
Index 425-054 Ditch Bottom Inlet Type J

ORIGINATION

Date: 11-1-19

Name: Tim Holley

Phone: 850 414-4117

Email: tim.holley@dot.state.fl.us

COMMENTARY

Reorganized Details and Sheets to declutter Index. Moved information from detail callouts to Notes in order to decrease clutter of the drawing. Moved design information to SPI.

COMMENTS AND RESPONSES

BLACK = Internal Review Comments **RED** = Standard Plans Response

Name: Missy Hollis

Date: 8-10-20

COMMENT: The term used in the Ditch Bottom Inlet indexes referring to either ditch pavement or inlet pavement around the inlet could be confusing, since Specification 524 pertains to ditch pavement. As the concrete surrounding the inlet is to be included in the cost of the inlet, it is recommended to change the term to “concrete apron” in order to differentiate that concrete from the pavement outlined in Specification 524.

RESPONSE: Agreed

Change made to Index: The index was revised to include concrete apron in the place of concrete ditch pavement.

Date: 8-24-2020

Name: Nathan Pulido

Date: 8-27-2020

COMMENT: 425-040 type-S section B-B refers to "grate elevation" and 425-041 and 425-054 refers to "Inlet elevation". Should be consistent throughout.

RESPONSE: Agreed

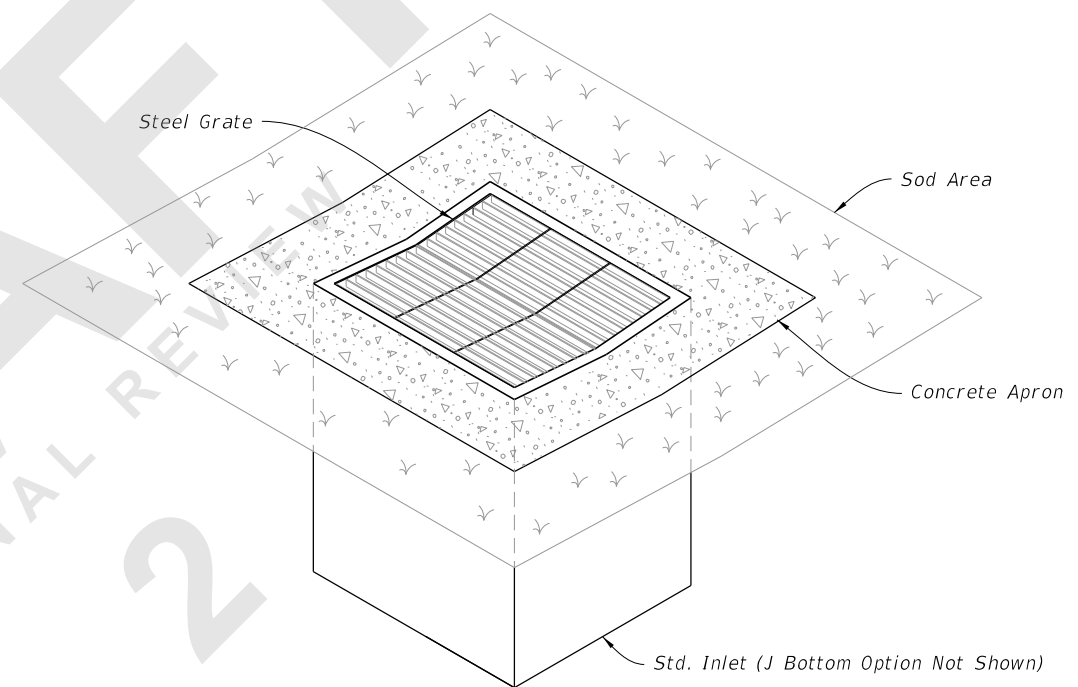
Change made to Index: Changed callouts in each index to “Sta./Offset Elev.” for uniformity.

Date: 8-28-2020

GENERAL NOTES:

