

ORIGINATION FORM

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

Contact Information:

Date: May 7, 2018
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Standard Plans:

Index Number: 430-031
Sheet Number (s): 1 of 1
Index Title: Straight Concrete Endwalls - Single and Double
60" Pipe +

Summary of the changes:

Reorganized Index.

Sheet 1: General Notes and Overview. Moved specification and payment information to Specifications. Deleted design information covered in the Design Manual. Added note on quantities for estimating purposes only.

Sheets 2 and 3: Bar naming conventions Updated to reflect Horizontal, Vertical, and Bent bars. +

Commentary / Background:

Specifications, payment information, and design criteria belong in other publications. The Index was reorganized to de-clutter the drawings and make them more user-friendly.

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 – |
| <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)

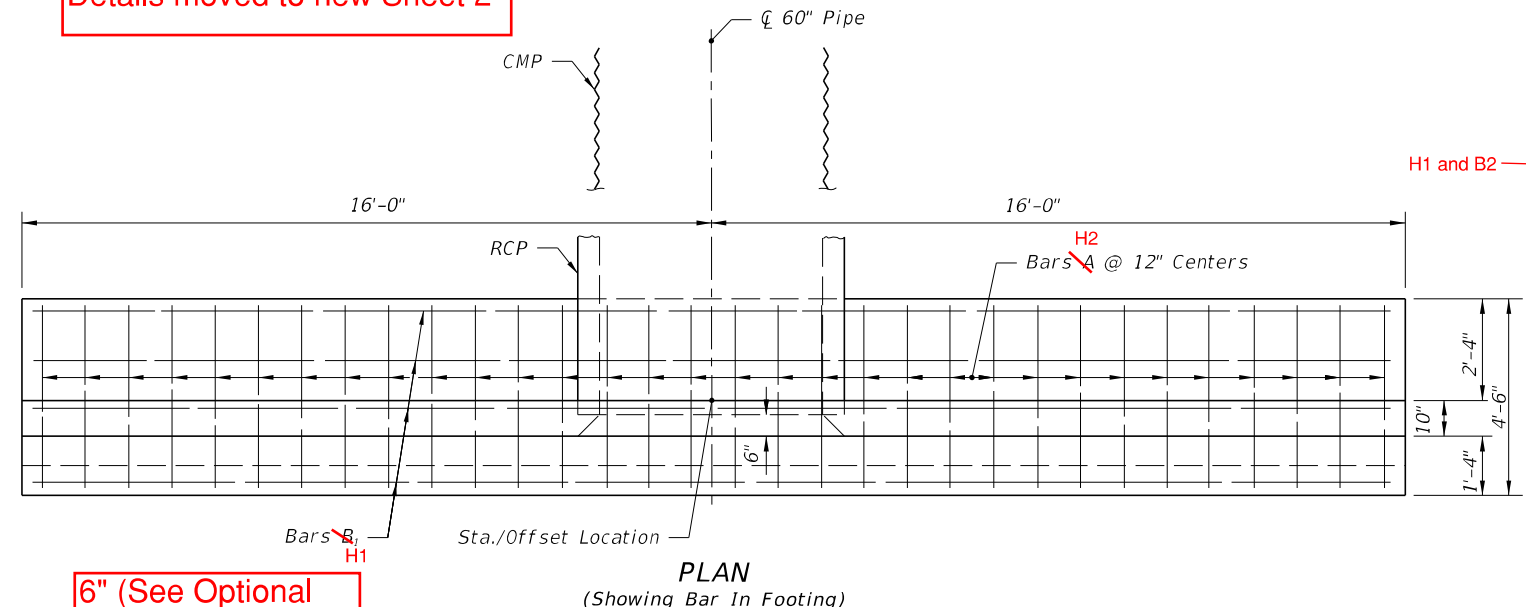
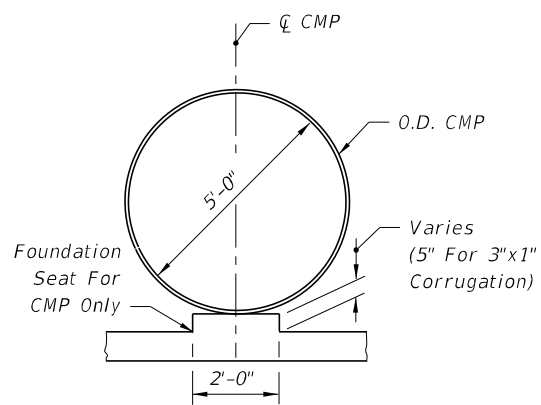
- | Yes | N/A | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Proposed Standard Plan Instructions (SPI) |
| <input type="checkbox"/>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

