
ORIGINATION FORM

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

Contact Information:

Date: November 10, 2019
Originator: Tim Holley
Phone: (850) 414-4117
Email: Tim.Holley@dot.state.fl.us

Standard Plans:

Index Number: 425-021
Sheet Number (s): ALL
Index Title: Curb Inlet Tops Types 5 and 6

Summary of the changes:

Reorganized Index, Added additional Sheet.
Sheet 1: General Notes
Sheet 2: Dimensional Details
Sheet 3: Reinforcing and Bar Bending Details
Sheet 4: Precast Dimensional and Reinforcing Details
Sheet 5: Cast-in-place Dimensional and Reinforcing Details
Sheet 6: Alternate Welded Wire Reinforcing Details
Sheet 7: Grate, Anchor, and Grouting Details

Commentary / Background:

Reorganized Details and Sheets to declutter Index. Moved information from detail callouts to Notes in order to decrease clutter of the drawing. Separated details into dimensional and reinforcing details.

Other Affected Offices / Documents: (Provide name of person contacted)

Yes	No	
<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	Standard Specifications –
<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:

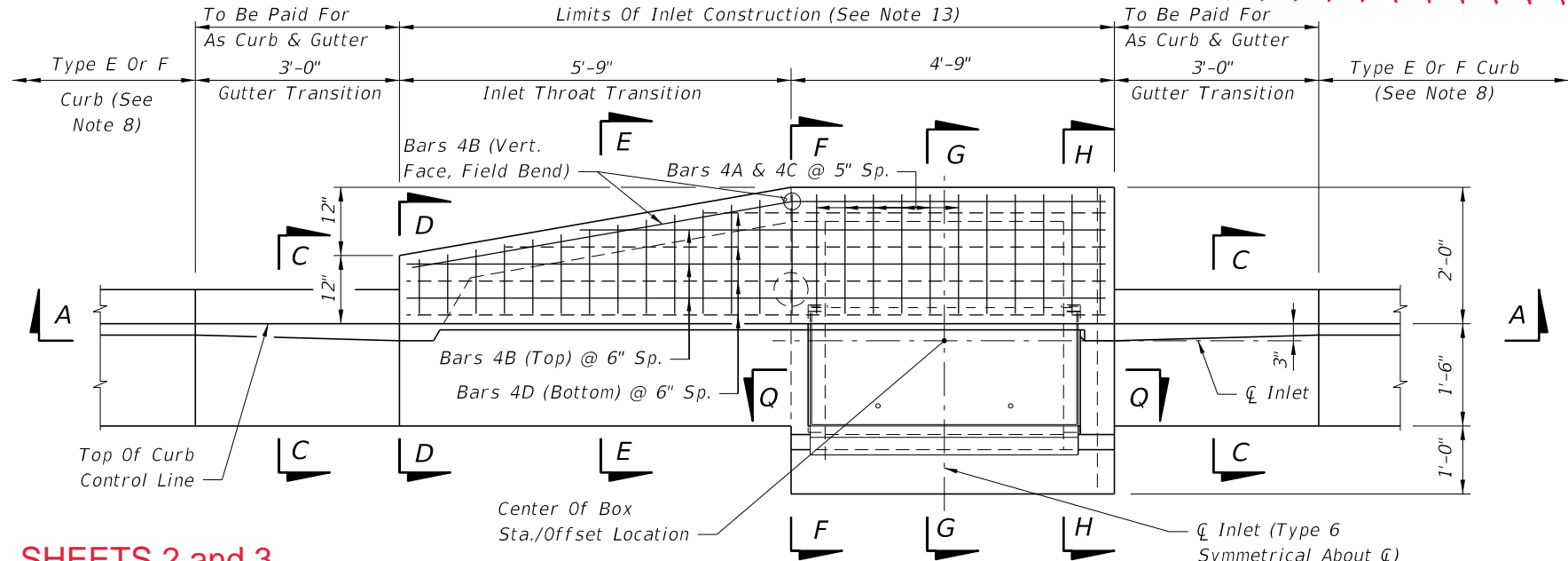
(Email or hand deliver package to Rick Jenkins)

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

Implementation:

<input type="checkbox"/>	Design Bulletin (Interim)
<input type="checkbox"/>	DCE Memo
<input type="checkbox"/>	Program Mgmt. Bulletin
<input checked="" type="checkbox"/>	FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form



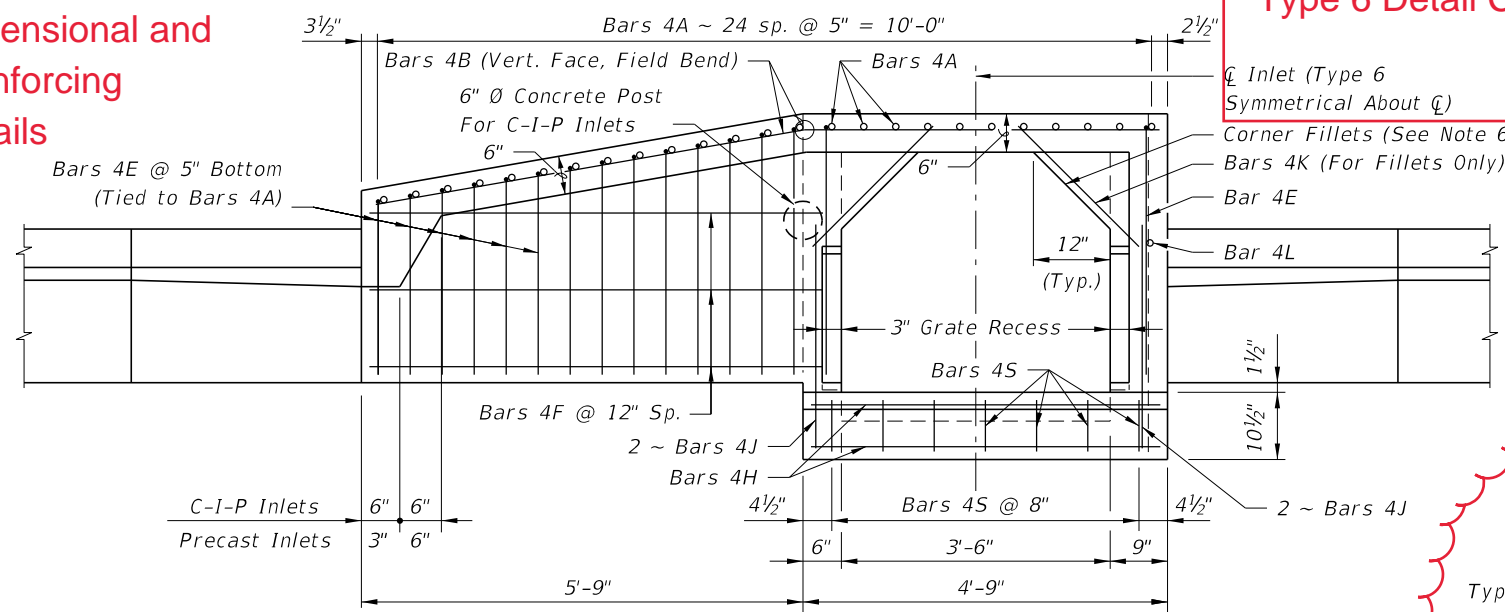
TOP VIEW

SHEETS 2 and 3
Separated into
Dimensional and
Reinforcing
Details

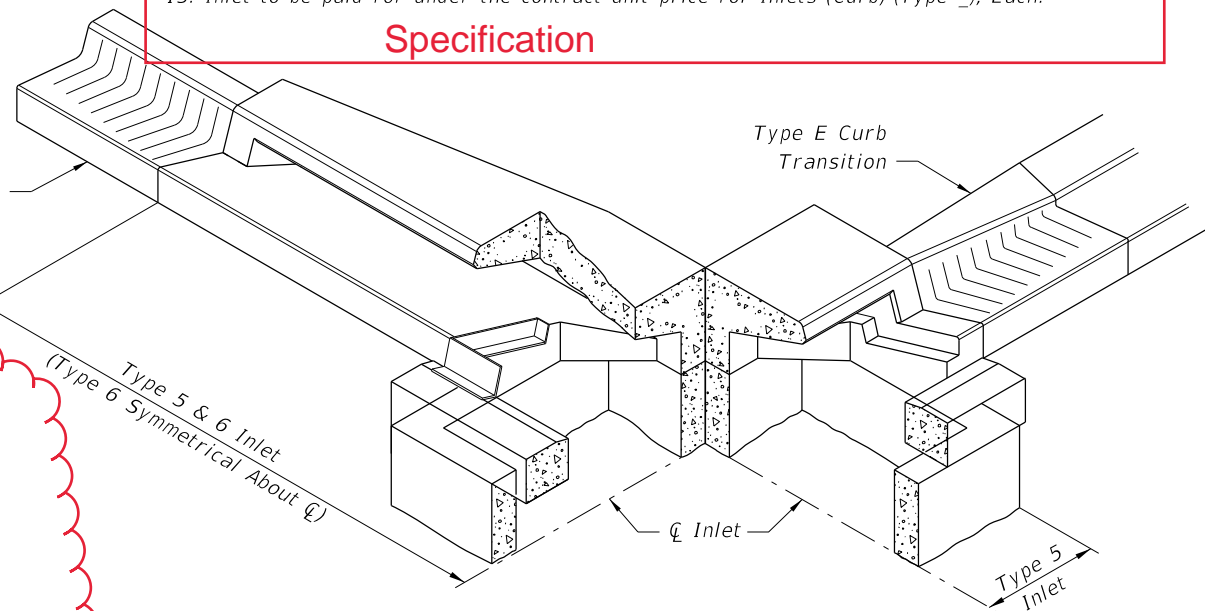
Type 6 Detail Created

- UPDATED GENERAL NOTES**
1. The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or border.
 2. For inlets constructed on a curve, refer to the plans to determine the radius, and modify the inlet details accordingly. Bend steel when necessary.
 3. All reinforcing steel to be Grade 60 bars with 1 1/4" minimum cover unless otherwise shown, see Sheet 4 for equivalent area Welded Wire Reinforcement details.
 4. Inlet tops shall be either cast-in-place or precast concrete. Precast units shall conform to the dimensions shown or in accordance with approved shop drawings. Request for shop drawing approval shall be directed to the State Drainage Engineer.
 5. Concrete meeting the requirements of ASTM C478 (4,000 psi) may be used in lieu of Class II concrete for precast units, manufactured in plants which meet the requirements of Section 449 of the Specifications.
 6. Corner fillets are required at inlet opening for precast units or C-I-P units used in conjunction with circular inlet bottoms or skewed rectangular inlet boxes. Finish top of fillets flush with drain throat bottom and match slope.
 7. For inlet bottoms see Index 425-010. Inlet tops are to be used with Type P bottoms, or Type J bottoms with 3'-6" square (Type B), 3'-6" or 4' round (Type A) risers or top slab openings.
 8. These inlet tops are designed for use with standard curb and gutter Type E and Type F. Locate inlet outside of pedestrian crosswalks. For Type E curb, transition the shape of the curb over the gutter transition length to match the face of the inlet (Type F).
 9. See Index 425-001 for supplemental details.
 10. All steel used for frame and grate shall meet the requirements of ASTM A36/A36M.
 11. Either cast iron grates or steel grates may be used.
 12. When Alternate "G" grate is specified in the plans either the cast iron grate and galvanized steel frame or the the galvanized steel grate and frame must be used. Grates are to be grouted in accordance with the grouting detail shown on Sheet 5, in lieu of tack welding.
 13. Inlet to be paid for under the contract unit price for Inlets (Curb) (Type _), Each.

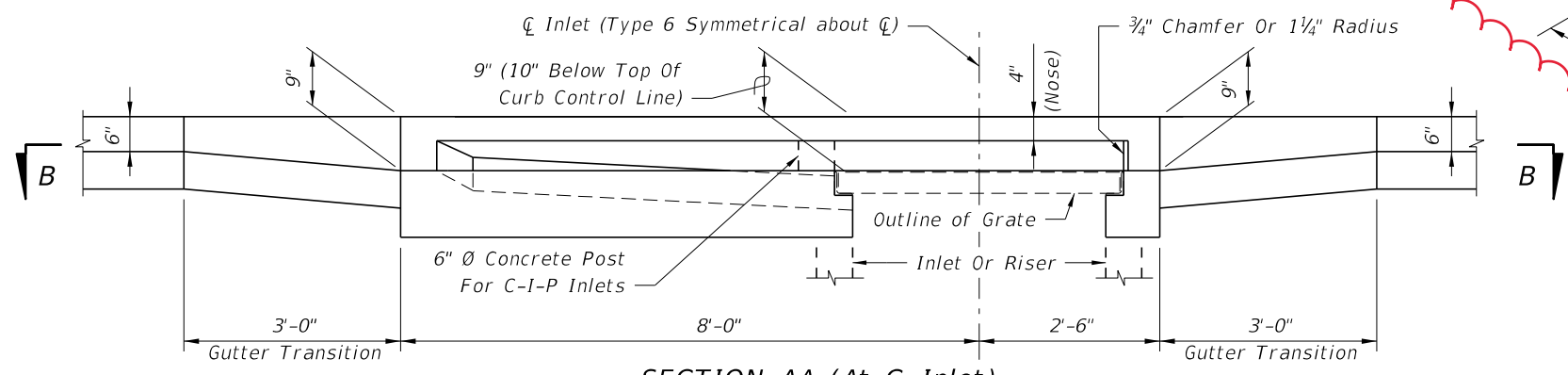
Specification



SECTION BB



SKETCH SHOWING FRAME SEAT AND THROAT RECESS

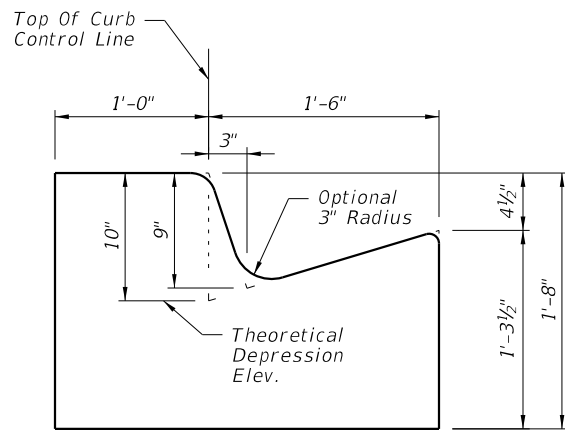


SECTION AA (At Q Inlet)

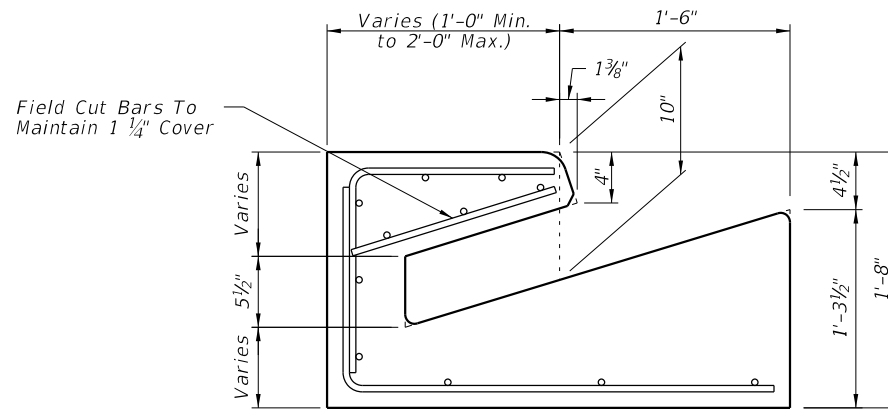
INLET TYPE 5 (Curb Inlet Type 6 Symmetrical With Left Half)

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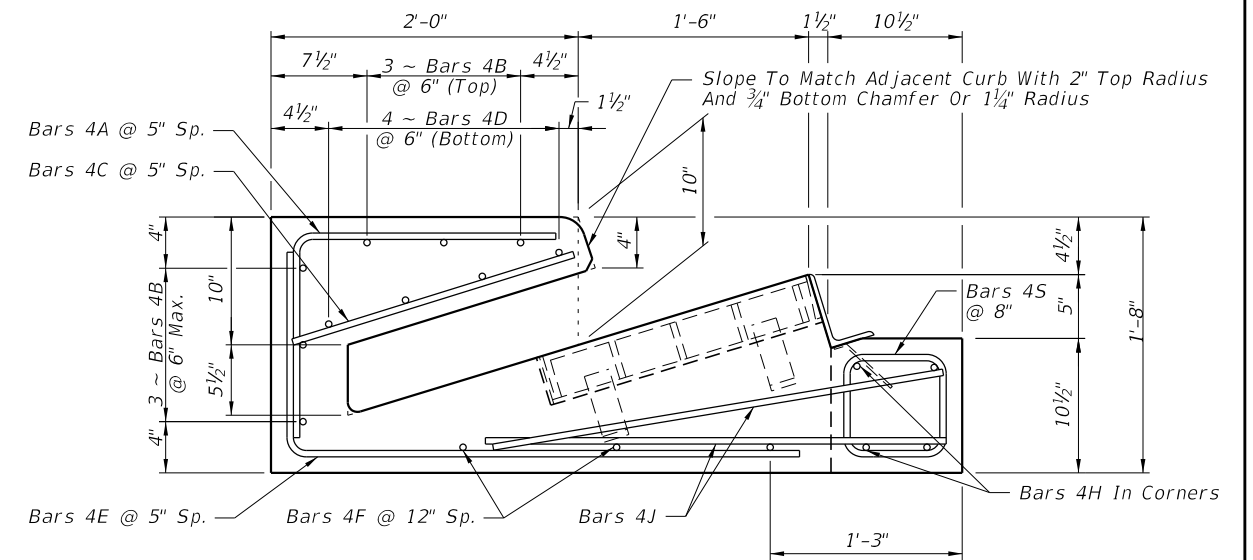
LAST REVISION	DESCRIPTION
11/01/17	