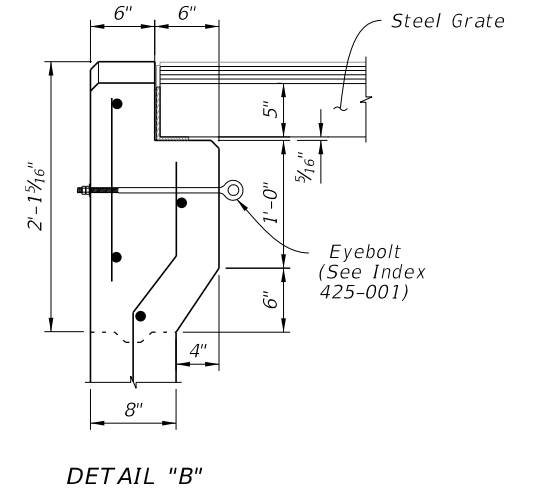
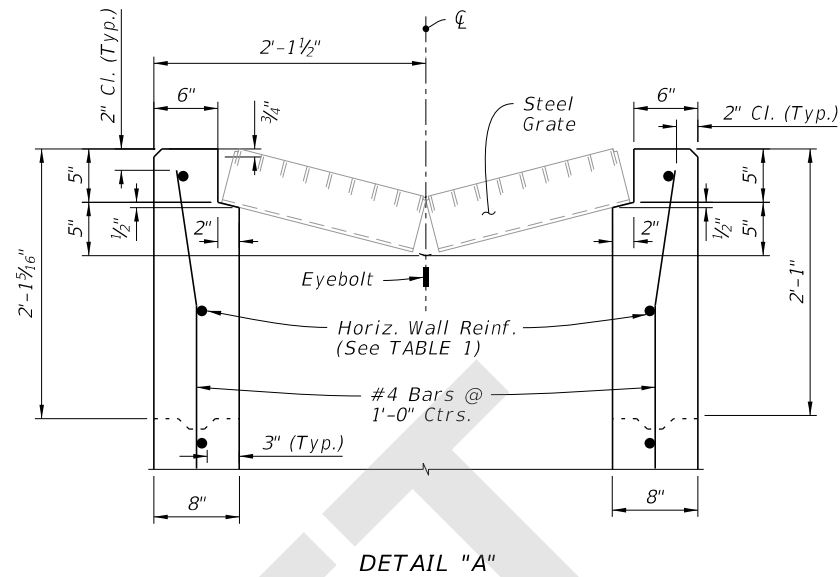
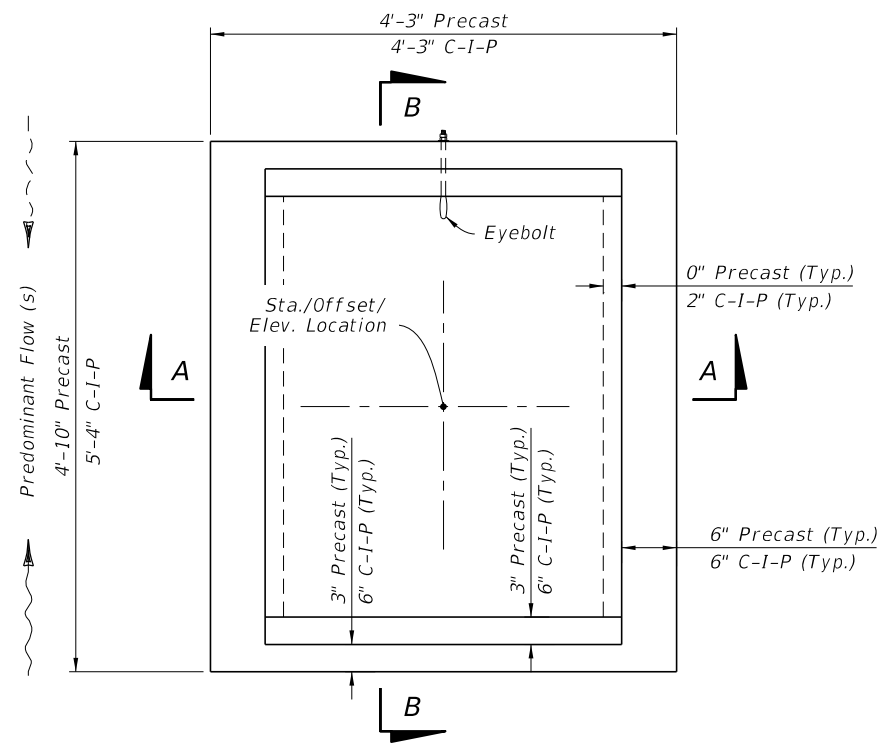
1. Work this Index with Index 425-001 and Index 425-010.
2. Reinforcing bars are Grade 60 bars with 2" minimum cover unless otherwise noted. See Index 425-001 for equivalent area of welded wire fabric. Cut or bend bars out of way of pipe when necessary; bars to clear pipe by 1½".
3. Chamfer all exposed edges and corners ¾" or tooled to ¼" radius.
4. Dimensions are for both precast and cast-in-place inlets unless otherwise noted.
5. Quantities are for informational and estimating purposes only.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Dimensional and Reinforcement Details
3	Grate, Concrete Apron, and Sodded Area Details
4	Alternate A Structure Bottom - Top Slab Details



===== DITCH BOTTOM INLET TYPE J =====
(Pipe Connection Not Shown)