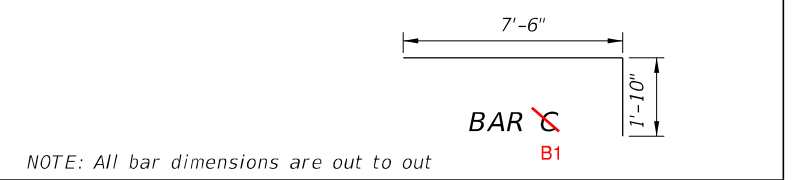
————— Contact the Roadway Design Office for assistance in completing this form —————

Details moved to new Sheet 2



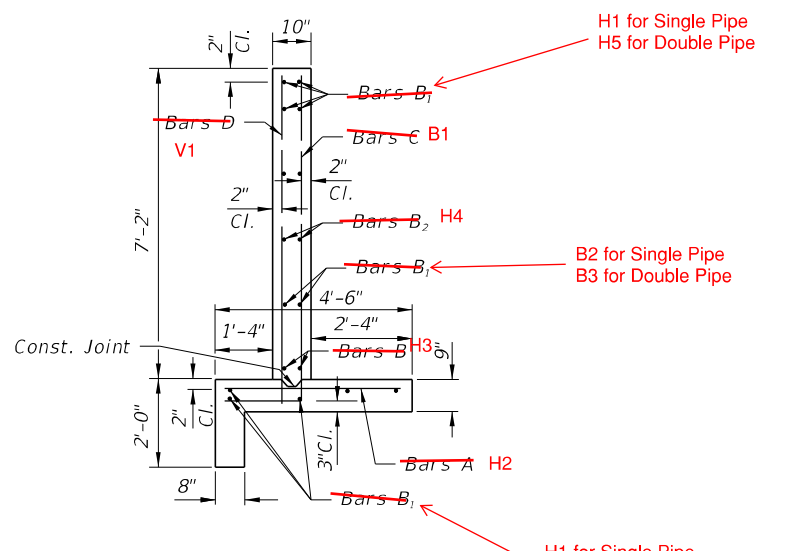
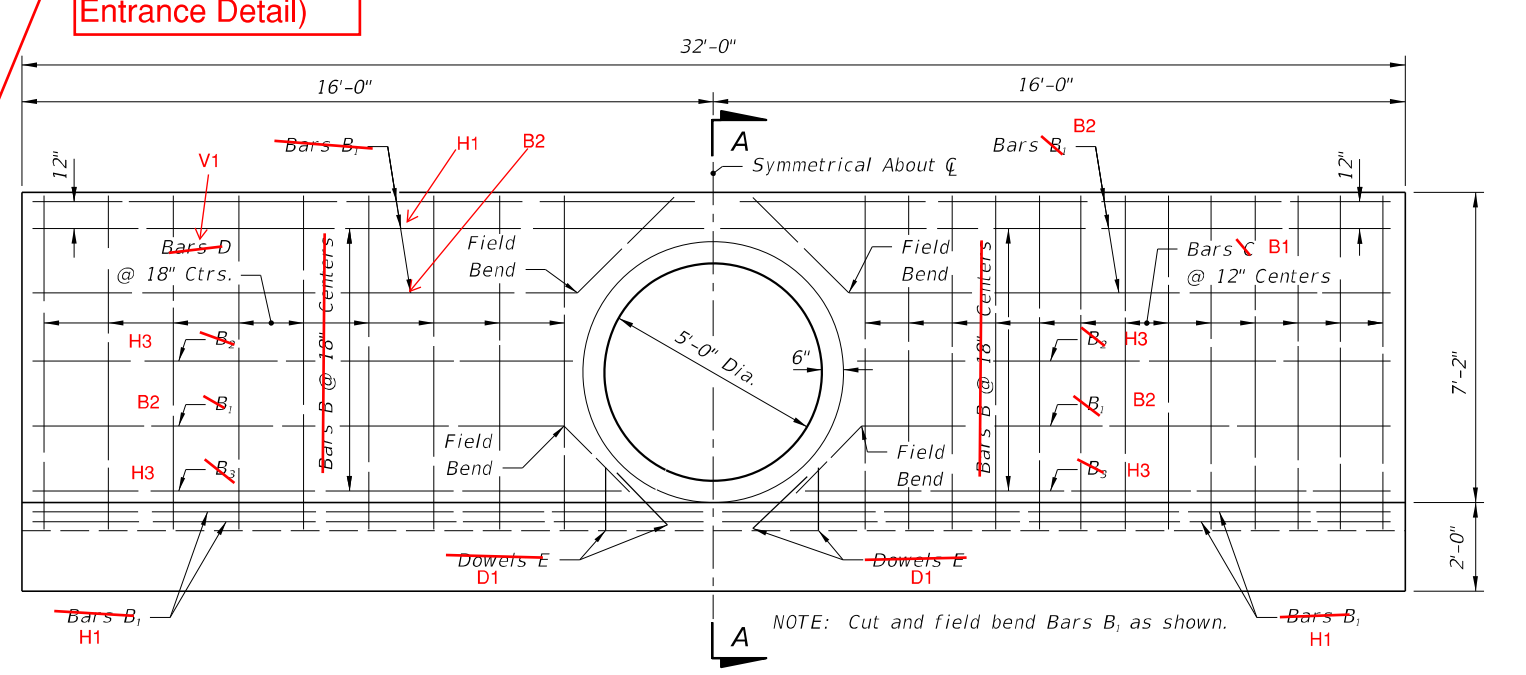
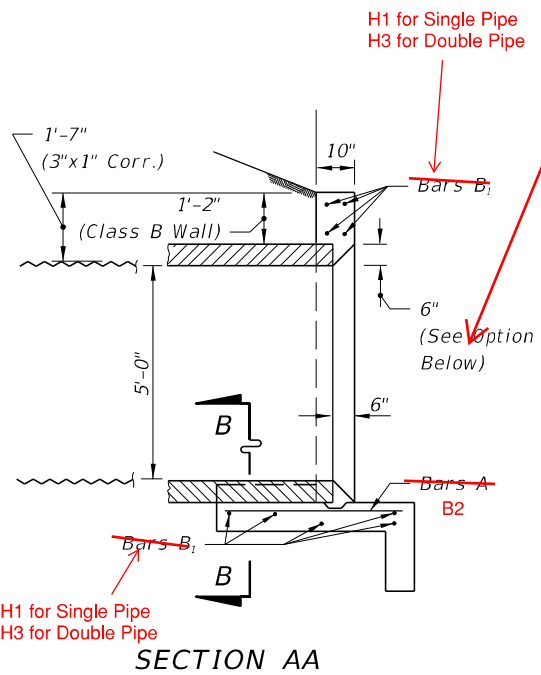
BILL OF REINFORCING STEEL					
MARK	SIZE	NO. REQD.	LENGTH	LOCATION	BENDING
H2 A	#4	32	4'-2"	Footing	Straight
H2 B	#4	13	31'-8"	Footing & Wall	Straight
H4 B	#4	4	12'-4"	Wall	Straight
H3 B	#4	4	13'-9"	Wall	Straight
B1	#4	26	9'-4"	Wall	Bend
V1	#4	18	7'-6"	Wall	Straight
D1	#4	8	1'-8"	Footing & Wall	Straight

