

# 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: 430-033  
Sheet Number (s): 1 of 1  
Index Title: Straight Concrete Endwalls - Single and Double  
72" 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)

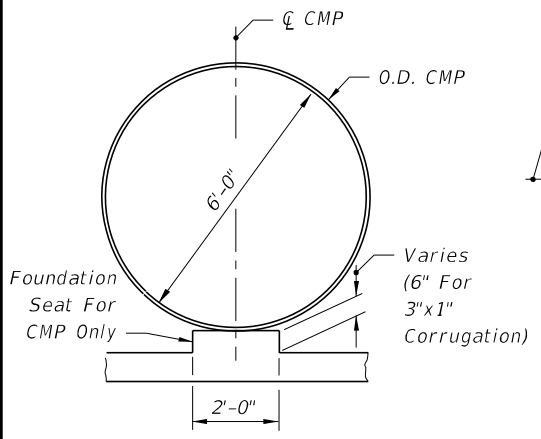
- | Yes                                 | N/A                      |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups                          |
| <input type="checkbox"/>            | <input 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:

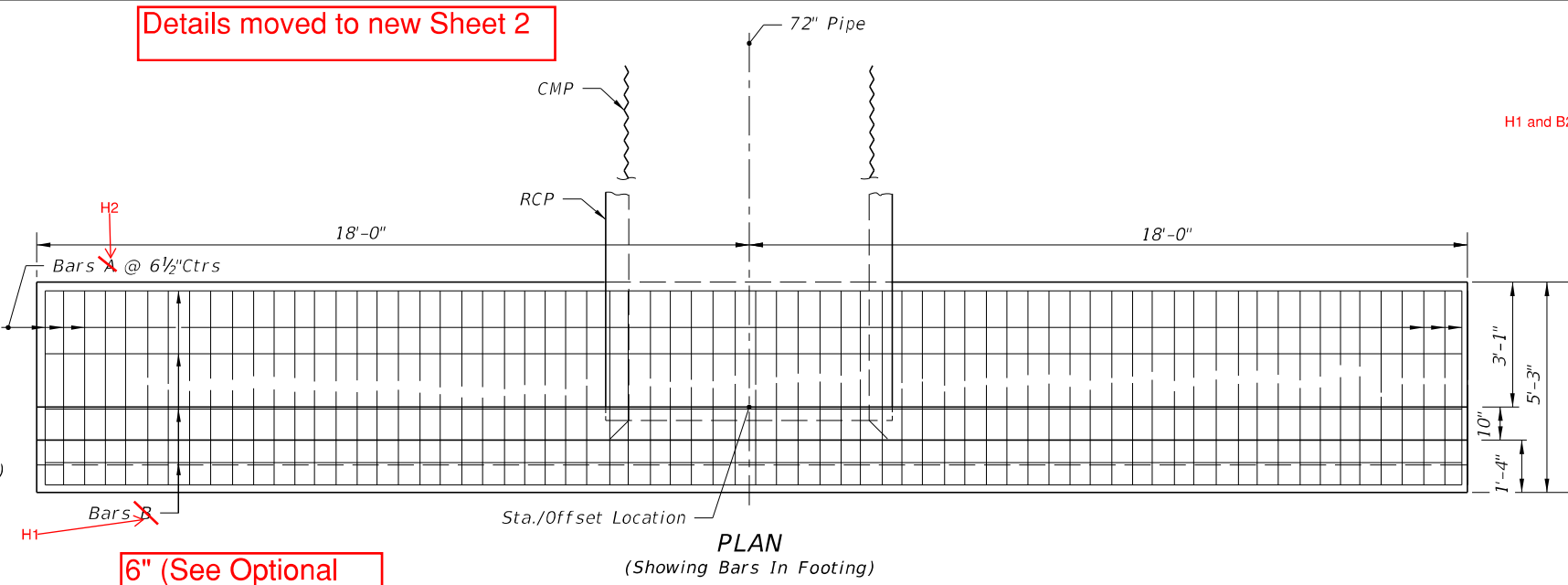
- Design Bulletin (Interim)    DCE Memo    Program Mgmt. Bulletin    FY-Standard Plans (Next Release)