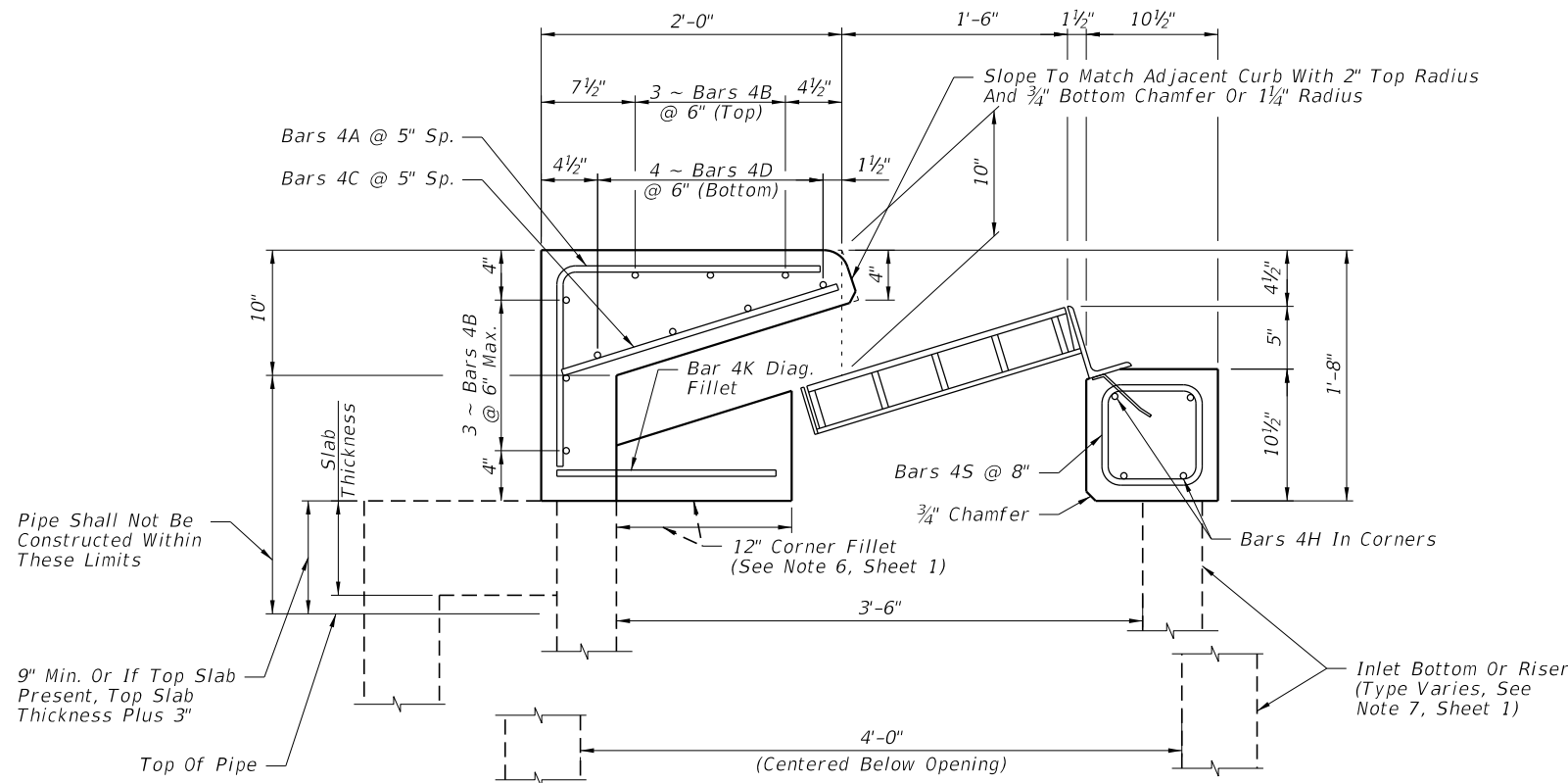
SECTION DD
(End View Of Inlet)



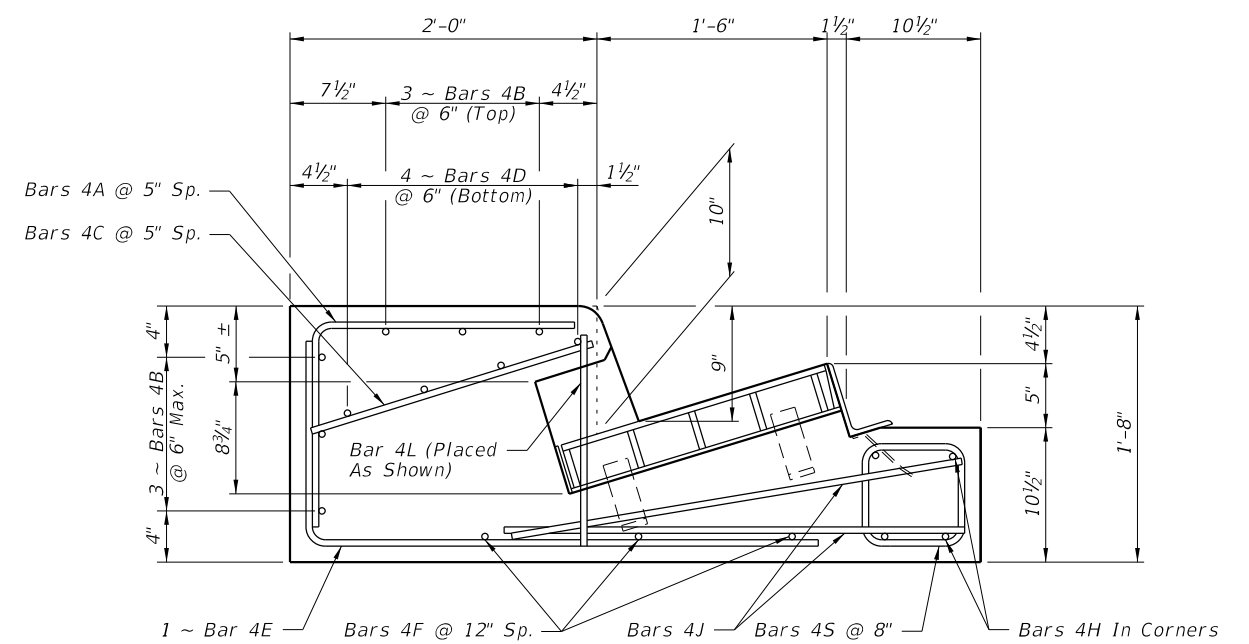
SECTION EE



SECTION FF



SECTION GG



SECTION HH
(Type 5 Inlet Only)

SHEET 4

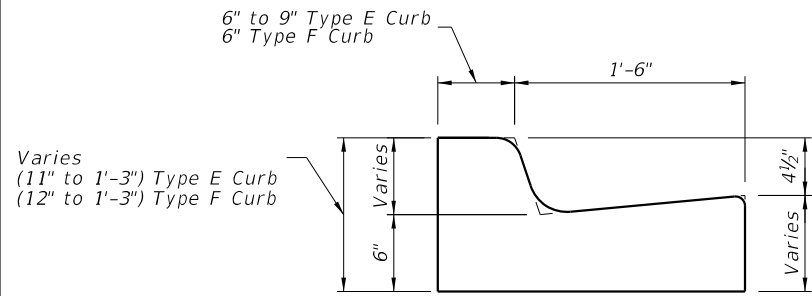
CROSS REFERENCES:
For General Notes See Sheet 1.
For Location Of Sections DD
Thru HH See Sheet 1.

PRECAST DETAILS

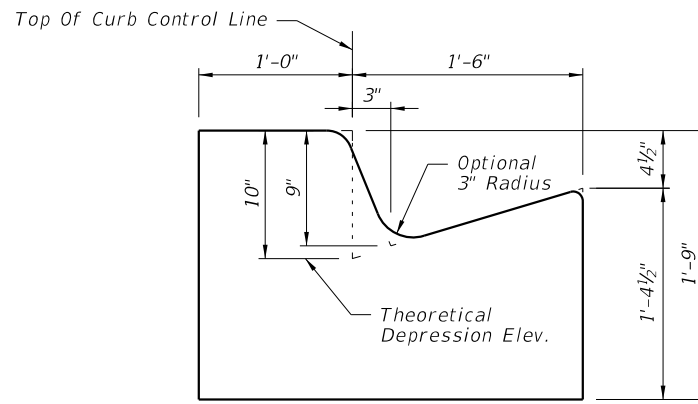
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LAST REVISION 11/01/17	DESCRIPTION:	FDOT FY 2019-20 STANDARD PLANS	CURB INLET TOPS TYPES 5 AND 6	INDEX 425-021	SHEET 2 of 5
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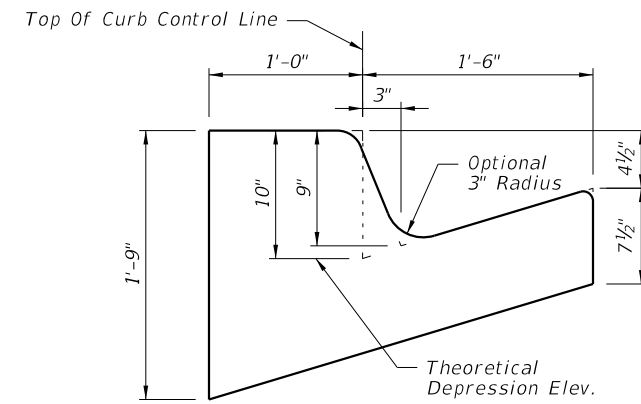
SHEET 5



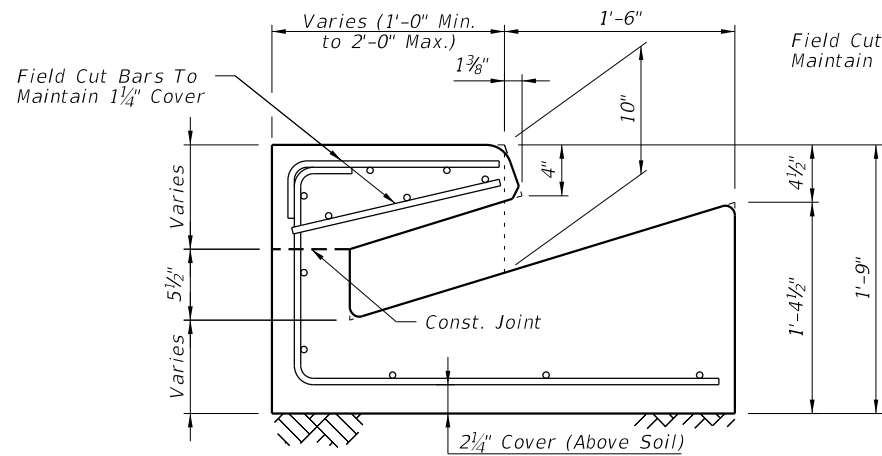
SECTION CC
(Gutter Transition)
Type F Shown, Type E Similar



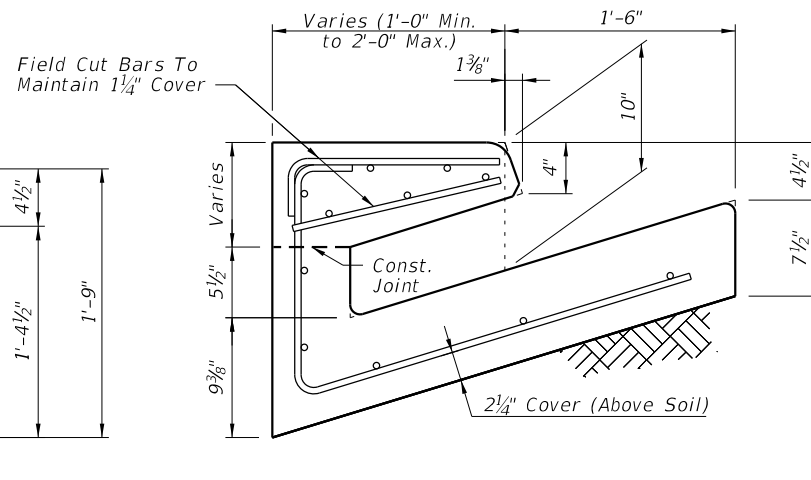
SECTION DD (OPTION A)
(End View Of Inlet)



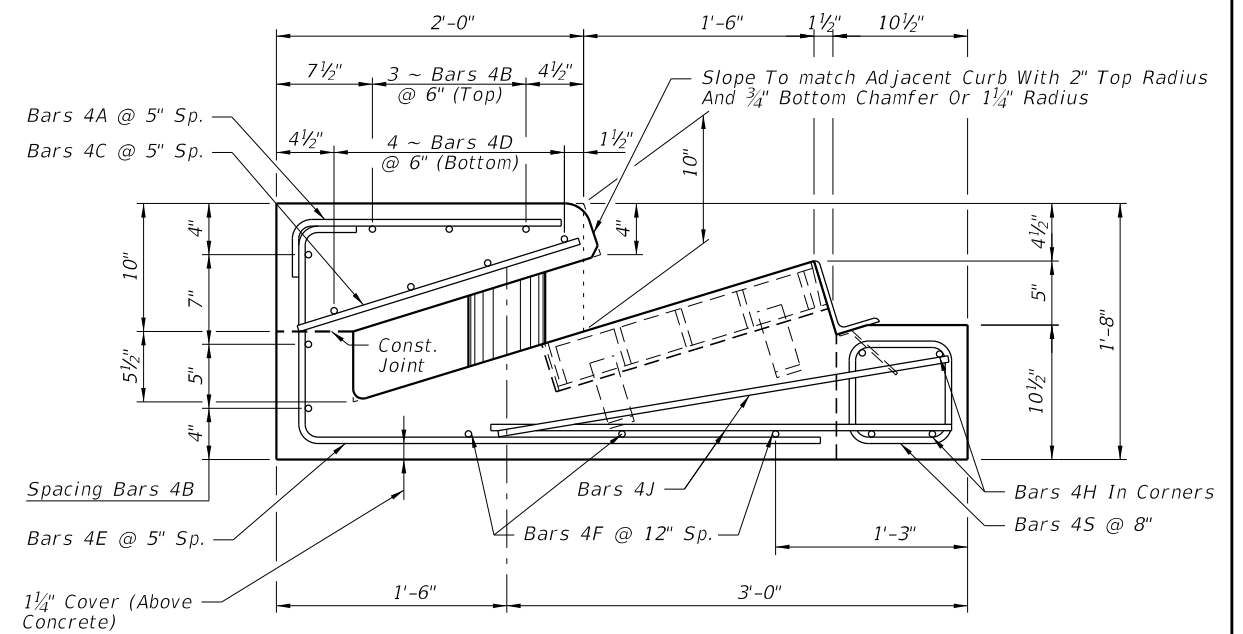
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(End View Of Inlet)



