

# ORIGINATION FORM

Proposed Revisions to a Standard Plans Index  
(Please provide all information – Incomplete forms will be returned)

## Contact Information:

Date: May 7, 2018  
Originator: Rick Jenkins  
Phone: (850) 414-4355  
Email: Rick.Jenkins@dot.state.fl.us

## Standard Plans:

Index Number: 443-001  
Sheet Number (s): 1 of 1  
Index Title: French Drain

## Summary of the changes:

Update and Reorganized Index. Removing language and moving it to the appropriate document (Specs, SPI...).

Re-writing language to be first person imperative.

## Commentary / Background:

### Other Affected Offices / Documents: (Provide name of responsible personnel)

- | Yes                                 | No                                  |  |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Other Standard Plans –                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | FDOT Design Manual –                   |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Basis of Estimates Manual –            |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Standard Specifications – Rick Jenkins |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Approved Product List –                |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Construction –                         |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Maintenance –                          |

### Origination Package Includes: (Email or hand deliver package to Derwood Sheppard)

- | Yes                                 | N/A                      |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups                          |
| <input type="checkbox"/>            | <input type="checkbox"/> | Proposed Standard Plan Instructions (SPI) |
| <input type="checkbox"/>            | <input type="checkbox"/> | Revised SPI                               |
| <input type="checkbox"/>            | <input type="checkbox"/> | Other Support Documents                   |

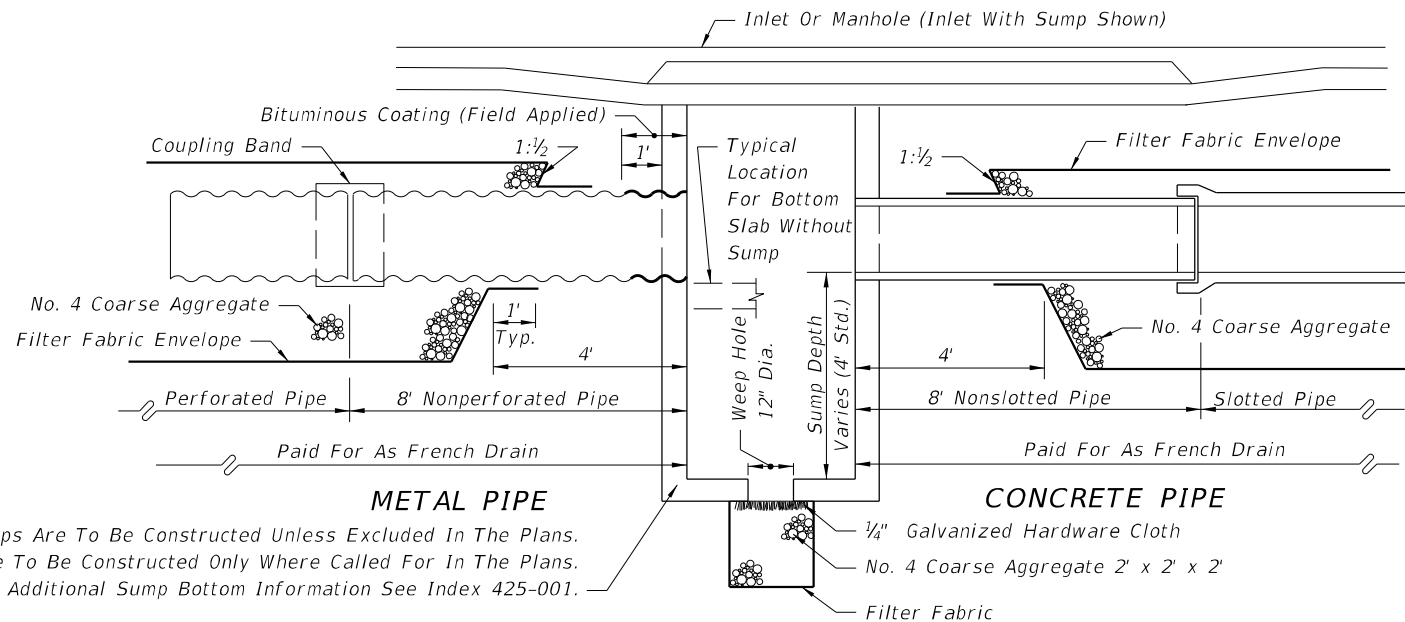
## Implementation:

- Design Bulletin (Interim)    DCE Memo    Program Mgmt. Bulletin    FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form

NEW SHEET 1 OF 3

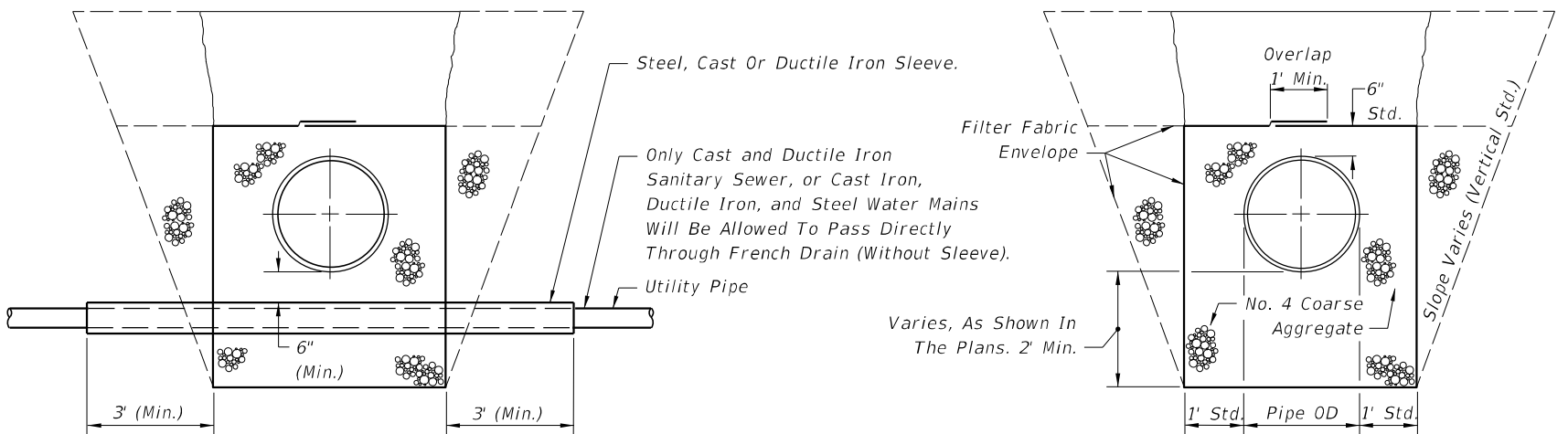
"GENERAL NOTES - TABLE OF CONTENTS - FRENCH DRAIN ASSEMBLY



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 425-001.

**LONGITUDINAL SECTION**

**SHEET 2 - UPDATED**



ROUND PIPE SHOWN  
UTILITY PIPES THRU FRENCH DRAIN

ROUND PIPE SHOWN  
STANDARD CROSS SECTION (ENLARGED)

**FRENCH DRAIN SYSTEM**

**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 Type D-3 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 430-001.
8. The contractor shall take the necessary precautions to prevent contamination of the trench with sand, silt and foreign materials.
9. French drains 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.


**MOVED TO SHEET 1 - UPDATED**

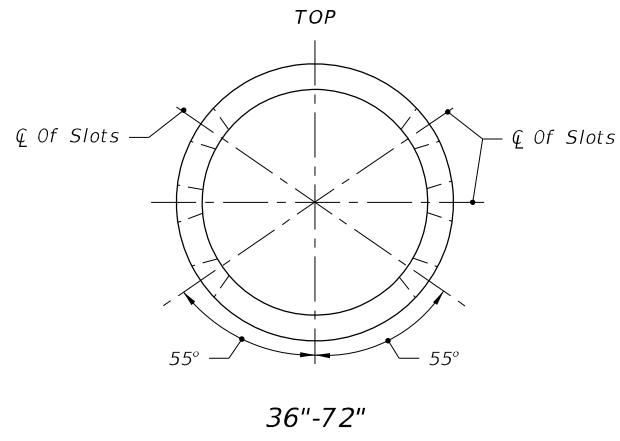
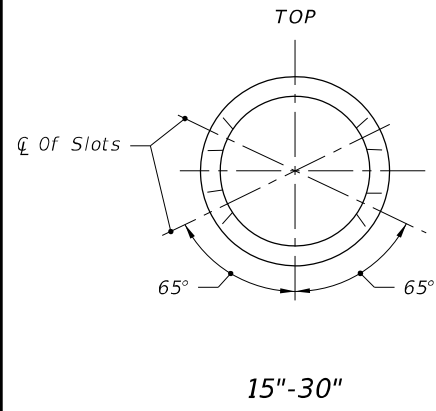
**DESIGN NOTES**

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.