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

Details moved to new Sheet 2

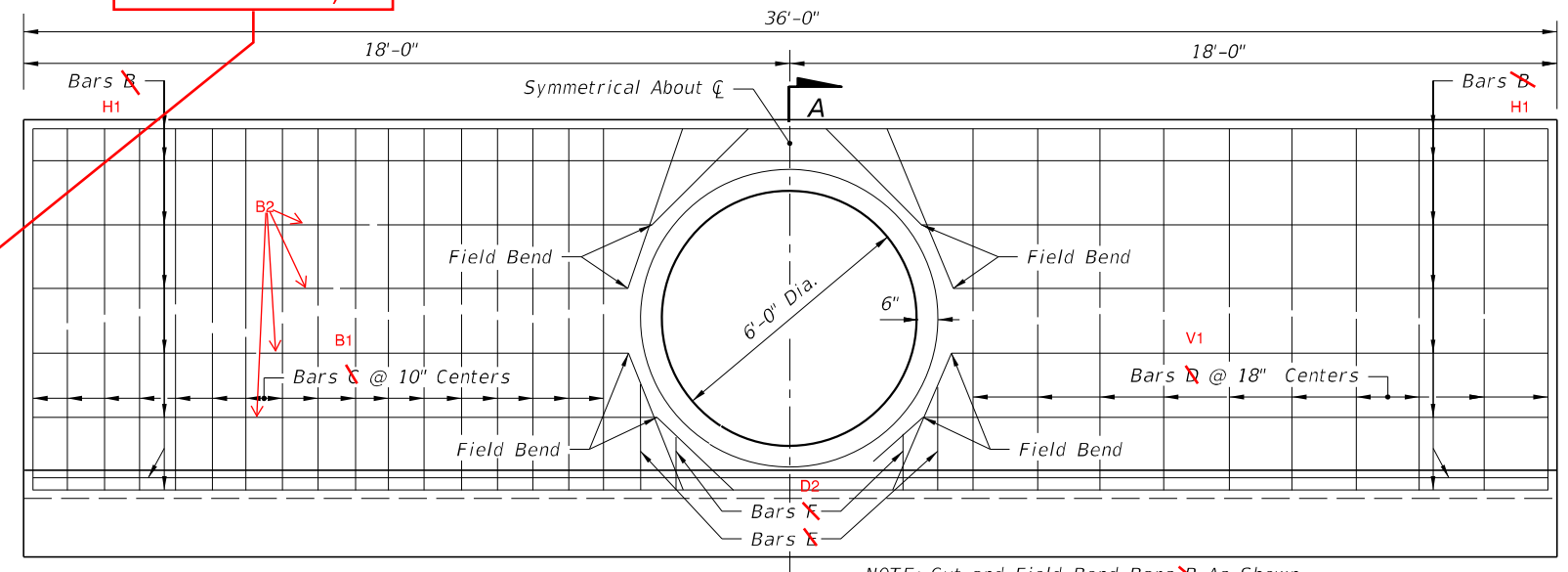


SECTION BB



PLAN  
(Showing Bars In Footing)

6" (See Optional Entrance Detail)



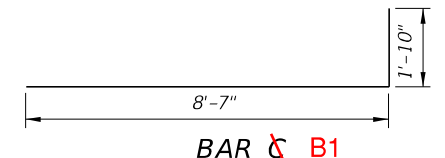
HALF ELEVATION  
(Showing Bars In Back Face Of Wall)

HALF ELEVATION  
(Showing Bars In Front Face Of Wall)

BILL OF REINFORCING STEEL					
MARK	SIZE	NO. REOD.	LENGTH	LOCATION	BENDING
H2	5	68	4'-11"	Footing	Straight
H1	4	17	35'-8"	Footing & Wall	Straight
B1	5	34	10'-5"	Wall	Bend
V1	4	20	8'-7"	Wall	Straight
D1	4	4	2'-6"	Wall	Straight
D2	4	4	1'-6"	Wall	Straight

H1 and B2

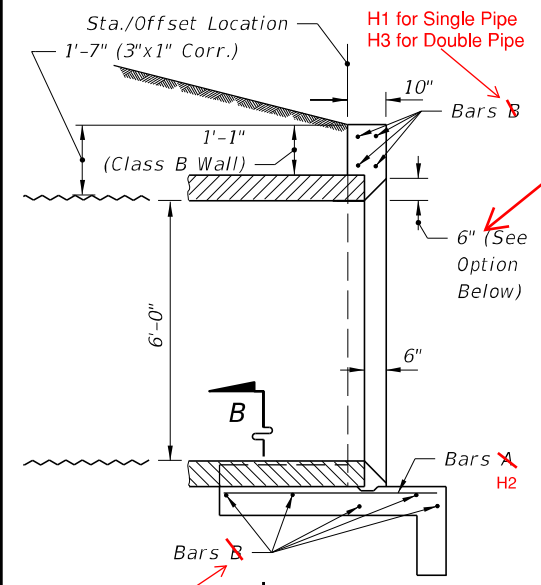
BENDING DIAGRAM



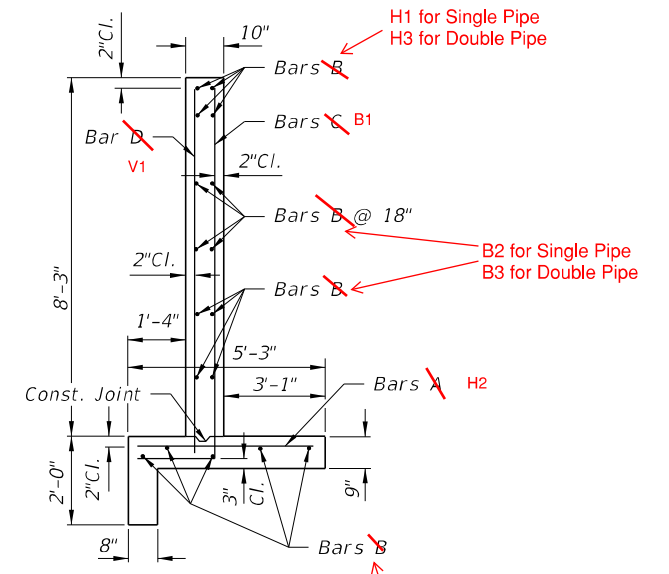
NOTE: All bar dimensions are out to out

ESTIMATED QUANTITIES

ITEM	UNIT	RCP	CMP
Class II Concrete	Cu. Yd.	14.4	14.5
Reinforcing Steel	Lb.	1249	1249