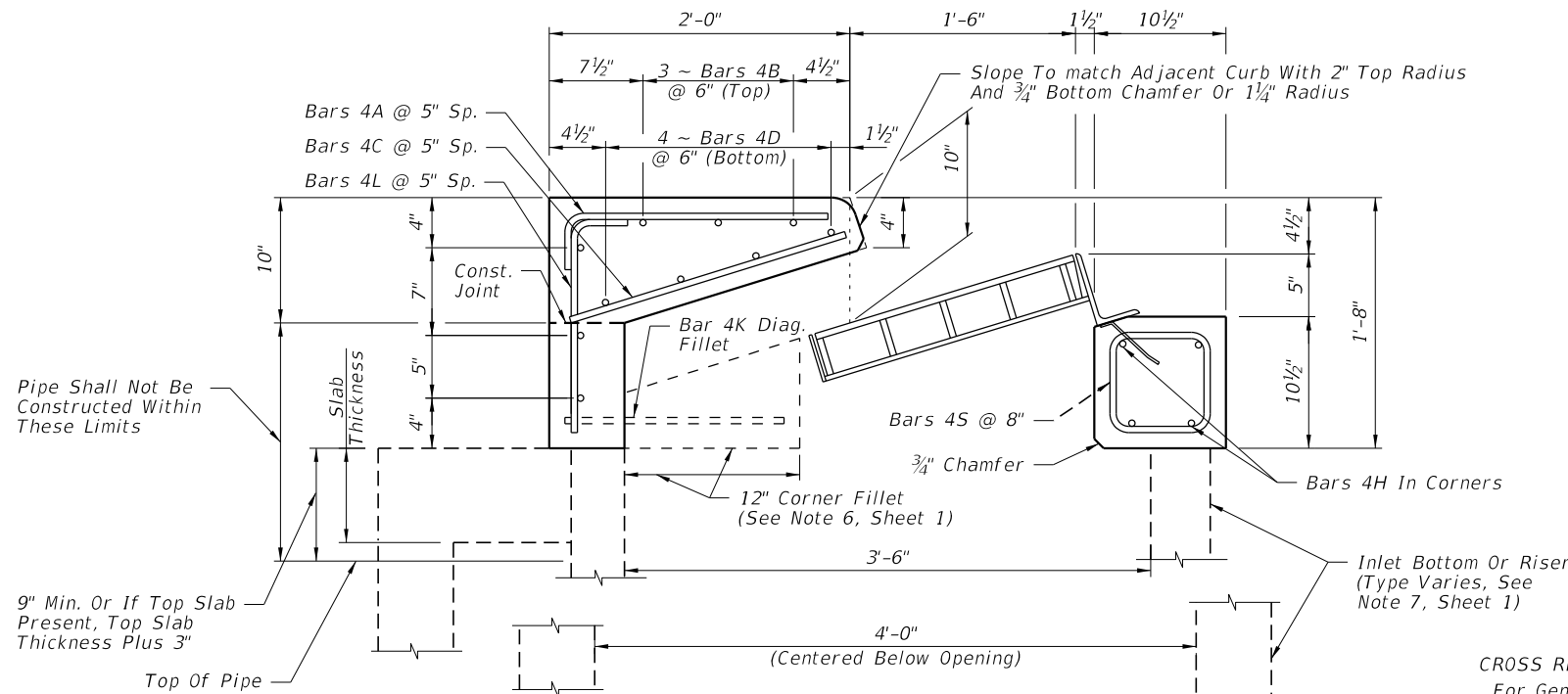
SECTION EE (OPTION A)



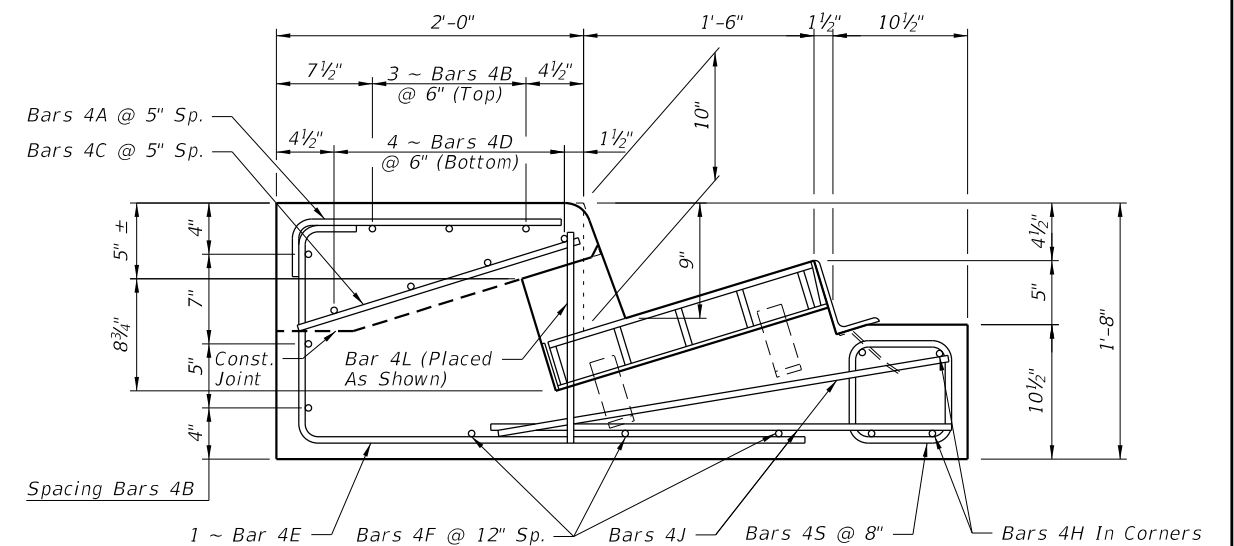
SECTION EE (OPTION B)



SECTION FF



SECTION GG



SECTION HH (Type 5 Inlet Only)

CROSS REFERENCES:
For General Notes See Sheet 1.
For Location Of Sections CC Thru HH See Sheet 1.

CAST-IN-PLACE DETAILS

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LAST REVISION	DESCRIPTION:
11/01/17	



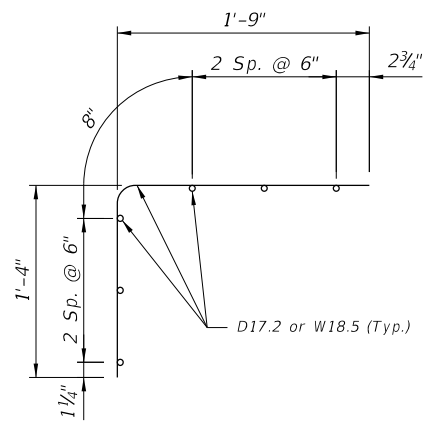
FY 2019-20
STANDARD PLANS

CURB INLET TOPS TYPES 5 AND 6

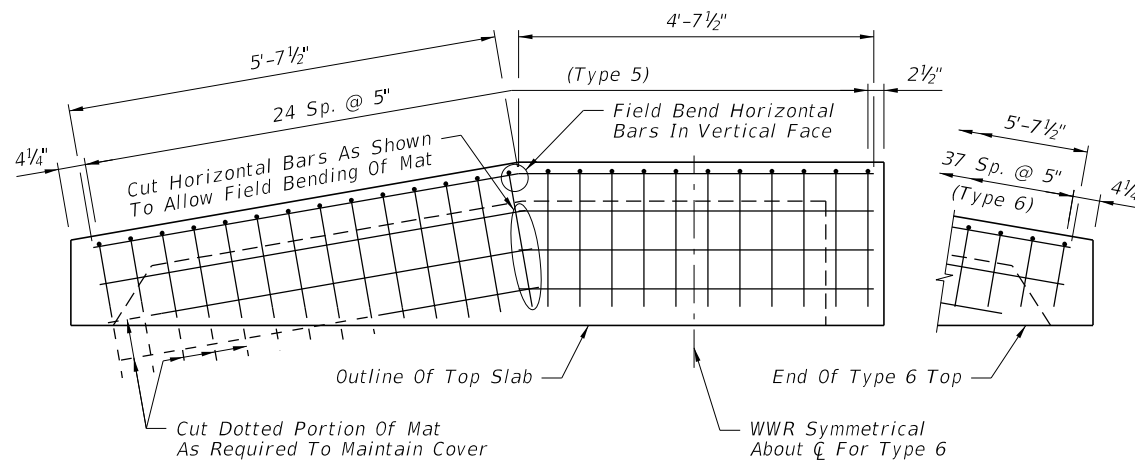
INDEX
425-021

SHEET
3 of 5

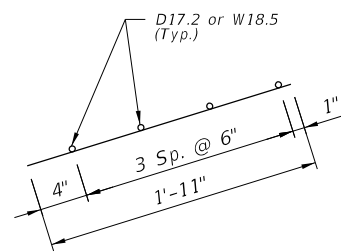
ALTERNATE REINFORCING STEEL DETAILS FOR WELDED WIRE REINFORCEMENT (WWR)



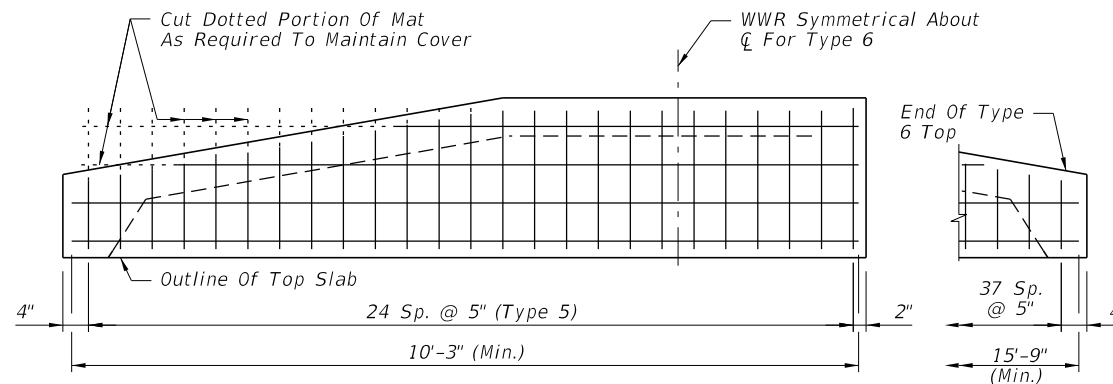
WELDED WIRE REINFORCEMENT
PIECE NO. 1



PLACEMENT SCHEMATIC FOR WELDED
WIRE REINFORCEMENT PIECE NO. 1

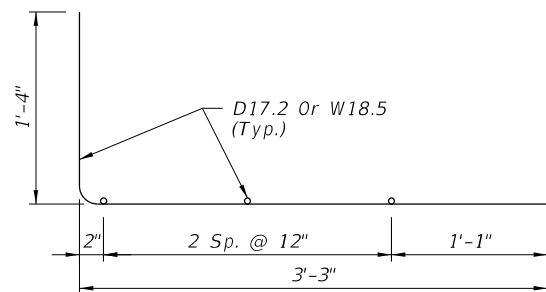


WELDED WIRE REINFORCEMENT
PIECE NO. 2

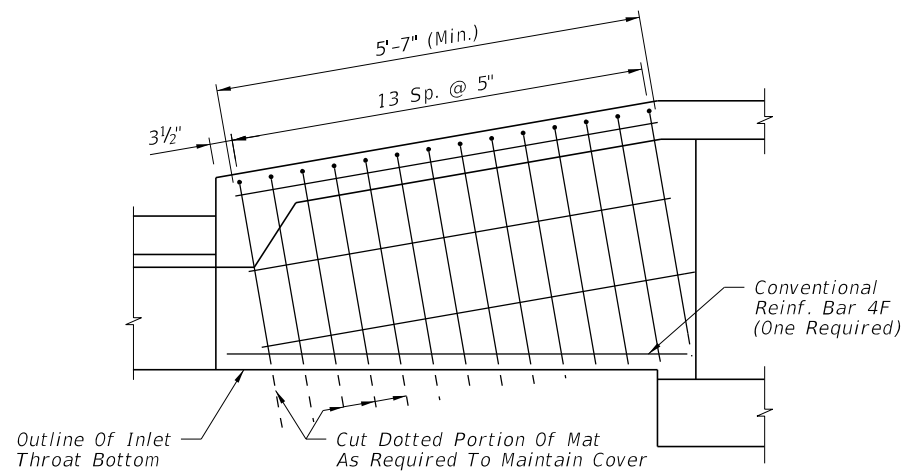


PLACEMENT SCHEMATIC FOR WELDED
WIRE REINFORCEMENT PIECE NO. 2

SHEET 6



WELDED WIRE REINFORCEMENT
PIECE NO. 3



PLACEMENT SCHEMATIC FOR WELDED
WIRE REINFORCEMENT PIECE NO. 3

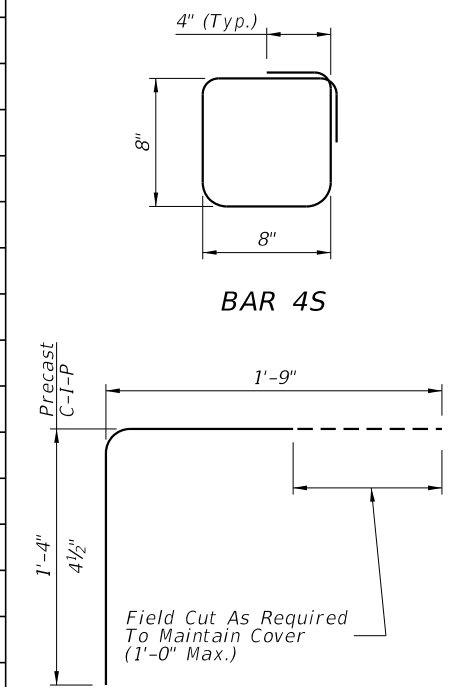
CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

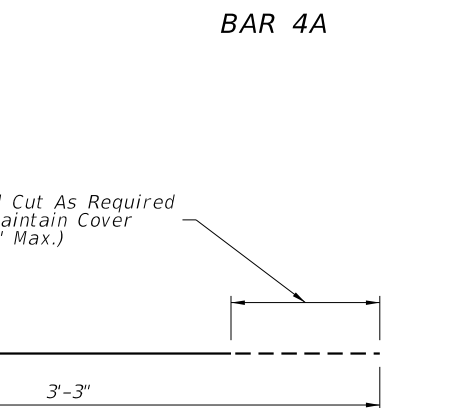
MARK	SIZE	TYPE 5 INLET		TYPE 6 INLET	
		NO.	LENGTH	NO.	LENGTH
A (Precast)	4	25	3'-1"	38	3'-1"
A (C-I-P)	4	25	2'-1 1/2"	38	2'-1 1/2"
B	4	6	10'-3"	6	15'-9"
C	4	25	11" to 1'-11"	38	11" to 1'-11"
D	4	4	10'-3"	4	15'-9"
E	4	16	4'-11 1/2"	30	4'-11 1/2"
F	4	3	6'-0"	6	6'-0"
H	4	4	4'-6"	4	4'-6"
J	4	4	3'-0"	4	3'-0"
K (Fillet)	4	2	2'-3"	2	2'-3"
L (Precast)	4	1	1'-4"	0	---
L (C-I-P)	4	10	1'-4"	9	1'-4"
S	4	7	3'-2"	7	3'-2"

- REINFORCING STEEL NOTES:
- All bar dimensions in the bending diagrams are out to out.
 - Bars 4A and 4E may be combined into a single bar.
 - Welded Wire Reinforcement consists of Smooth or Deformed wire meeting the requirements of Specification Section 931.

