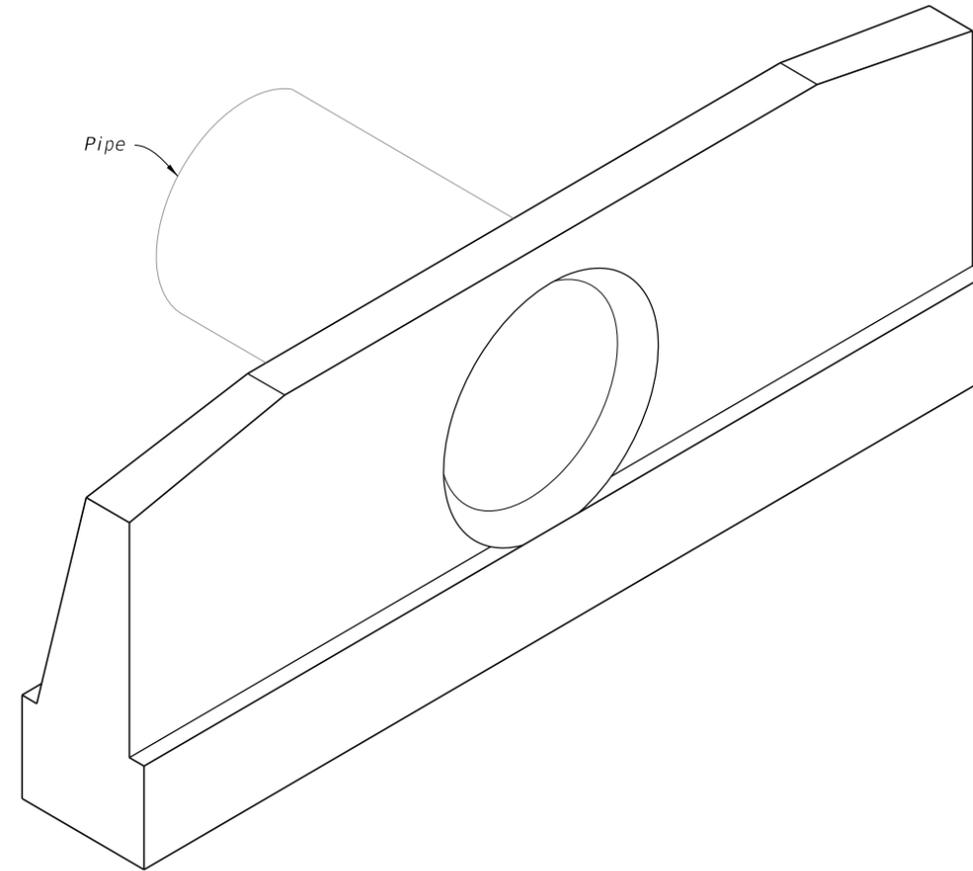


GENERAL NOTES:

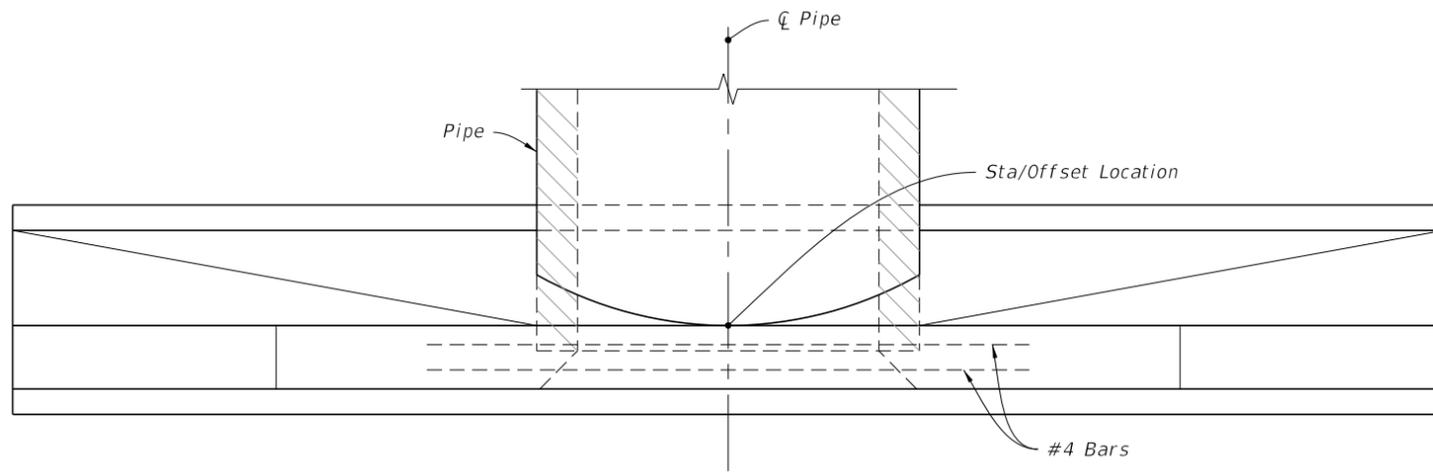
1. Use Class I concrete.
2. Reinforcing steel is either Grade 40 or 60.
3. Endwalls may be cast in place or precast concrete. (Additional reinforcement necessary for handling precast units will be determined by the Contractor or the supplier).
4. Chamfer all exposed edges and corners to $\frac{3}{4}$ ".
5. Endwall dimensions, locations and positions are for round and elliptical concrete pipe and for round and pipe-arch corrugated metal pipe. Round concrete pipe shown.
6. On outfall ditches with side slopes flatter than 1:1.5 provide 20' transitions from the endwall to the flatter side slopes, right of way permitting.
7. Construct front slope and ditch transitions in accordance with Index 430-001.
8. Quantities shown are for estimating purposes only.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Concrete Endwall Details
3	Concrete and Metal Pipe Tables
4	Spacing For Multiple Pipes

