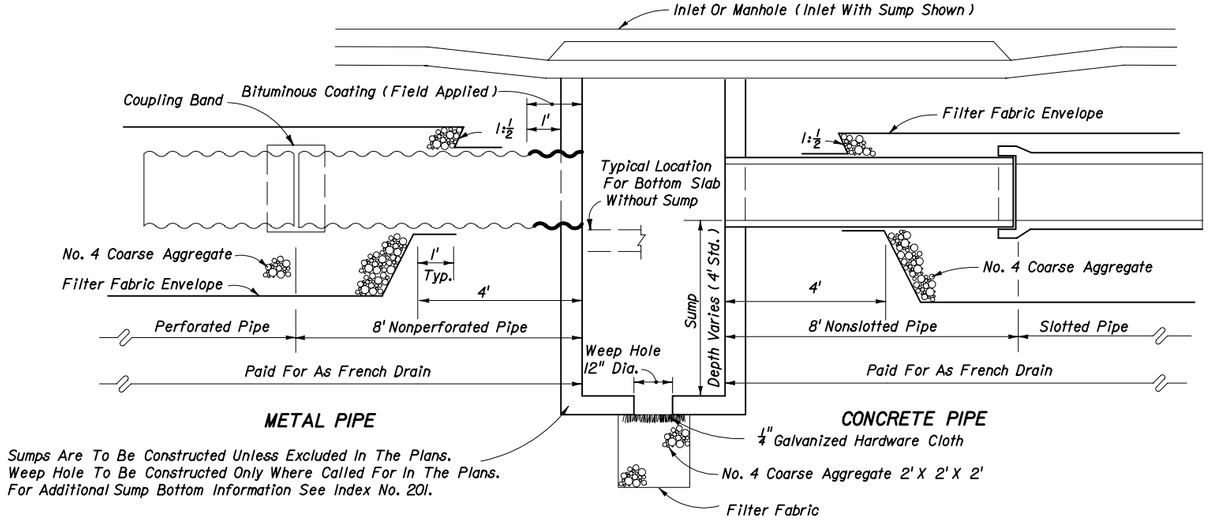


Sumps Are To Be Constructed Unless Excluded In The Plans.
Weep Hole To Be Constructed Only Where Called For In The Plans.
For Additional Sump Bottom Information See Index No. 201.

LONGITUDINAL SECTION

GENERAL NOTES

1. Pipe shall be any of the optional types permitted in Section 443 of the Specifications unless otherwise restricted in the plans. Dissimilar types of pipe will not be permitted in a continuous run of pipe.
2. Concrete pipe shall be placed with the slots positioned on sides.
3. Alignment joints are standard (gaskets not required). Recorrugation of metal pipe ends not required.
4. The contractor may submit other methods of providing slots having equal or greater area of opening, for approval by the Engineer.
5. Filter fabric shall be Subsurface Drainage type meeting the requirements of Section 985. All filter fabric joints shall lap a minimum of one (1) foot.
6. The standard cross section shall be constructed unless other section(s) described or detailed in the plans.
7. For supplemental details see Index No. 280.
8. The contractor shall take the necessary precautions to prevent contamination of the trench with sand, silt and foreign materials.
9. French drains following the typical cross section shall be paid for under the contract unit price for French Drains, LF. The unit price shall include the cost of pipe, pipe plugs, pipe fittings, coarse aggregate and filter fabric in place, and the cost for trench excavation, backfill and compaction. The unit price shall also include the cost for disposal of surplus excavated materials and cost for restoration of pavement removed or damaged by french drain construction, but shall not include payments for items paid for elsewhere.

   French drains with a significantly different cross section shall be paid for under the contract unit prices for separate items as follows:

   (a) Slotted or Perforated Pipe Culvert, LF. Unit price shall include cost for pipe, pipe plugs and fittings in place.

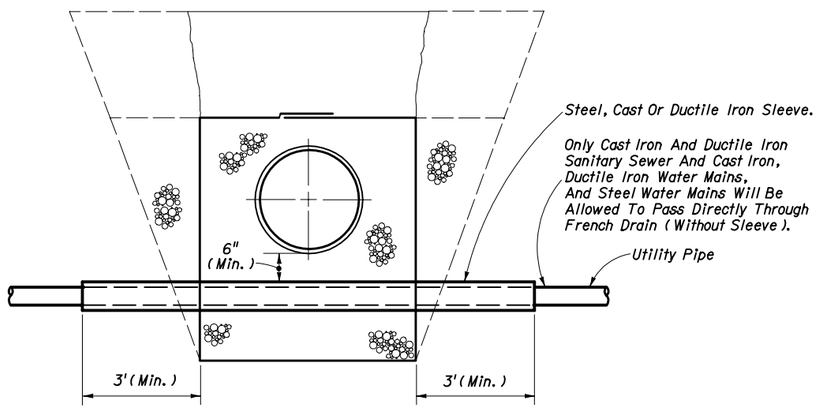
   (b) Ballast Rock (French Drain Aggregate), CY. Unit price shall include cost for coarse aggregate in place, and cost for trench excavation, backfill and compaction. The unit price shall also include the cost for disposal of surplus excavated materials and cost for restoration of pavement removed or damaged by french drain construction, but shall not include payment for items paid for elsewhere.

   (c) Plastic Filter Fabric (Subsurface), SY. Unit price shall be for cost of fabric in place. Quantity shall be determined by plan neat dimensions of the fabric envelope.