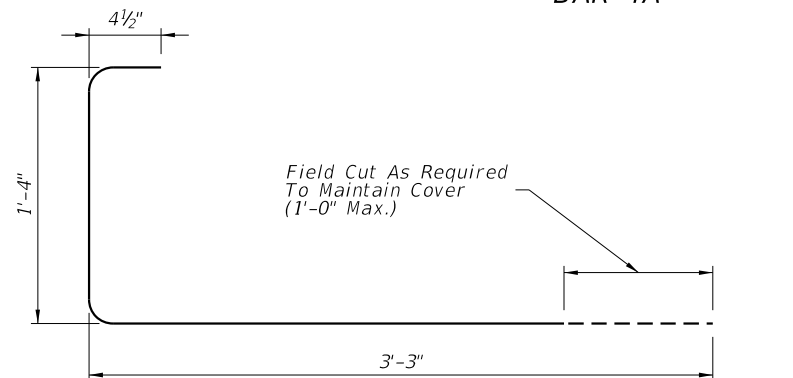
MOVED TO SHEET 3



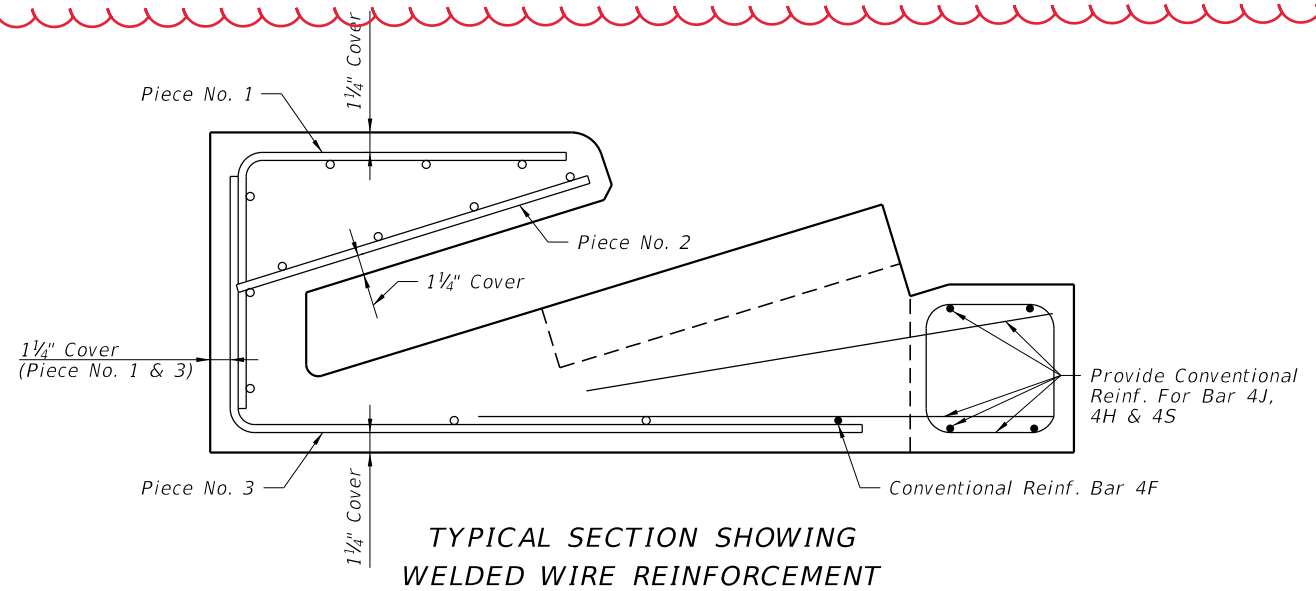
BAR 4S



BAR 4A



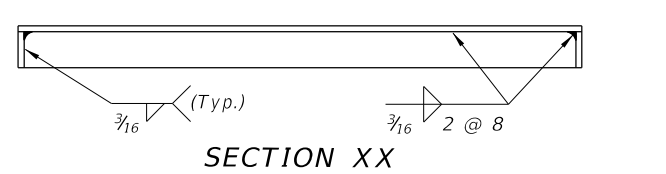
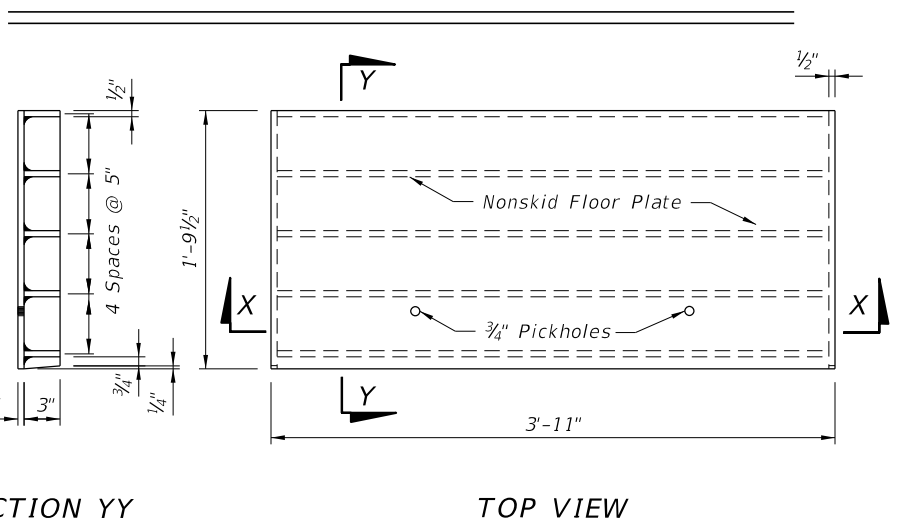
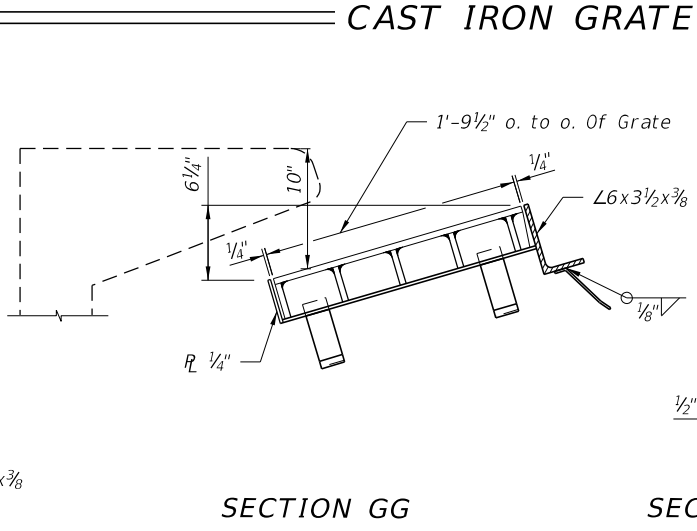
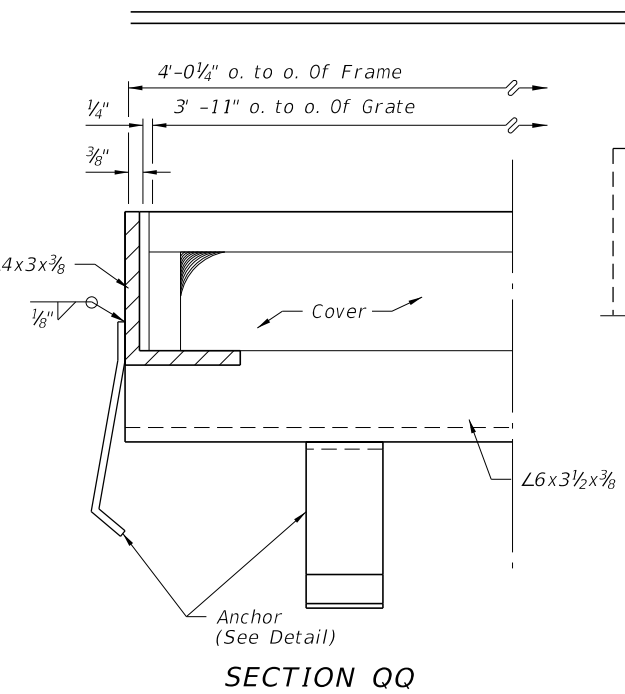
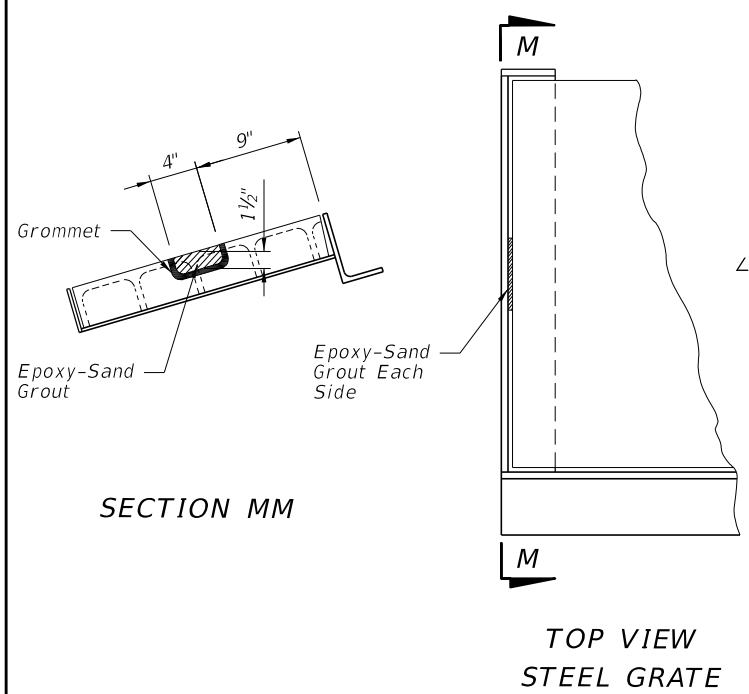
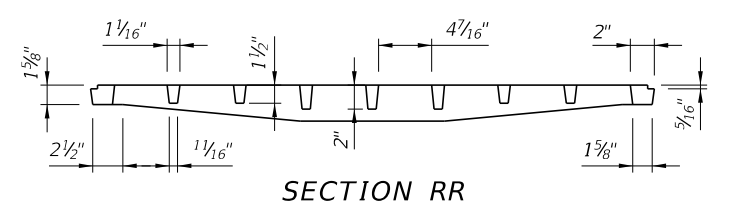
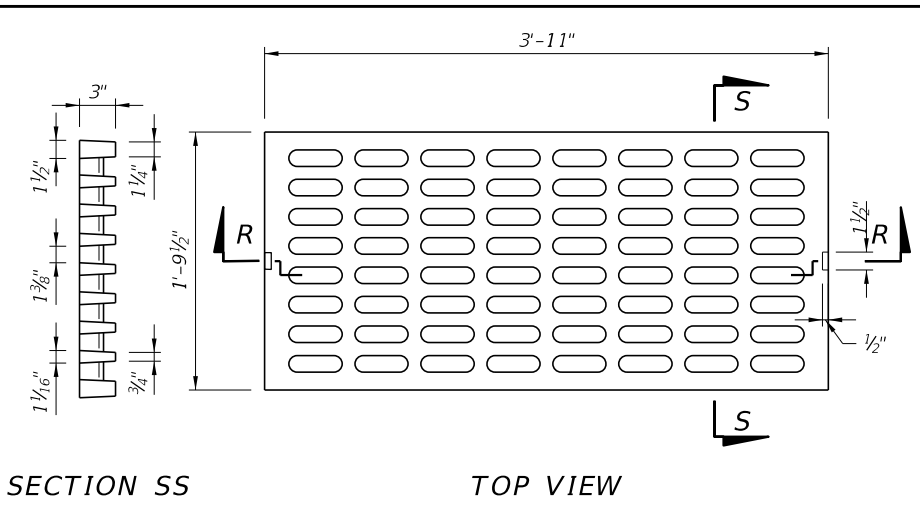
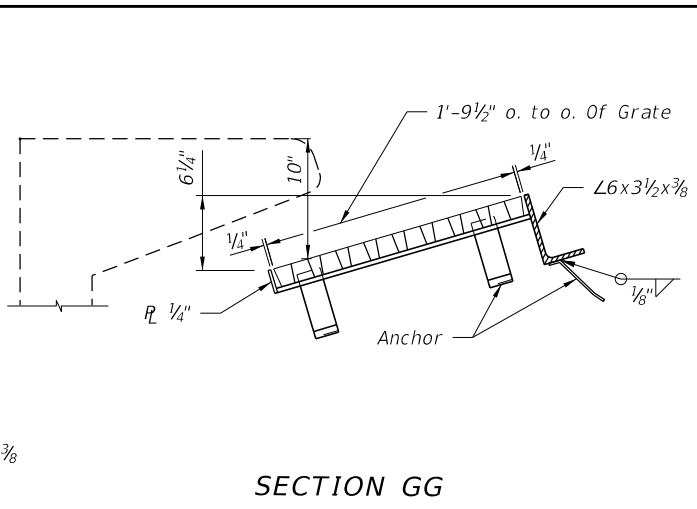
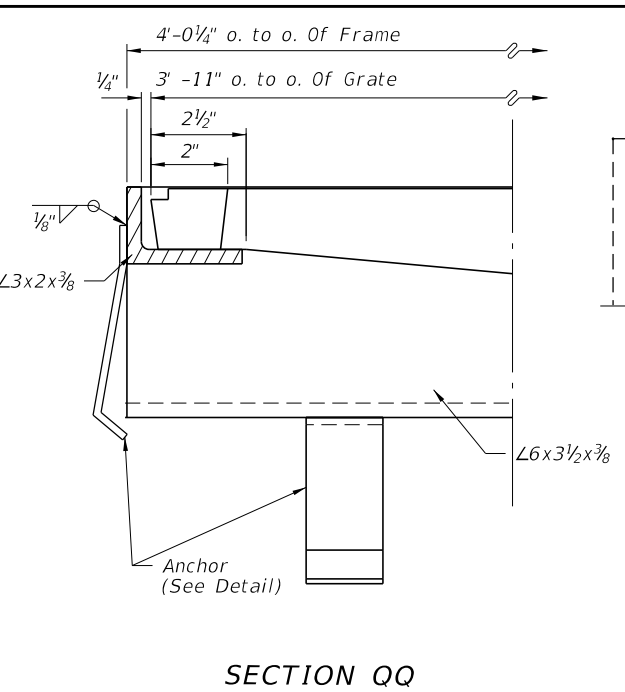
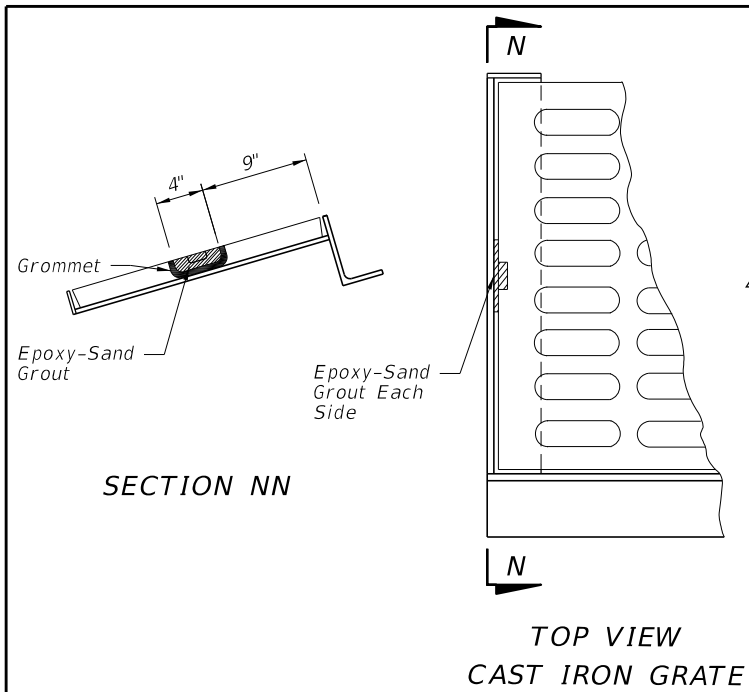
BAR 4E



TYPICAL SECTION SHOWING
WELDED WIRE REINFORCEMENT

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LAST REVISION	DESCRIPTION:
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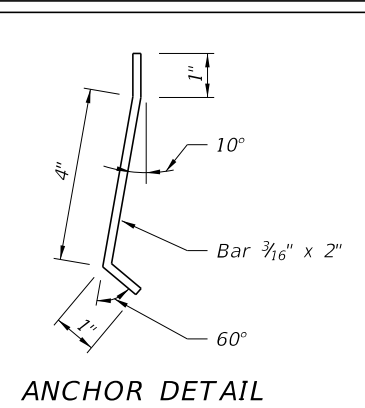
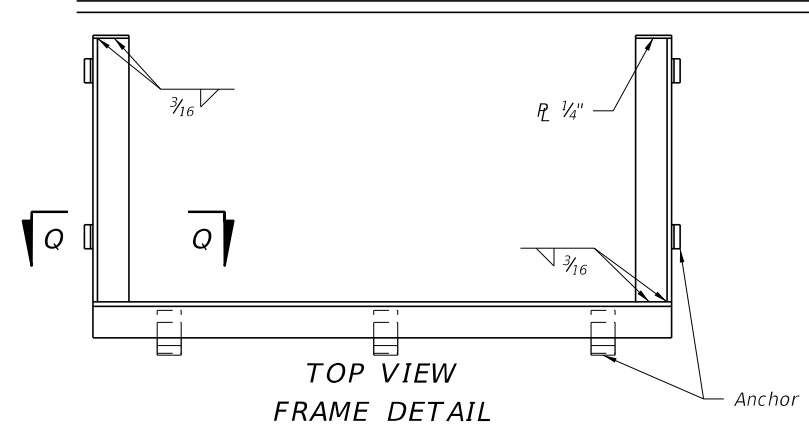


GROUTING DETAILS

SHEET 7

Sheet Reorganized

CROSS REFERENCES:
For Location Of Section GG and QQ
See Sheet 1.