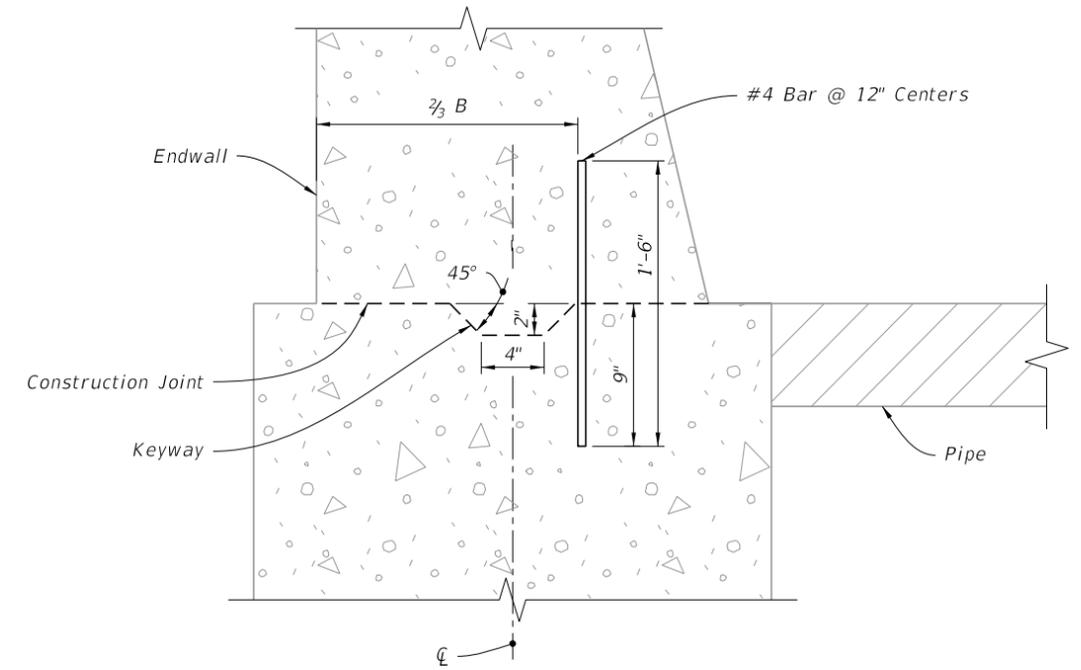


===== **STRAIGHT CONCRETE ENDWALL** =====

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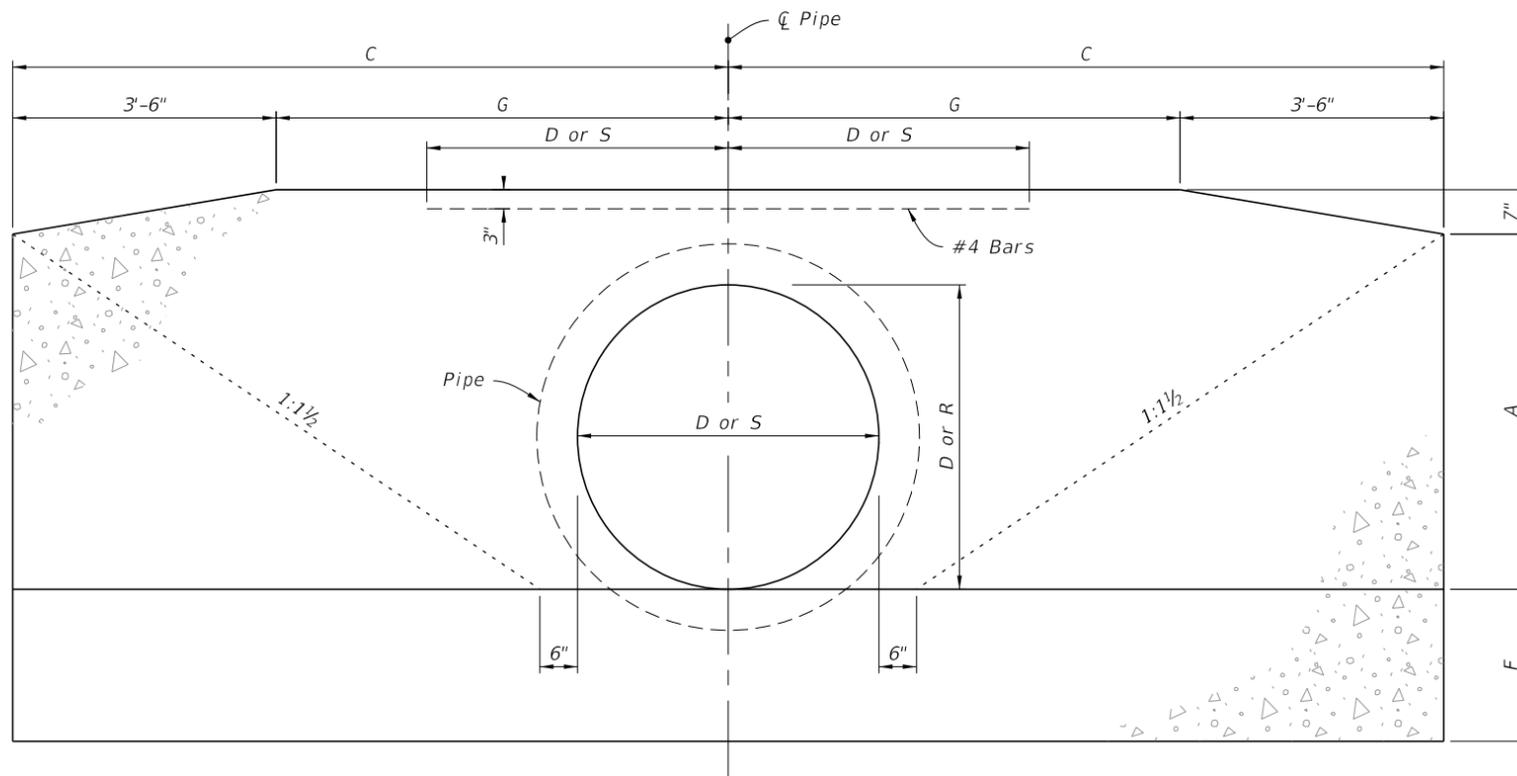