BENDING DIAGRAM



ESTIMATED QUANTITIES

ITEM	UNIT	RCP	CMP
Class II Concrete	Cu. Yd.	11.3	11.4
Reinforcing Steel	Lb.	695	695



Delete: Already in DM Table 3.5. Add to SPI?

SINGLE 60" PIPE ENDWALL DETAILS

GENERAL NOTES

1. Straight concrete endwalls are intended for use outside the clear zone.
2. Endwalls may be cast-in-place or precast construction. Cast-in-place endwalls shall conform to the details on this Index. Precast construction which adheres to this Index, including any additional reinforcement required for handling which shall be determined by the Contractor or supplier, does not require additional approvals. Deviations from this Index, for precast units, shall require the approval of the State Drainage Engineer prior to construction. For precast construction, see Index 425-001 for opening and grouting details.
3. Reinforcing steel shall be either Grade 40 or 60.
4. Concrete shall be Class II, except ASTM C478 (4000 psi) concrete may be substituted for precast items manufactured in plants meeting the requirements of Section 449 of the Specifications.
5. Chamfer all exposed edges and corners 3/4" unless otherwise shown.
6. Apply continuous bituminous coating with a minimum thickness of 0.004" to the portion of corrugated metal pipe that is in direct contact with the concrete slab and extending 12"
7. Sodding shall be in accordance with Index 524-001 and paid for under the contract unit price for Performance Turf, SY.
8. Basis of payment for either cast-in-place or precast construction shall be the estimated quantities tabulated on the Index. Concrete and reinforcing steel shall be paid for under the contract unit prices for Class II Concrete (Endwalls), CY and Reinforcing Steel (Roadway) / LB.