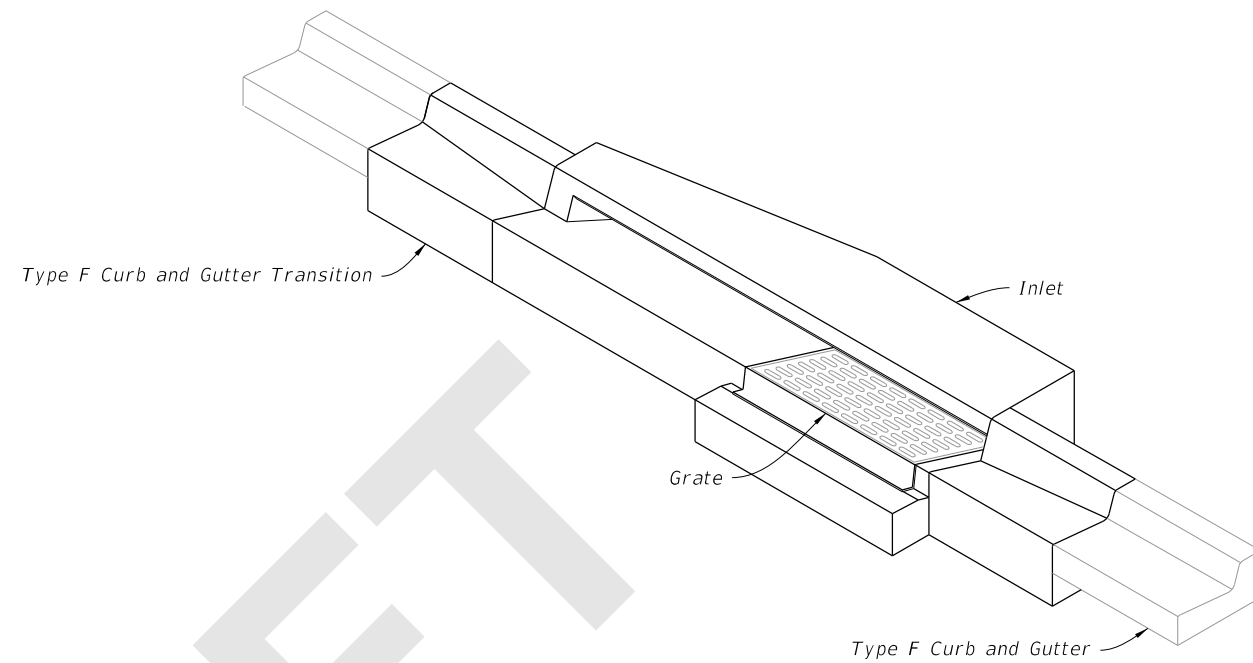


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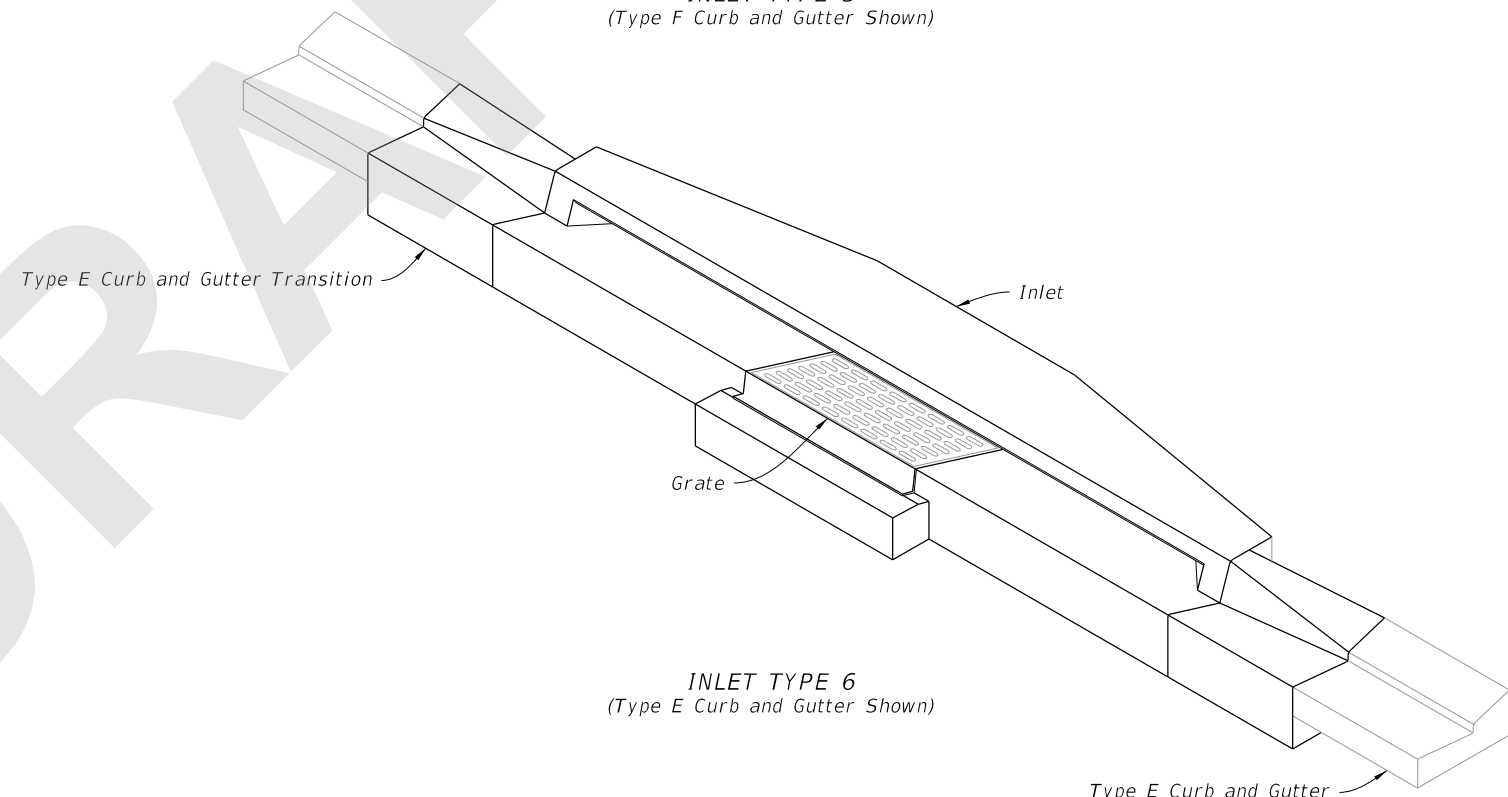
LAST REVISION 11/01/17	DESCRIPTION:	FDOT FY 2019-20 STANDARD PLANS	CURB INLET TOPS TYPES 5 AND 6	INDEX 425-021	SHEET 5 of 5
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GENERAL NOTES:

1. Work this Index with Index 425-001 and Index 425-010.
2. Conform the finished grade and slope of the inlet tops with the finished cross slope and grade of the proposed sidewalk and/or border.
3. For inlets constructed on a curve, refer to the plans to determine the radius. Bend steel when necessary.
4. Use Grade 60 reinforcing bars with 1¼" minimum cover unless otherwise shown, see Sheet 6 for equivalent area Welded Wire Reinforcement details.
5. Inlet tops may be either cast-in-place or precast concrete. Conform precast units to the dimensions shown or in accordance with approved shop drawings.
6. Corner fillets are required at inlet opening for precast units or C-I-P units used in conjunction with circular inlet bottoms or skewed rectangular inlet boxes. Finish top of fillets flush with drain throat bottom and match slope.
7. For Type E curb and gutter, transition the shape of the curb over the gutter transition length to match the face of the inlet (Type Ft).
8. Meet the requirements of ASTM A36/A36M with steel used for frames and grates.
9. Use either cast iron grates or steel grates.



INLET TYPE 5
(Type F Curb and Gutter Shown)



INLET TYPE 6
(Type E Curb and Gutter Shown)

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Type 5 and 6 Dimensional Details
3	Type 5 and 6 Reinforcing and Bar Bending Details
4	Precast Dimensional and Reinforcing Details
5	Cast-In-Place Dimensional and Reinforcing Details
6	Alternate Welded Wire Reinforcing (WWR) Details
7	Grate, Anchor, and Grouting Details

=====**CURB INLETS TOPS**=====

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LAST REVISION 11/01/20	REVISION	DESCRIPTION:
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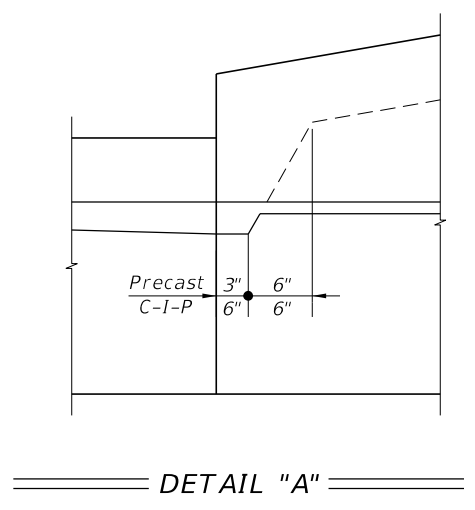
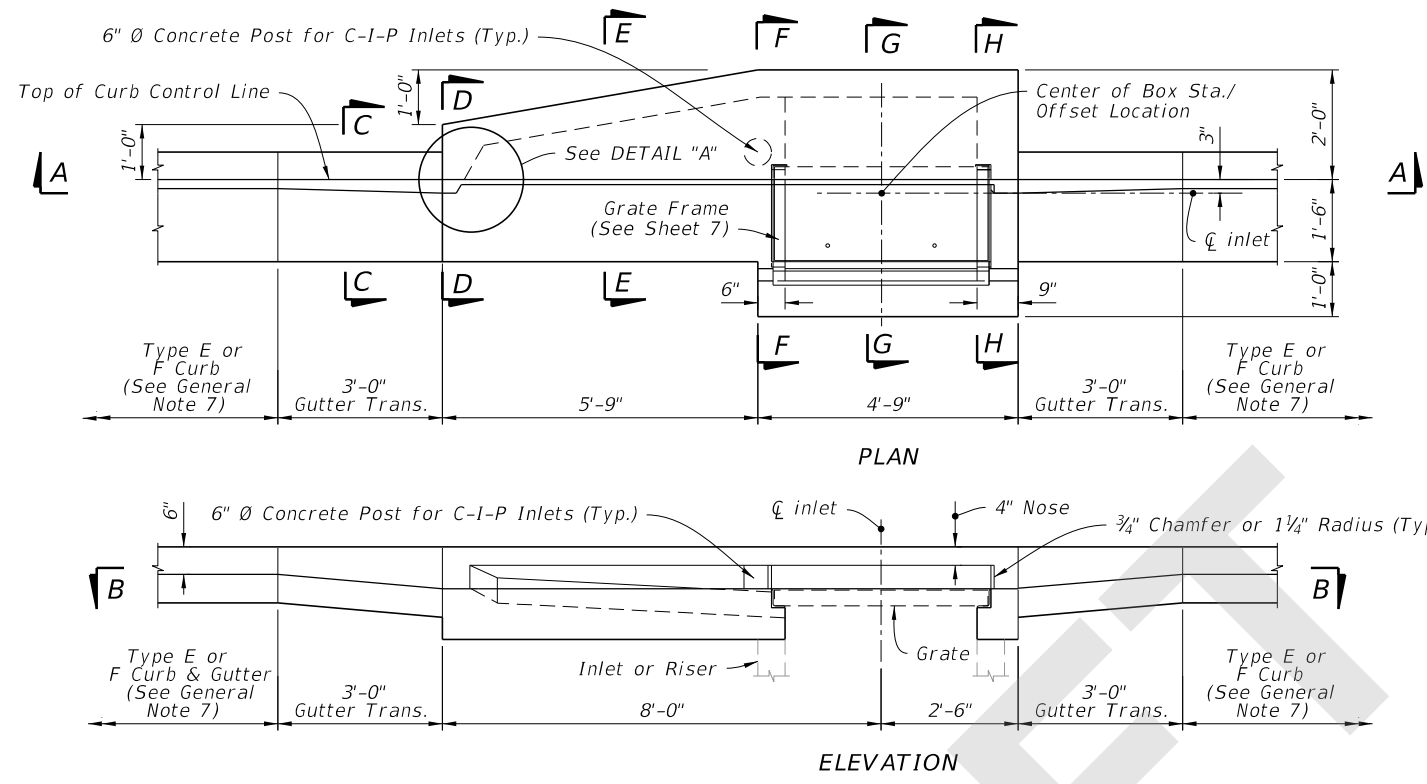