PLAN

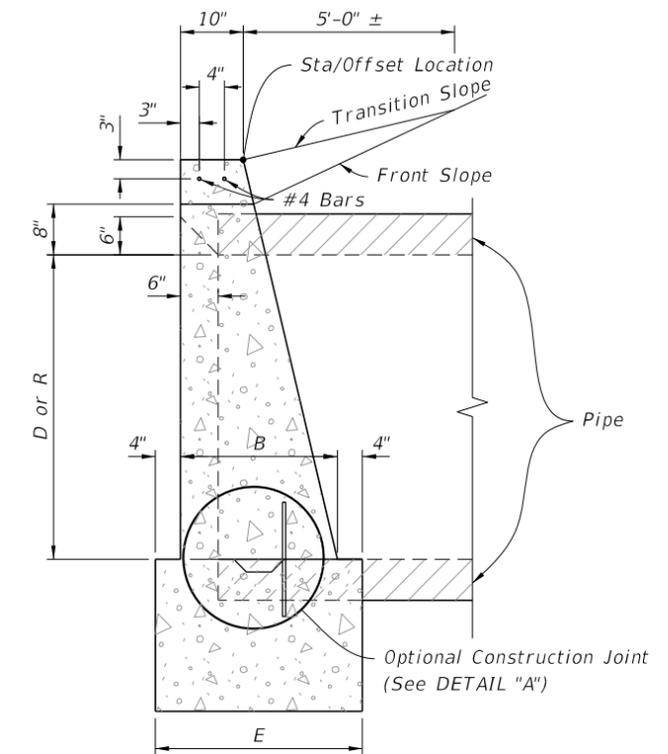


NOTE: Keyway and Dowels are required for optional construction joint.

DETAIL "A"



FRONT ELEVATION



SIDE ELEVATION

CONCRETE ENDWALL DETAILS

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LAST REVISION 11/01/19	REVISION	DESCRIPTION:
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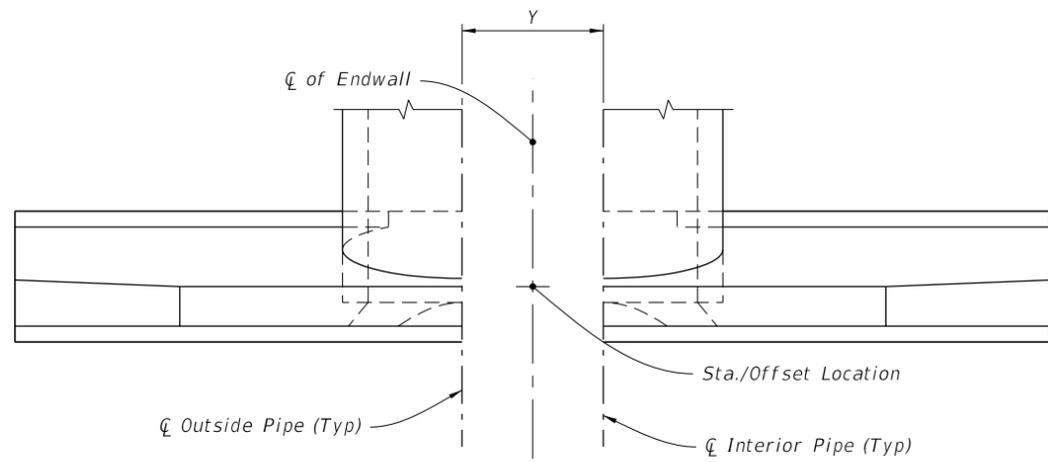
FY 2021-22
STANDARD PLANS

