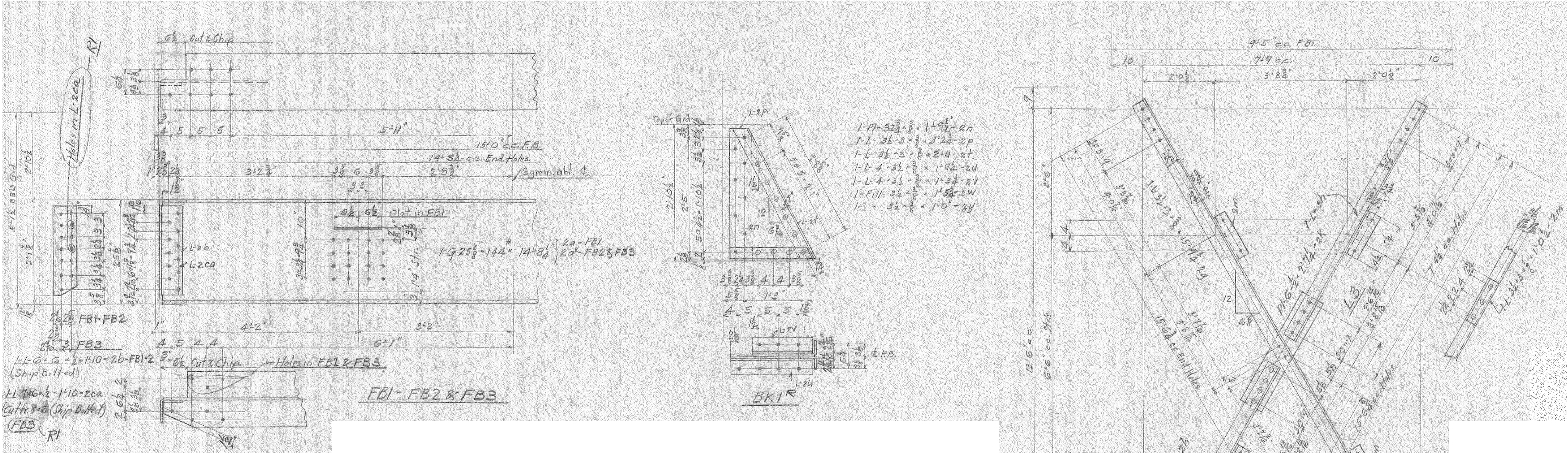
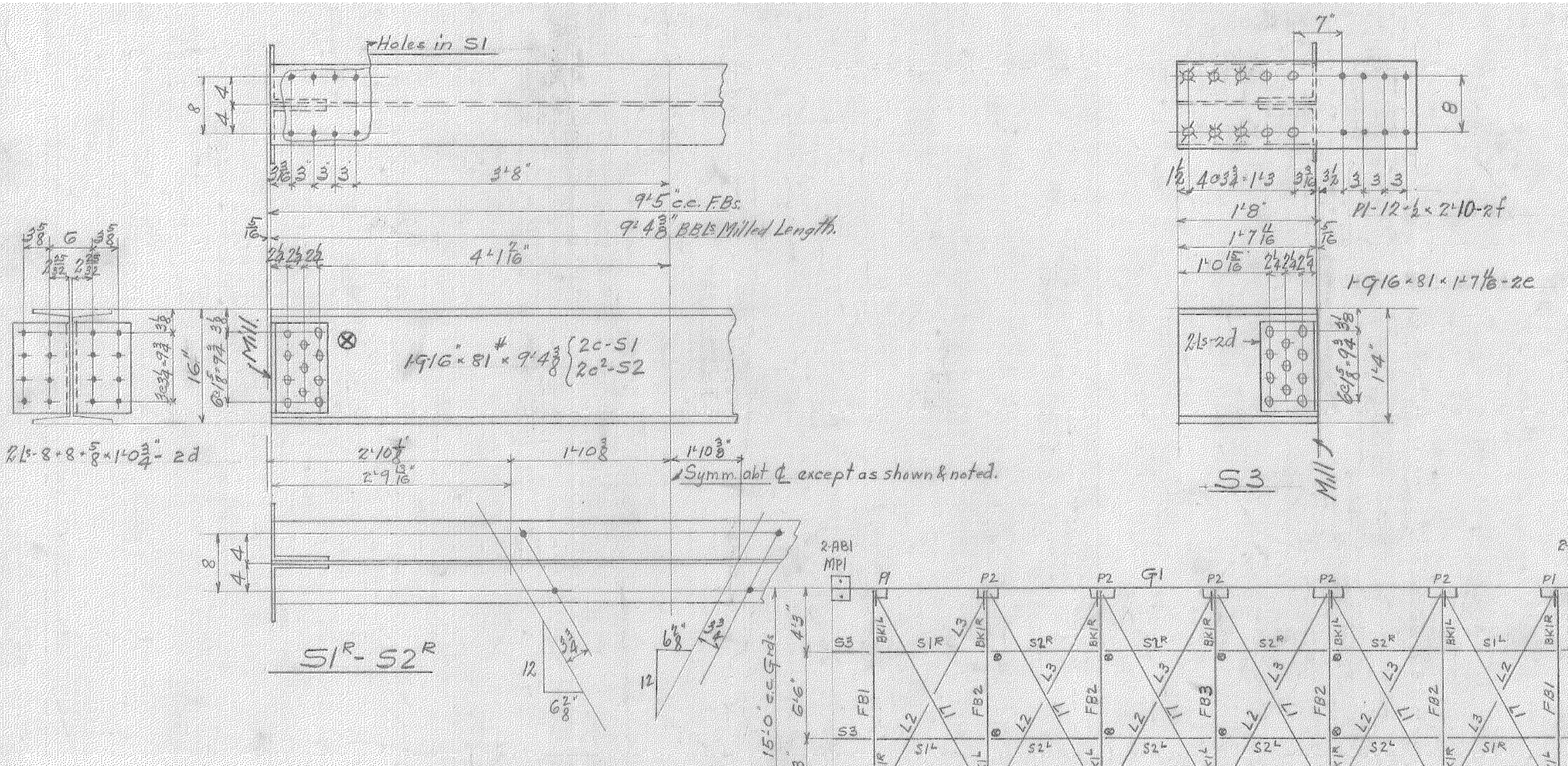
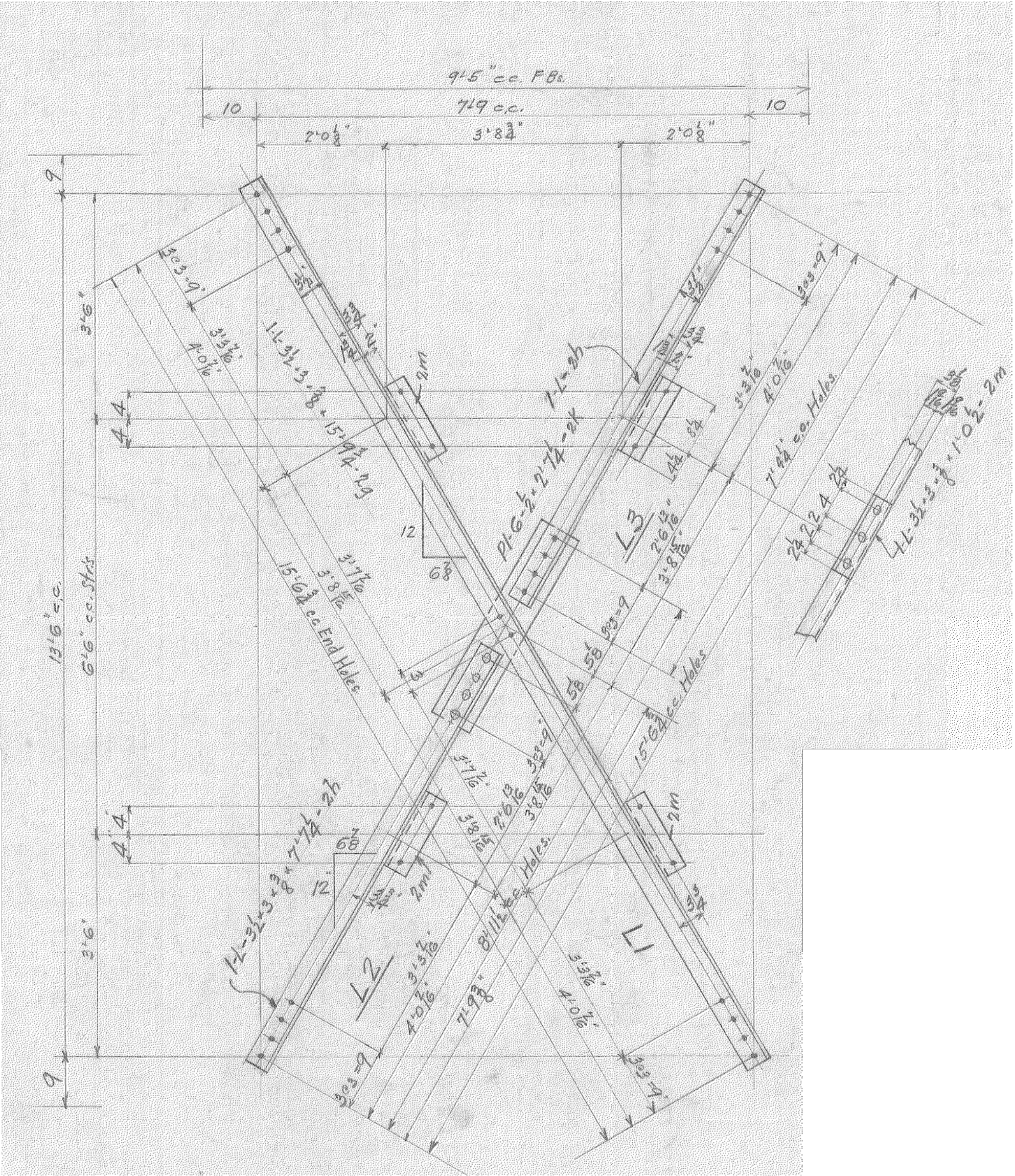
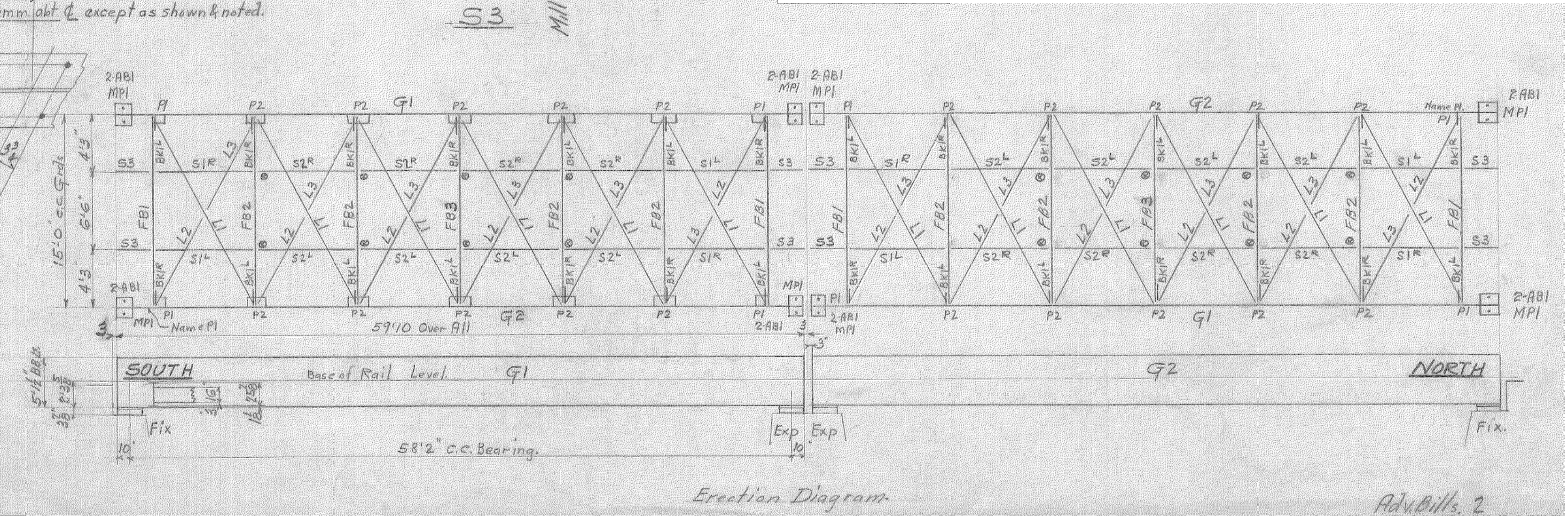