8/28/2020 1:33:59 PM



CAST-IN-PLACE OPTION

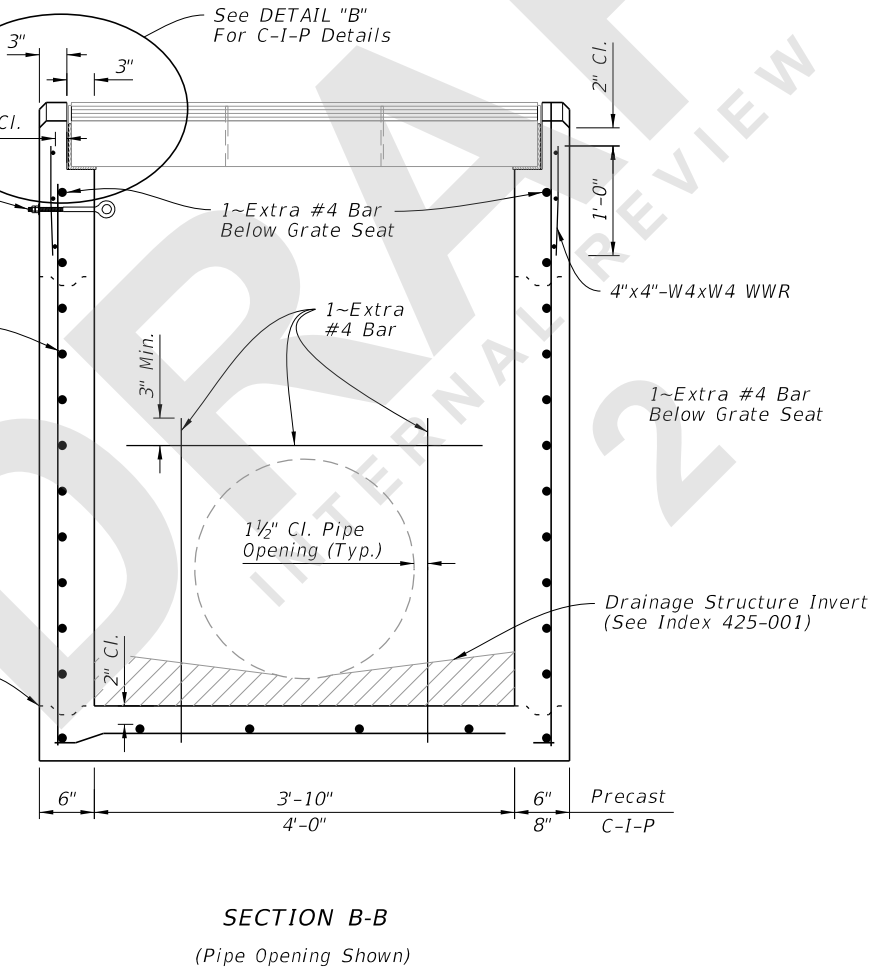
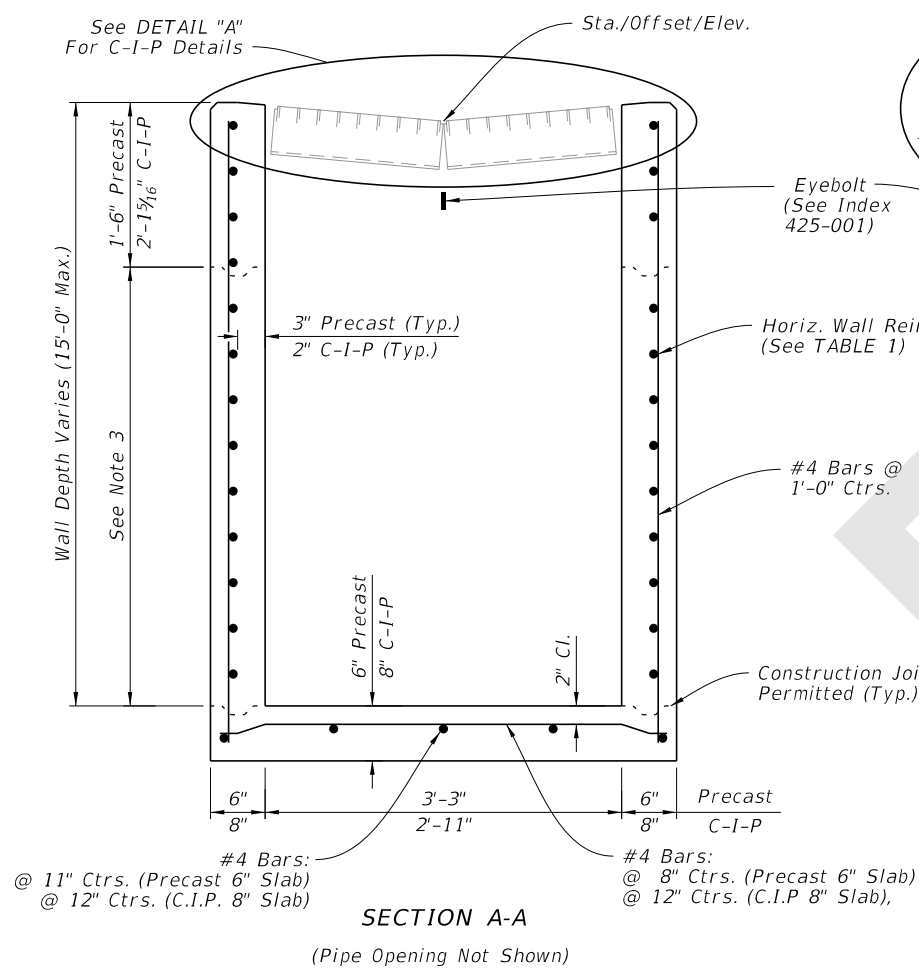