SECTION AA



TYPICAL SECTION  
THRU ENDWALL

Straight Concrete Endwalls Single Pipe

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

GENERAL NOTES

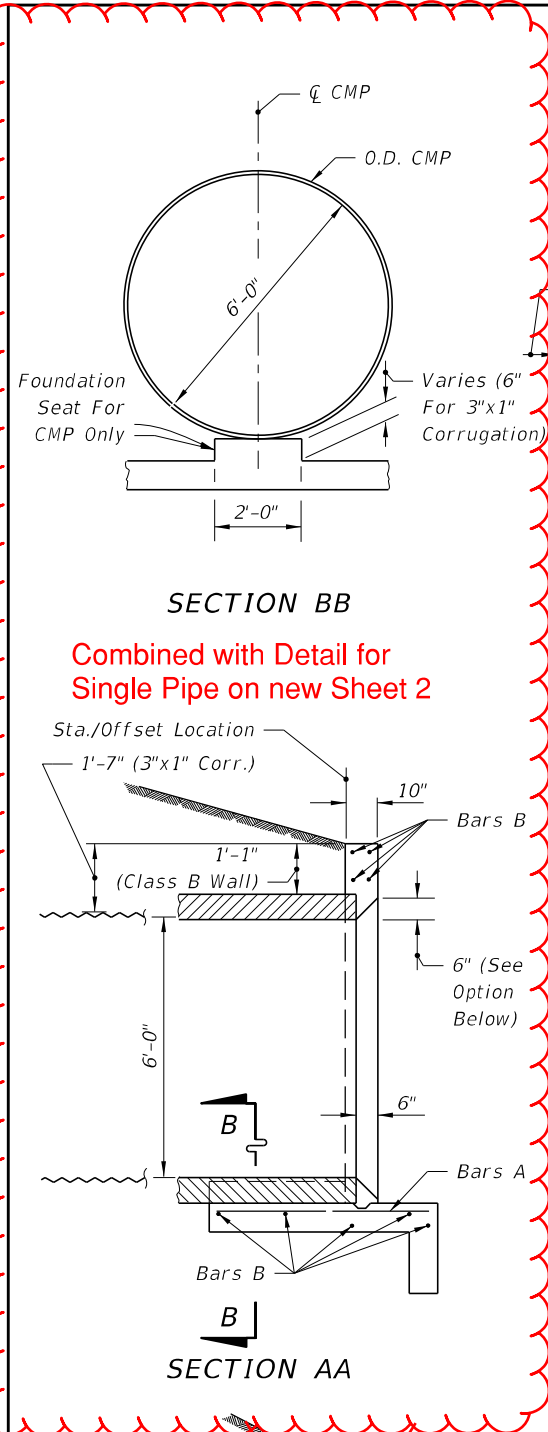
1. Straight concrete endwalls are intended for use outside the clear zone.
2. Endwalls may be cast-in-place or precast construction. Cast-in-place endwalls shall conform to the details on this Index. Precast construction which adheres to this Index, including any additional reinforcement required for 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. That portion of corrugated Metal pipe in direct contact with the concrete slab and extending 12" beyond shall have a continuous bituminous coating of 0.004" minimum thickness coated applied prior to placing of the concrete.
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  
(Used only with concrete pipe)

Moved to Specification

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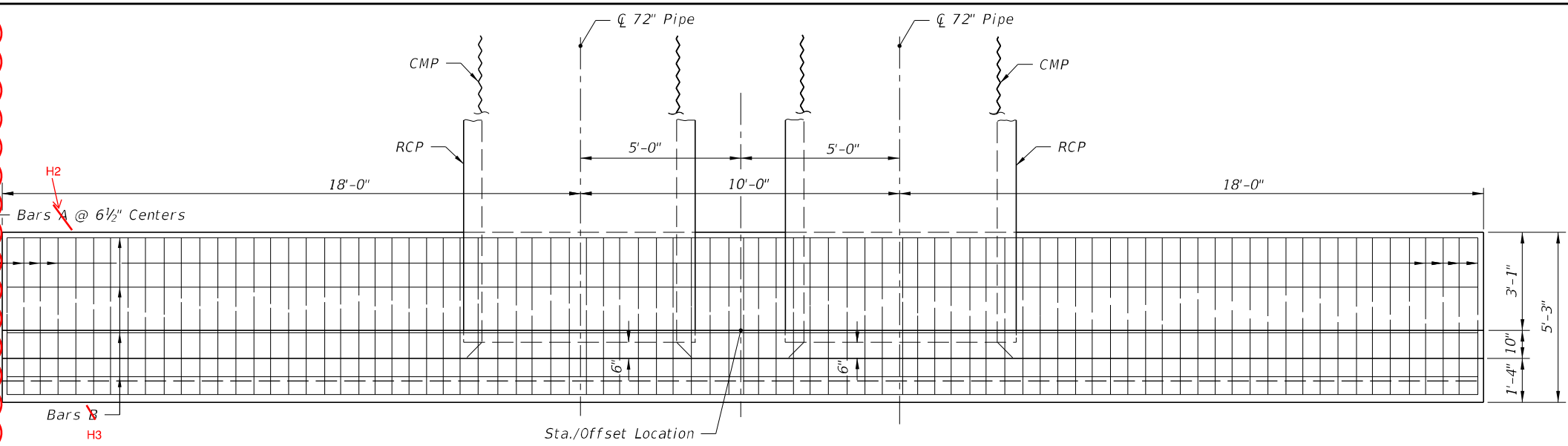