STRAIGHT CONCRETE ENDWALLS
SINGLE AND MULTIPLE PIPE

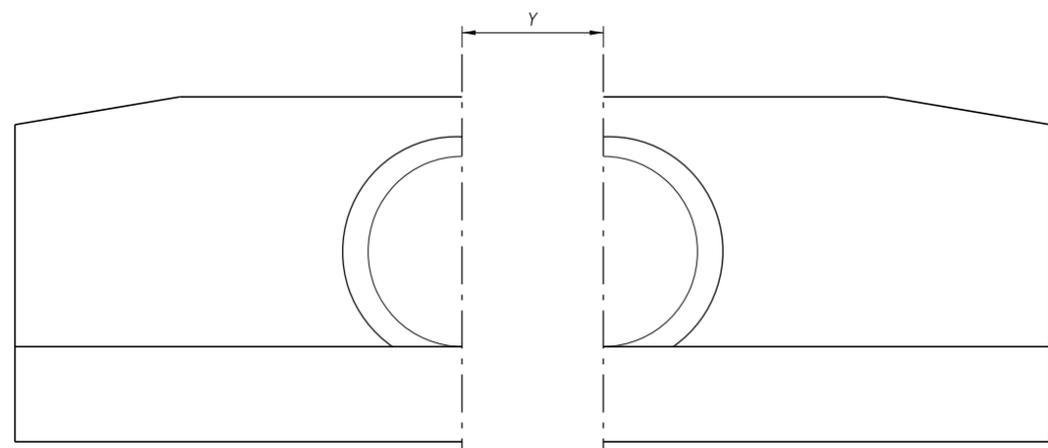
INDEX
430-030

SHEET
2 of 4

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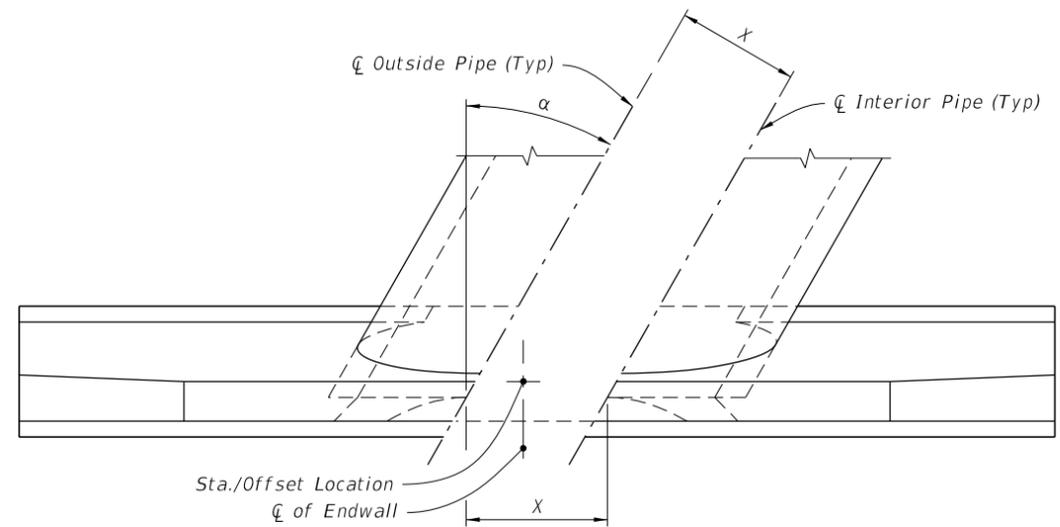


PLAN

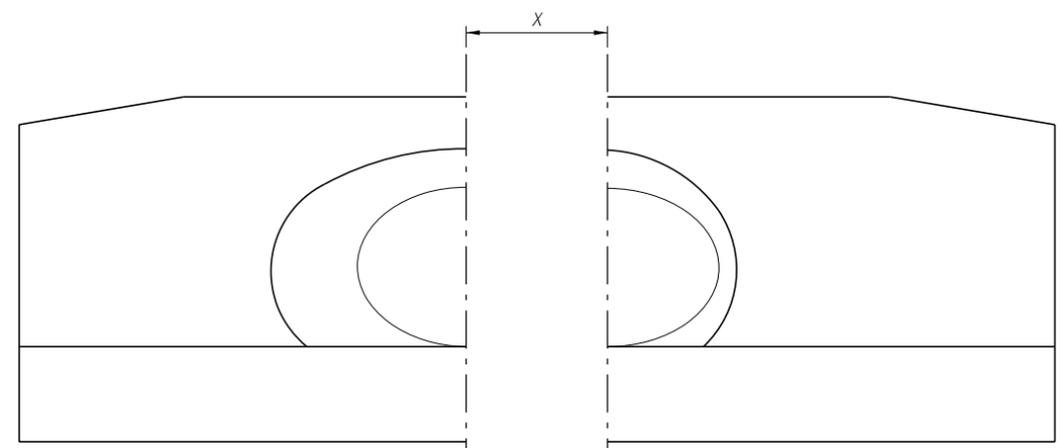


FRONT ELEVATION

NORMAL PIPE



PLAN



FRONT ELEVATION

SKEWED PIPE

(Multiple Pipe Shown, Single Pipe Similar)

LEGEND:

- α Pipe Skew Angle
- S Center to Center between pipes
- X Center to Center along front of Headwall

SPACING FOR MULTIPLE PIPES

LAST REVISION 11/01/19	DESCRIPTION:
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FY 2021-22
STANDARD PLANS

STRAIGHT CONCRETE ENDWALLS
SINGLE AND MULTIPLE PIPE

INDEX
430-030

SHEET
4 of 4