FY 2021-22
STANDARD PLANS

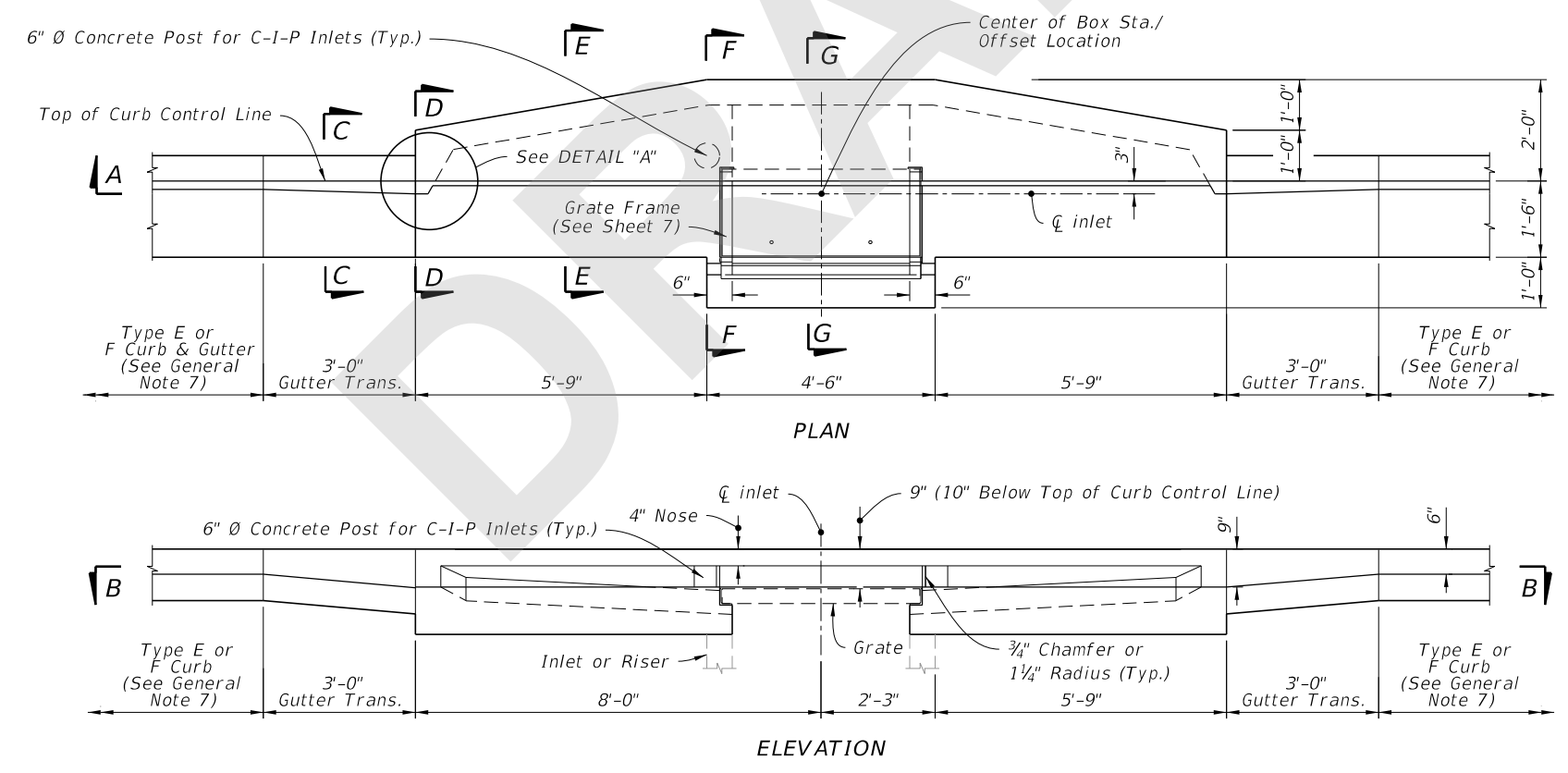
CURB INLET TOP TYPES 5 AND 6

INDEX
425-021

SHEET
1 of 7




TYPE 5 DIMENSIONAL DETAILS

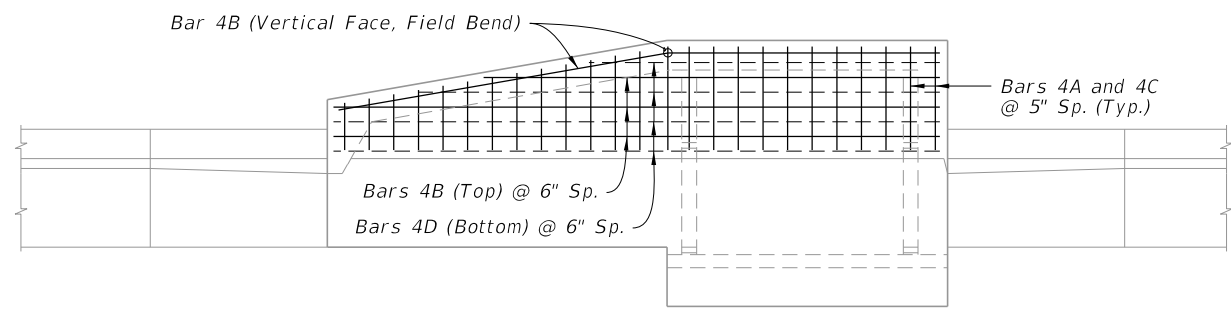


TYPE 6 DIMENSIONAL DETAILS

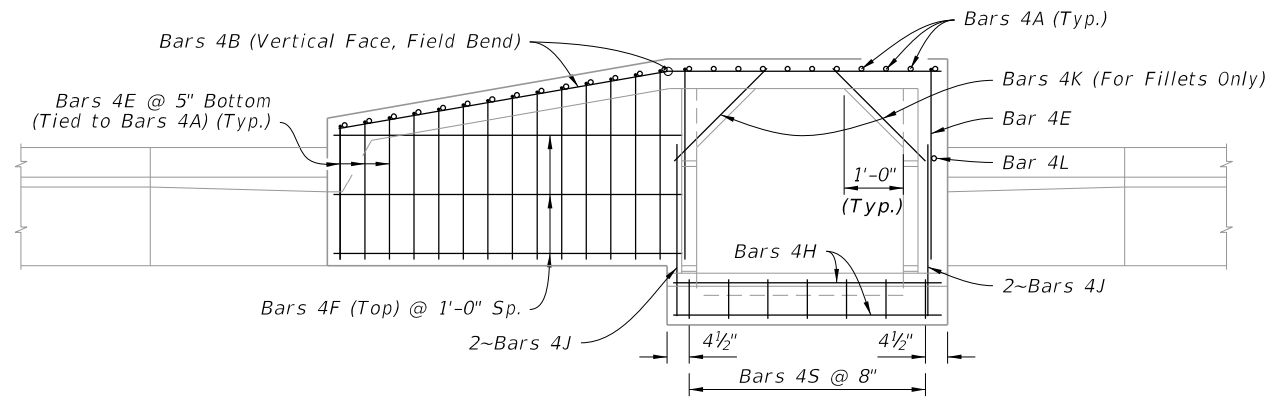
TYPE 5 AND 6 DIMENSIONAL DETAILS

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LAST REVISION 11/01/20	REVISION	DESCRIPTION:	 FY 2021-22 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX 425-021	SHEET 2 of 7
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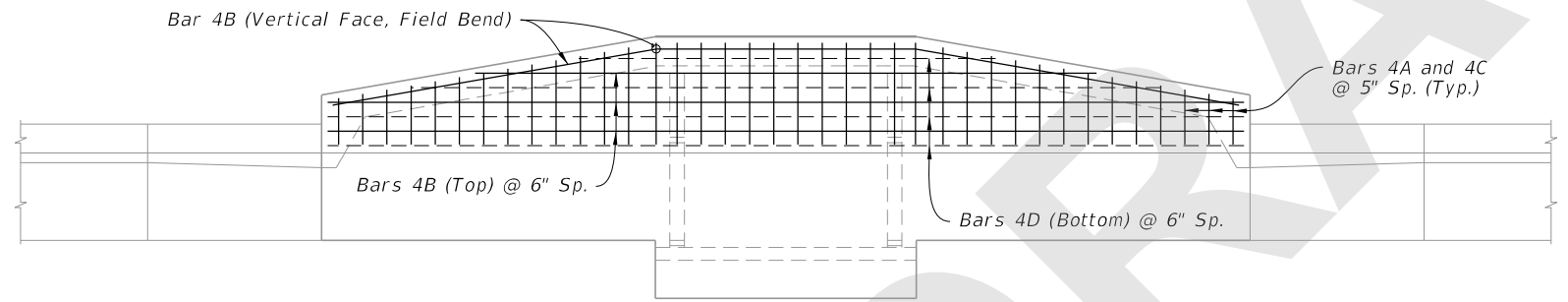


TOP

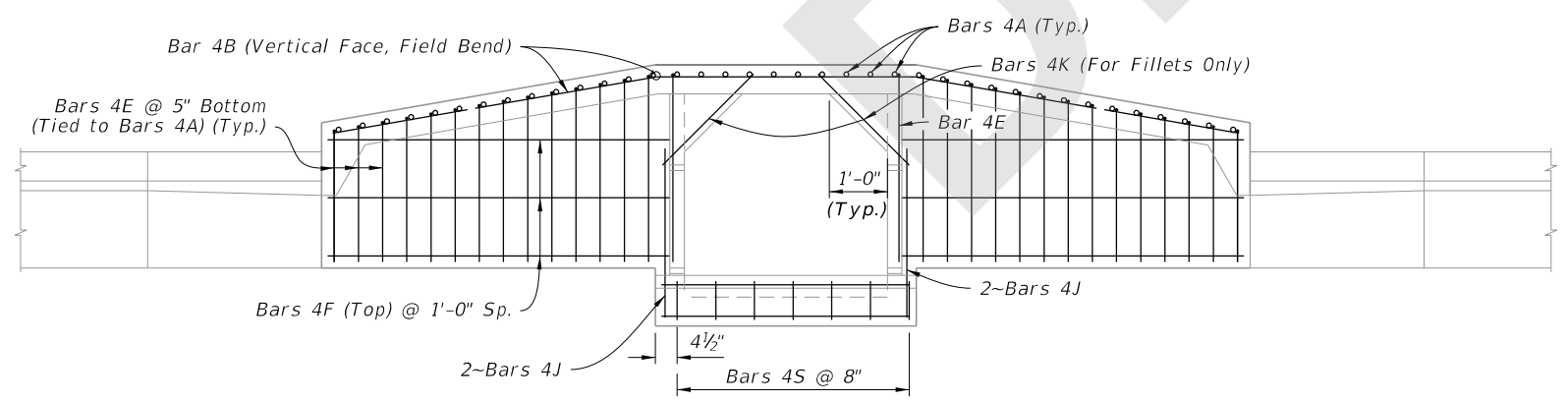


SECTION B-B

TYPE 5 REINFORCING DETAILS

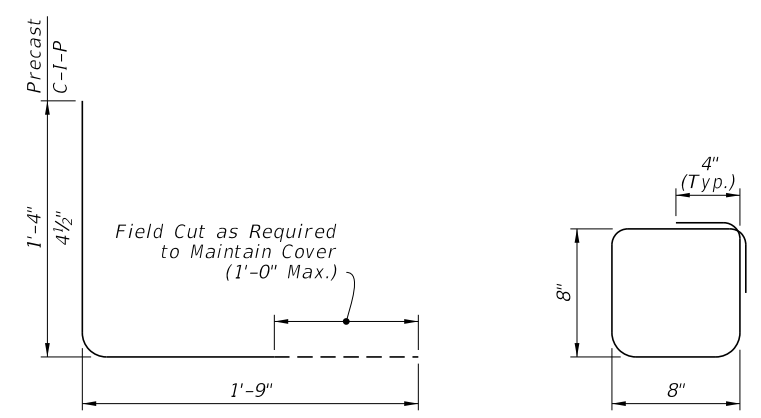


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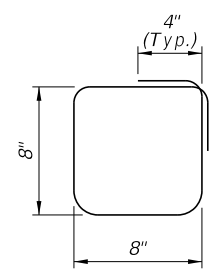


SECTION B-B

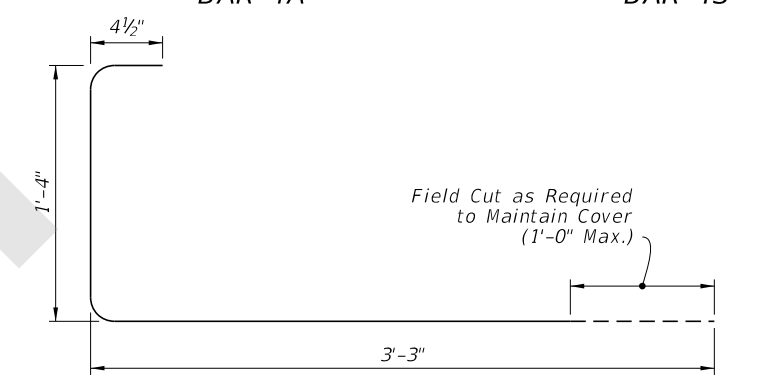
TYPE 6 REINFORCING DETAILS



BAR 4A



BAR 4S



BAR 4E

BILL OF REINFORCING STEEL					
MARK	SIZE	TYPE 5 INLET		TYPE 6 INLET	
		NO.	LENGTH	NO.	LENGTH
A (Precast)	4	25	3'-1"	38	3'-1"
A (C-I-P)	4	25	2'-1 1/2"	38	2'-1 1/2"
B	4	6	10'-3"	6	15'-9"
C	4	25	11" to 1'-11"	38	11" to 1'-11"
D	4	4	10'-3"	4	15'-9"
E	4	16	4'-11 1/2"	30	4'-11 1/2"
F	4	3	6'-0"	6	6'-0"
H	4	4	4'-6"	4	4'-6"
J	4	4	3'-0"	4	3'-0"
K (Fillet)	4	2	2'-3"	2	2'-3"
L (Precast)	4	1	1'-4"	0	---
L (C-I-P)	4	10	1'-4"	9	1'-4"
S	4	7	3'-2"	7	3'-2"

- NOTES:**
- All bar dimensions in the bending diagrams are out to out.
 - Bars 4A and 4E may be combined into a single bar.
 - Welded Wire Reinforcement consists of smooth or deformed wire meeting the requirements of Specification 931.

TYPE 5 AND 6 REINFORCING AND BAR BENDING DETAILS

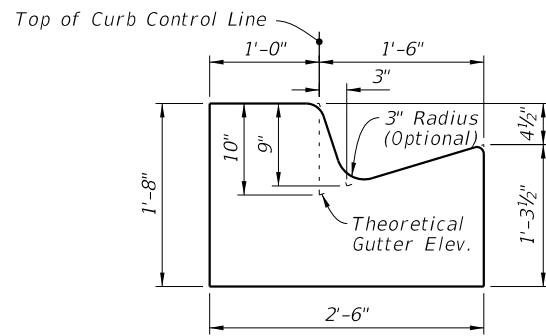
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LAST REVISION 11/01/20	DESCRIPTION:
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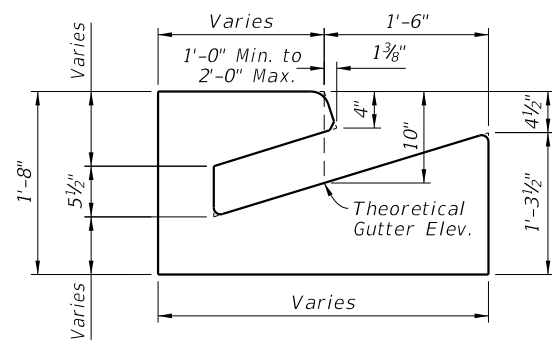
**FY 2021-22
STANDARD PLANS**

CURB INLET TOP TYPES 5 AND 6

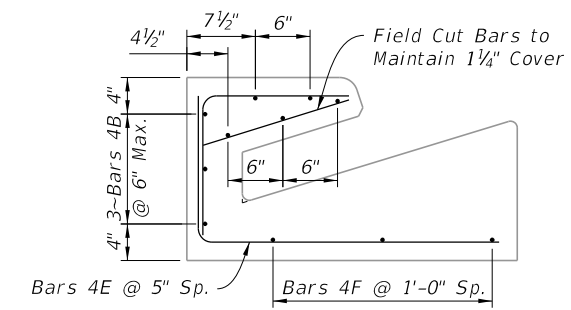
INDEX 425-021	SHEET 3 of 7
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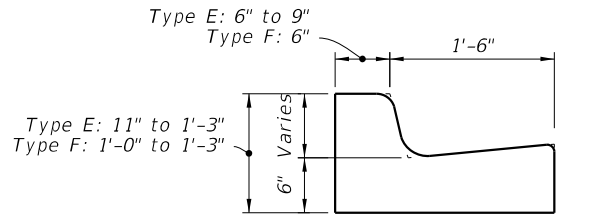
SECTION D-D



SECTION E-E

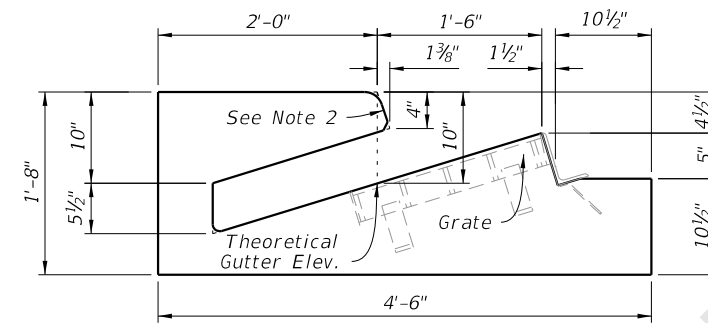


SECTION E-E

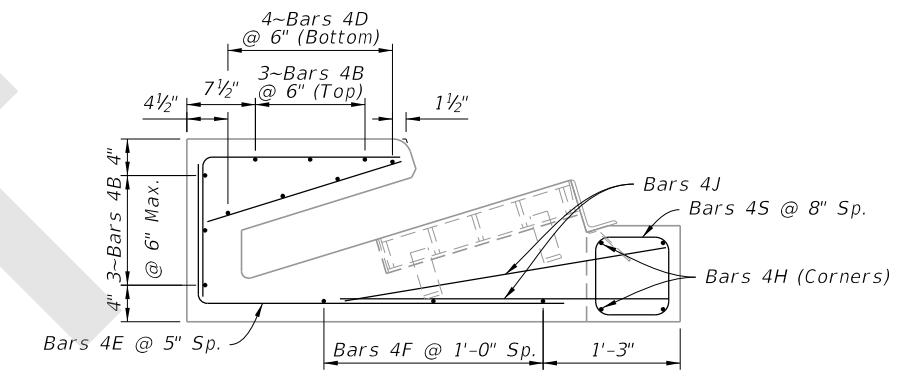


Type F Shown, Type E Similar

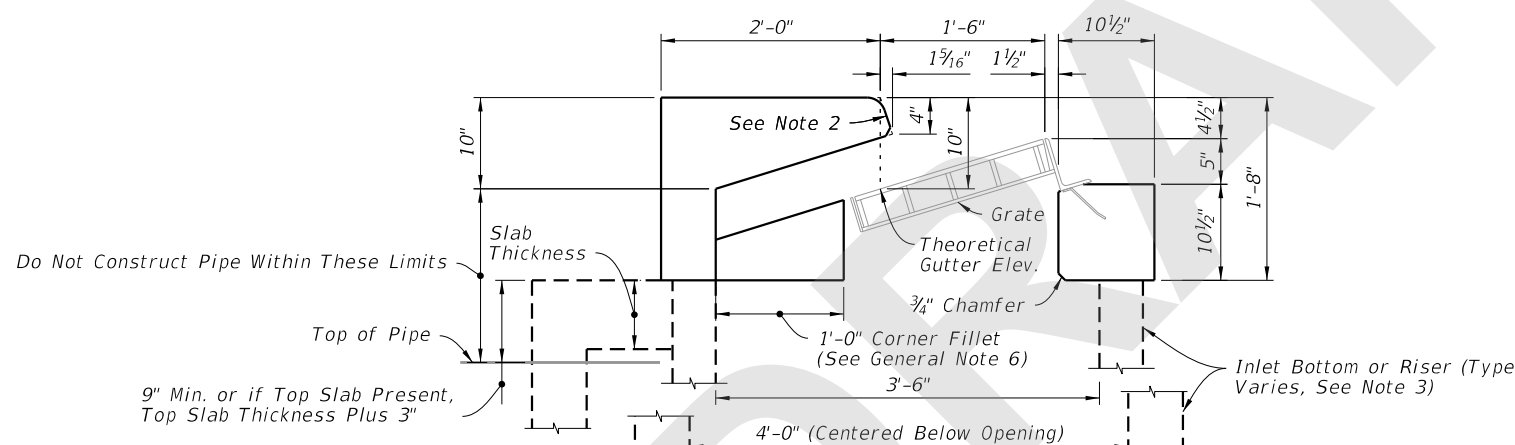
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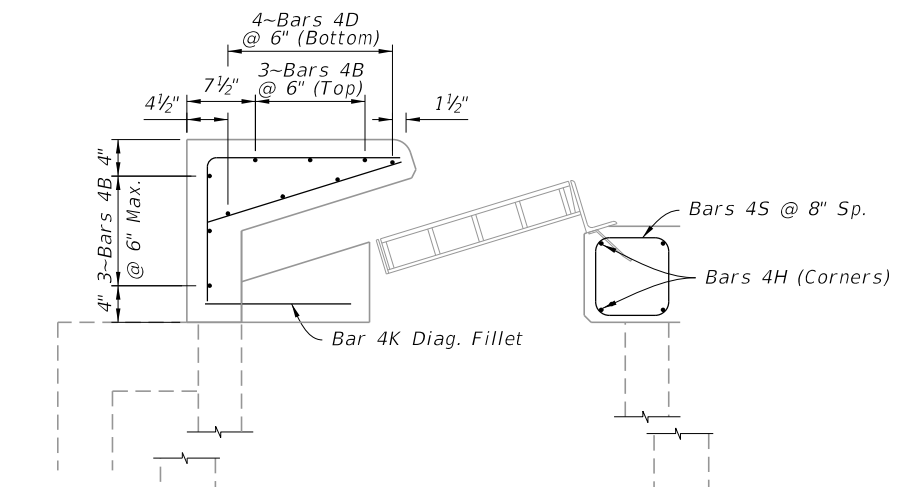
SECTION F-F



SECTION F-F



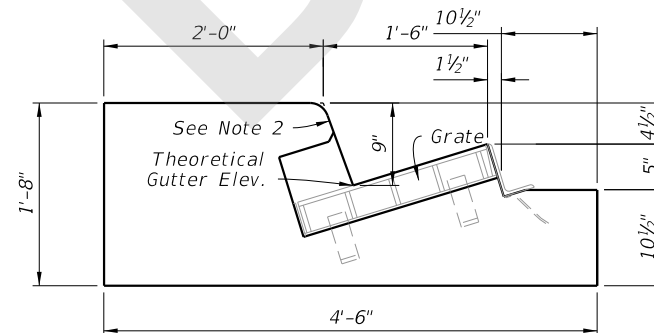
SECTION G-G



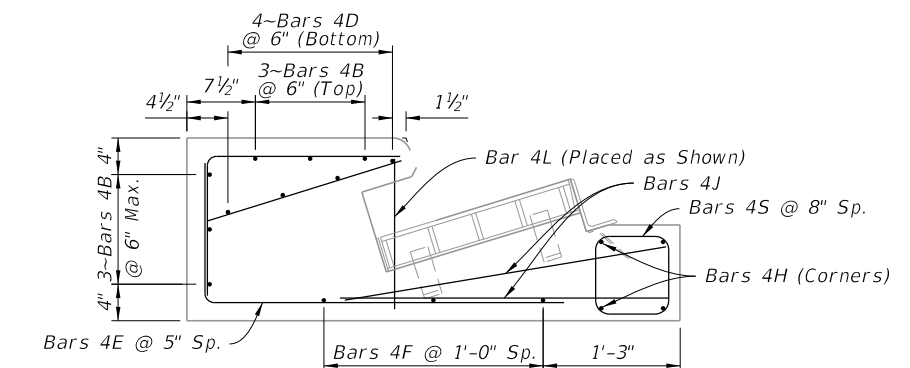
SECTION G-G

NOTES:

1. For location of Sections D-D thru H-H see Sheet 2.
2. Match slope of adjacent curb with 2" top radius and 3/4" bottom chamfer of 1/4" radius.
3. See Plans for bottom and riser type.