EXISTING FLOORBEAM DETAILS
Not to Scale



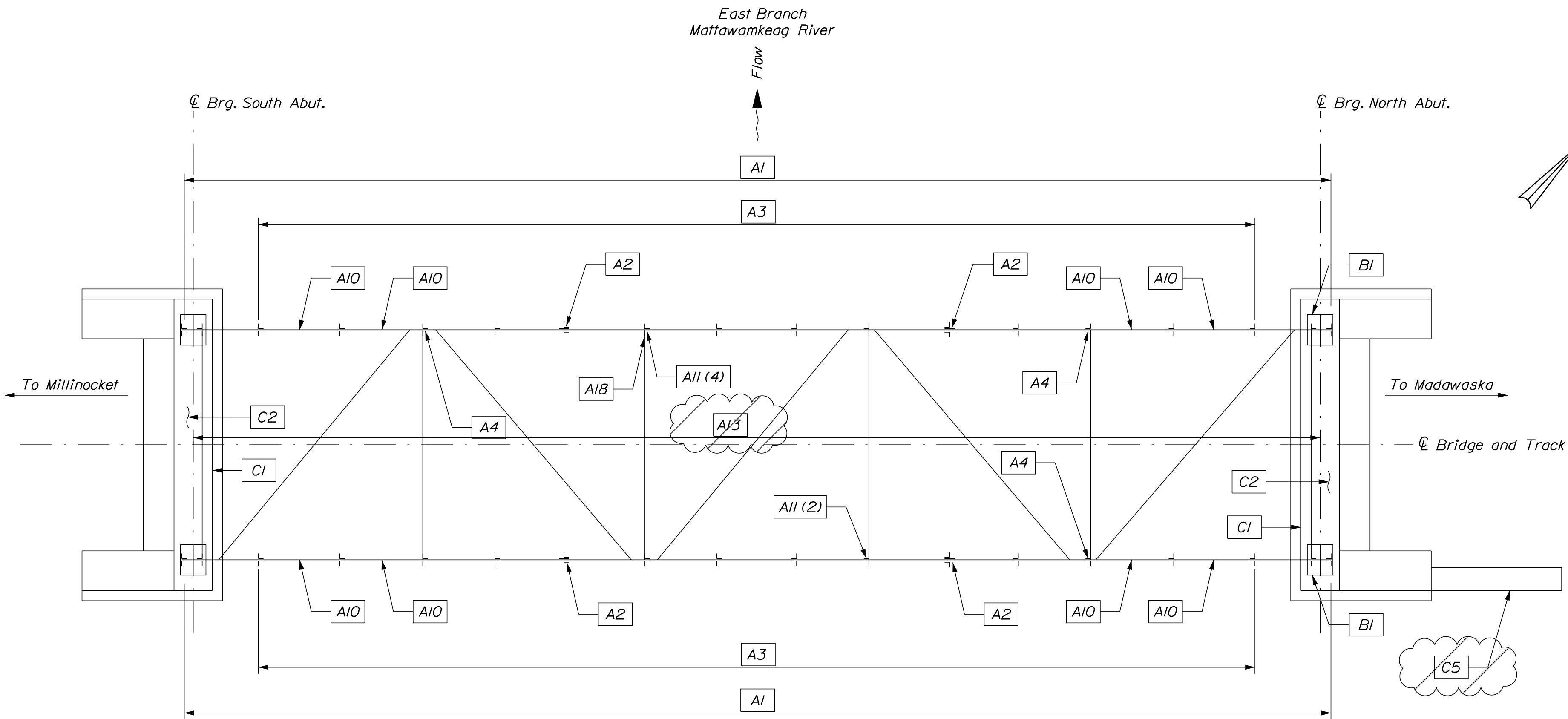
EXISTING STRINGER
DETAILS
Not to Scale



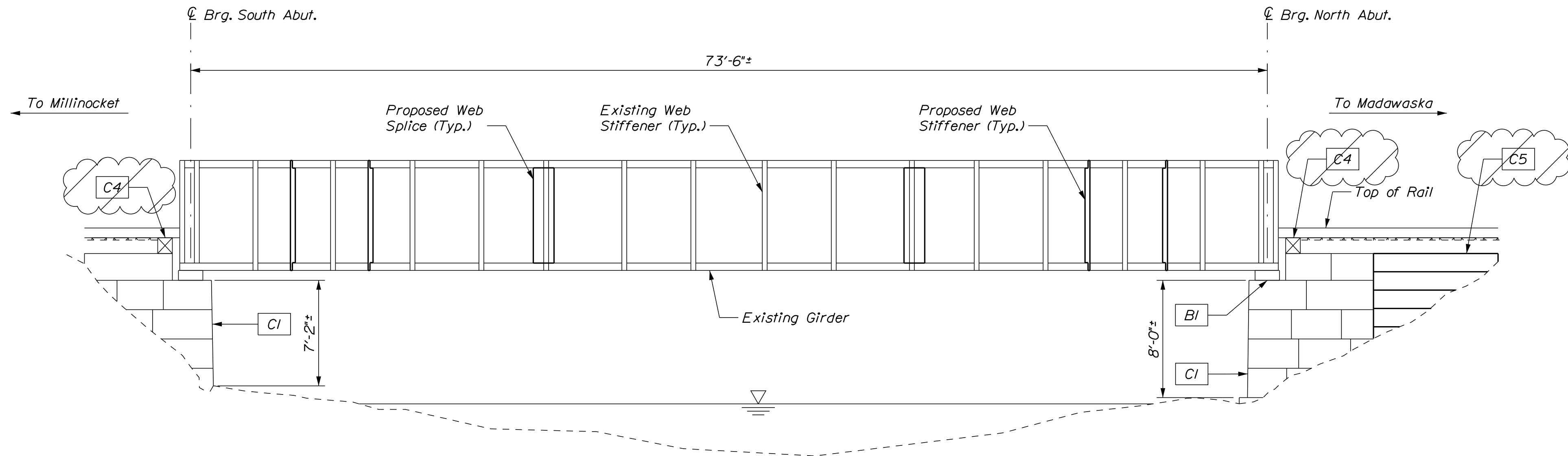
EXISTING LATERAL BRACING DETAILS
Not to Scale

SHEET PROVIDED FOR INFORMATION ONLY

NOTES
1. See General Notes Sheet for General Bridge Construction Notes and Railroad Construction Notes.



REHABILITATION KEY PLAN
Not to Scale



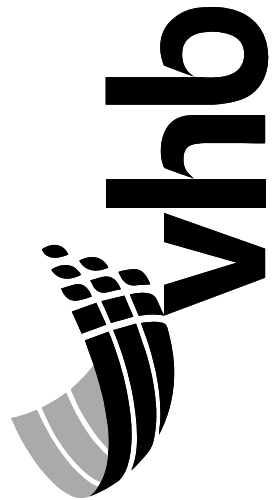
BRIDGE ELEVATION
Not to Scale

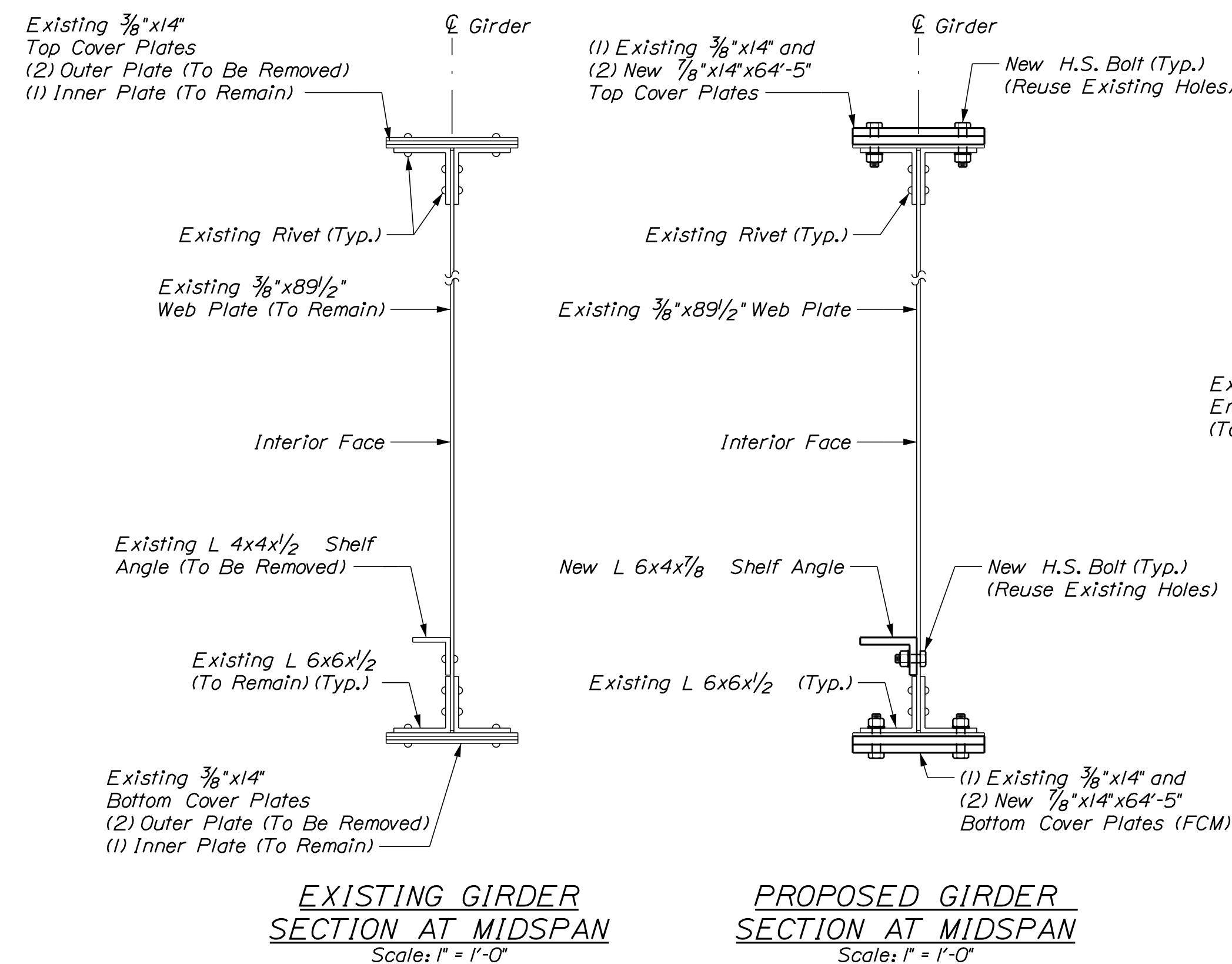
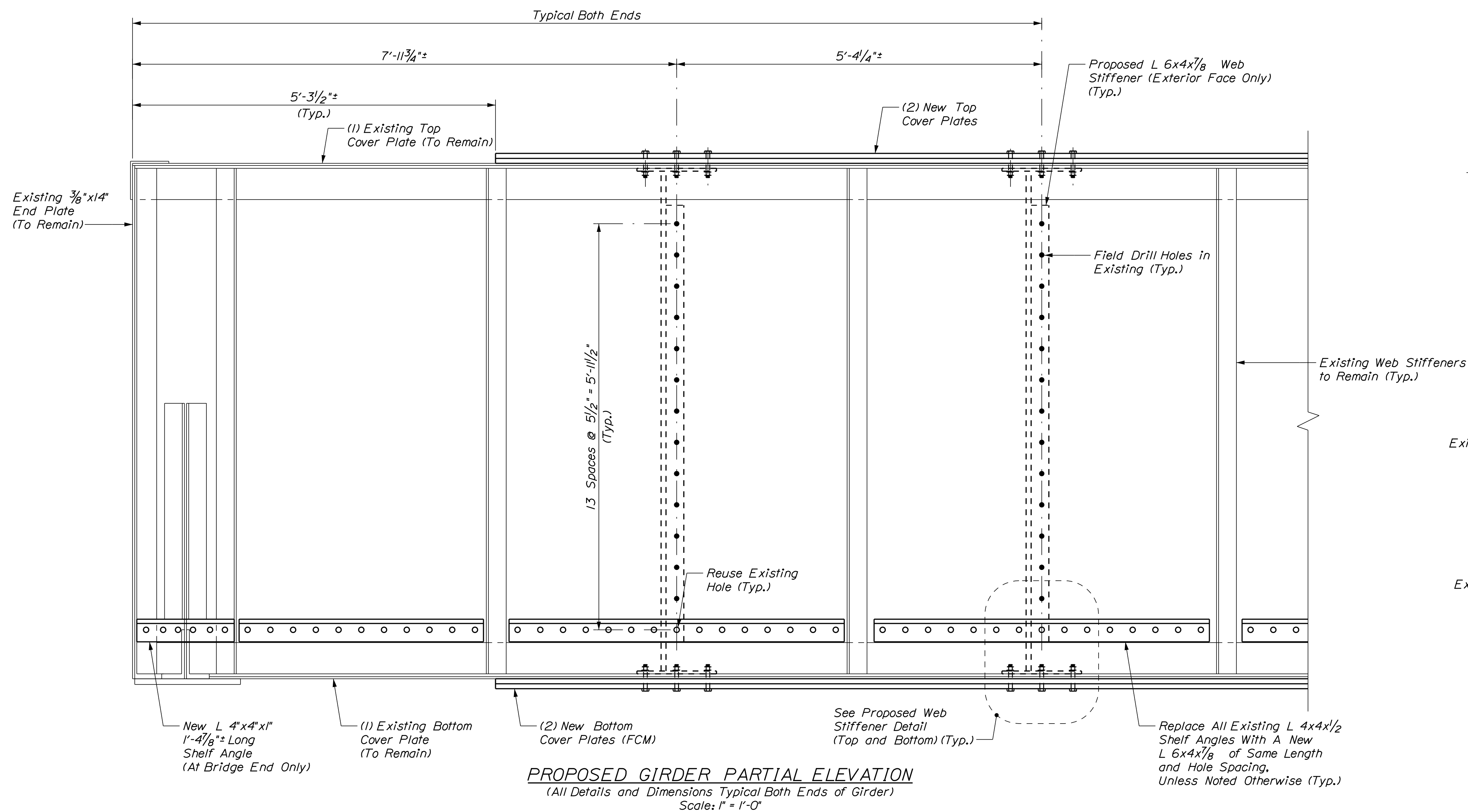
SUPERSTRUCTURE WORK ITEMS			
Work ID	Description	Number of Locations	See Detail on Sheet
A1	Remove and Replace All Bridge Timber Support Shelf Angles	34	46
A2	Remove and Replace Web Splice Plates	4	47
A3	Remove and Replace Top and Bottom Flange Cover Plates	2	46
A4	Remove and Replace Web Stiffener (See Note 3)	3	N/A
A10	Install Additional Web Stiffener	8	46
A11	Replace Loose, Missing, or Deteriorated Rivet or Bolt with H.S. Bolt	6	4
A13	Replace All Bridge Timbers (See Note 2)	1	13
A18	Repair Impact Damage - Type 2	1	5
BEARING AND PEDESTAL WORK ITEMS			
Work ID	Description	Number of Locations	See Detail on Sheet
B1	Remove and Replace Expansion Bearing	2	8, 9 & 48
SUBSTRUCTURE WORK ITEMS			
Work ID	Description	Number of Locations	See Detail on Sheet
C1	Repoint Stone Masonry Abutment	2	6
C2	Remove Debris and/or Vegetation from Bridge Seat	2	N/A
C4	Remove and Replace Backwall Timber	2	4
C5	Remove and Replace Timber Retaining Wall	1	N/A

Indicates work to be done by the Railroad (Separate Contract)

NOTES

- See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.
- See Deck Details (4 of 7) Sheet for Timber Bridge Tie Layout and Details.
- For replacement of existing double sided web stiffeners, only replace side of stiffener which arrow is pointing to. Stiffener angles shall be replaced in-kind and existing filler plate may be reused.
- Overhead power lines are located over the north end of bridge. See Special Provision 104, Utilities.