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWR
0' - 4'	A12	0.20	12"	8"
4' - 9'	A6	0.20	6"	5"
9' - 12'	A4	0.24	4"	3"
9' - 15'	B5.5	0.24	5 1/2"	5"

- NOTES:**
1. Grate, Concrete Apron, and Sod not shown in Plan View.
 2. See Sheet 3 for Concrete Apron and Sodded Area details.
 3. Construction joints permitted between these limits. See Index 425-001 for minimum dimensions.

DIMENSIONAL AND REINFORCEMENT DETAILS

DIMENSIONAL AND REINFORCEMENT DETAILS

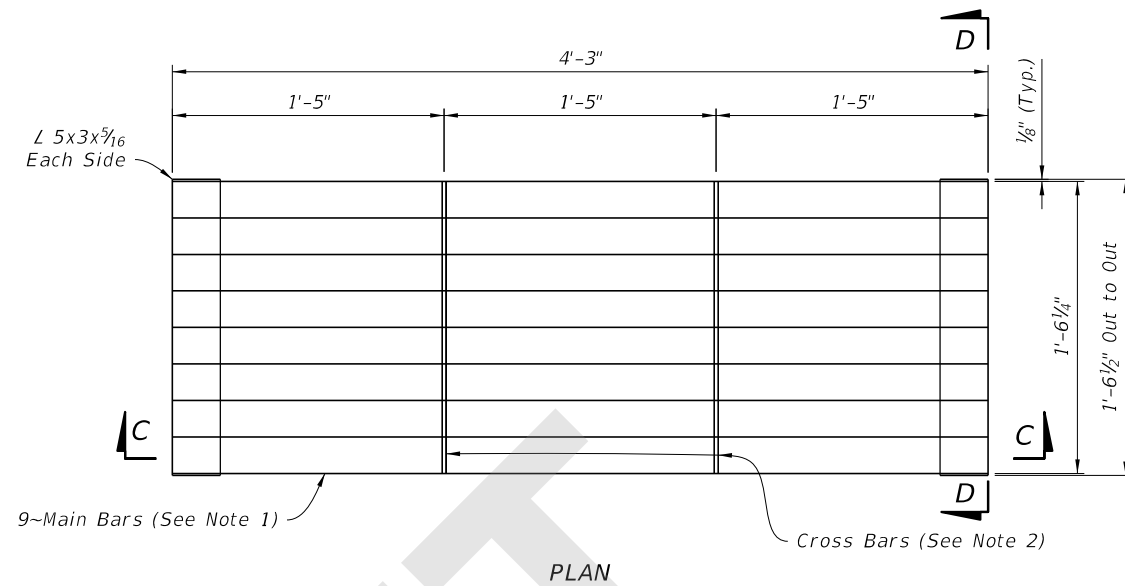
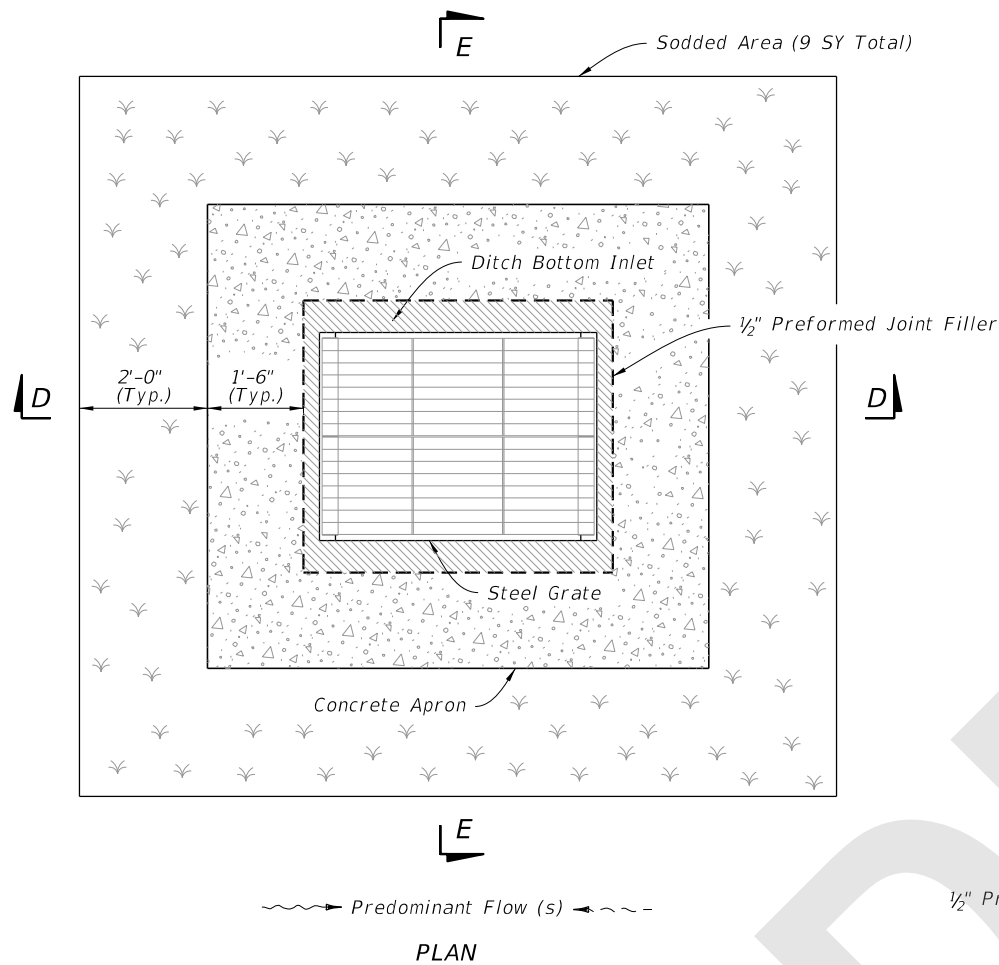
8/28/2020 1:34:01 PM