SECTION H-H



SECTION H-H

DIMENSIONAL DETAILS

REINFORCING DETAILS

PRECAST DIMENSIONAL AND REINFORCING DETAILS

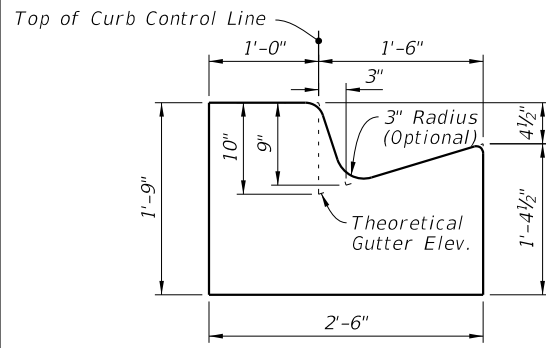
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LAST REVISION	DESCRIPTION:
11/01/20	

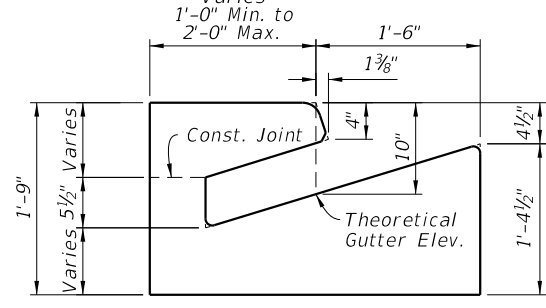

**FY 2021-22
STANDARD PLANS**

CURB INLET TOP TYPES 5 AND 6

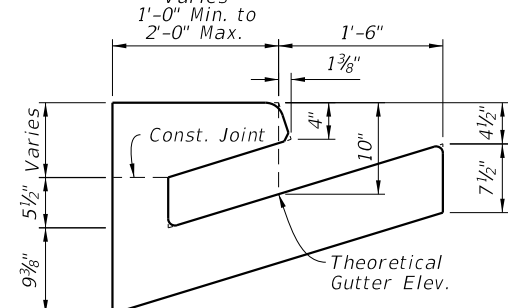
INDEX	SHEET
425-021	4 of 7



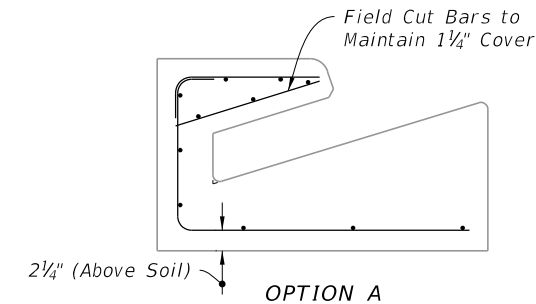
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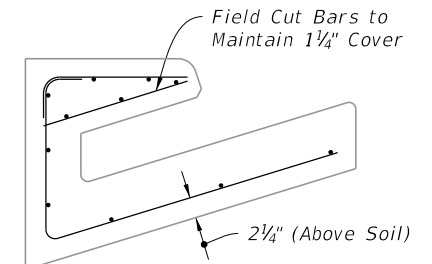
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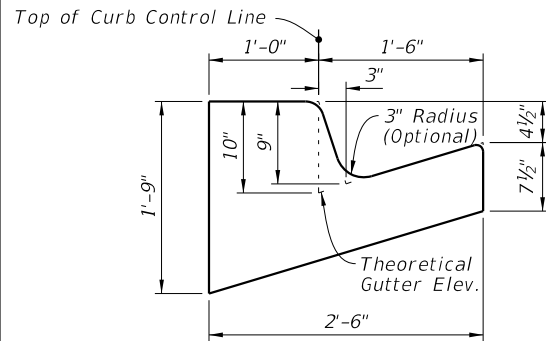
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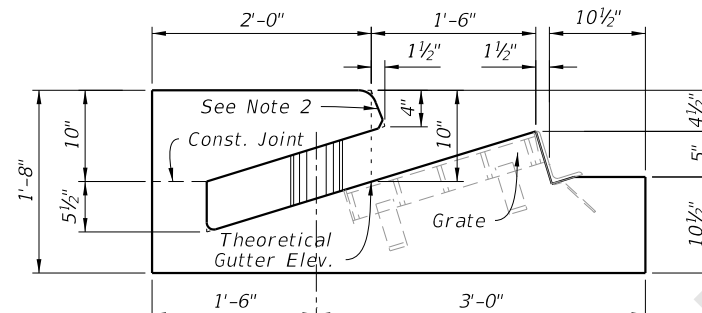
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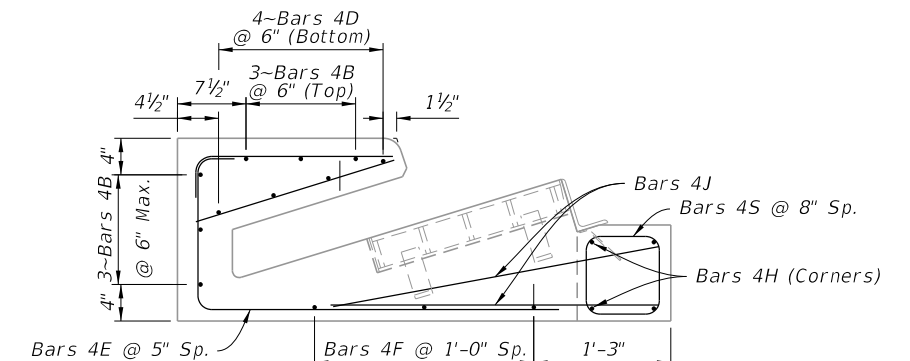
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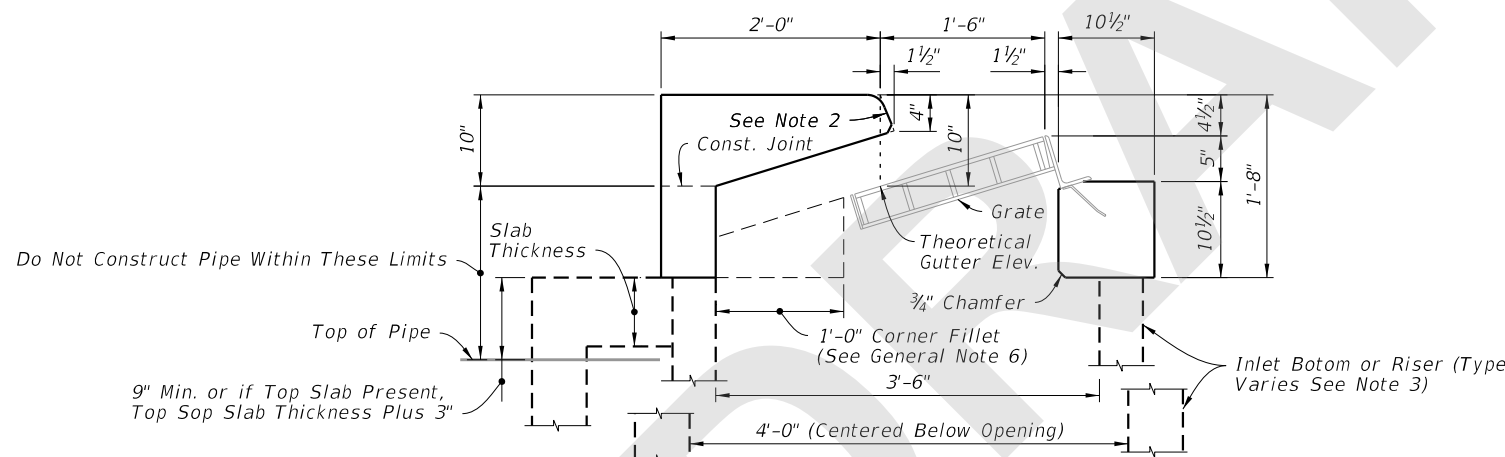
OPTION B
SECTION D-D



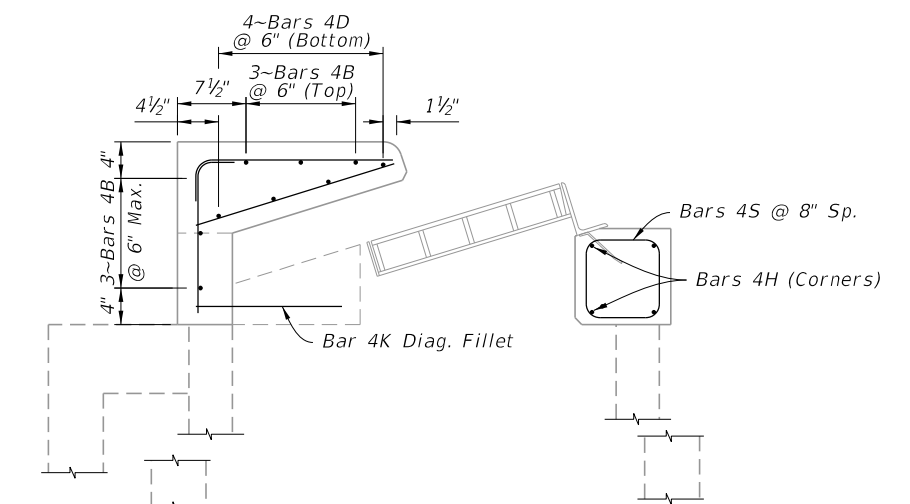
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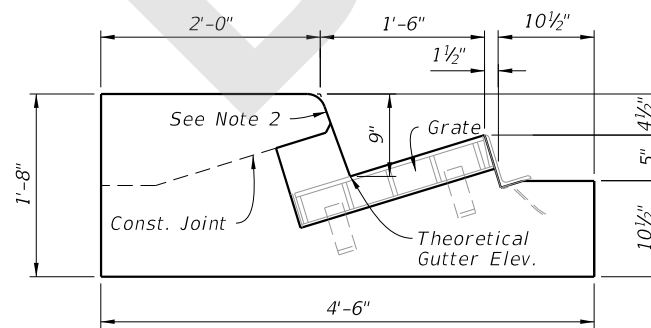
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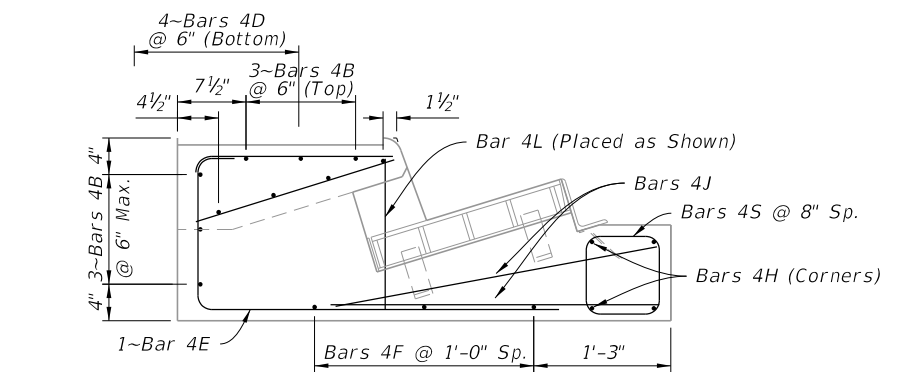
SECTION G-G



SECTION G-G



SECTION H-H



SECTION H-H

NOTES:

1. For location of Sections D-D thru H-H see Sheet 2.
2. Match slope of adjacent curb with 2" top radius and 3/4" bottom chamfer or 1/4" radius.
3. See Plans for bottom and riser type.

DIMENSIONAL DETAILS

REINFORCING DETAILS

CAST-IN-PLACE DIMENSIONAL AND REINFORCING DETAILS

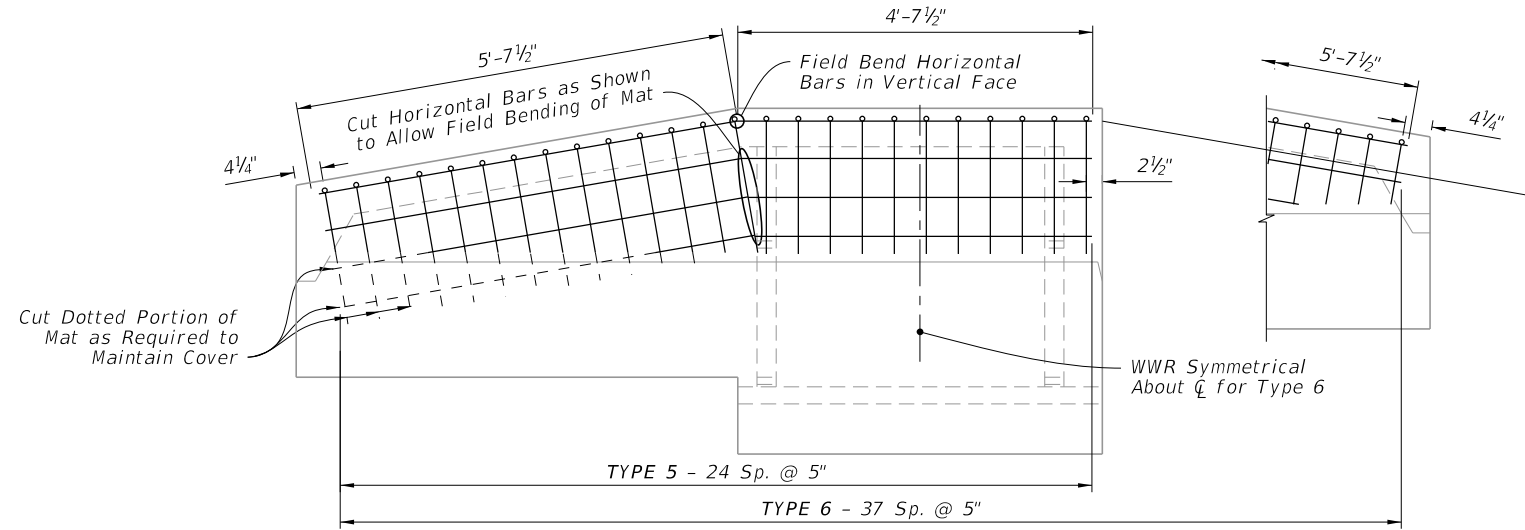
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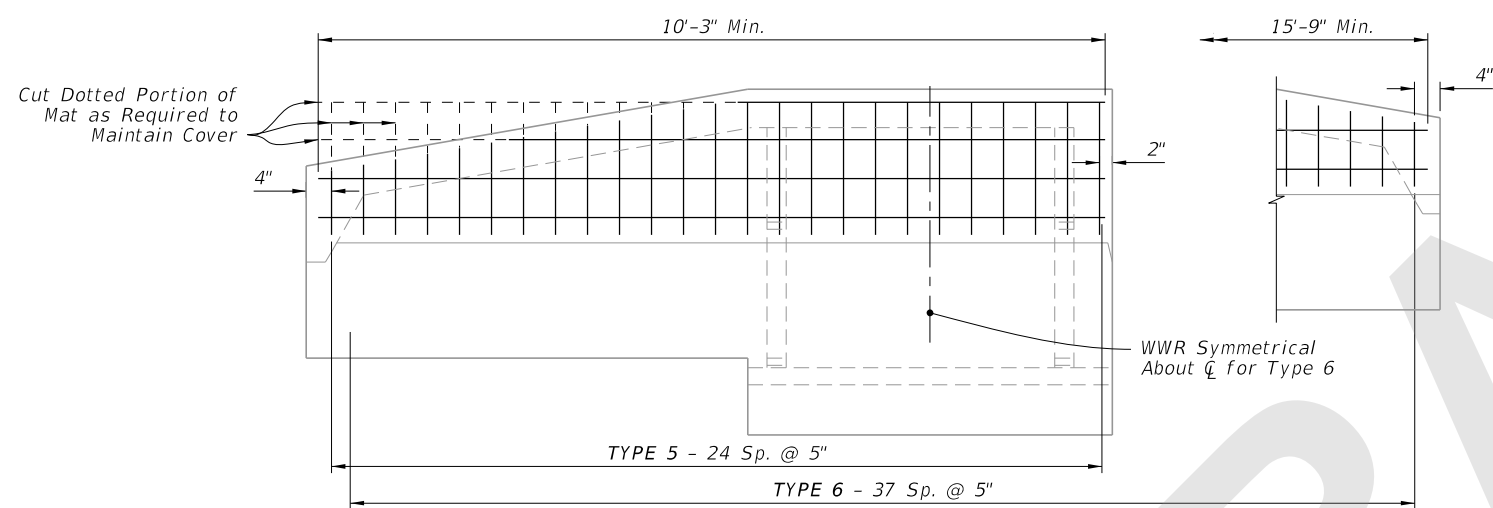
FDOT
FY 2021-22
STANDARD PLANS