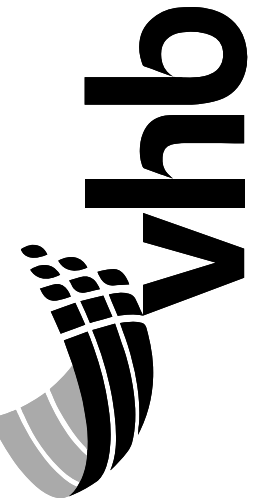
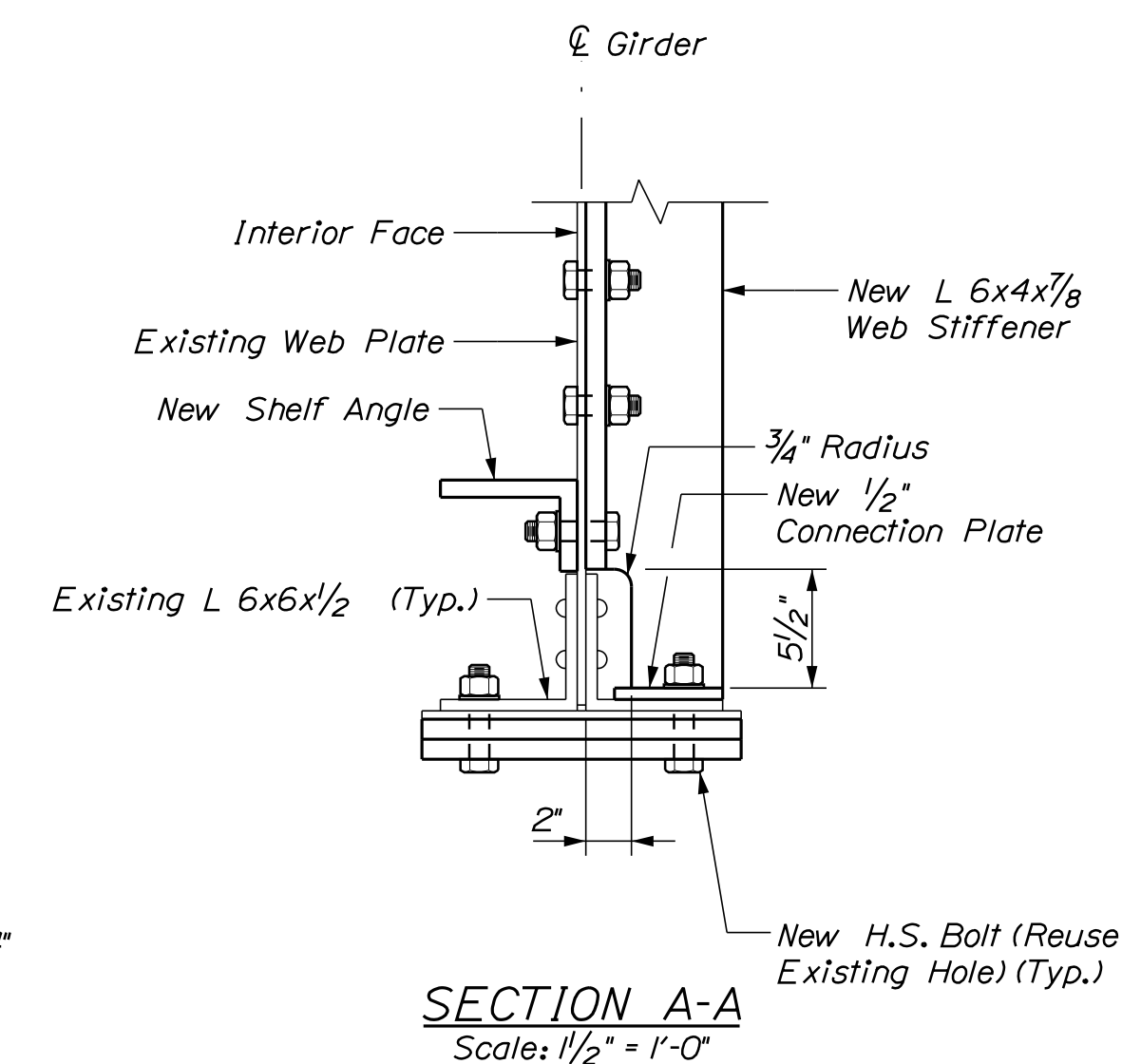
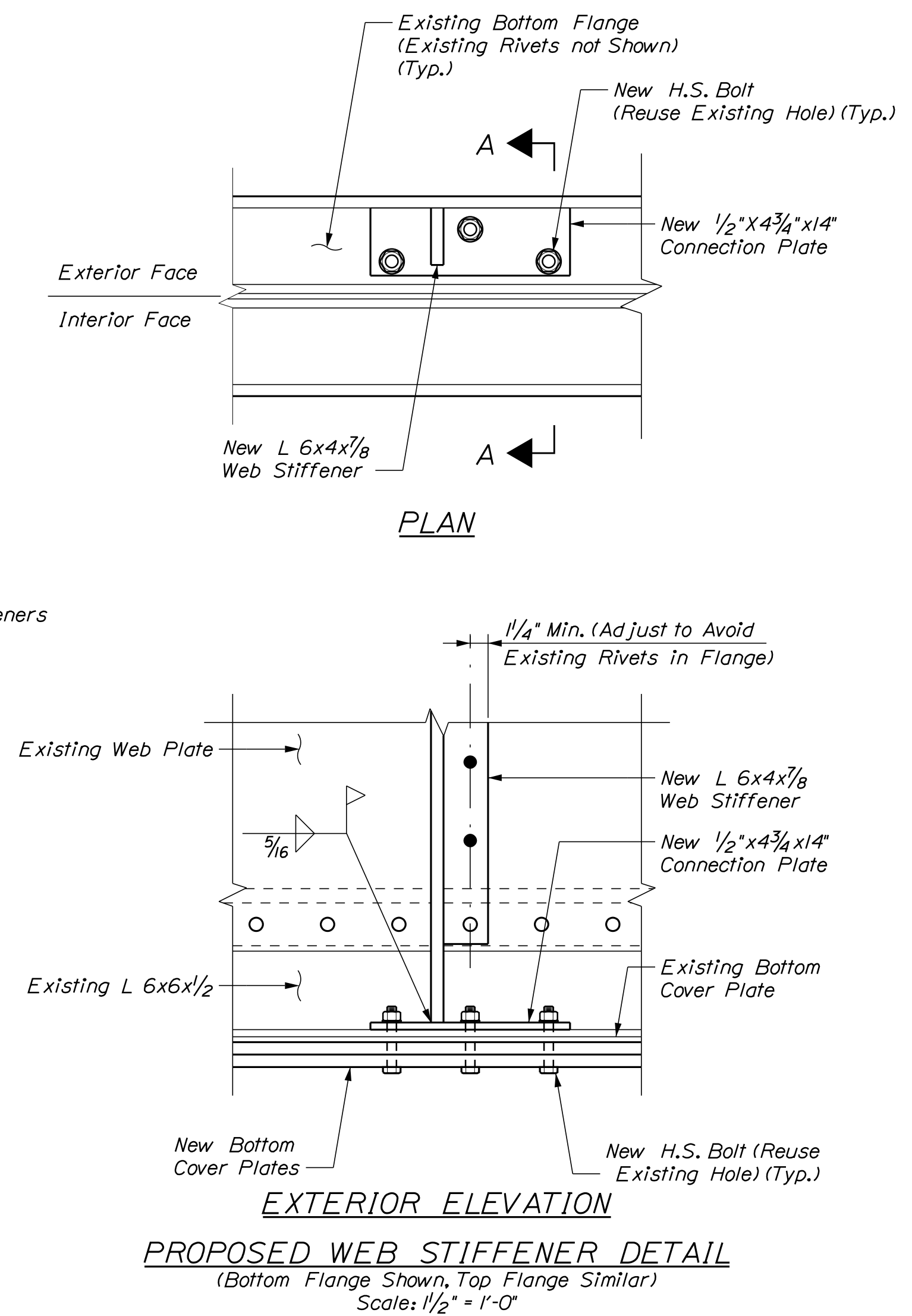
Dimensions in these plans shall not be used for fabrication purposes. All necessary dimensions and configurations shall be determined from actual field measurements by the Contractor. See Br. No. 7775 (M.P. 151.54) Over E. Br. Mattawamkeag (5 of 5) Sheet for Existing Plans.

LEGEND

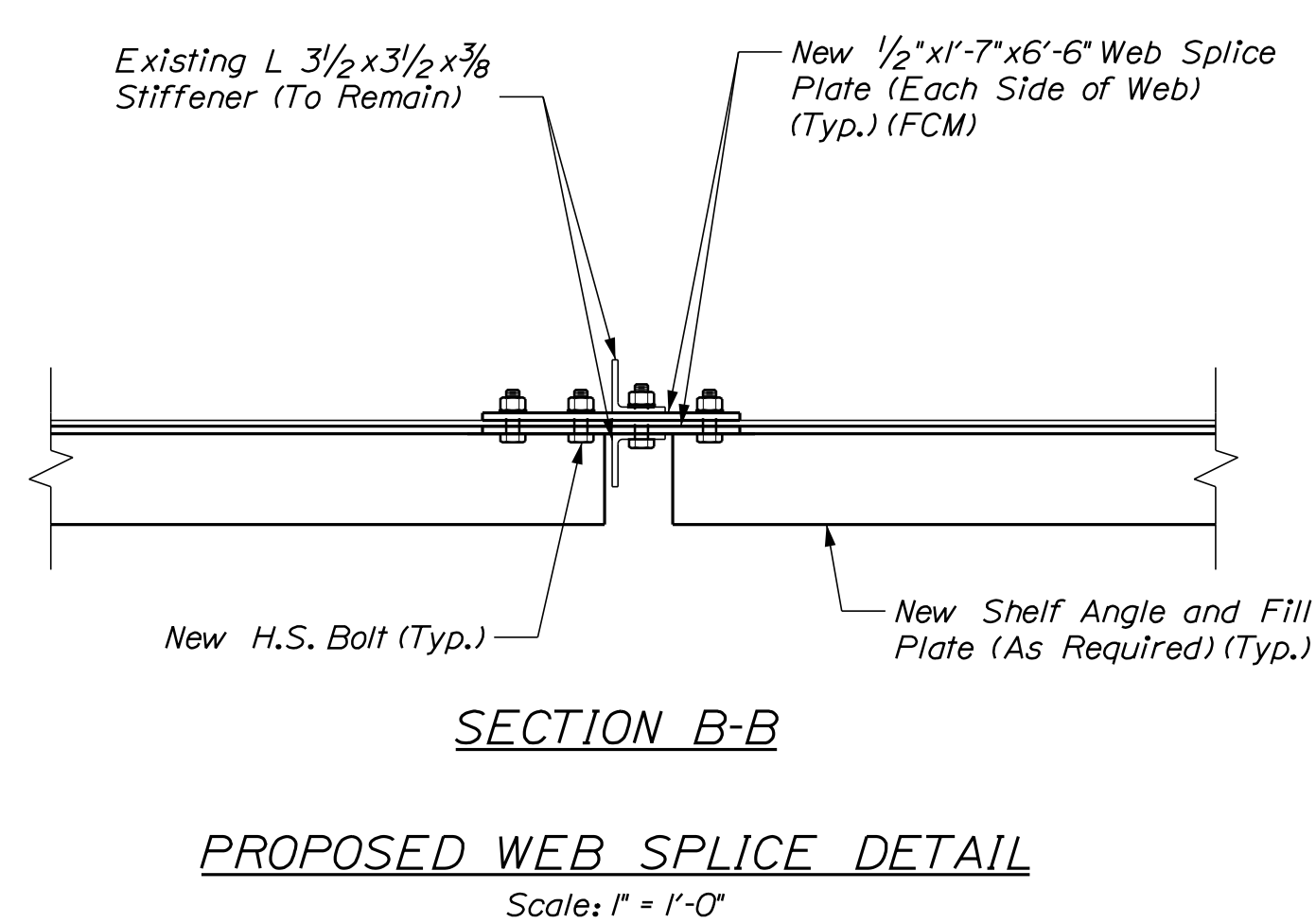
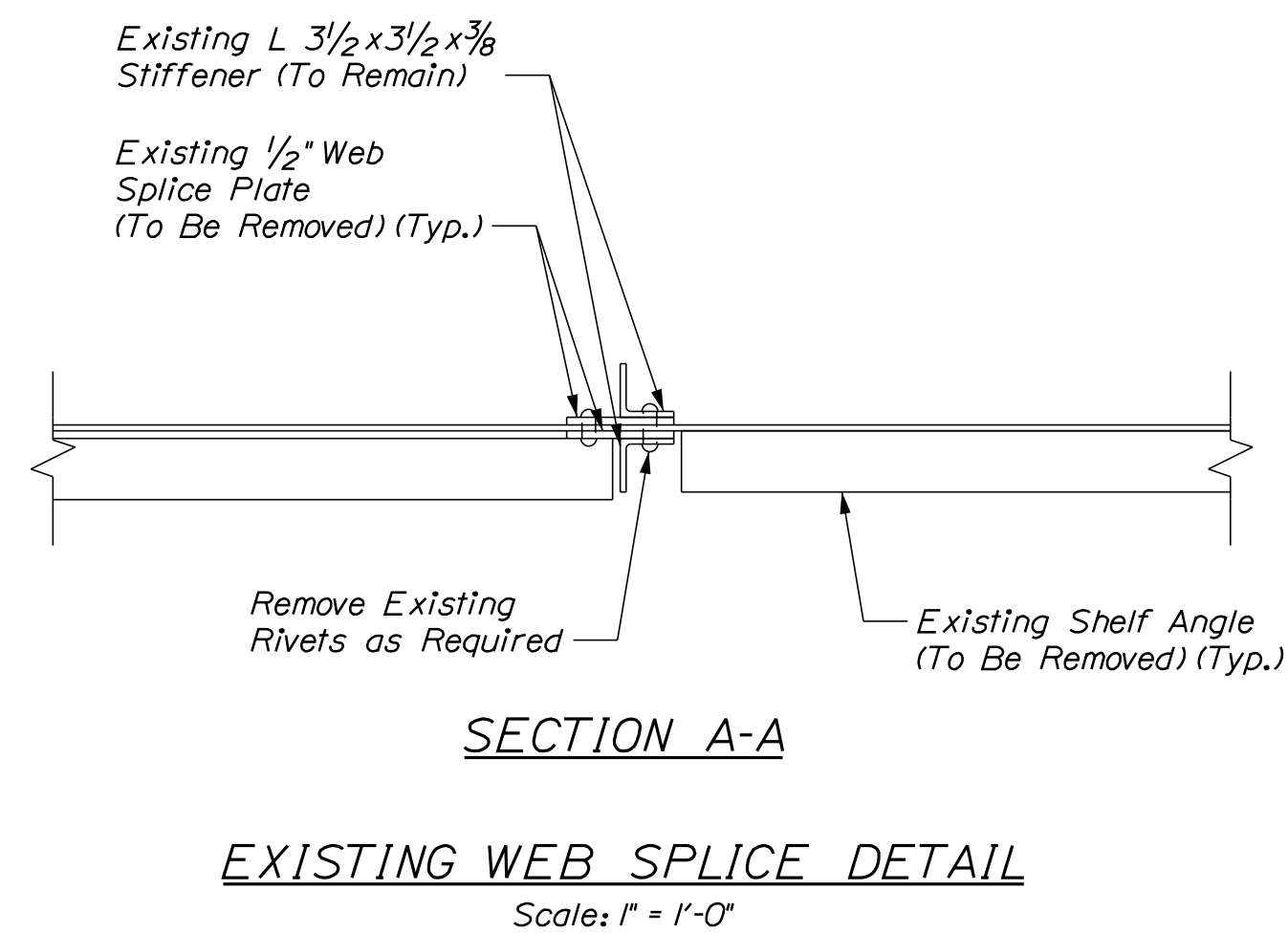
- *Field Drilled Hole*
 - *Reuse Existing Hole*
- (FCM) = *Fracture Critical Member*

NOTES

1. See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.
2. Repairs shown are typical for Bridge No. 7775 (M.P. 151.54), Bridge No. 7778 (M.P. 161.03) and Bridge No. 7782 (M.P. 185.84).



DATE	BY	MAT. BENEFIT	PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED
11/20/8	BUM		JCM		
11/20/8	GSG		MP7 LUC		
				DESIGN-DETAILED2	
				DESIGN-DETAILED3	
				REVSIONS 1	
				REVSIONS 2	
				REVSIONS 3	
				REVSIONS 4	
				FELD CHANGES	



LEGEND

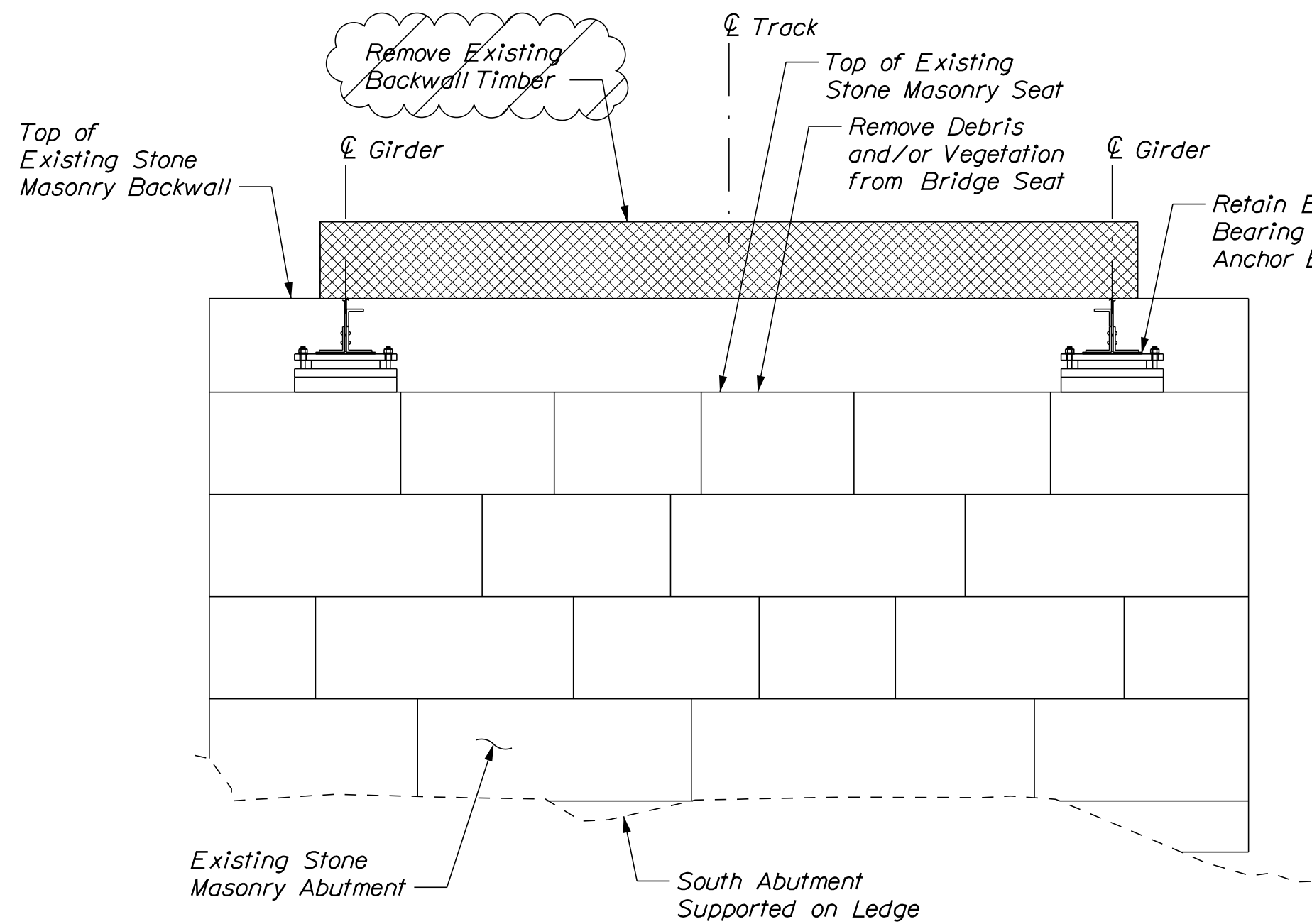
- *Field Drilled Hole*
- *Reuse Existing Hole*

