

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition November 2017.

TRAFFIC DATA

Current (2019) AADT	4080
Future (2039) AADT	4900
DHV - % of AADT	9
Design Hour Volume	404
Heavy Trucks (% of AADT)	13
Heavy Trucks (% of DHV)	7
Directional Distribution (% of DHV)	54
18 kip Equivalent P 2.0	447
18 kip Equivalent P 2.5	426
Design Speed (mph)	55

HYDROLOGIC DATA

Drainage Area	2.20 sq mi
Design Discharge (Q50)	388.8 cfs
Check Discharge (Q100)	455.0 cfs
Headwater Elevation (Q1.1)	388.45 ft
Headwater Elevation (Q25)	392.34 ft
Headwater Elevation (Q50)	393.08 ft
Headwater Elevation (Q100)	393.86 ft
Discharge Velocity (Q1.1)	5.63 fps
Discharge Velocity (Q25)	9.83 fps
Discharge Velocity (Q50)	10.87 fps
Discharge Velocity (Q100)	11.60 fps

MATERIALS

Invert Lining	Shotcrete or Class "A" CIP
Reinforcing Steel	ASTM A615/A 615M, GRADE 60

BASIC DESIGN STRESSES

Concrete	
Class "A"	f 'c = 4000 psi
Shotcrete	f 'c = 5000 psi
Reinforcing Steel	F y = 60,000 psi

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CANTON
OXFORD COUNTY
CHILDS BROOK #4 BRIDGE
OVER
CHILDS BROOK
PLEASANT STREET
STATE PROJECT NO. 22292.00
BRIDGE NO. 5242

UTILITIES

Central Maine Power Company
FirstLight
Spectrum
Consolidated Communications

MAINTENANCE OF TRAFFIC

Maintain two 11'-0" wide lanes of two - way traffic for the duration of construction. Single lane closure with flaggers and alternaing one-way traffic will be permitted.

PROJECT LOCATION	Childs Brook Bridge #4, #5242, in Canton Carrying Rte 108 Over Childs Brook Lat./Long. 44°27'03" N/ 70°19'04" W
PROGRAM AREA	Highway Bridge - Traditional
OUTLINE OF WORK	Bridge Culvert Rehabilitation - Concrete Invert Liner

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	COMMISSIONER: <i>[Signature]</i> DEPUTY CHIEF ENGINEER: <i>[Signature]</i>	9/28/19 8/28/19

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	SIGNATURE	P.E. NUMBER	DATE
	<i>[Signature]</i> GARRETT A. GUSTAFSON 13553 8-27-19	13553 8-27-19	8-27-19

PROGRAM	PROJECT MANAGER	DESIGNER	DETAILER	PROJECT RESIDENT	CONTRACTOR	PROJECT COMPLETION DATE
BRIDGE	M. KERSBERGEN	G. GUSTAFSON	JEREMIAH BRUNELLE			