Moved to Specification

Optional Entrance Detail "A" (Used only with concrete pipe)

Moved to Specification

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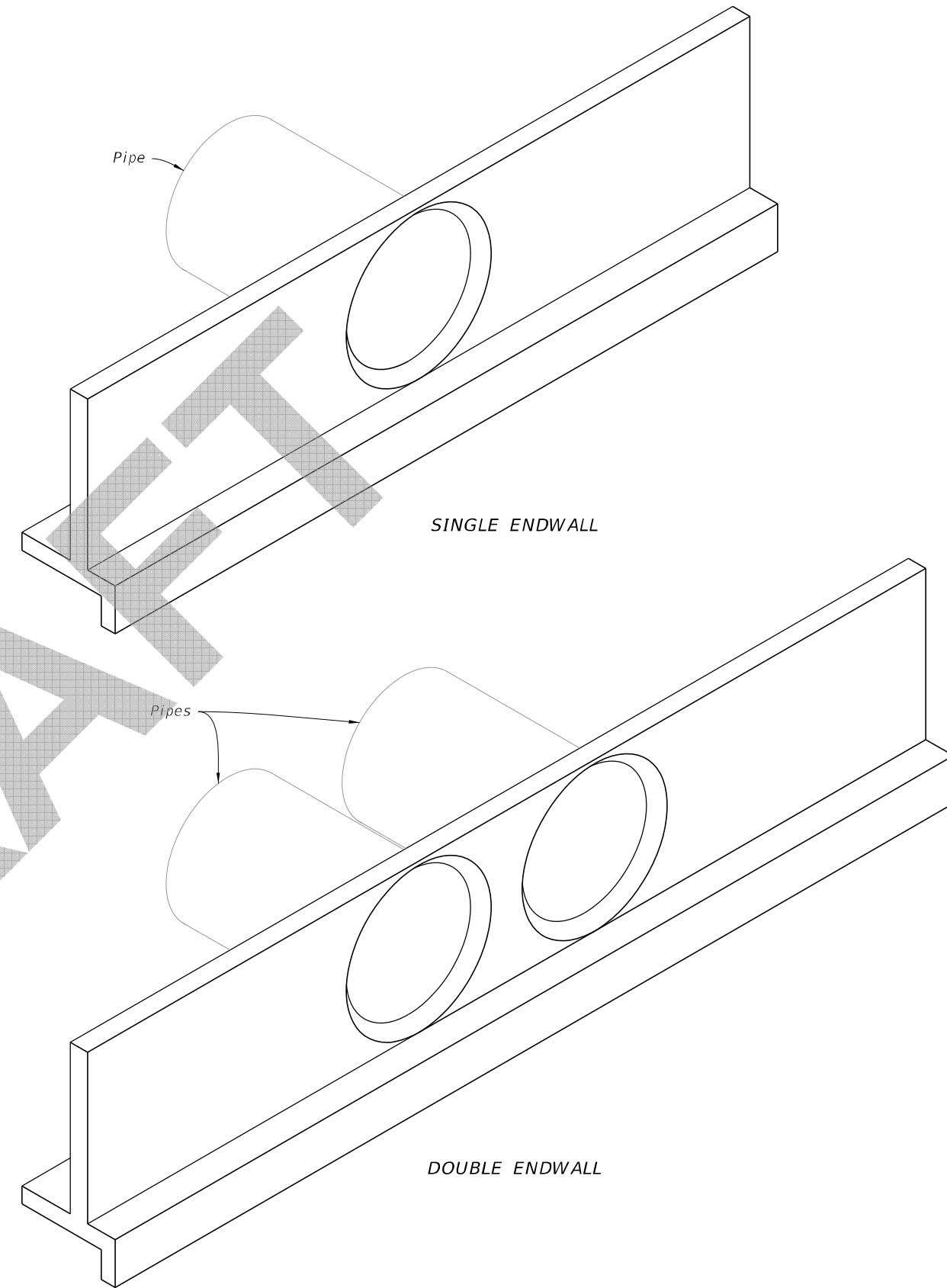
GENERAL NOTES:

1. Use Class II concrete.
2. Reinforcing steel is either Grade 40 or 60.
3. Endwalls may be cast in place or precast concrete. The Contractor or the Supplier will determine the additional reinforcement necessary for handling precast units.
4. Chamfer all exposed edges and corners $\frac{3}{4}$ " unless otherwise shown.
5. Quantities shown are for estimating purposes only.