SECTION BB

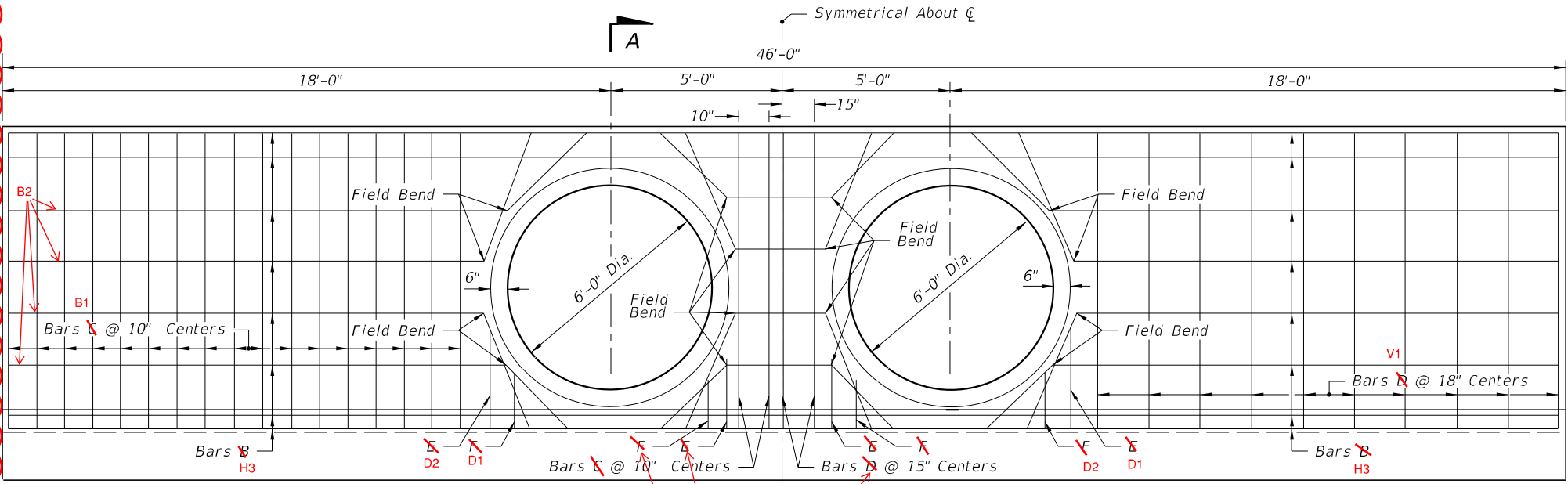
Combined with Detail for Single Pipe on new Sheet 2

SECTION AA

OPTIONAL ENTRANCE FOR CONCRETE PIPE

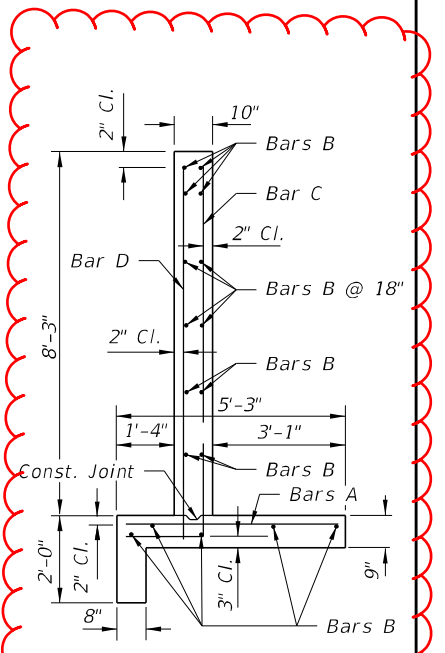


PLAN  
(Showing Bars In Footing)



HALF ELEVATION  
(Showing Bars In Back Face Of Wall)

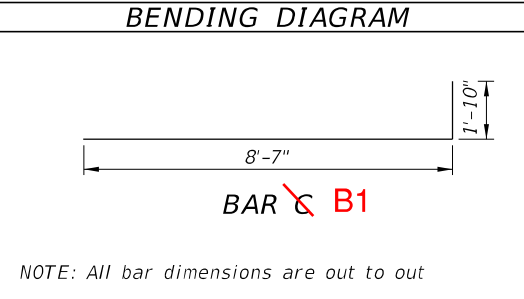
HALF ELEVATION  
(Showing Bars In Front Face Of Wall)



TYPICAL SECTION THRU ENDWALL

Combined with Detail for Single Pipe on new Sheet 2

BILL OF REINFORCING STEEL					
MARK	SIZE	NO. REQD.	LENGTH	LOCATION	BENDING
H2	5	85	4'-11"	Footing	Straight
B	4	17	45'-8"	Footing & Wall	Straight
B1	5	38	10'-5"	Wall	Bend
V1	4	23	8'-7"	Wall	Straight
D1	4	8	2'-6"	Wall	Straight
D2	4	8	1'-6"	Wall	Straight



ESTIMATED QUANTITIES			
ITEM	UNIT	RCP	CMP
Concrete Class II	Cu. Yd.	17.5	17.8
Reinforcing Steel	Lb.	1519	1519

NOTE: See Sheet 1 of 2 for General Notes.