(FCM) = Fracture Critical Member

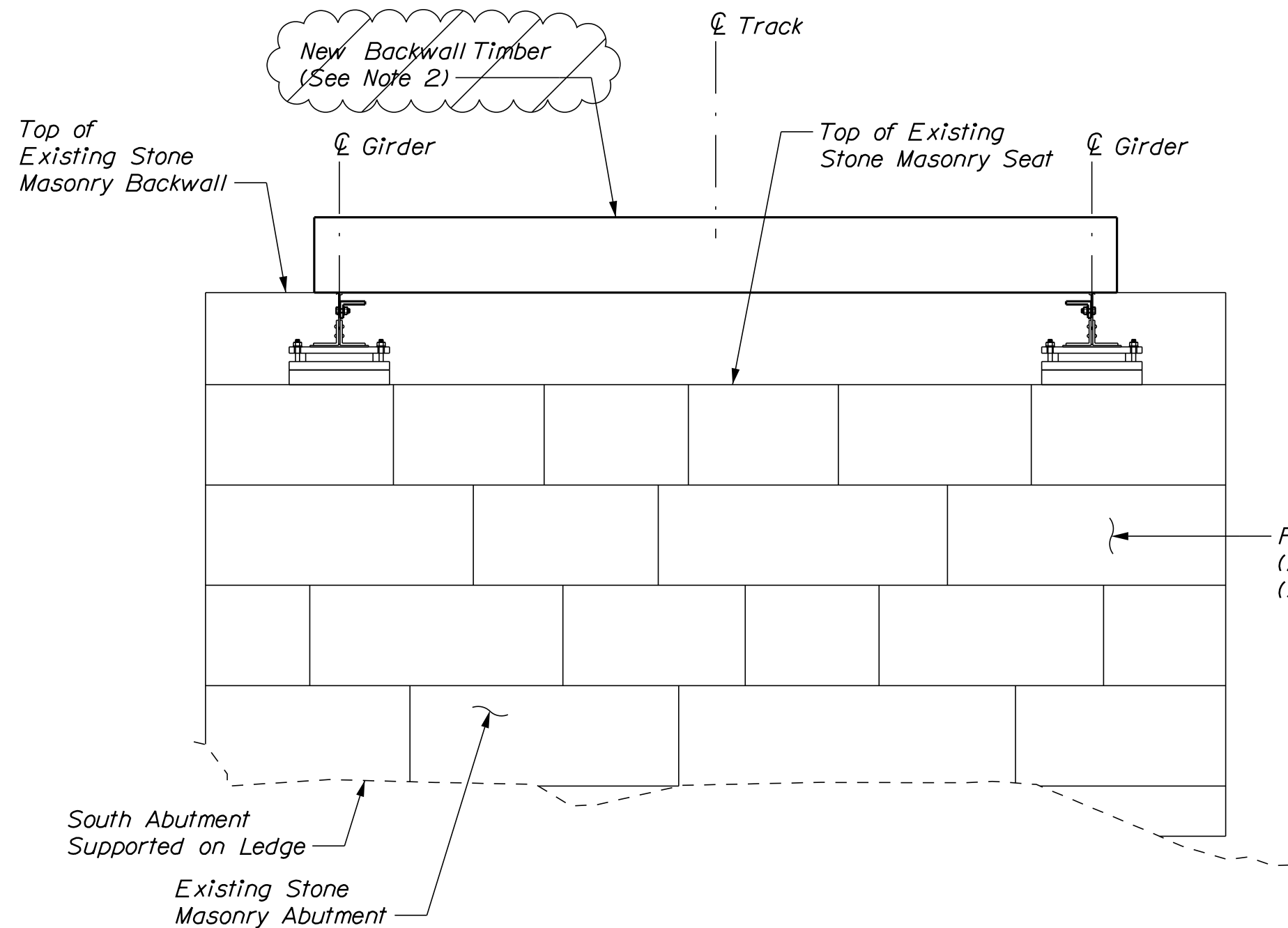
NOTES

1. See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.

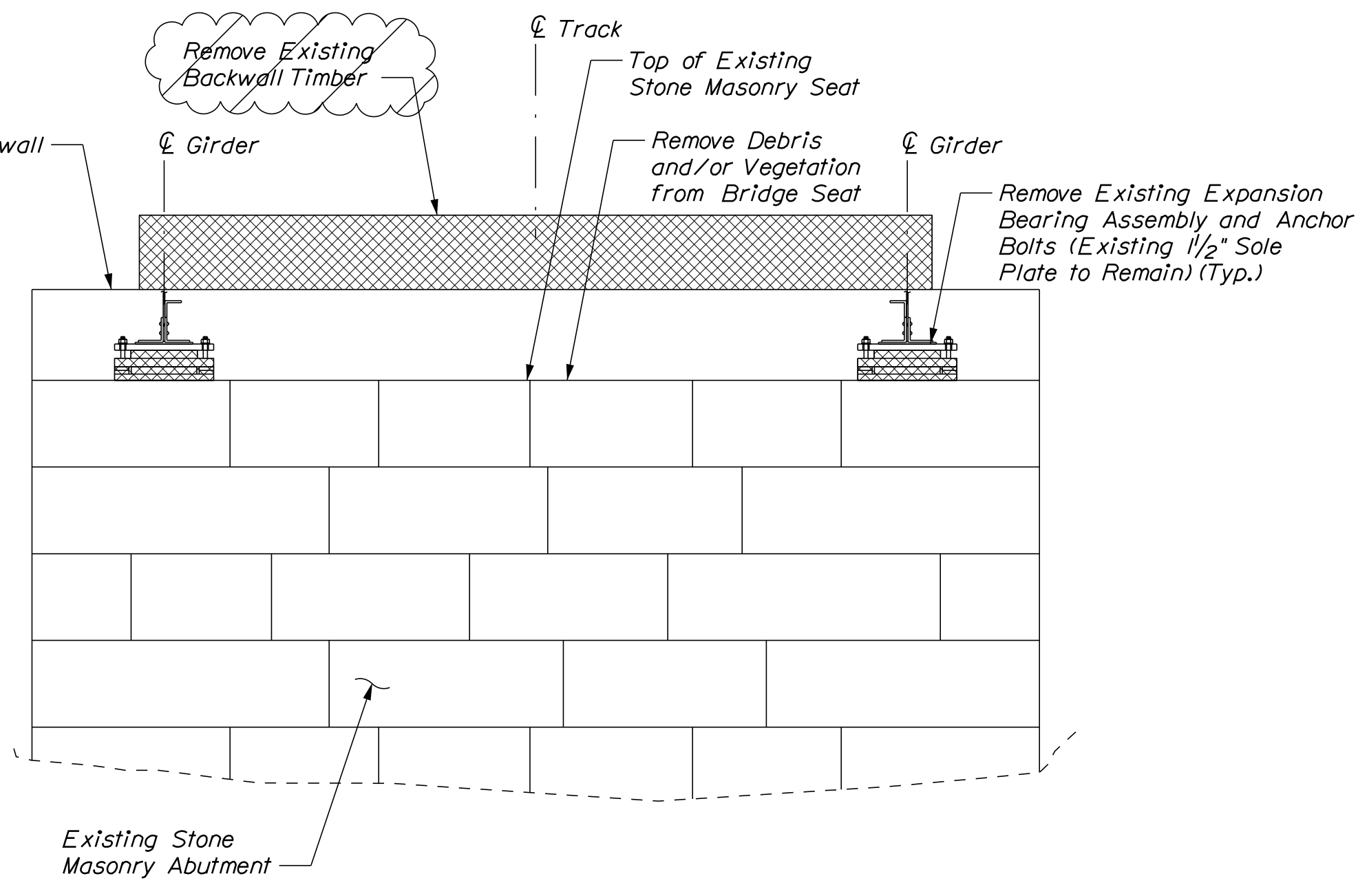
2. Repairs shown are typical for Bridge No. 7775 (M.P. 151.54), Bridge No. 7778 (M.P. 161.03) and Bridge No. 7782 (M.P. 185.84).



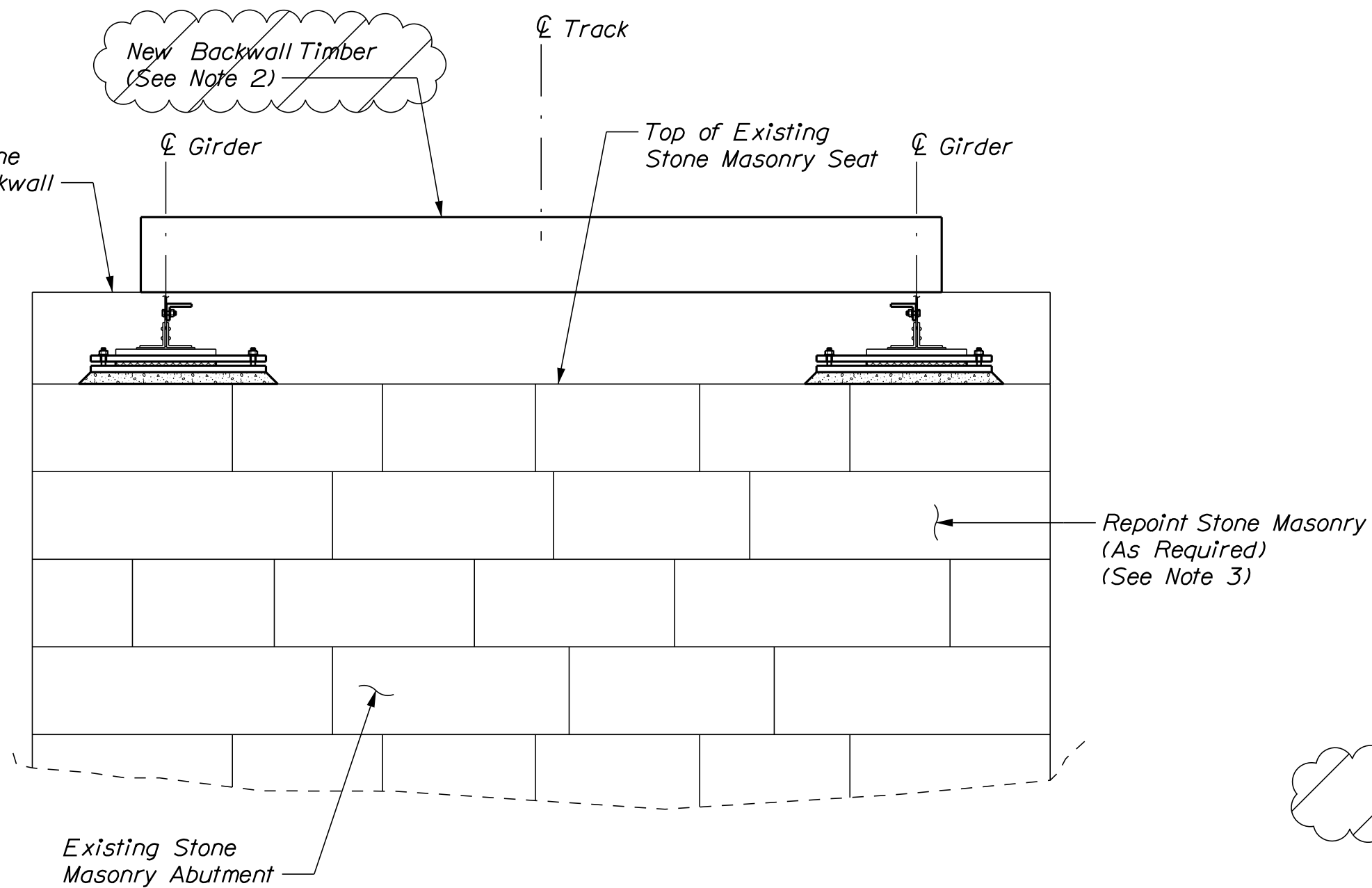
EXISTING SOUTH ABUTMENT
ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



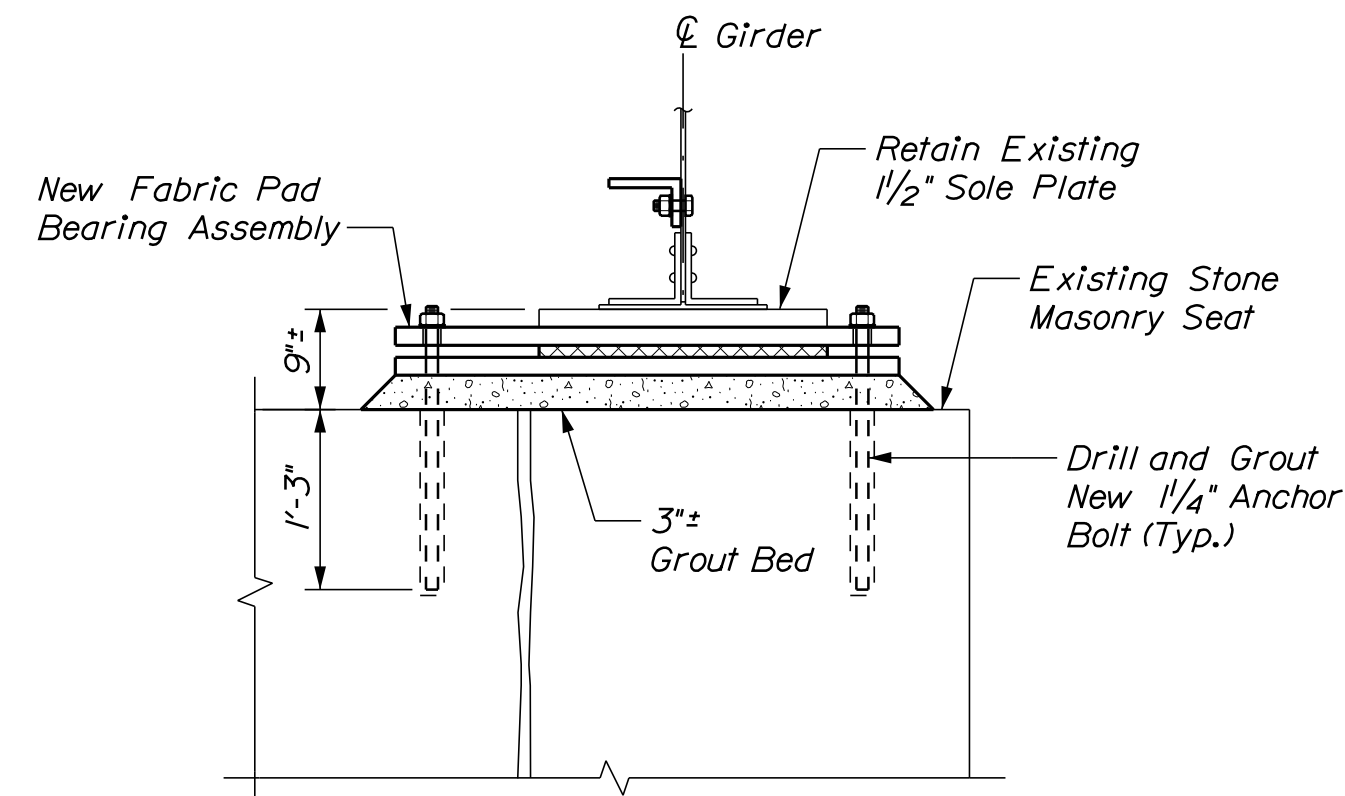
PROPOSED SOUTH ABUTMENT
ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