CURB INLET TOP TYPES 5 AND 6

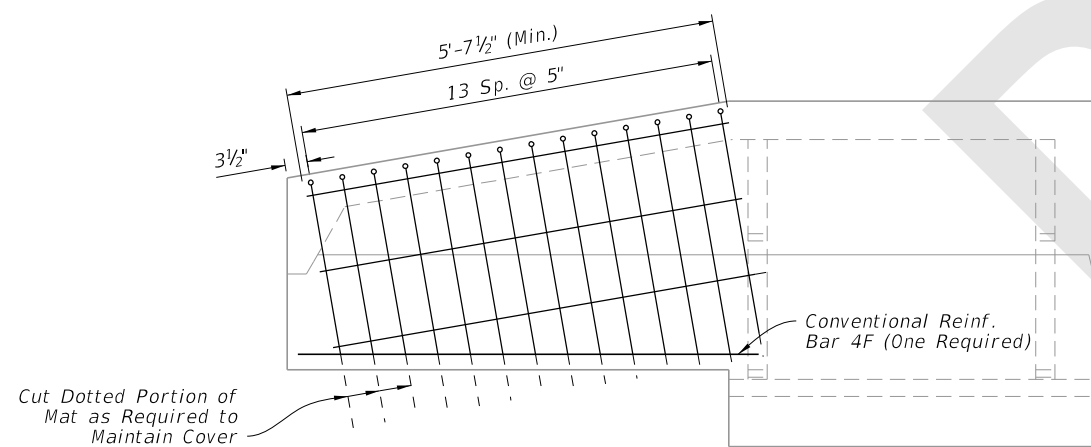
INDEX 425-021	SHEET 5 of 7
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PIECE - 1 PLACEMENT SCHEMATIC

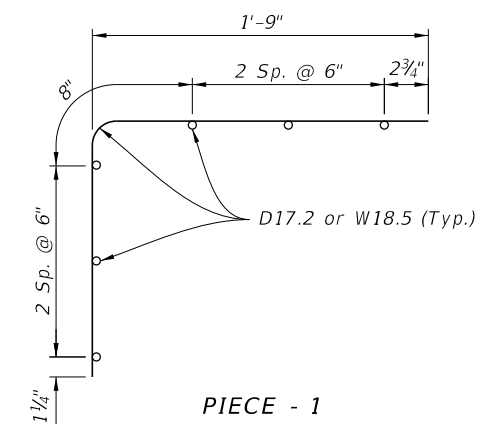


PIECE - 2 PLACEMENT SCHEMATIC

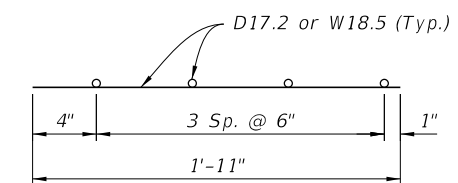


PIECE - 3 PLACEMENT SCHEMATIC

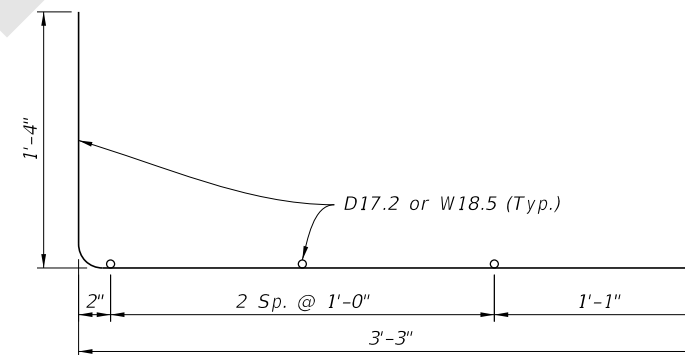
WWR REINFORCING DETAILS



PIECE - 1

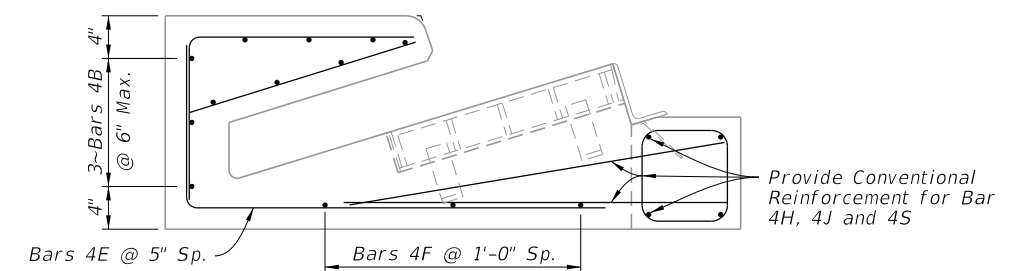


PIECE - 2



PIECE - 3

WELDED WIRE REINFORCING DETAILS



TYPICAL SECTION

NOTES:

1. All bar dimensions in the bending diagrams are out to out.
2. Welded Wire Reinforcement consists of Smooth or Deformed wire meeting the requirements of Specification 931.

ALTERNATE WELDED WIRE REINFORCING (WWR) DETAILS

8/10/2020 11:23:52 AM

LAST REVISION 11/01/20	DESCRIPTION:
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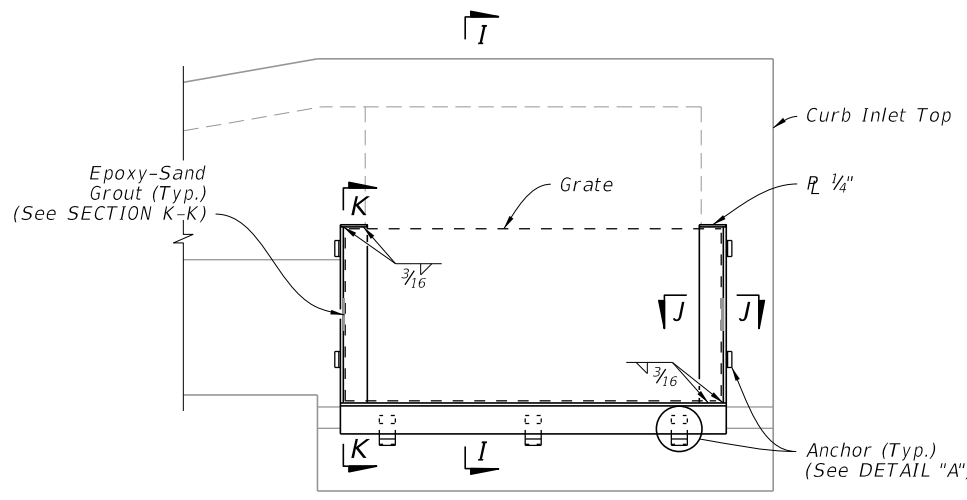


FY 2021-22
STANDARD PLANS

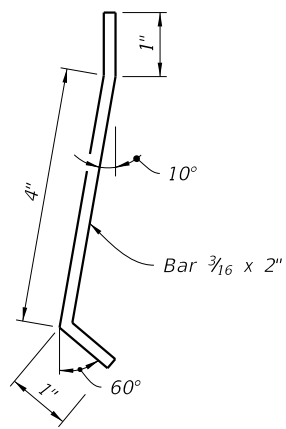
CURB INLET TOP TYPES 5 AND 6

INDEX
425-021

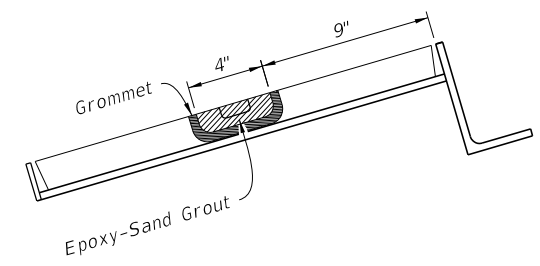
SHEET
6 of 7



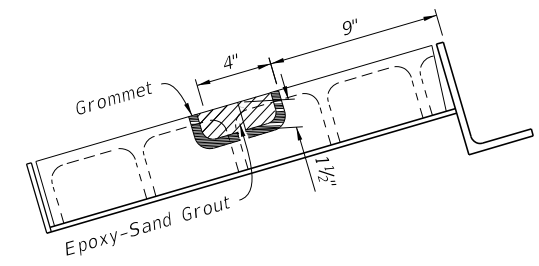
FRAME DETAIL



ANCHOR
DETAIL "A"

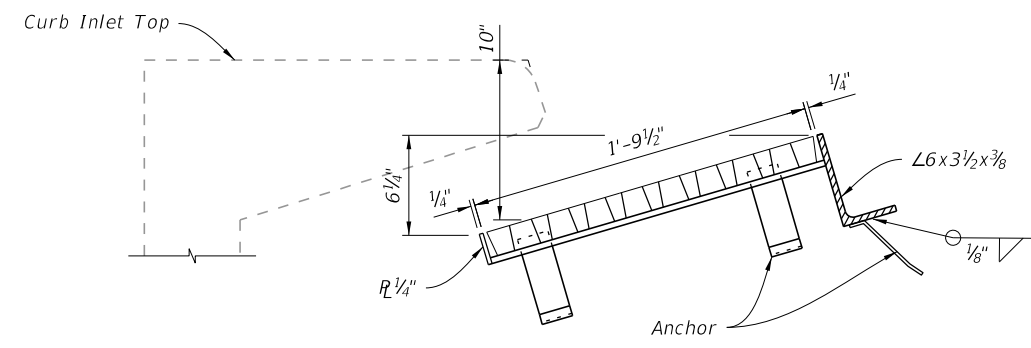


CAST IRON GRATE GROUTING DETAILS

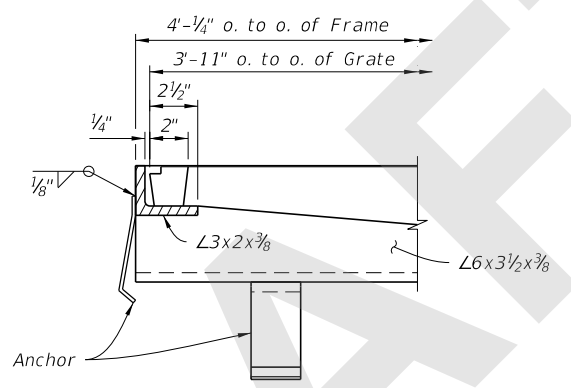


STEEL GRATE GROUTING DETAILS

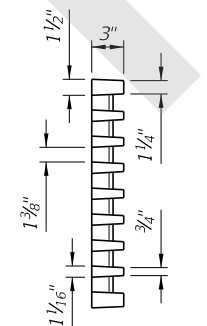
SECTION K-K



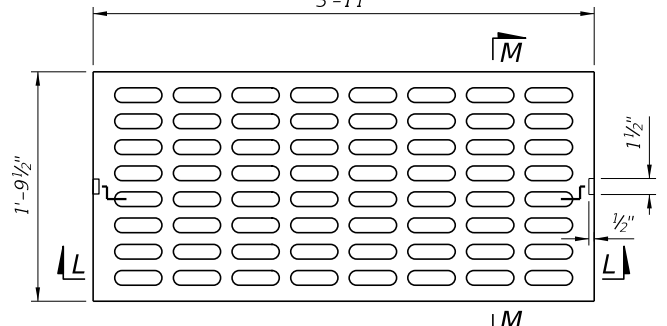
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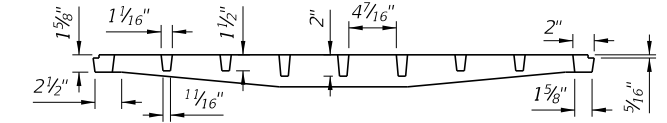
SECTION J-J



SECTION M-M

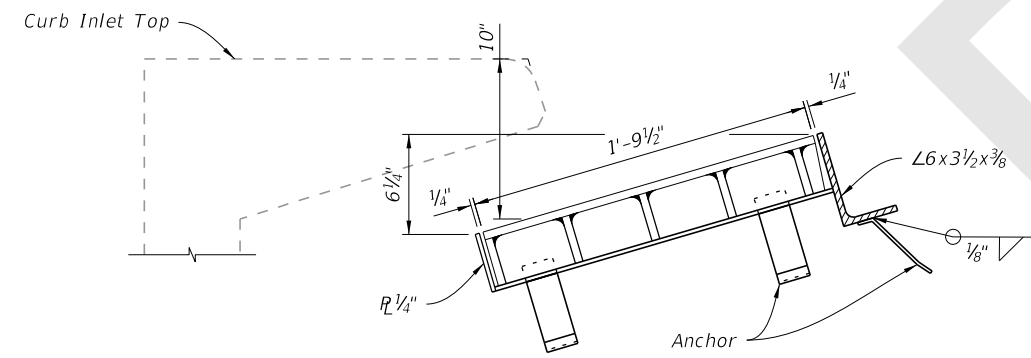


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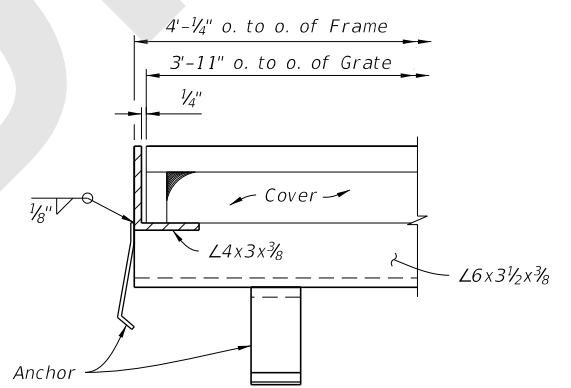


SECTION L-L

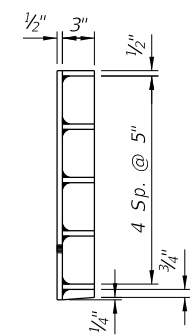
CAST IRON GRATE



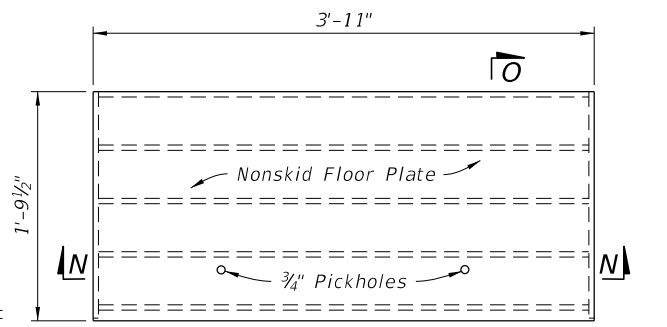
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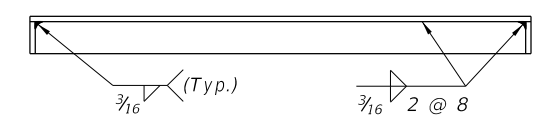
SECTION J-J



SECTION O-O



TOP



SECTION N-N

STEEL GRATE

GRATE, ANCHOR, AND GROUTING DETAILS

8/10/2020 11:24:01 AM

LAST REVISION 11/01/20	DESCRIPTION:
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FDOT FY 2021-22
STANDARD PLANS

CURB INLET TOP TYPES 5 AND 6

INDEX 425-021	SHEET 7 of 7
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