Straight Concrete Endwalls Double Pipe

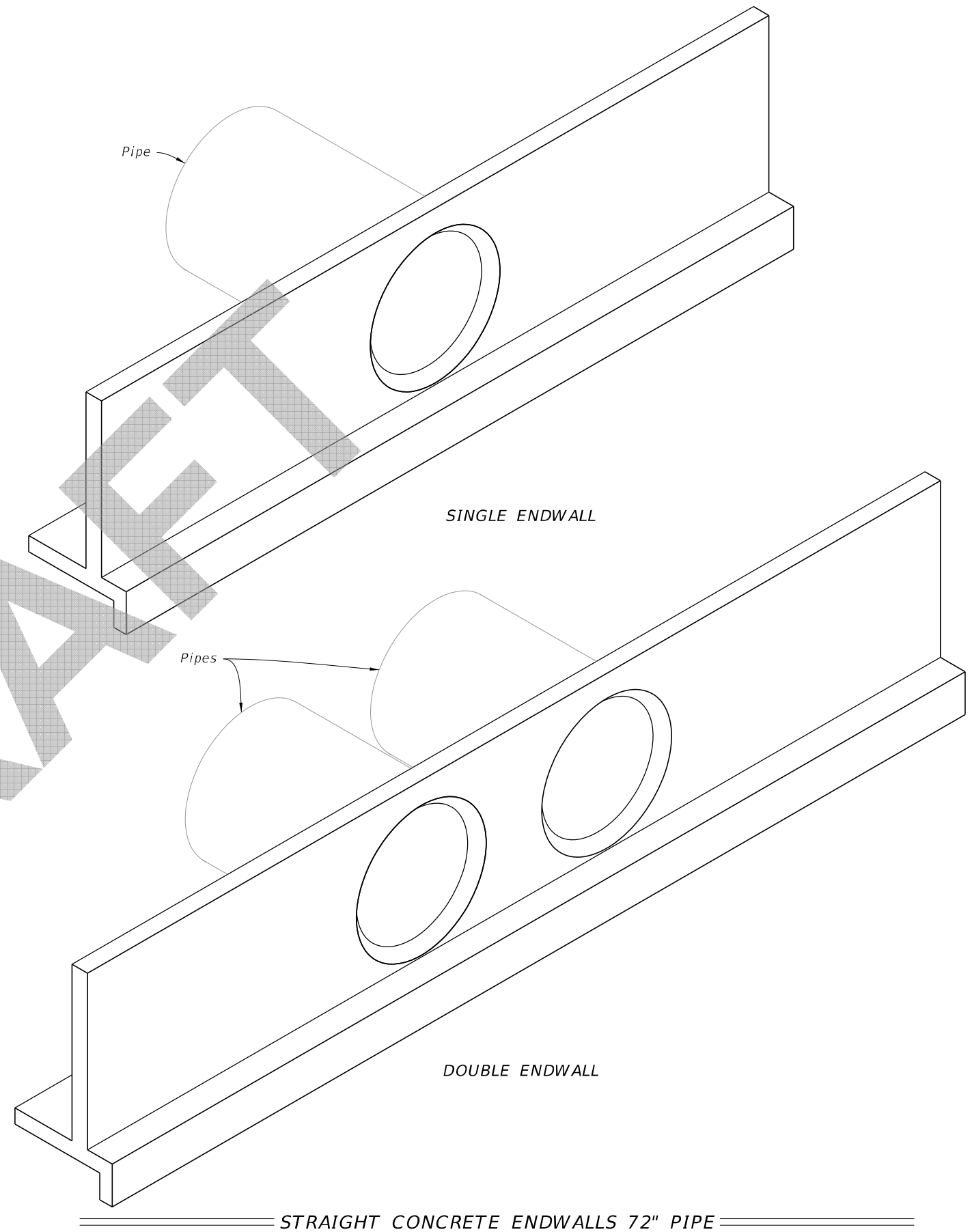
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**GENERAL NOTES:**

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.