EXISTING NORTH ABUTMENT
ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



PROPOSED NORTH ABUTMENT
ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



PROPOSED NORTHEAST
EXPANSION BEARING DETAIL
(Northwest Bearing Similar, but Opposite Hand)
(See Note 4)
Not to Scale

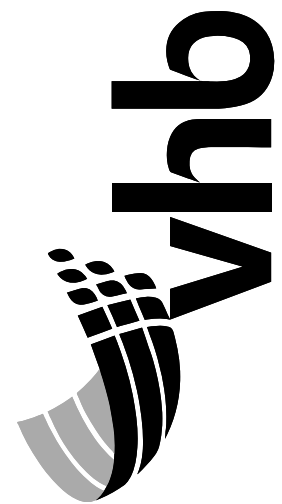
Indicates work to be done by
the Railroad (Separate Contract)

NOTES

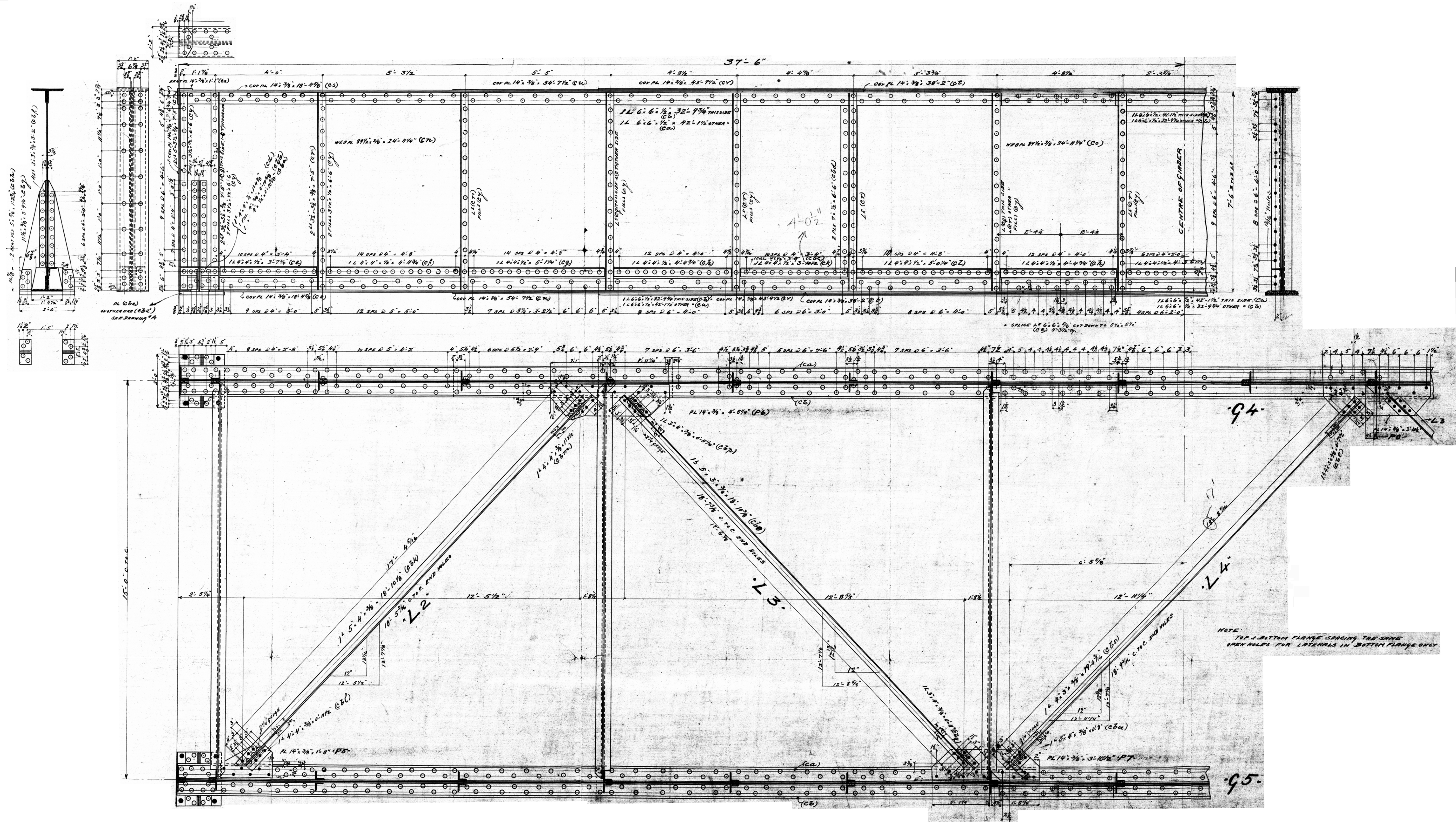
1. See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.
2. See Typical Repair Details Sheet (1 of 4) for Backwall Timber Replacement Details.
3. See Typical Repair Details Sheet (3 of 4) for Masonry Repointing Details.
4. See Bearing and Pedestal Details Sheets for Proposed Bearing Details and Notes.

LEGEND

Limits of Existing Bridge Removal



PROJ. MANAGER	DATE	BY	DATE	REVISIONS	FIELD CHANGES
DESIGN-DETAILED	11/2018	BUM	11/2018		
CHECKED-REVIEWED		GSG			
DESIGN-DETAILED3					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					



EXISTING GIRDER HALF ELEVATION
BRIDGE NO. 7775 (M.P. 151.54), BRIDGE NO. 7778 (M.P. 161.03)
AND BRIDGE NO. 7782 (M.P. 185.84)
Not to Scale

SHEET PROVIDED FOR INFORMATION ONLY

NOTES

1. See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.

2. Bridge No. 7775 (M.P. 151.54), Bridge No. 7778 (M.P. 161.03) and Bridge No. 7782 (M.P. 185.84) are built from the same existing plan and have identical superstructures.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 7775, 7778 & 7782

WIN

23486.00

BRIDGE PLANS

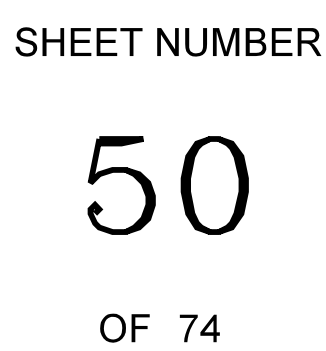
PROJ. MANAGER	MATE BENEFIT	BY	DATE
CHECKED-DETAILED	N/A	N/A	11/2018
DESIGNED-REVIEWED	N/A	N/A	11/2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

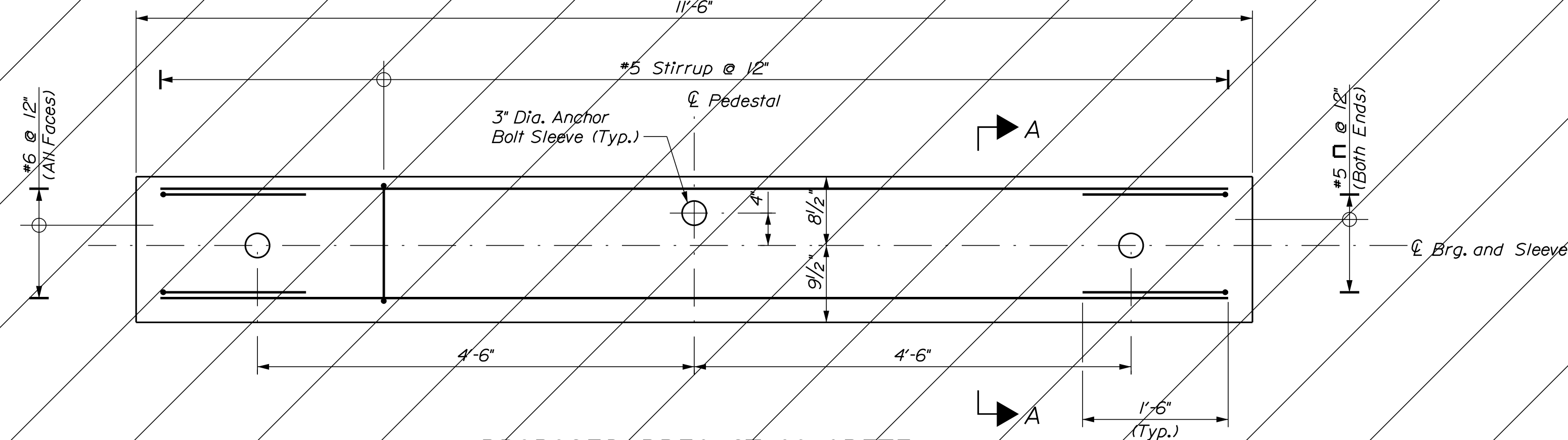
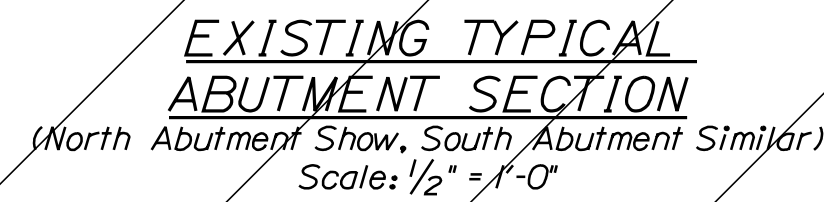
MAINE RAILROAD BRIDGE
CAPACITY PROJECT - CONTRACT 2
MADAWASKA SUB. AROOSTOOK/PENOBSCOT
BR. NO. 7775 (M.P. 151.54) OVER
E. BR. MATTAWAMKEAG (5 OF 5)