**MOVED TO SPI OR SPECIFICATIONS**

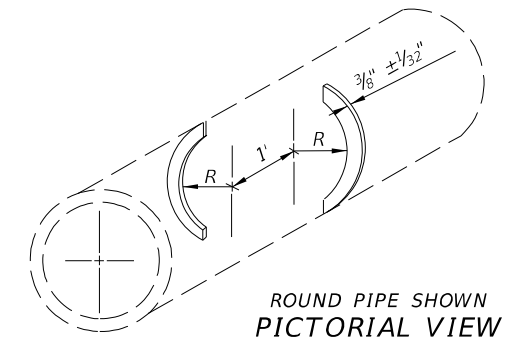
10/18/2018 10:57:11 AM

LAST REVISION 11/01/17	DESCRIPTION: 11/01/19	 FY 2019-20 STANDARD PLANS	FRENCH DRAIN	INDEX 443-001	SHEET 1 of 2
---------------------------	--------------------------	--	--------------	------------------	-----------------

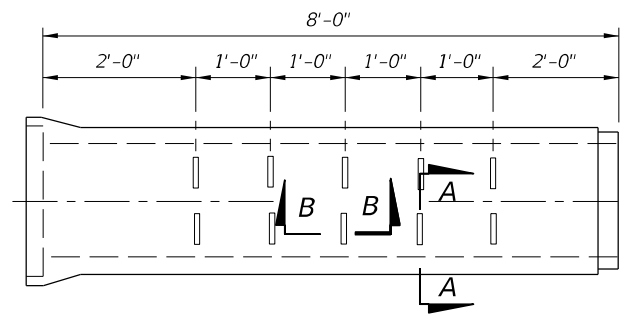


ELLIPTICAL PIPE		
Pipe Size	Slot Cut	
	Opening c	
	Min.	Max.
14"x23"	10"	12"
19"x30"	14"	16"
24"x38"	14"	16"
29"x45"	20"	22"
34"x53"	20"	22"
38"x60"	20"	22"

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"