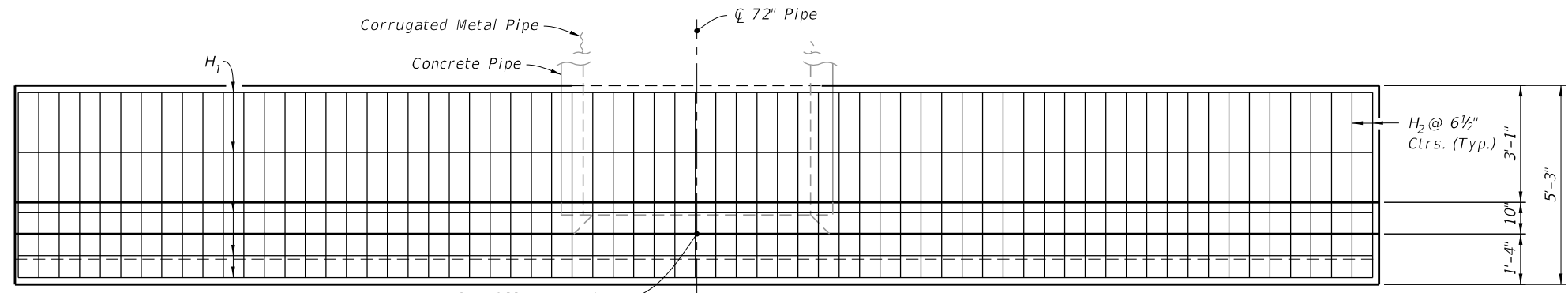
TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Single 72" Pipe Endwall Details
3	Double 72" Pipe Endwall Details

DRAFT



7/15/2019 2:25:01 PM

LAST REVISION 11/01/18	REVISION	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 72" PIPE	INDEX 430-033	SHEET 1 of 3
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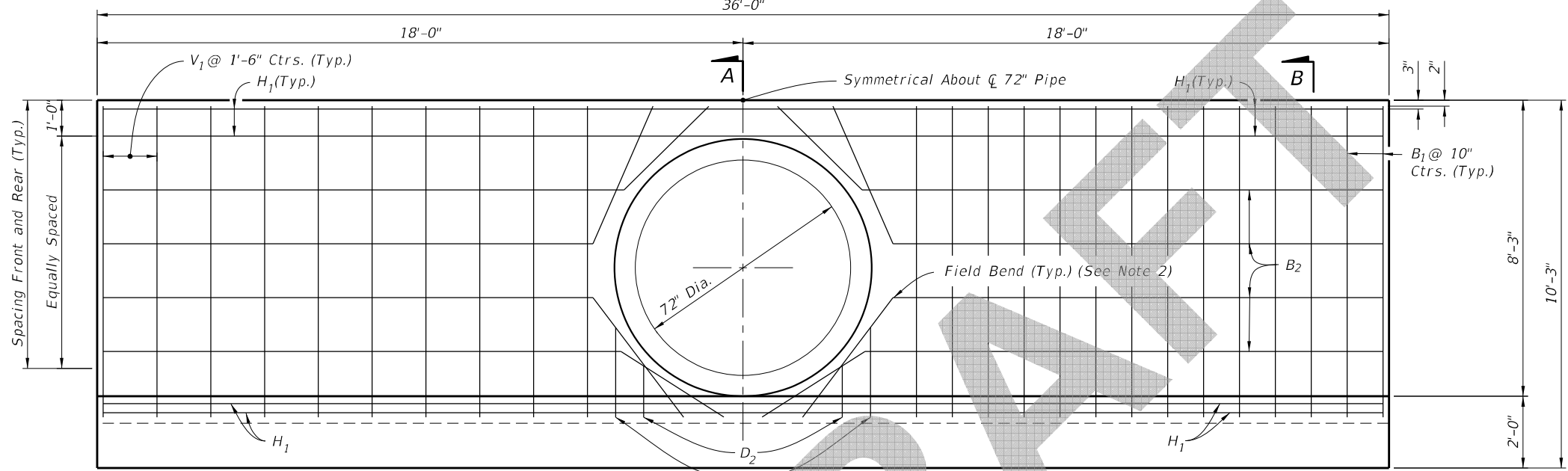
**PLAN**  
(Showing Bars In Footing)  
36'-0"

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

SINGLE 72" PIPE ENDWALL ESTIMATED QUANTITIES			
ITEM	UNIT	RCP	CMP
Class II Concrete	Cu. Yd.	14.4	14.5
Reinforcing Steel	Lb.	1249	1249

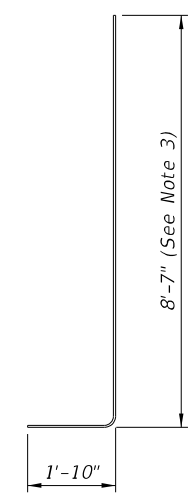
  

BILL OF REINFORCING STEEL			
MARK	SIZE	NO. REQD.	LENGTH
H <sub>1</sub>	4	9	35'-8"
H <sub>2</sub>	5	68	4'-11"
V <sub>1</sub>	4	20	8'-7"
B <sub>1</sub>	5	34	10'-5"
B <sub>2</sub>	4	8	35'-8"
D <sub>1</sub>	4	4	2'-6"
D <sub>2</sub>	4	4	1'-6"