TABLE OF CONTENTS:


Sheet	Description
1	General Notes and Contents
2	Single 60" Pipe Endwall Details
3	Double 60" Pipe Endwall Details

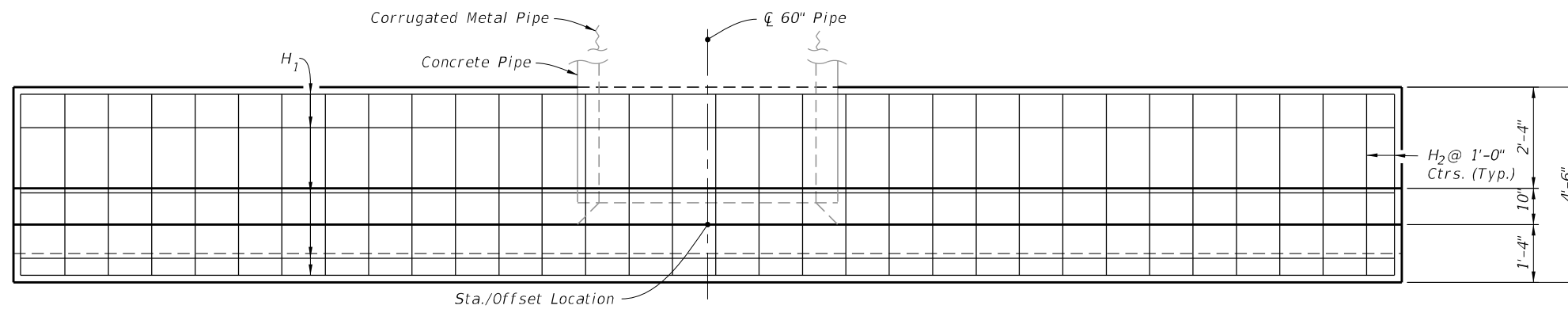
DRAFT



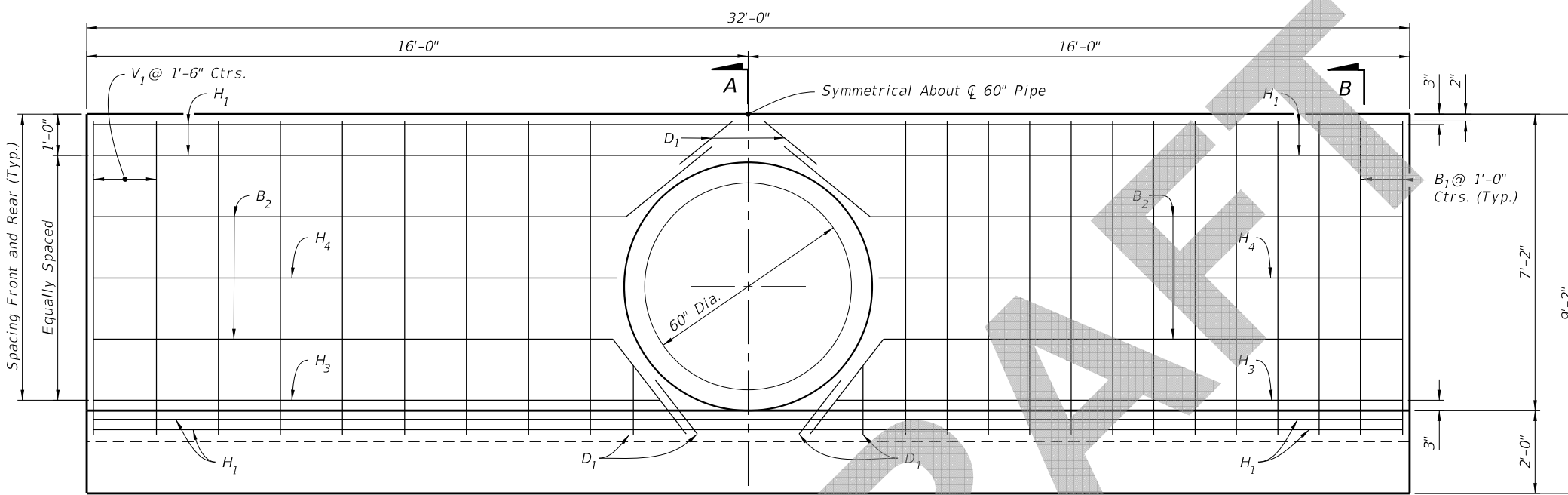
————— STRAIGHT CONCRETE ENDWALLS 60" PIPE —————