LAST REVISION 11/01/20	DESCRIPTION:
---------------------------	--------------

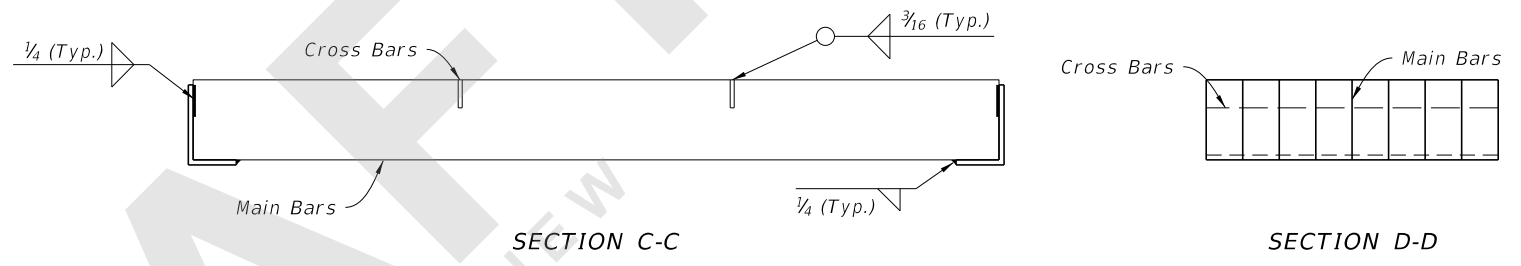
**FY 2021-22
STANDARD PLANS**

DITCH BOTTOM INLET TYPE J

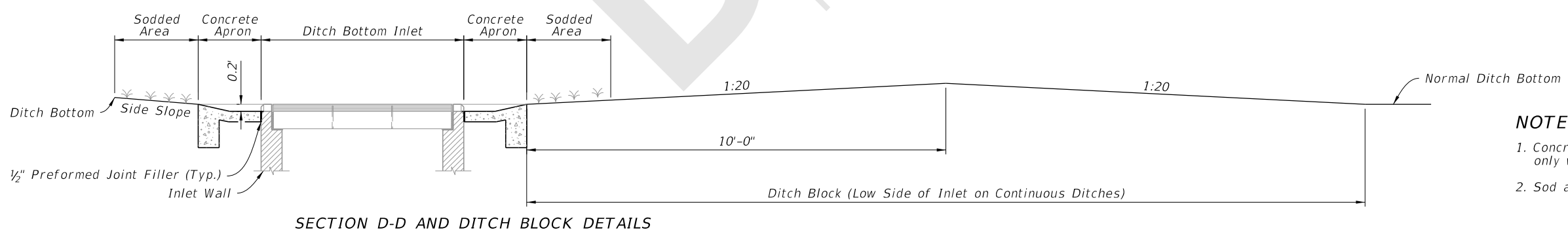
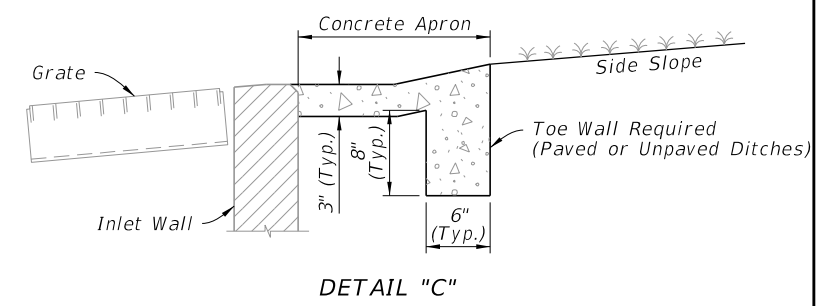
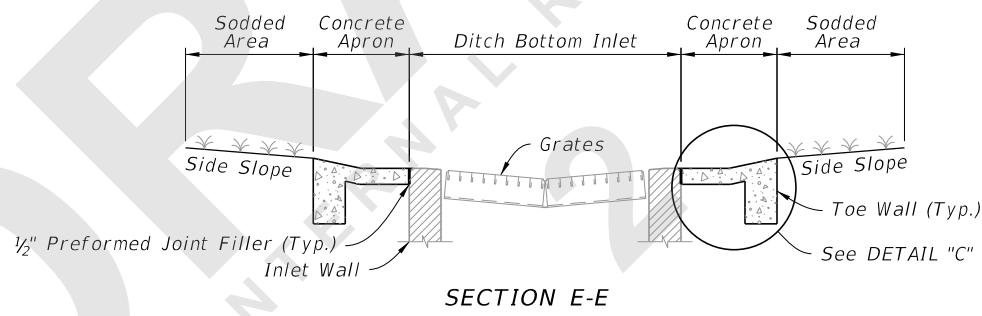
INDEX 425-054	SHEET 2 of 4
------------------	-----------------



- NOTES:**