SHEET NUMBER

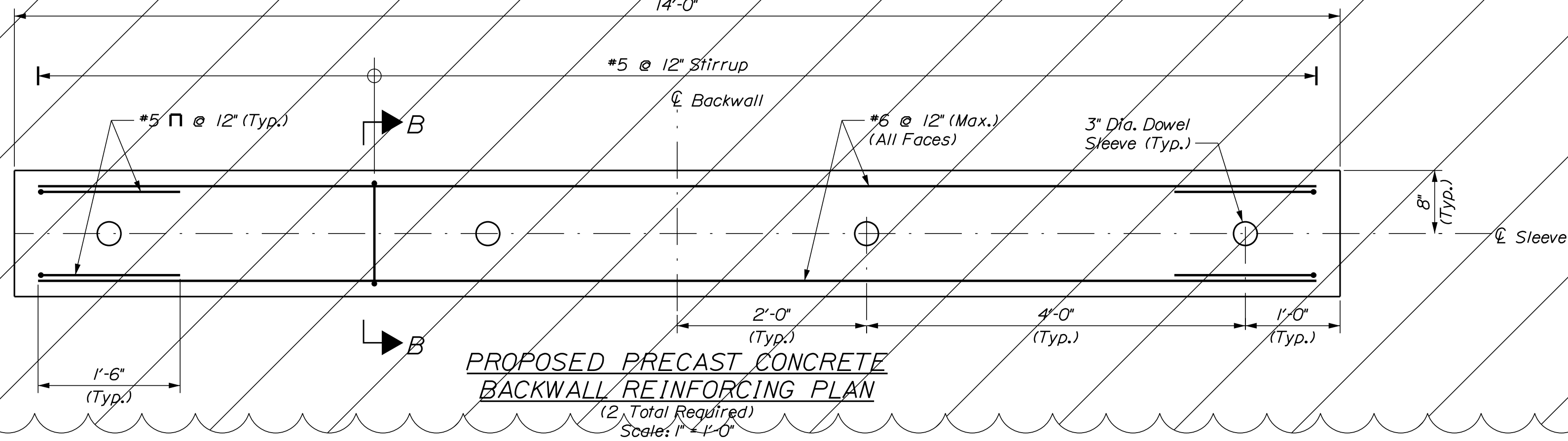
49

OF 74

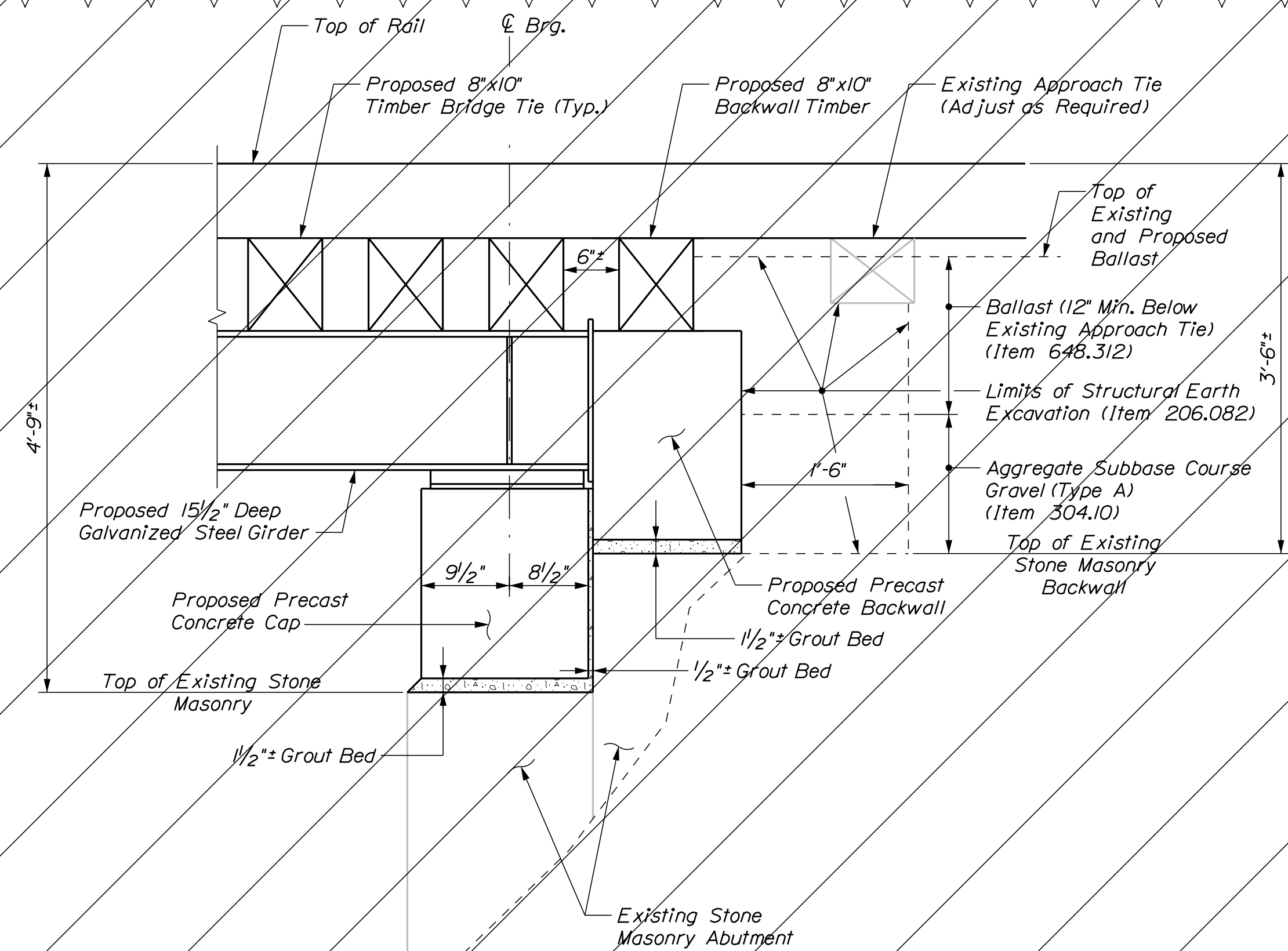




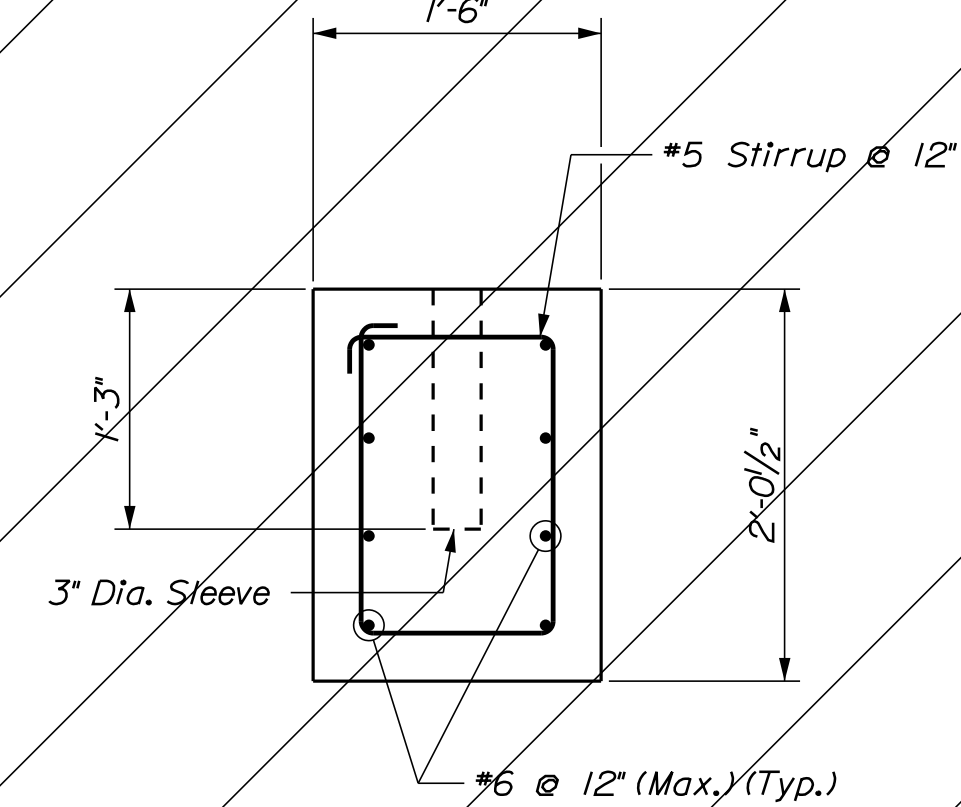
PROPOSED PRECAST CONCRETE
CAP REINFORCING PLAN
(2 Total Required)
Scale: 1" = 1'-0"



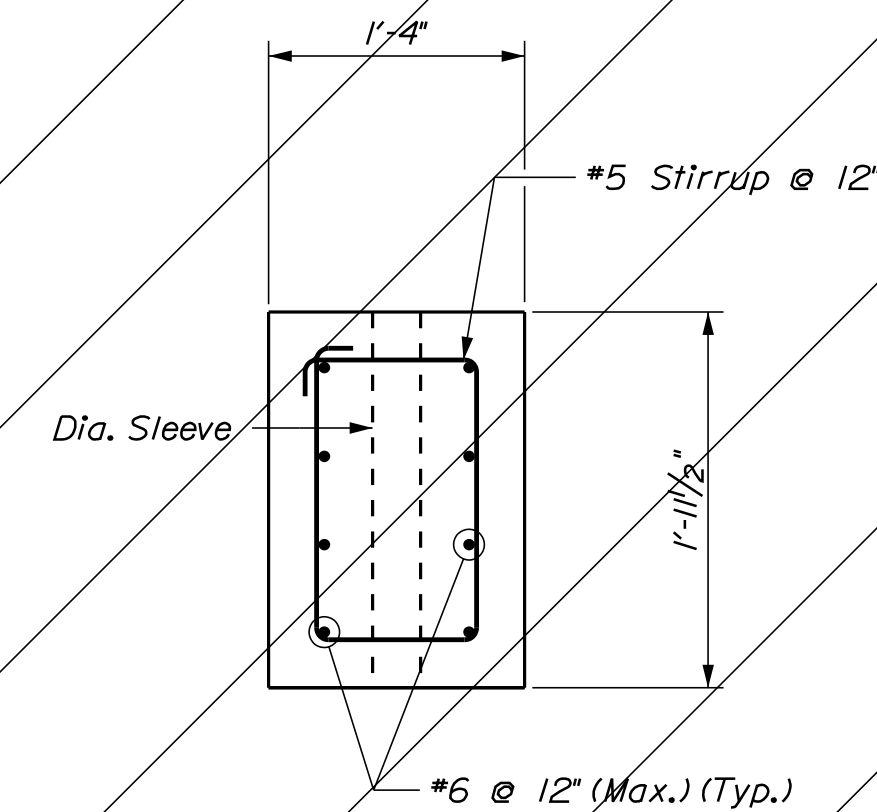
PROPOSED PRECAST CONCRETE
BACKWALL REINFORCING PLAN
(2 Total Required)
Scale: 1" = 1'-0"



~~PROPOSED ABUTMENT SECTION~~
~~(North Abutment Show, South Abutment Similar)~~
~~Scale: 1" = 1'-0"~~



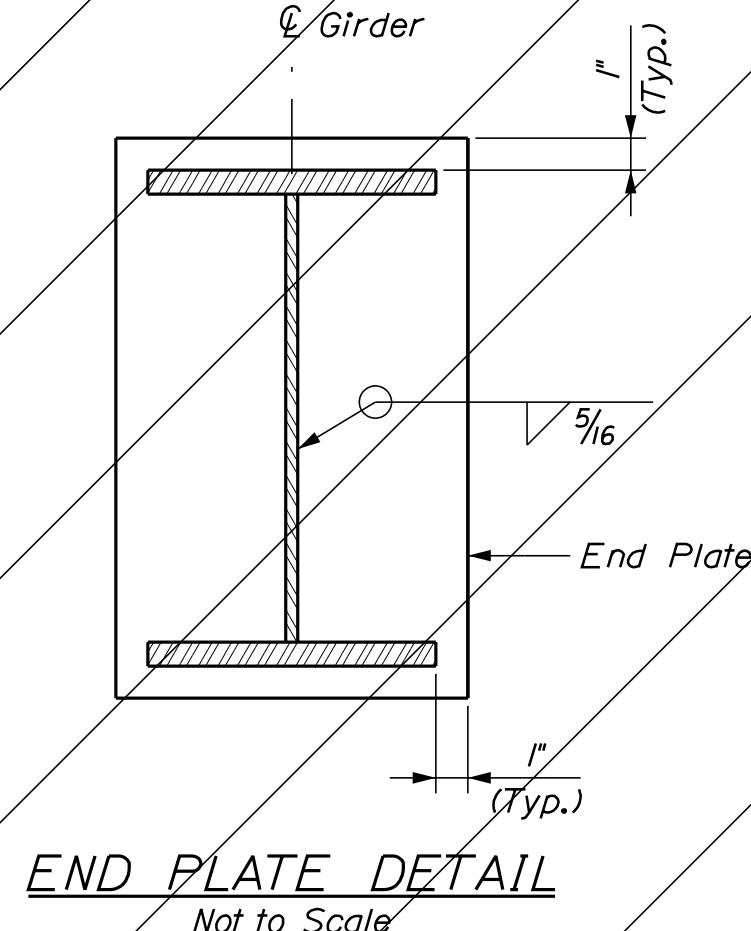
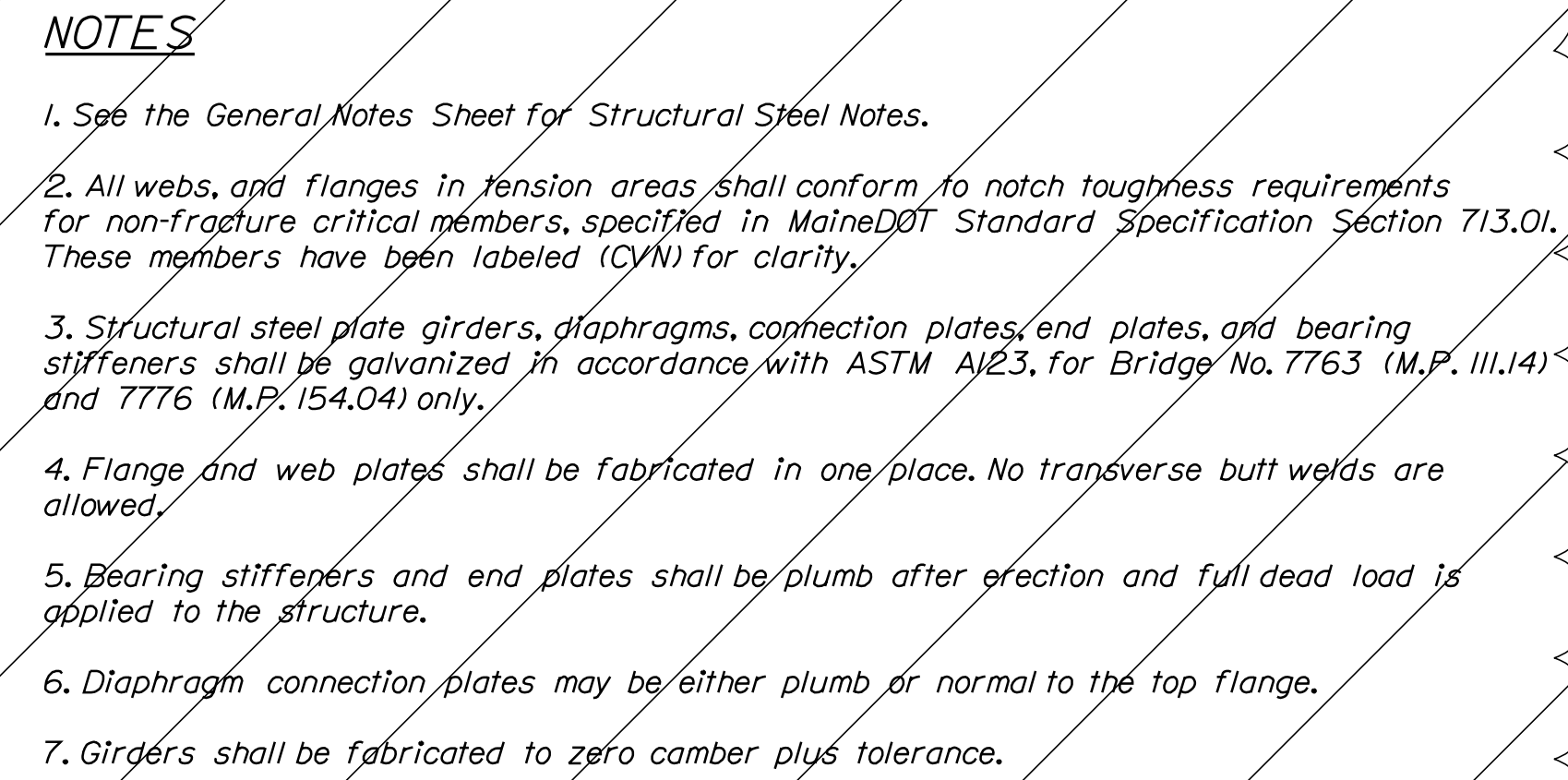
SECTION A-A
Scale: 1" = 1'-0"



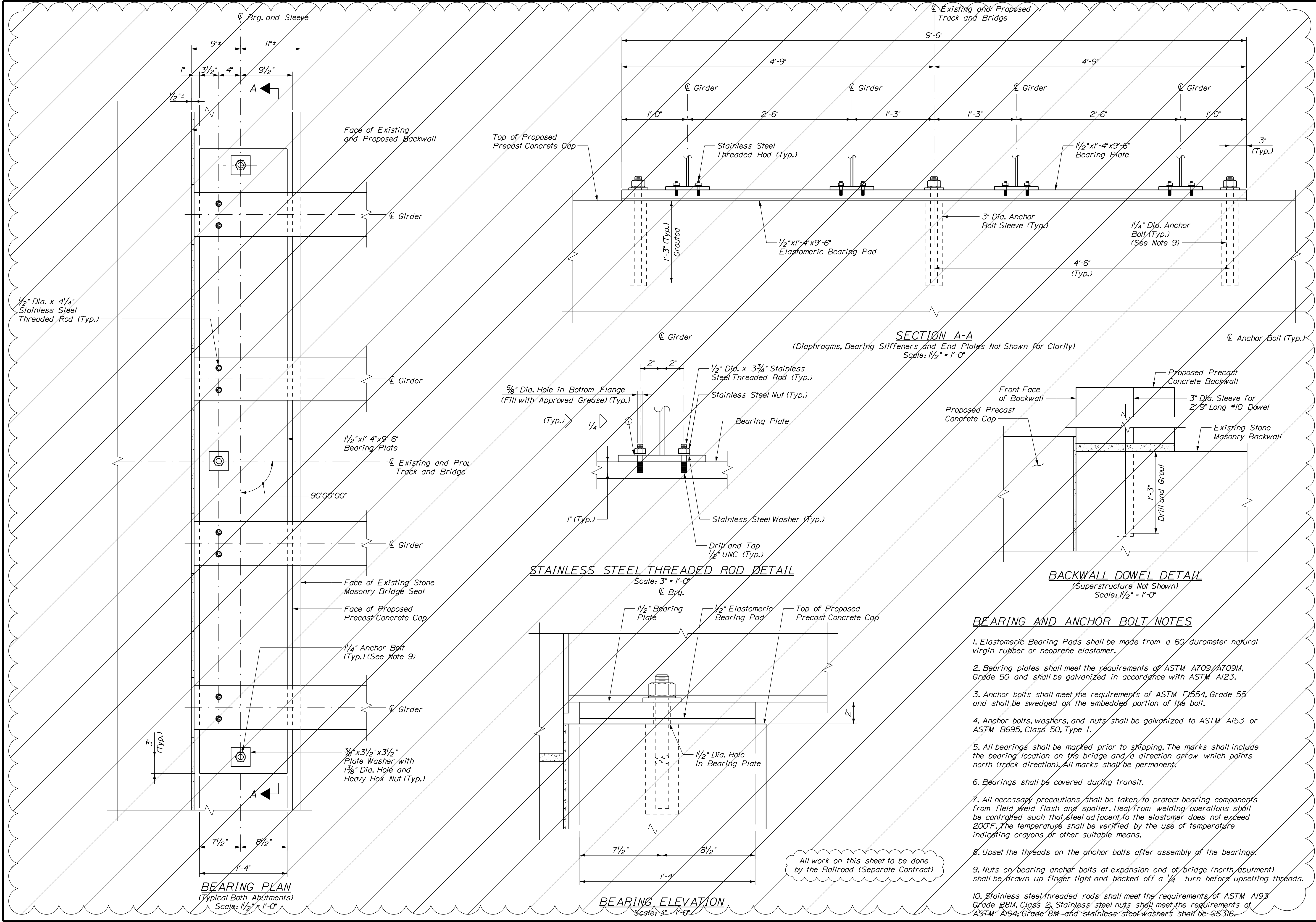
SECTION B-B
Scale: 1" = 1'-0"

*All work on this sheet to be done
by the Railroad (Separate Contract)*

1. See General Notes Sheet for Reinforced Concrete Notes.
2. Adjust reinforcing as required to avoid anchor bolt sleeves.