DESIGN NOTES

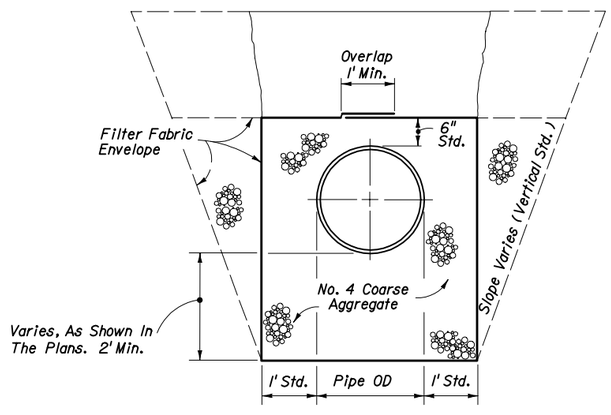
1. Pipe invert should be at or above the water table whenever possible.
2. French drains with minor dimensional changes or otherwise different from the standard cross-section shall be either described or detailed in the plans.

   French drains with significantly different cross-sections shall be detailed in the plans.



ROUND PIPE SHOWN

UTILIITY PIPES THRU FRENCH DRAIN



ROUND PIPE SHOWN

STANDARD CROSS SECTION (ENLARGED)

FRENCH DRAIN SYSTEM

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FRENCH DRAIN

	Names	Dates
Designed By	MPS	09/83
Drawn By	RWR	09/83
Checked By	EGR	09/83

Approved By _____
State Drainage Engineer

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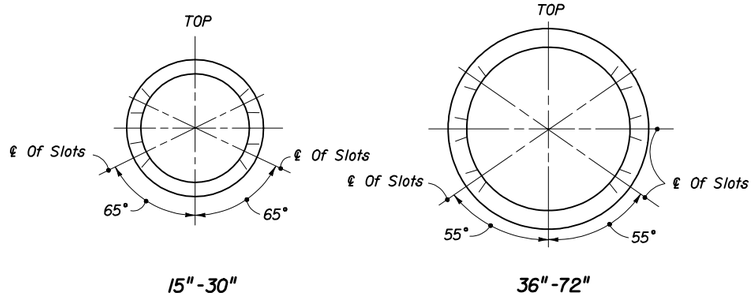
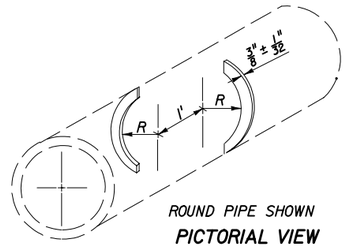


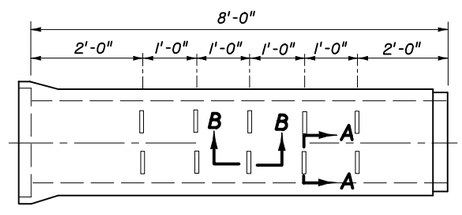
15"-30" 36"-72"

ELLIPTICAL PIPE		
Pipe Size	Slot Cut Opening c	
	Min.	Max.
14"x23"	10"	12"
19"x30"	14"	16"
24"x38"	14"	16"
29"x45"	20"	22"
34"x53"	20"	22"
38"x60"	20"	22"

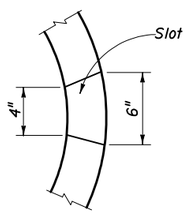
ROUND PIPE		
Pipe Size	Slot Cut Opening c	
	Min.	Max.
15"	12"	14"
18"	12"	14"
24"	16"	18"
30"	16"	18"
36"	22"	24"
42"	22"	24"
48"	22"	24"
54"	24"	26"
60"	24"	26"
66"	24"	26"
72"	24"	26"



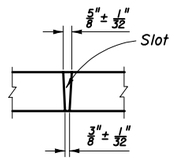
ROUND PIPE SHOWN
PICTORIAL VIEW



SIDE VIEW



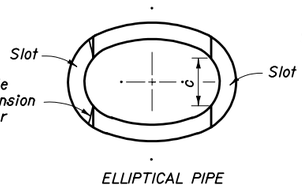
SECTION AA



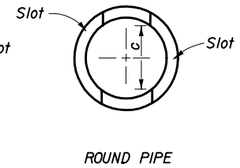
SECTION BB

OPTION A - ROUND PIPE

A curved cut is acceptable provided the control dimension is maintained (Typical For Elliptical & Round Pipe)

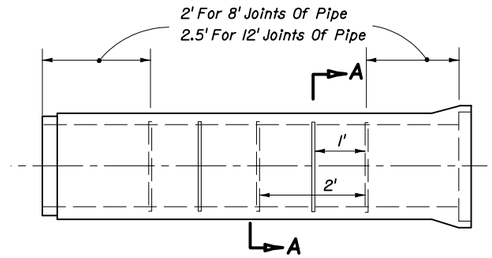


ELLIPTICAL PIPE



ROUND PIPE

SECTION AA



SIDE VIEW

OPTION B - ROUND OR ELLIPTICAL PIPE

SLOTTED PIPE OPTIONS

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

FRENCH DRAIN

	Names	Dates
Designed By		
Drawn By		
Checked By		

Approved By
State Drainage Engineer

Revision	Sheet No.	Index No.
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