1. Main Bars are 5"x $\frac{1}{4}$ " and are notched for Cross Bars.
 2. Cross Bars are 1 $\frac{3}{4}$ "x $\frac{1}{4}$ " and continuously welded at Main Bar Notches.
 3. Main Bars and Cross Bars are flush on top.



STEEL GRATE DETAIL



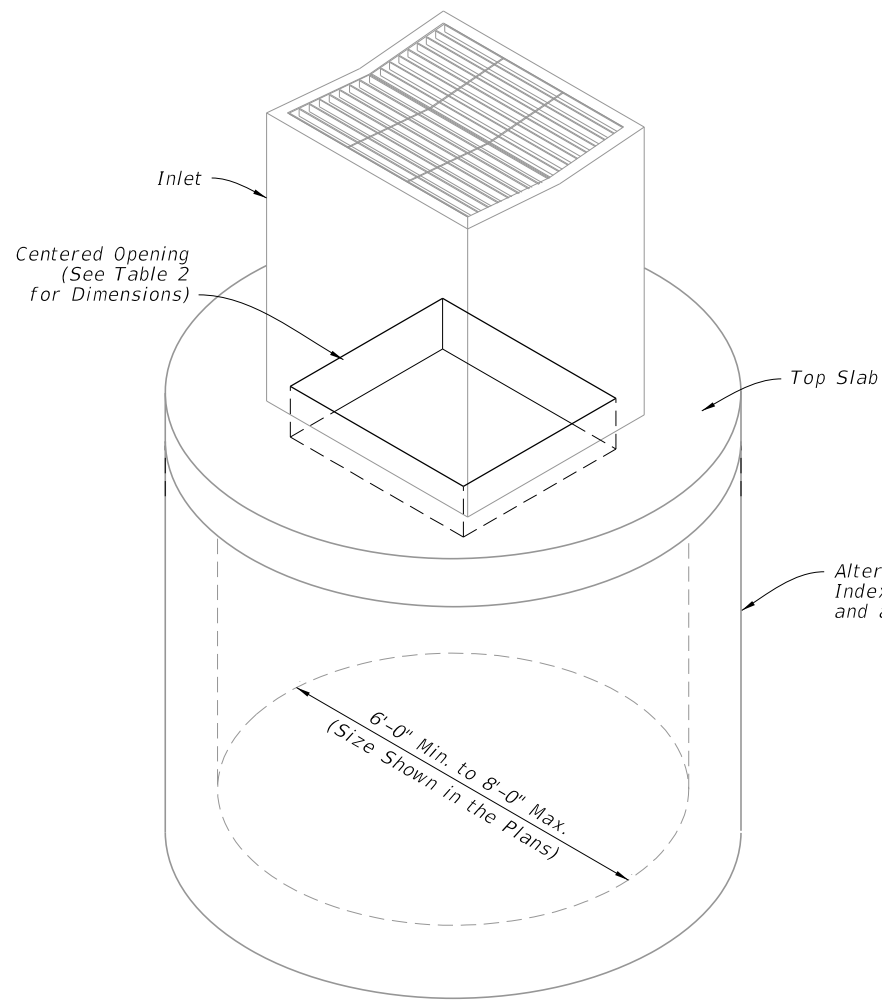
- NOTES:**
1. Concrete Ditch Pavement to be installed only where called for in the Plans.
 2. Sod always required.