SHEET NUMBER			MAINE RAILROAD BRIDGE CAPACITY PROJECT - CONTRACT 2 MADAWASKA SUB. AROOSTOOK/PENOBSCOT								STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
53 OF 74			PROJ. MANAGER		MTE BENGT		BY		DATE		BRIDGE NO. 7776 WIN 23486.00 BRIDGE PLANS	
			DESIGN-DETAILED		TSC		BJM		11/2018			
			CHECKED-REVIEWED		JOM		GSC		11/2018			
			DESIGNS DETAILER									
			DESIGNS-DETAILED									
BR. NO. 7776 (M.P. 154.04) OVER SOULE BROOK (4 OF 5)			REVIEWS 1									
			REVIEWS 2									
			REVIEWS 3									
			REVIEWS 4									
			FIELD CHANGES									



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
23486.00

BRIDGE NO. 7776

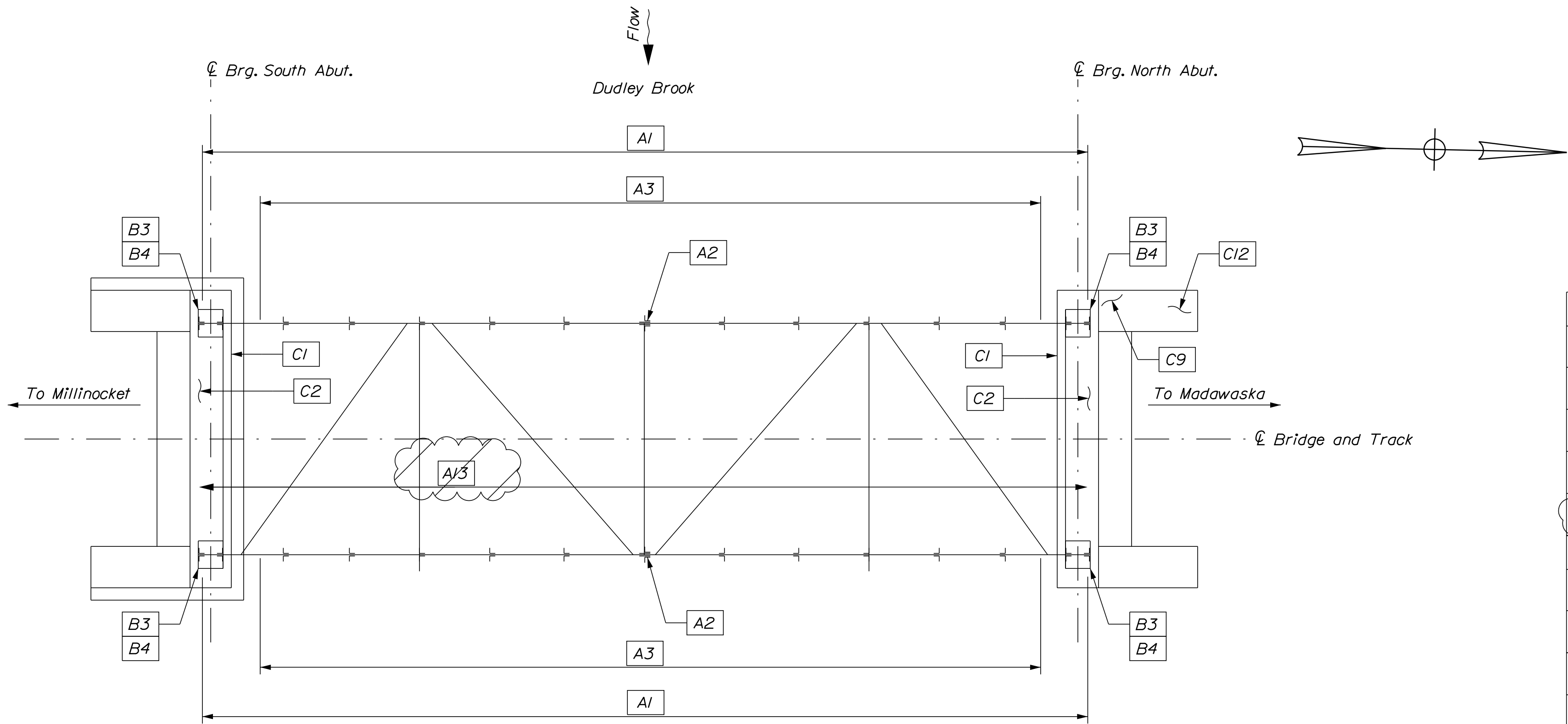
BRIDGE PLANS

PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED	11/2018	BUM	11/2018
CHECKED-REVIEWED	JCM	GSG	
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS	1		
REVISIONS	2		
REVISIONS	3		
REVISIONS	4		
FIELD CHANGES			

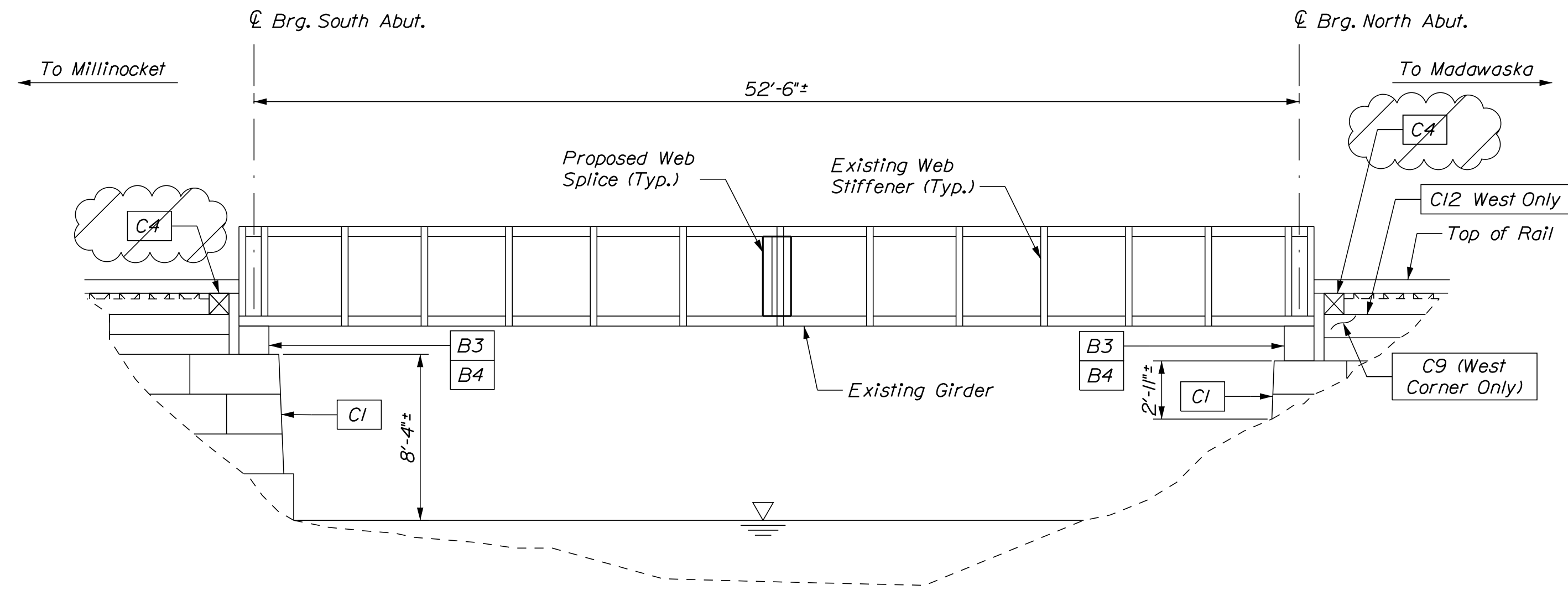
MAINE RAILROAD BRIDGE
CAPACITY PROJECT - CONTRACT 2
MADAWASKA SUB. AROOSTOOK/PENOBSCOT

BR. NO. 7776 (M.P. 154.04)
OVER SOULE BROOK (5 OF 5)

SHEET NUMBER
54
OF 74



REHABILITATION KEY PLAN
 Not to Scale



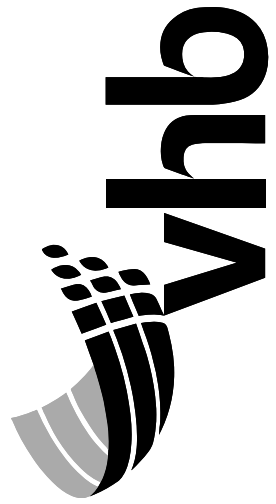
BRIDGE ELEVATION
 Not to Scale

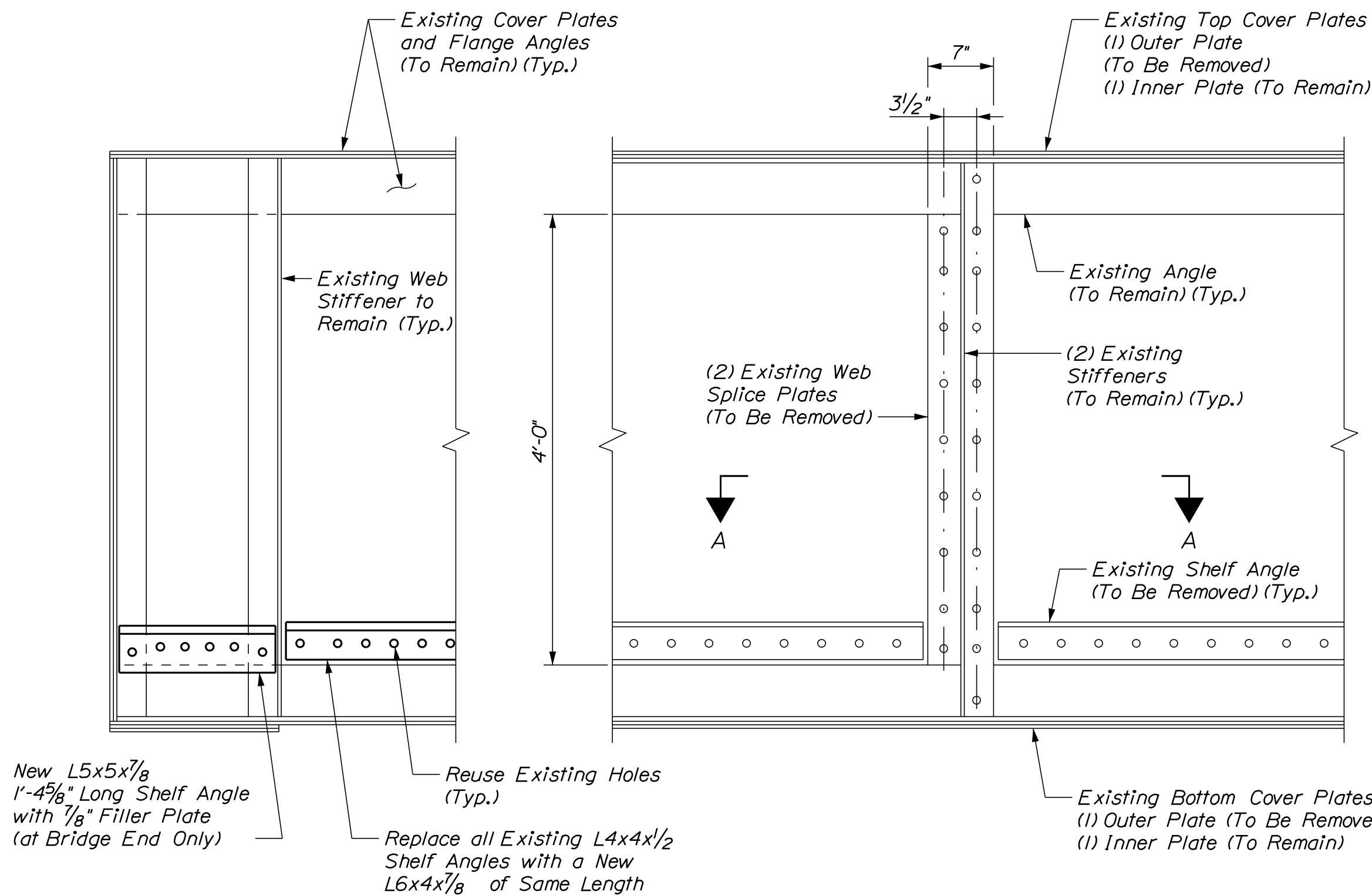
SUPERSTRUCTURE WORK ITEMS			
Work ID	Description	Number of Locations	See Detail on Sheet
A1	Remove and Replace All Bridge Timber Support Shelf Angles	28	56
A2	Remove and Replace Web Splice Plates	2	56
A3	Remove and Replace Top and Bottom Flange Cover Plates	2	56
A3	Replace All Bridge Timbers (See Note 2)	1	14
BEARING AND PEDESTAL WORK ITEMS			
Work ID	Description	Number of Locations	See Detail on Sheet
B3	Remove and Replace Anchor Bolts	4	9 & 57
B4	Remove and Replace Bearing Pedestal	4	9 & 57
SUBSTRUCTURE WORK ITEMS			
Work ID	Description	Number of Locations	See Detail on Sheet
C1	Repoint Stone Masonry Abutment	2	5
C2	Remove Debris and/or Vegetation from Bridge Seat	2	N/A
C4	Remove and Replace Backwall Timber	2	4
C9	Repair Corner of Concrete Backwall	1	7 & 57
C12	Repair Top of Concrete Wingwall	1	57

Indicates work to be done by the Railroad (Separate Contract)

NOTES

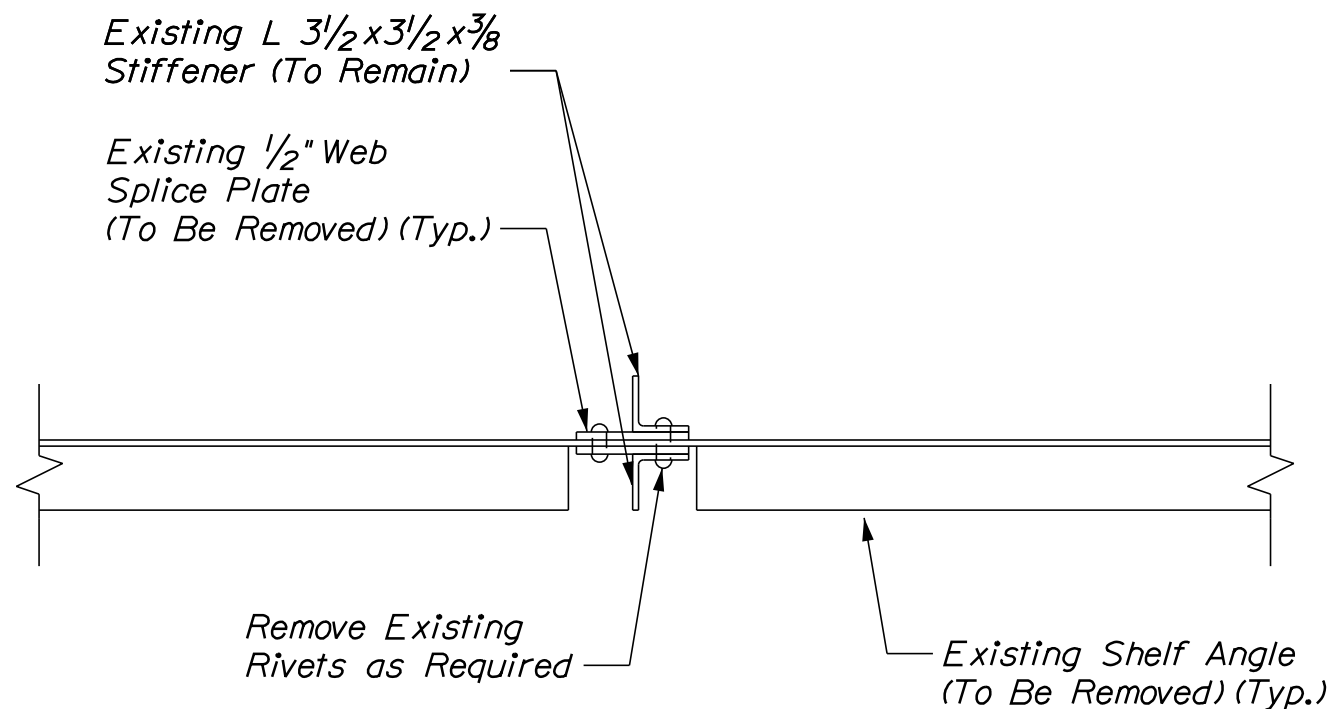
- See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.
- See Deck Details (5 of 7) Sheet for Timber Bridge Tie Layout and Details.