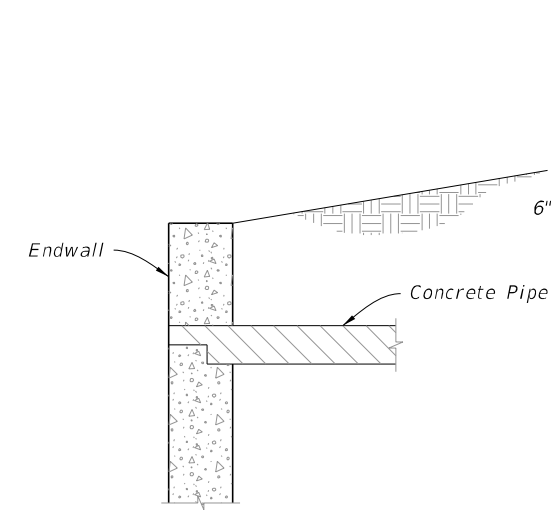


**HALF ELEVATION**  
(Showing Bars in Front Face of Wall)

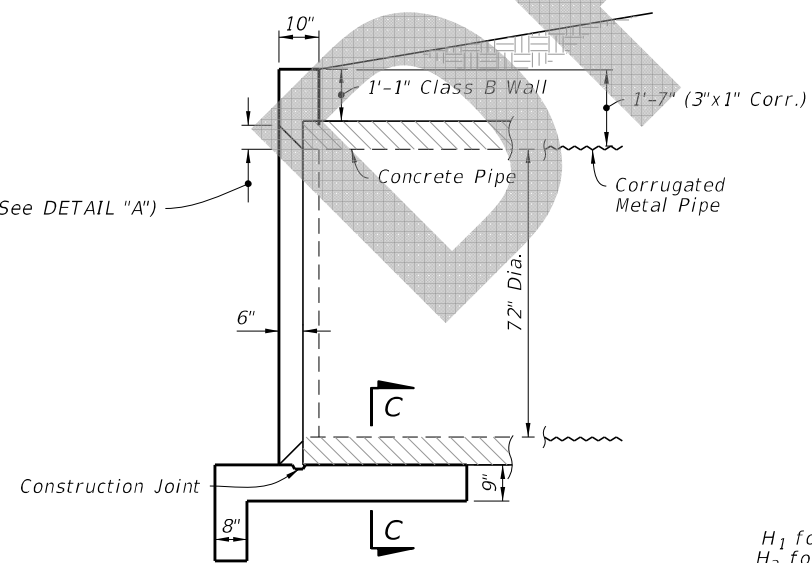
**HALF ELEVATION**  
(Showing Bars in Back Face of Wall)



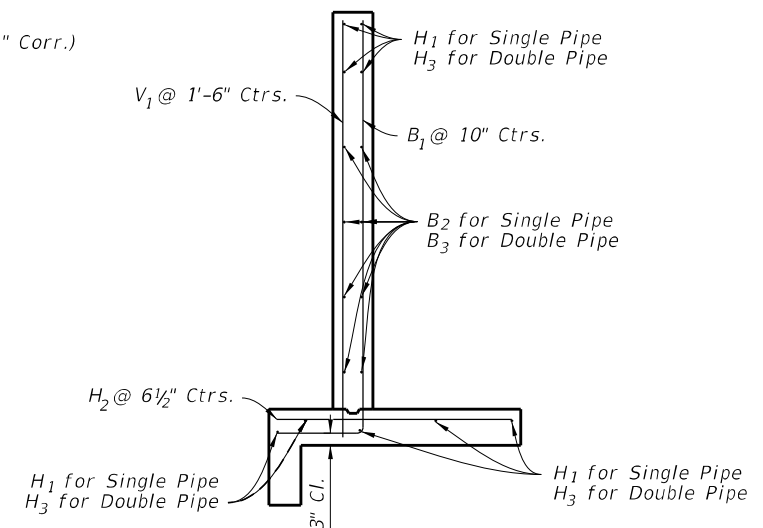
**BAR B<sub>1</sub>**  
**BENDING DIAGRAM**



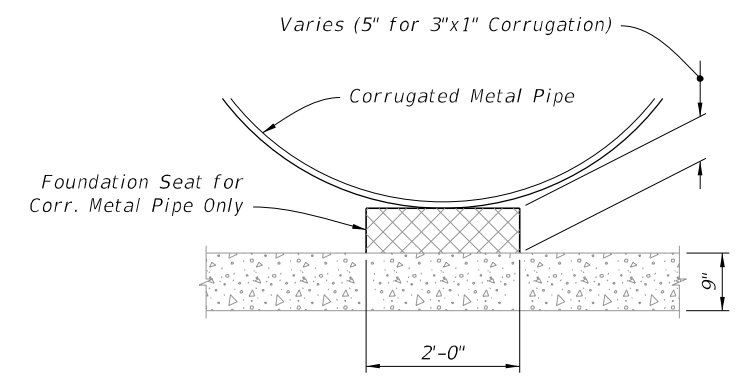
**DETAIL "A"**  
(Concrete Pipe Optional Entrance)



**SECTION A-A**  
(Rebar Not Shown)



(Typical Section)



**SECTION C-C**

**SINGLE 72" PIPE ENDWALL DETAILS**

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LAST REVISION 11/01/19	DESCRIPTION:	 <b>FY 2020-21</b> <b>STANDARD PLANS</b>	<b>STRAIGHT CONCRETE ENDWALLS</b> <b>SINGLE AND DOUBLE 72" PIPE</b>	INDEX 430-033	SHEET 2 of 3
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**DOUBLE 72" PIPE ENDWALL  
ESTIMATED QUANTITIES**