CONCRETE APRON AND SODDED AREA DETAILS

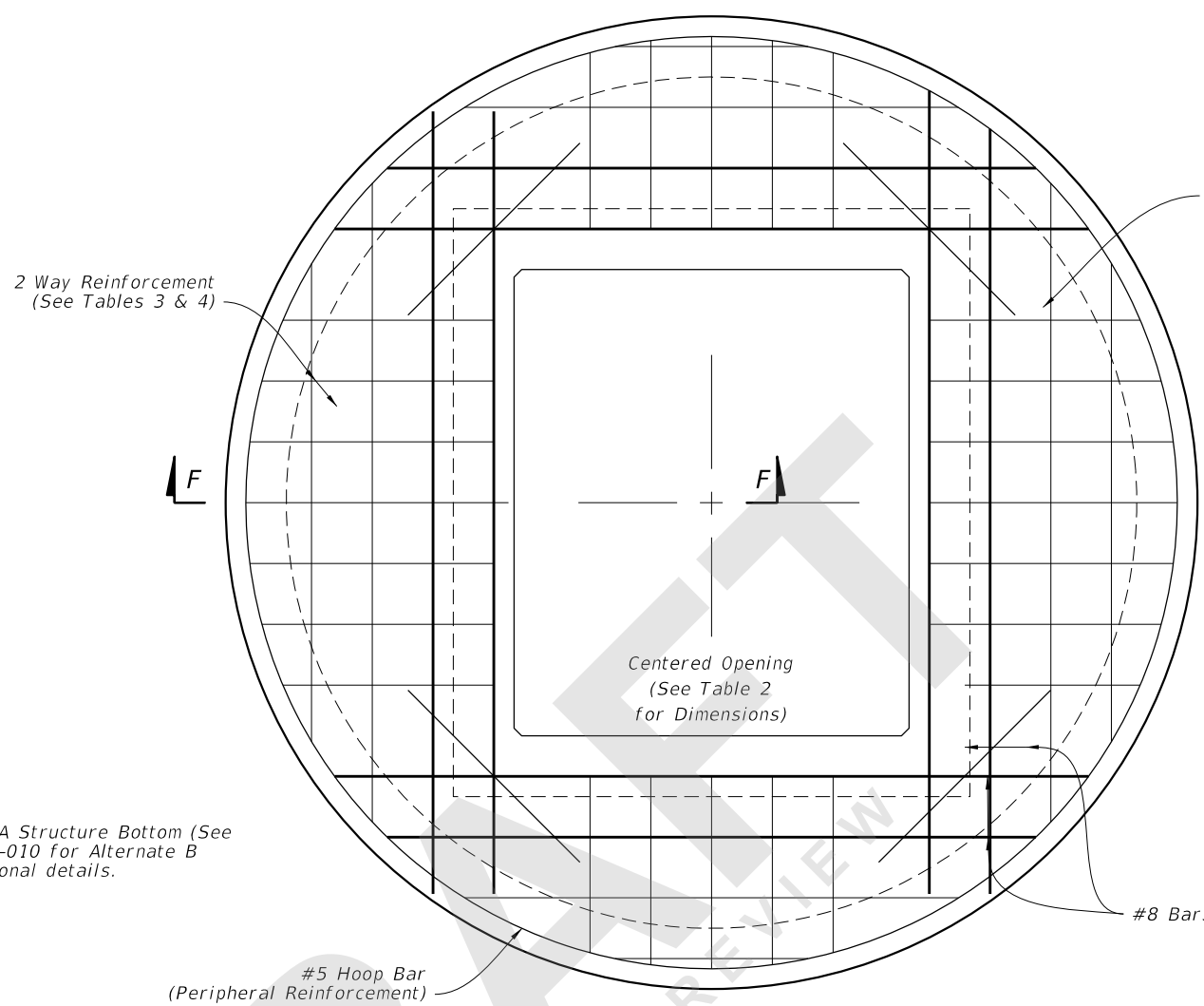
GRATE, CONCRETE APRON, AND SODDED AREA DETAILS

8/28/2020 1:34:05 PM

LAST REVISION 11/01/20	REVISION	DESCRIPTION:		FY 2021-22 STANDARD PLANS	DITCH BOTTOM INLET TYPE J	INDEX 425-054	SHEET 3 of 4
---------------------------	----------	--------------	--	------------------------------	---------------------------	------------------	-----------------

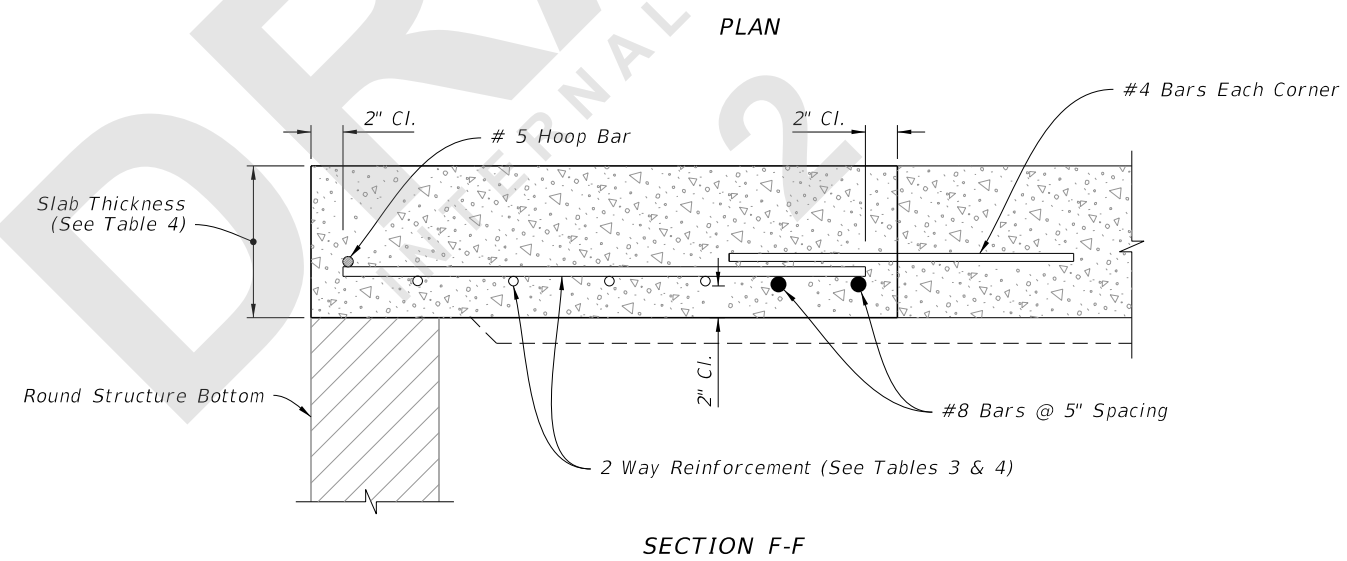


BOTTOM STRUCTURE DIAMETER	OPENING SIZE	
	Min.	Max.
6'-0" to 8'-0"	3'-8" x 4'-2"	3'-10" x 4'-2"



SCHEDULE	GRADE 60 (BAR) OR 65 KSI & 70 KSI (WIRE REINFORCING) In. ² /ft.
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

STRUCTURE DEPTH	SLAB THICKNESS	REINFORCING (2 WAY) SCHEDULE
SIZE: 6'-0"		
0.5' < 8'	9 1/2"	B
8' < 18'	9 1/2"	C
18' < 30'	9 1/2"	D
30' < 37'	9 1/2"	E
37' - 40'	9 1/2"	G
SIZE: 8'-0"		
≥ 0.5' < 9'	11 1/2"	C
9' < 15'	11 1/2"	D
15' < 23'	11 1/2"	E
23' < 33'	11 1/2"	E
33' - 40'	11 1/2"	G



ISOMETRIC VIEW

TOP SLAB REINFORCEMENT DETAILS

ALTERNATE A STRUCTURE BOTTOM - TOP SLAB DETAILS

8/28/2020 1:34:08 PM

LAST REVISION	DESCRIPTION:
11/01/19	

FY 2021-22
 STANDARD PLANS

DITCH BOTTOM INLET TYPE J

INDEX	SHEET
425-054	4 of 4