CANTON CHILDS BROOK #4 BRIDGE	TITLE SHEET
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SHEET NUMBER
1
OF 6

Date:8/27/2019

Username: Jeremich.Brunelle

Division: BRIDGE

Filename: \\00\BRIDGE\WSTA\001_Title.dgn

22292.00

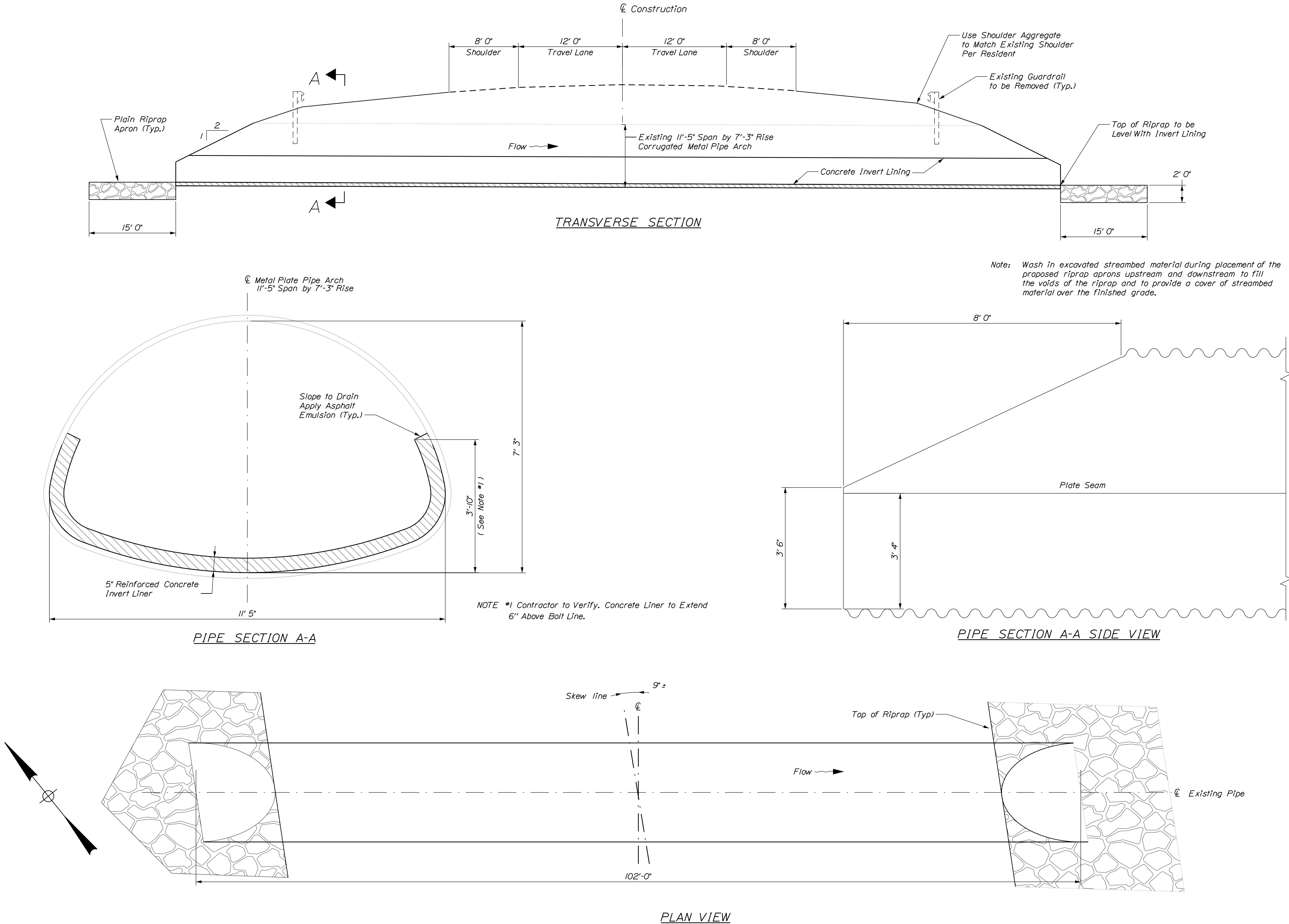
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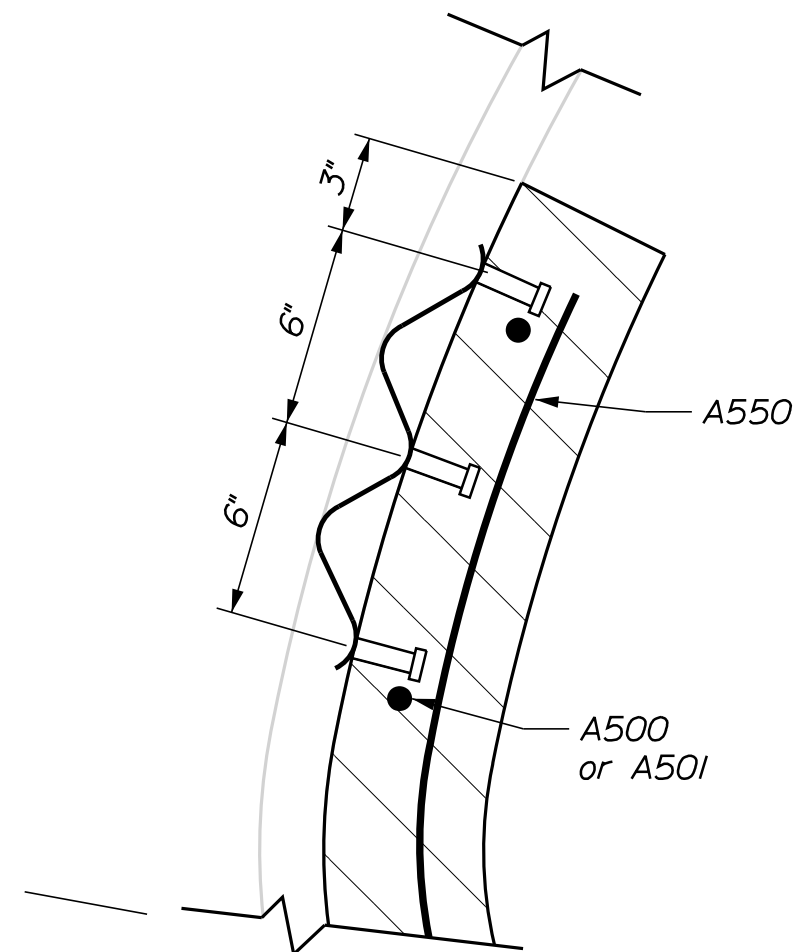
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OF 6