8/12/2019 1:20:35 PM

LAST REVISION 11/01/19	REVISION	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 60" PIPE	INDEX 430-031	SHEET 1 of 3
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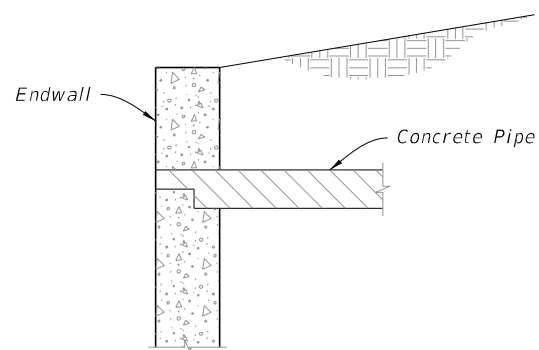


PLAN
(Showing Bars In Footing)

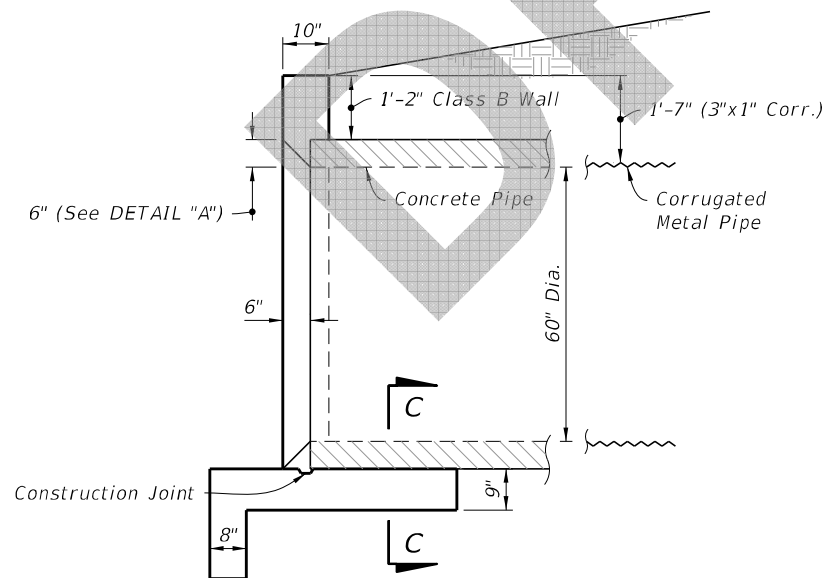


HALF ELEVATION
(Showing Bars in Front Face of Wall)

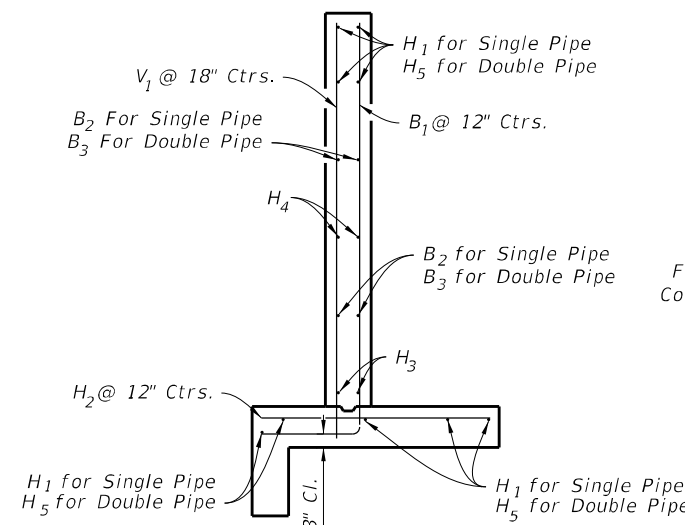
HALF ELEVATION
(Showing Bars in Back Face of Wall)