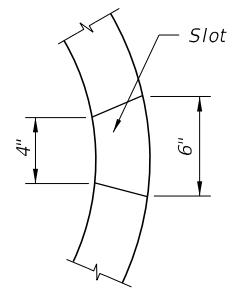


UPDATED SHEET

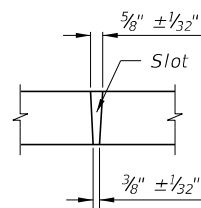


SIDE VIEW

OPTION A - ROUND PIPE

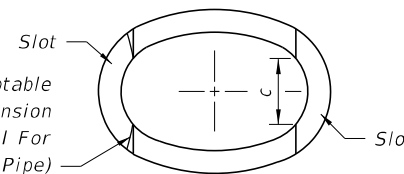


SECTION AA

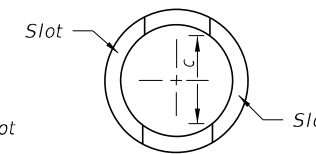


SECTION BB

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

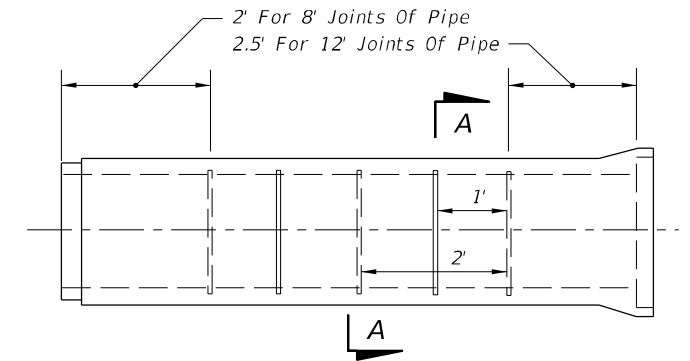


ELLIPTICAL PIPE



ROUND PIPE

SECTION AA



SIDE VIEW

OPTION B - ROUND OR ELLIPTICAL PIPE

SLOTTED PIPE OPTIONS

3 OF 3

10/18/2018 10:57:11 AM

LAST REVISION	DESCRIPTION:
11/01/17	
11/01/19	



FY 2019-20  
STANDARD PLANS

FRENCH DRAIN

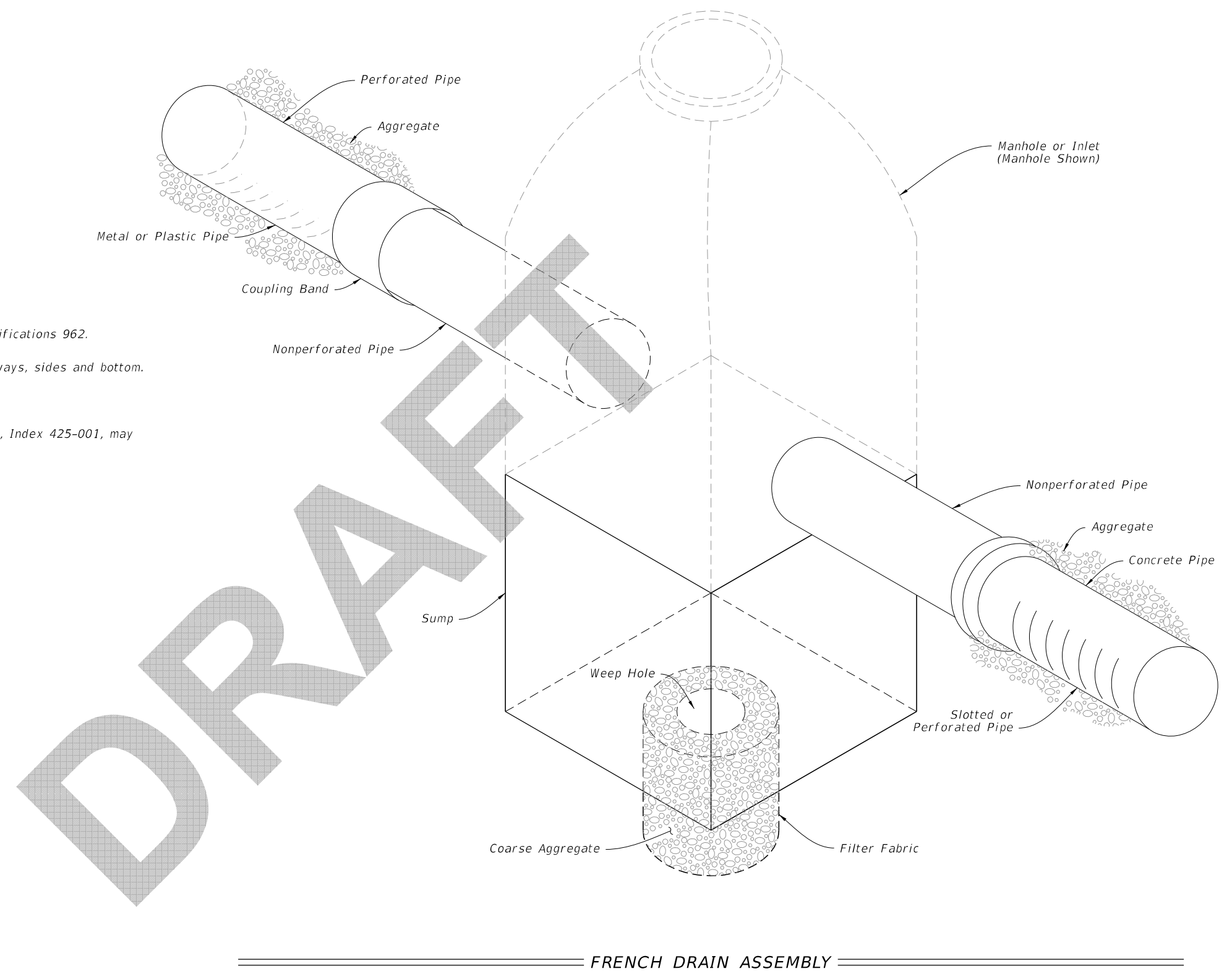
INDEX  
443-001

SHEET  
~~2 of 2~~

**GENERAL NOTES:**

1. Install light duty cast iron cover and frame in accordance with Specifications 962.
2. Use Class 1 concrete. Use No. 3 bars (Grade 60) on 8" centers both ways, sides and bottom.
3. Furnish covers with pick holes. Do not use fitted lifts or handles.
4. Manhole Type P Alternate A, Index 425-010, Type I Frame and Cover, Index 425-001, may be used in lieu of the box detailed in this Index.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Typical Inspection Box Installation
3	Typical Urban, Slope, and Top Adjustment Installations