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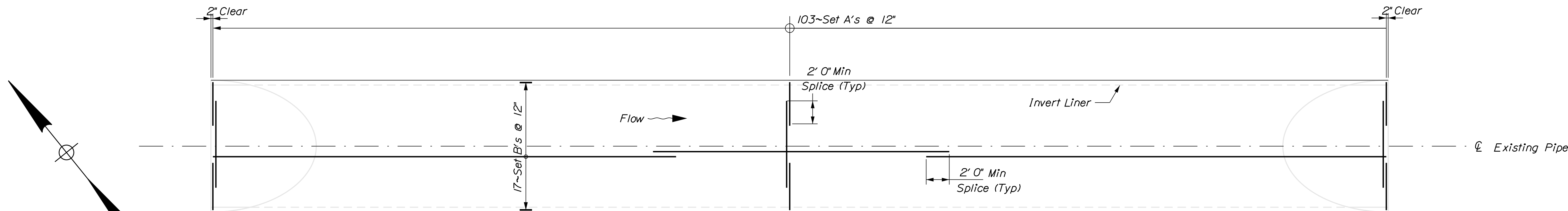
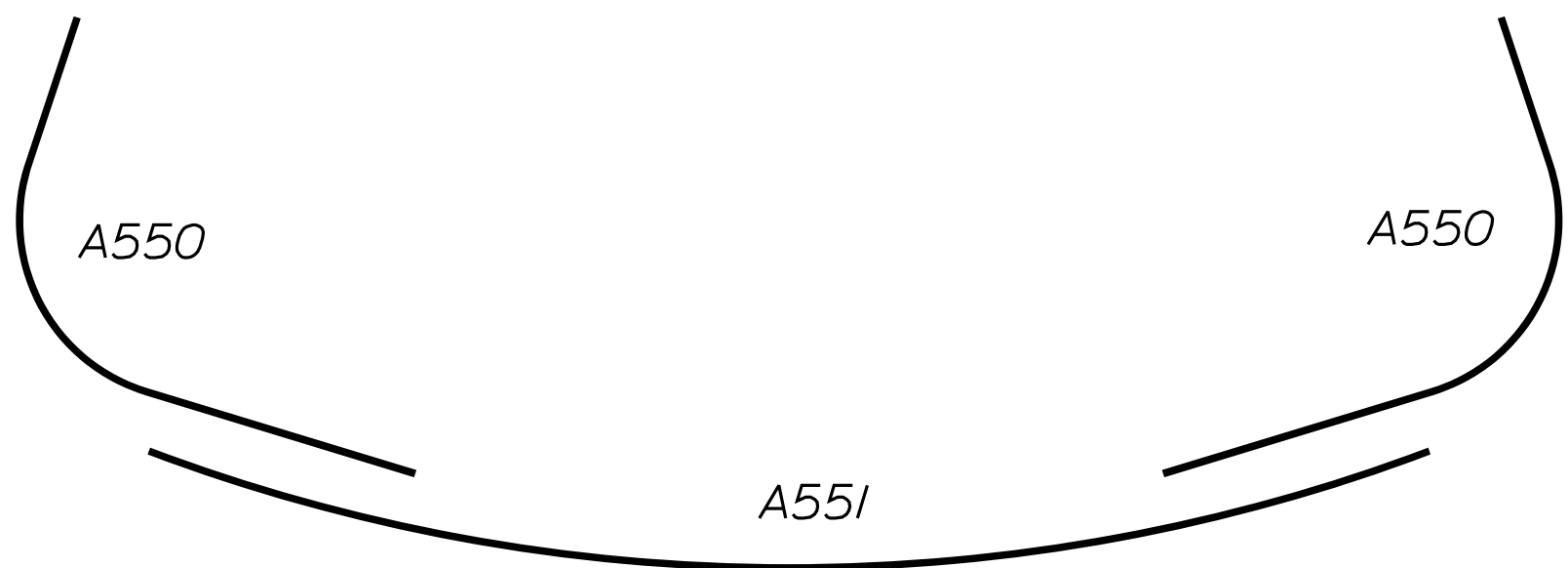


STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		22292.00		BRIDGE NO. 9242		WIN 22292.00		BRIDGE PLANS	
CHILD'S BROOK #4 BRIDGE		CHILD'S BROOK		OXFORD COUNTY		CANTON		INVERT LINING DETAILS		SHEET NUMBER	
8/15/19		8/16/19		SIGNATURE		P.E. NUMBER		DATE		4	
J. BRUNELLE		J. LEVIT								OF 6	
M. KERSBERGEN		GAC		DESIGN-DETAILED		DESIGN-DETAILED		DESIGN-DETAILED			
				REVISIONS 1		REVISIONS 2		REVISIONS 3			
				REVISIONS 4							
				FIELD CHANGES							



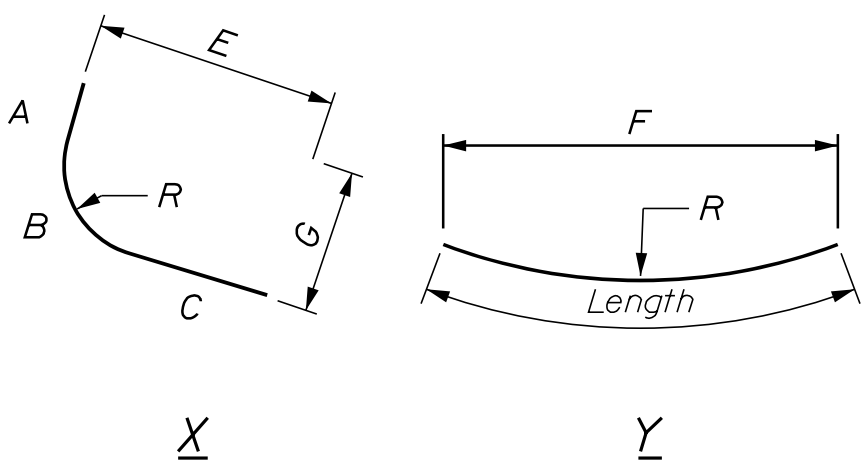
Shear Connector Detail

NOTE #1 Contractor to Verify. Concrete Liner to Extend 6" Above Bolt Line.

[illegible]

PLAN VIEW

Rebar in this area may need to be field cut

[illegible]

Mark "A502" = bar size #5
 Mark "P805" = bar size #8
 Mark "S650" = bar size #6