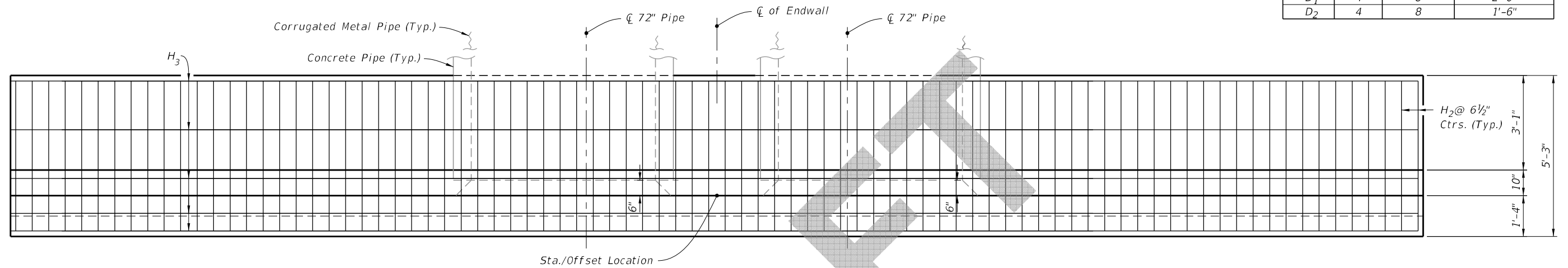
ITEM	UNIT	RCP	CMP
Class II Concrete	Cu. Yd.	17.5	17.8
Reinforcing Steel	Lb.	1519	1519

**BILL OF REINFORCING STEEL**

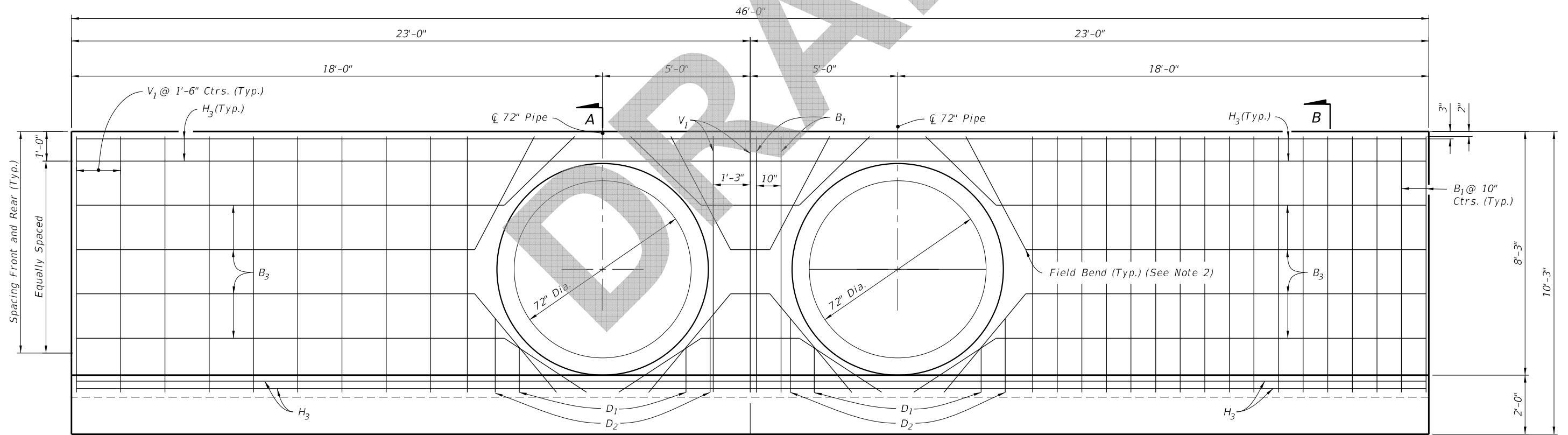
MARK	SIZE	NO. REQD.	LENGTH
H <sub>2</sub>	5	85	4'-11"
H <sub>3</sub>	4	9	45'-8"
V <sub>1</sub>	4	23	8'-7"
B <sub>1</sub>	5	38	10'-5"
B <sub>3</sub>	4	8	45'-8"
D <sub>1</sub>	4	8	2'-6"
D <sub>2</sub>	4	8	1'-6"

**NOTES:**

- 2" clearance on all reinforcement, unless otherwise shown.
- Cut and bend B<sub>3</sub> Bars as shown.
- All bar dimensions are out to out.



**PLAN**  
(Showing Bars In Footing)



**HALF ELEVATION**  
(Showing Bars in Front Face of Wall)

A See Sheet 2


Symmetrical About  $\bar{C}$

**HALF ELEVATION**  
(Showing Bars in Back Face of Wall)

B See Sheet 2

**DOUBLE 72" PIPE ENDWALL DETAILS**

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LAST REVISION 11/01/19	DESCRIPTION:	 FY 2020-21 STANDARD PLANS	STRAIGHT CONCRETE ENDWALLS SINGLE AND DOUBLE 72" PIPE	INDEX 430-033	SHEET 3 of 3
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