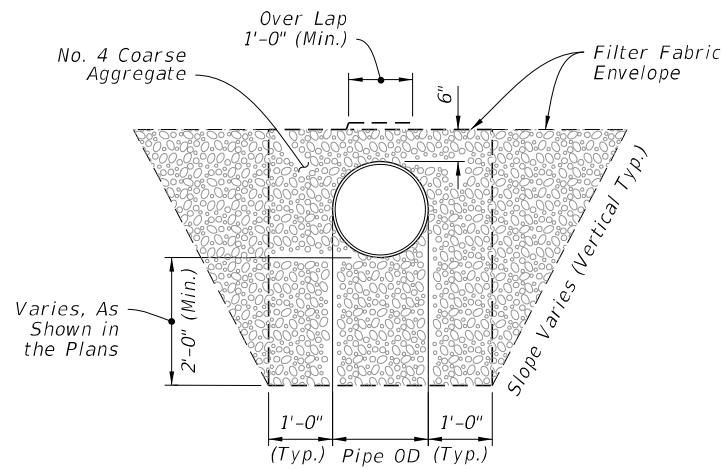
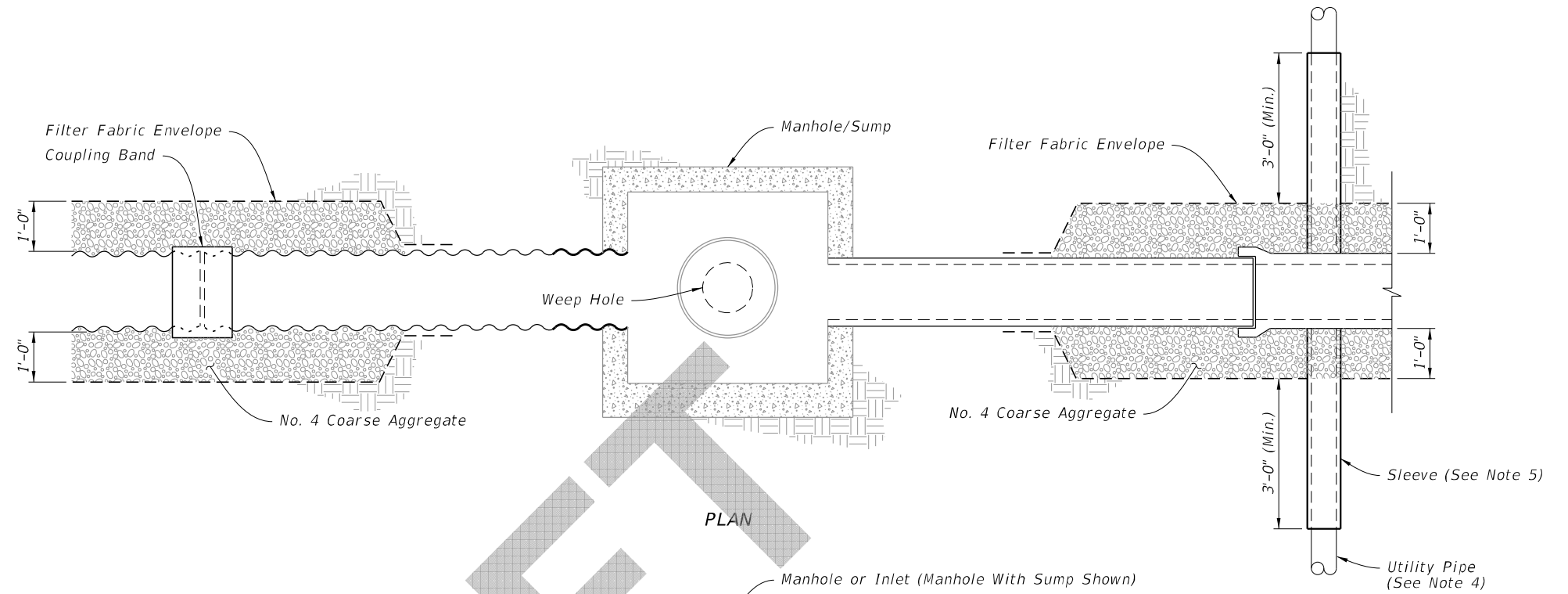
DRAFT