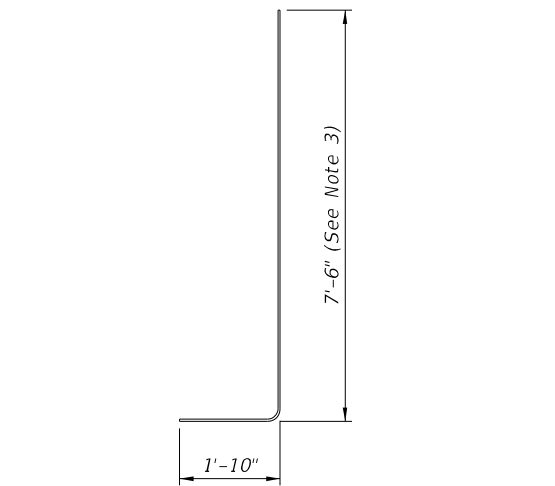
DETAIL "A"
(Concrete Pipe Optional Entrance)



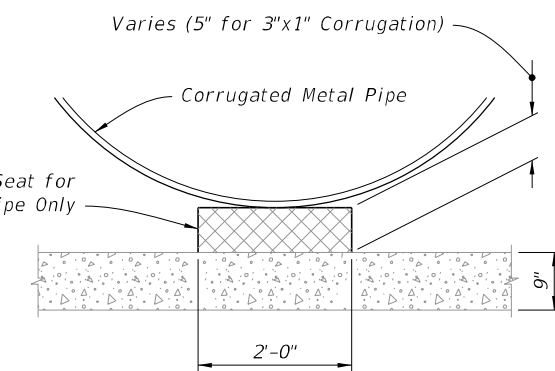
SECTION A-A
(Rebar Not Shown)



SECTION B-B
(Typical Section)



BAR B₁
BENDING DIAGRAM



SECTION C-C

NOTES:

- 2" clearance on all reinforcement, unless otherwise shown.
- Cut and bend B₂ and B₃ Bars as shown.
- All bar dimensions are out to out.

LEGEND:

H = Horizontal Bars B = Bent Bars
V = Vertical Bars D = Dowels or Diagonal Bars

SINGLE 60" PIPE			
ESTIMATED QUANTITIES			
ITEM	UNIT	RCP	CMP
Class II Concrete	Cu. Yd.	11.3	11.4
Reinforcing Steel	Lb.	695	695

BILL OF REINFORCING STEEL			
MARK	SIZE	NO. REQD.	LENGTH
H ₁	4	9	31'-8"
H ₂	4	32	4'-2"
H ₃	4	4	13'-9"
H ₄	4	4	12'-4"
V ₁	4	18	7'-6"
B ₁	4	26	9'-4"
B ₂	4	4	31'-8"
D ₁	4	8	1'-8"