**FRENCH DRAIN ASSEMBLY**

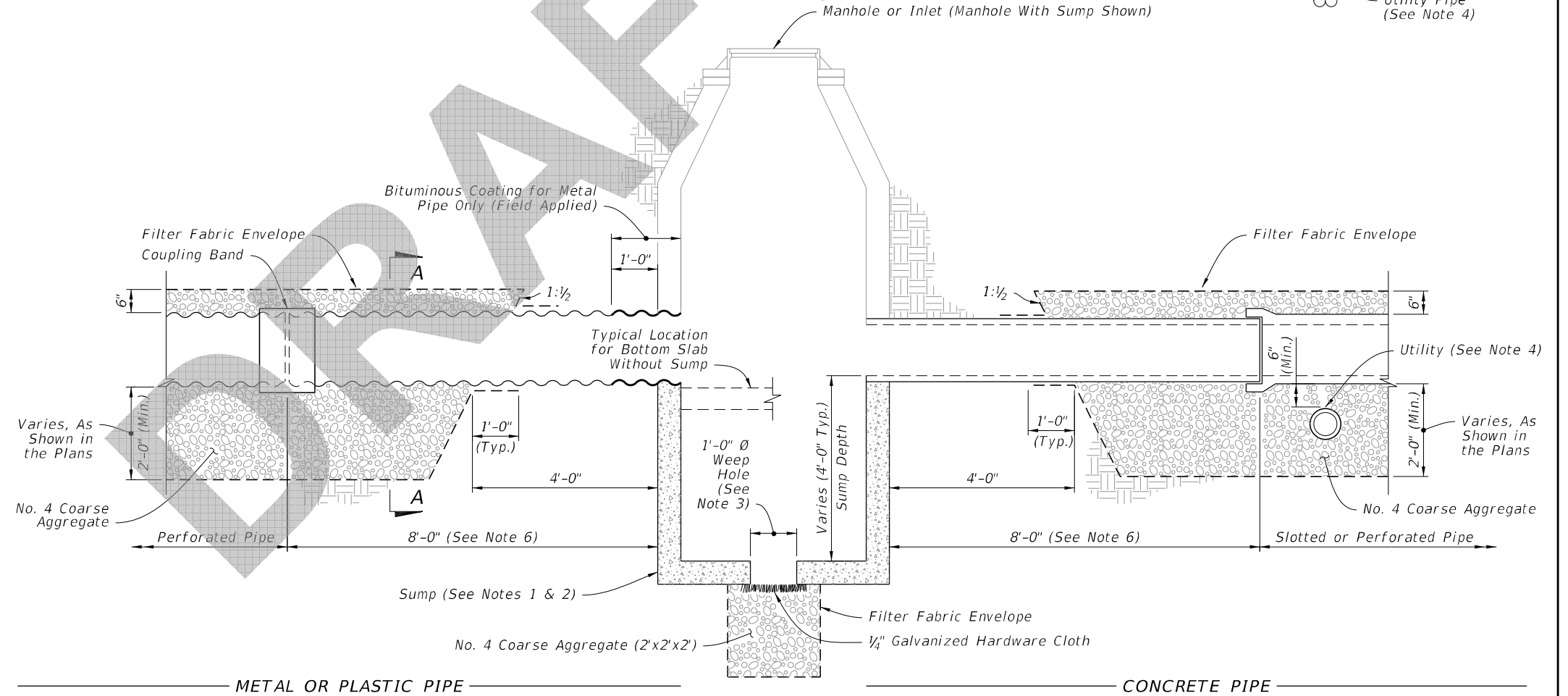
7/15/2019 11:39:01 AM

**NOTES:**

1. Construct sumps unless excluded in the Plans.
2. For additional sump bottom information see Index 425-001.
3. Construct weep holes only where called for in the Plans.
4. Only cast and ductile iron sanitary sewer, or cast iron, ductile and steel water mains will be allowed to pass directly through french drain (without sleeve).
5. Use only steel, cast or ductile iron sleeves.
6. No slots or perforations.