SINGLE 60" PIPE ENDWALL DETAILS

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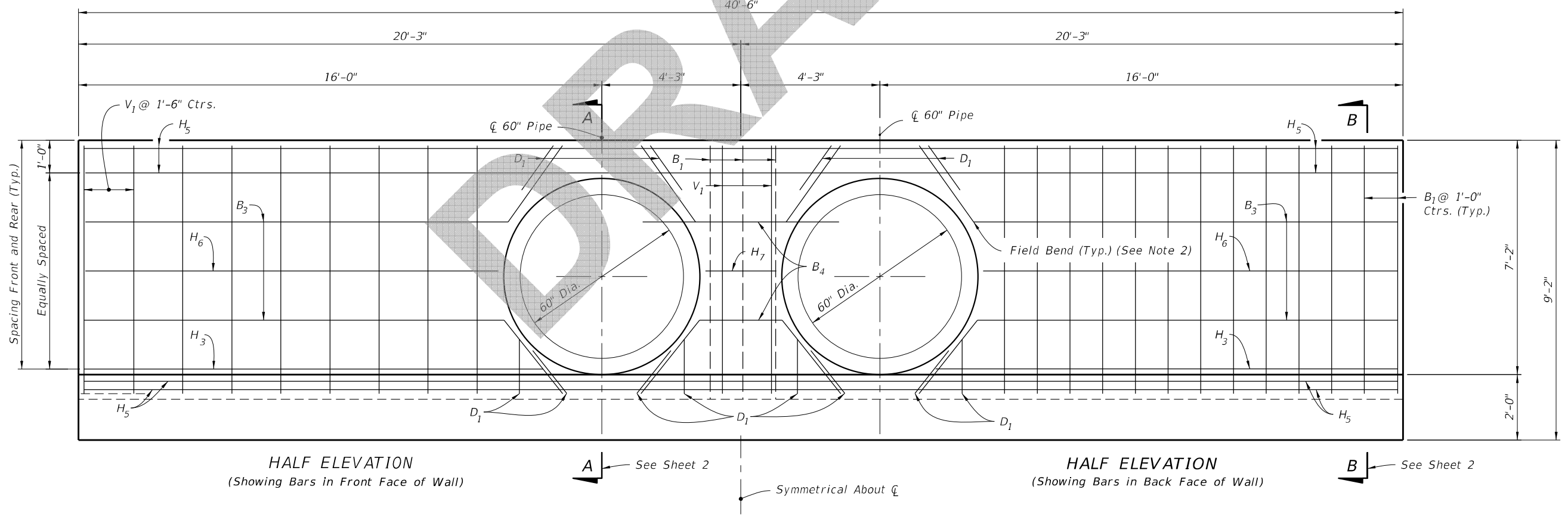
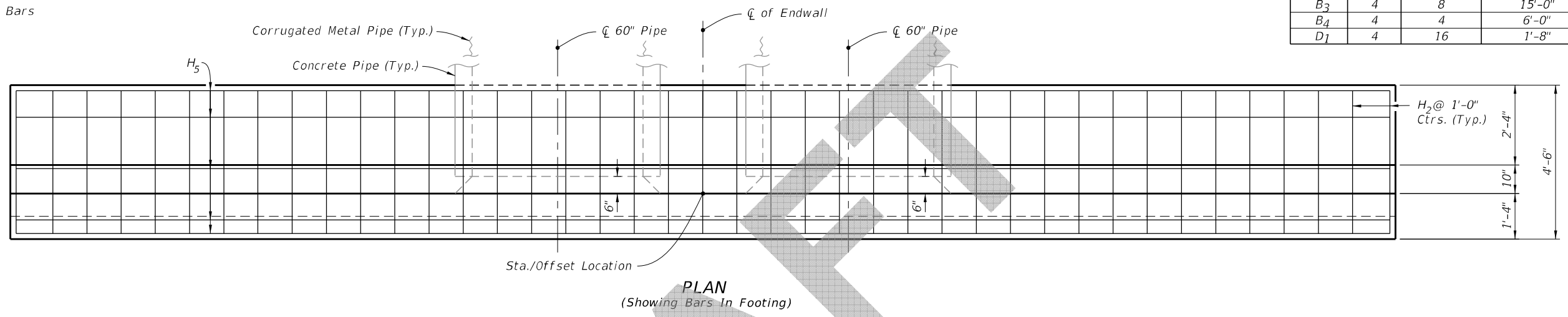
LAST REVISION	11/01/19	DESCRIPTION:		FY 2020-21 STANDARD PLANS	STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 60" PIPE	INDEX	SHEET
						430-031	2 of 3

DOUBLE 60" PIPE ESTIMATED QUANTITIES			
ITEM	UNIT	RCP	CMP
Class II Concrete	Cu. Yd.	13.7	13.8
Reinforcing Steel	Lb.	824	824

BILL OF REINFORCING STEEL			
MARK	SIZE	NO. REQD.	LENGTH
H ₂	4	41	4'-2"
H ₃	4	4	13'-9"
H ₅	4	9	40'-2"
H ₆	4	4	12'-6"
H ₇	4	2	2'-2"
V ₁	4	20	7'-6"
B ₁	4	29	9'-4"
B ₃	4	8	15'-0"
B ₄	4	4	6'-0"
D ₁	4	16	1'-8"

- NOTES:**
- 2" clearance on all reinforcement, unless otherwise shown.
 - Cut and bend B₃ Bars as shown.
 - All bar dimensions are out to out.

- LEGEND:**
- H = Horizontal Bars
 - V = Vertical Bars
 - B = Bent Bars
 - D = Dowels or Diagonal Bars



DOUBLE 60" PIPE ENDWALL DETAILS

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LAST REVISION 11/01/19	DESCRIPTION:	FDOT FY 2020-21 STANDARD PLANS	STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 60" PIPE	INDEX 430-031	SHEET 3 of 3
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