**SECTION A-A**



**ELEVATION**

**FRENCH DRAIN**  
(Round Pipe Shown)



**FY 2020-21  
STANDARD PLANS**

**FRENCH DRAIN**

**FRENCH DRAIN SYSTEM**

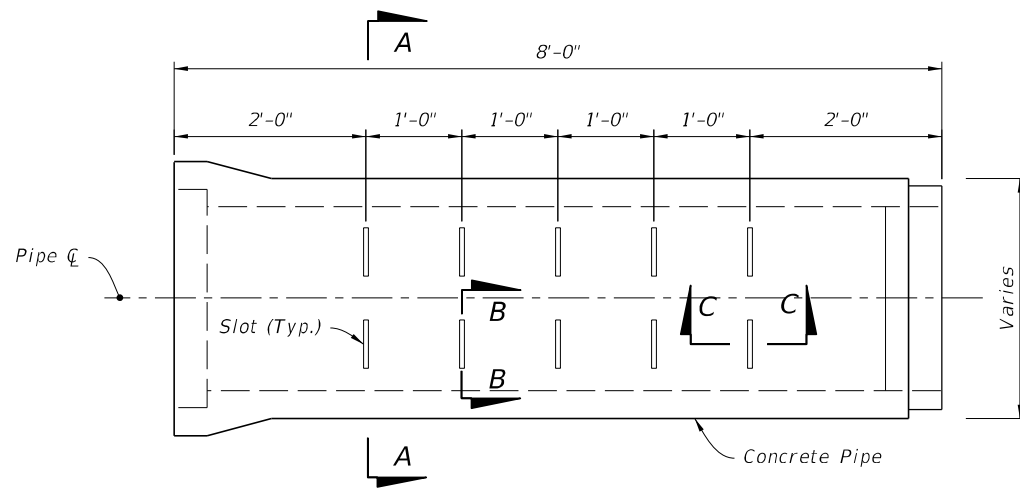
LAST REVISION  
11/01/19

DESCRIPTION:

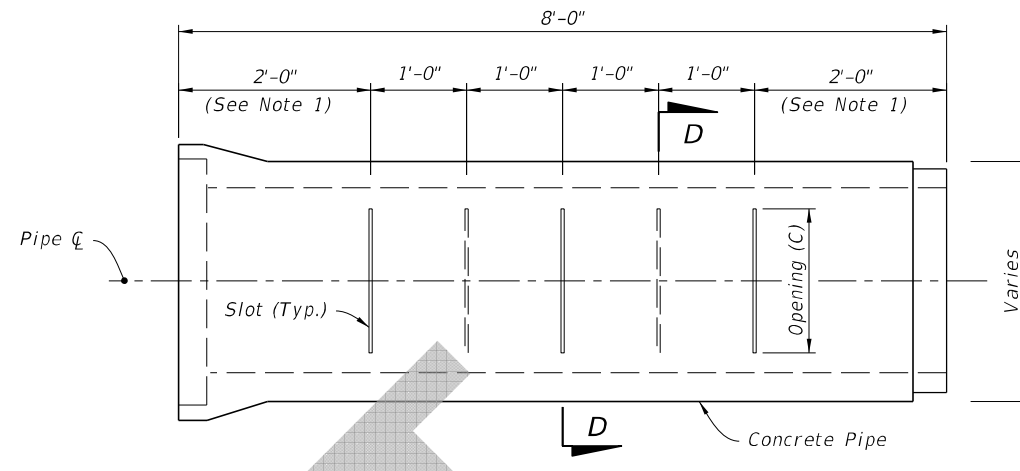
INDEX  
443-001

SHEET  
2 of 3

7/15/2019 11:39:02 AM



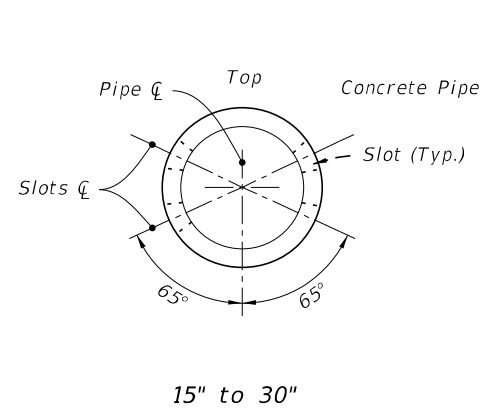
SIDE VIEW



SIDE VIEW

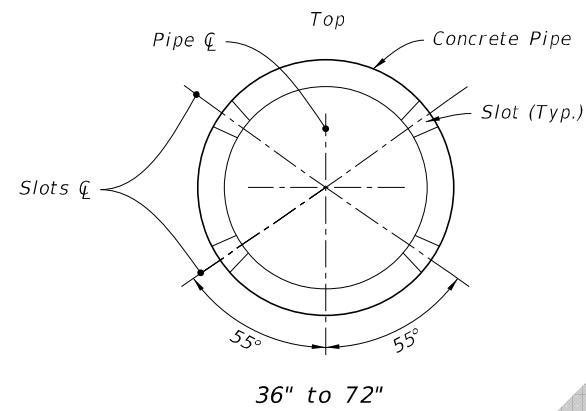
**NOTES:**

1. 2'-0" for 8'-0" joints of pipe;  
2'-6" for 12'-0" joints of pipe
2. A curved cut is acceptable provided the control dimension is maintained.

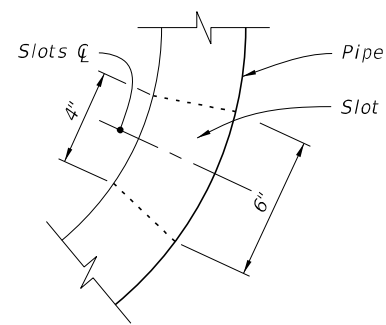


15" to 30"

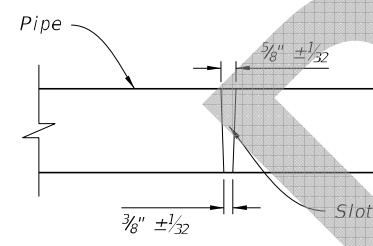
SECTION A-A



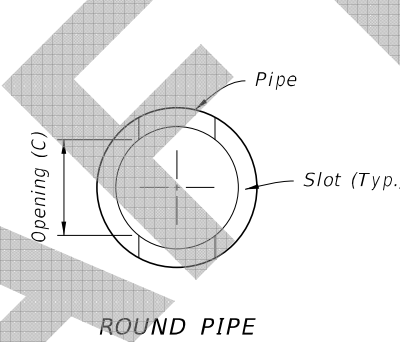
36" to 72"



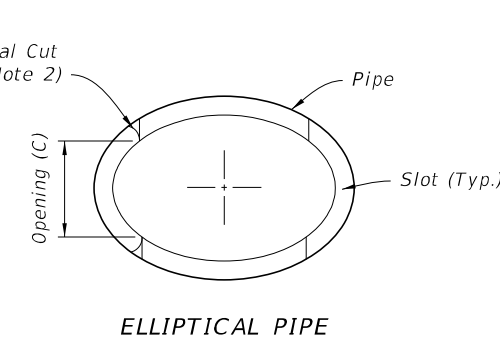
SECTION B-B



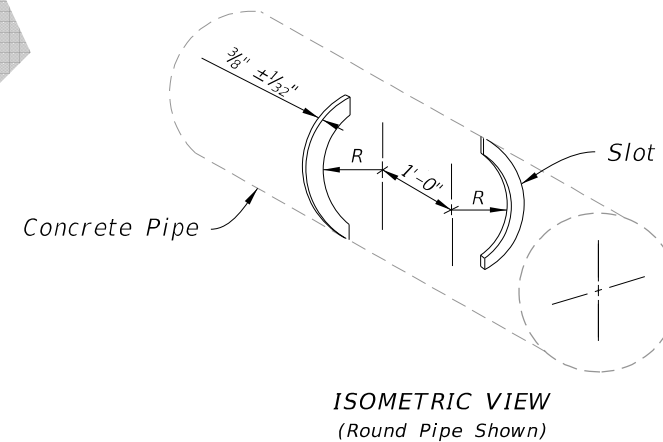
SECTION C-C



ROUND PIPE



ELLIPTICAL PIPE



ISOMETRIC VIEW  
(Round Pipe Shown)

SECTION D-D

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"

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"

OPTION A - ROUND PIPE

OPTION B - ROUND OR ELLIPTICAL PIPE

CONCRETE SLOTTED PIPE OPTIONS

7/15/2019 11:39:02 AM

LAST REVISION 11/01/19	REVISION	DESCRIPTION:		FY 2020-21 STANDARD PLANS	FRENCH DRAIN	INDEX 443-001	SHEET 3 of 3
---------------------------	----------	--------------	--	------------------------------	--------------	------------------	-----------------