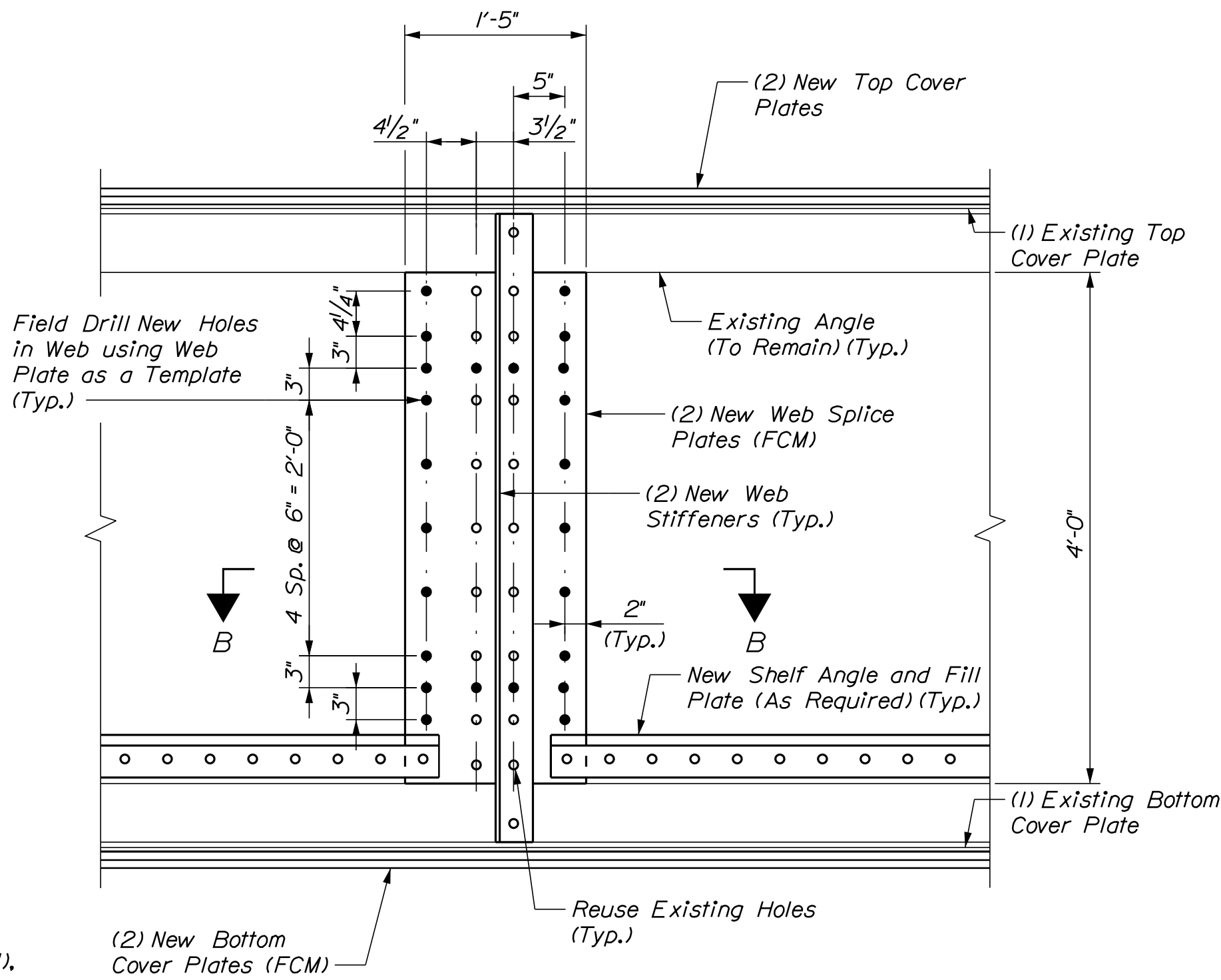


**PROPOSED GIRDER
END ELEVATION**
(All Details and Dimensions
Typical Both Ends of Girder)
Scale: 1" = 1'-0"

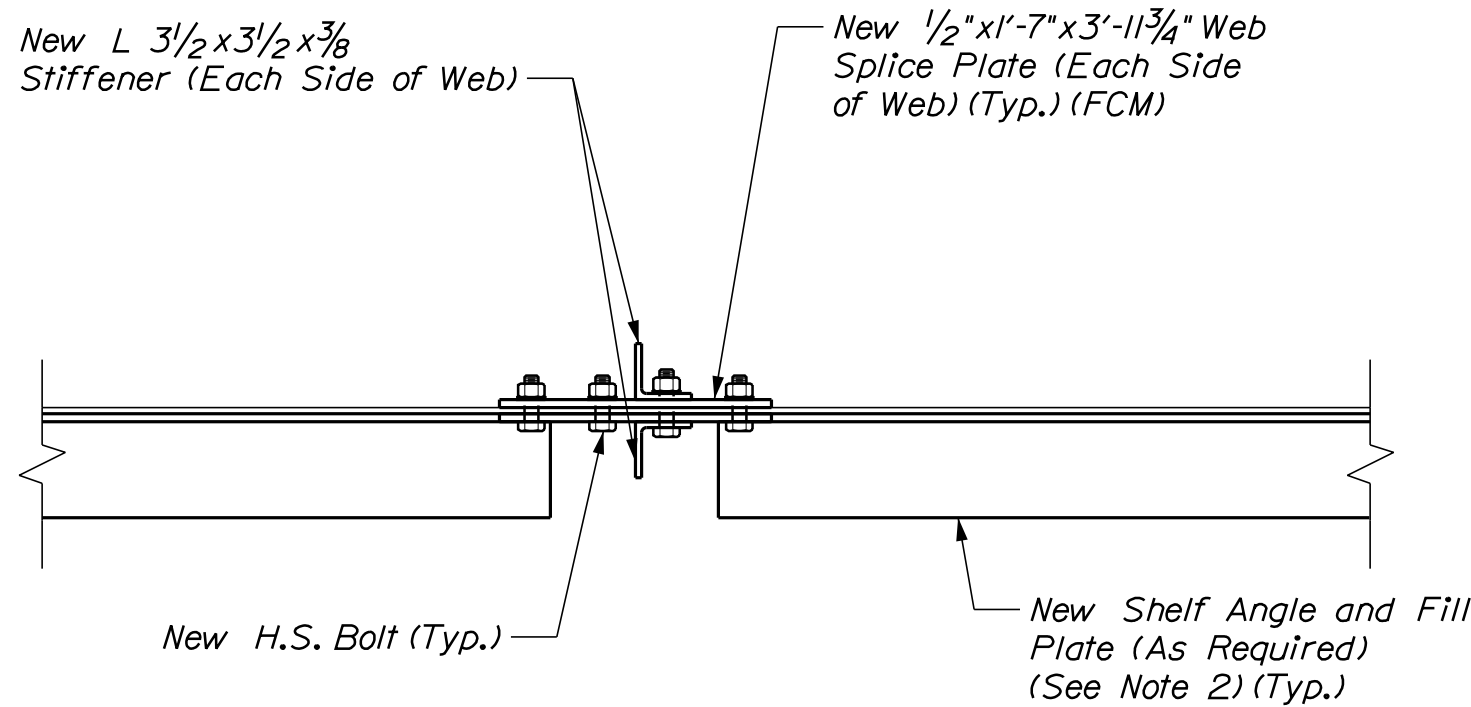
ELEVATION



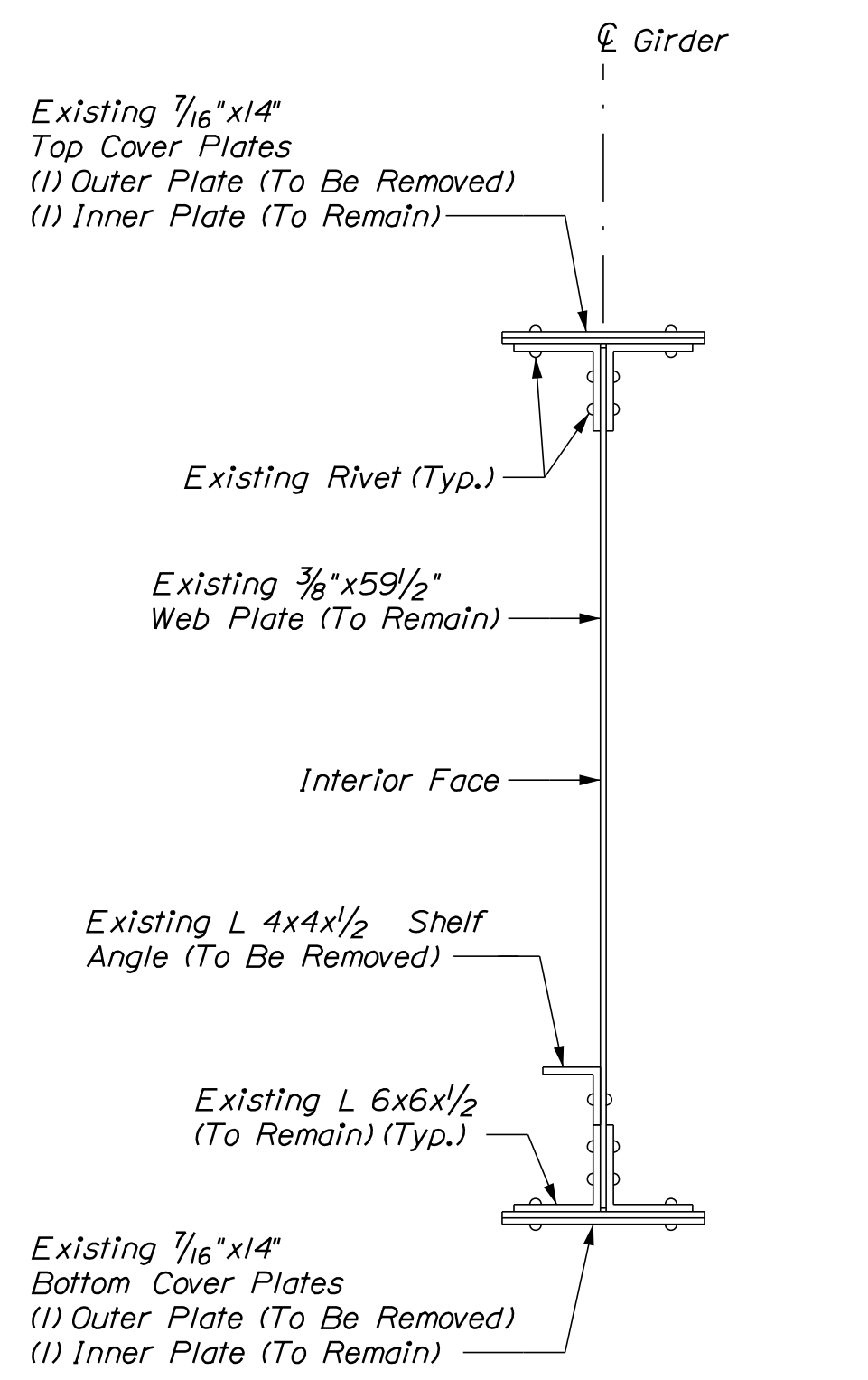
SECTION A-A
EXISTING WEB SPLICE DETAIL
Scale: 1" = 1'-0"



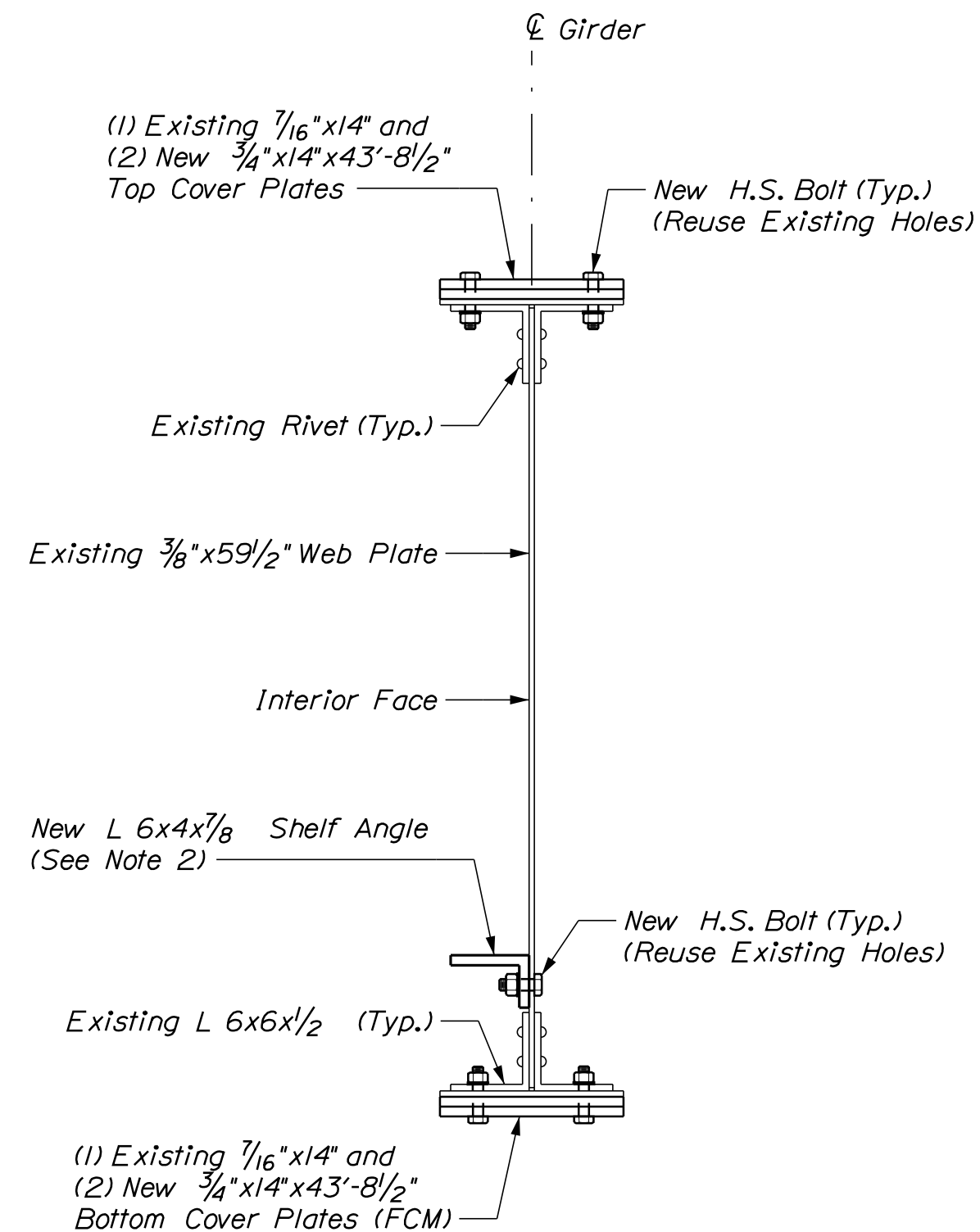
ELEVATION



SECTION B-B
PROPOSED WEB SPLICE DETAIL
Scale: 1" = 1'-0"



**EXISTING GIRDER
SECTION AT MIDSPAN**
Scale: 1" = 1'-0"



**PROPOSED GIRDER
SECTION AT MIDSPAN**
Scale: 1" = 1'-0"

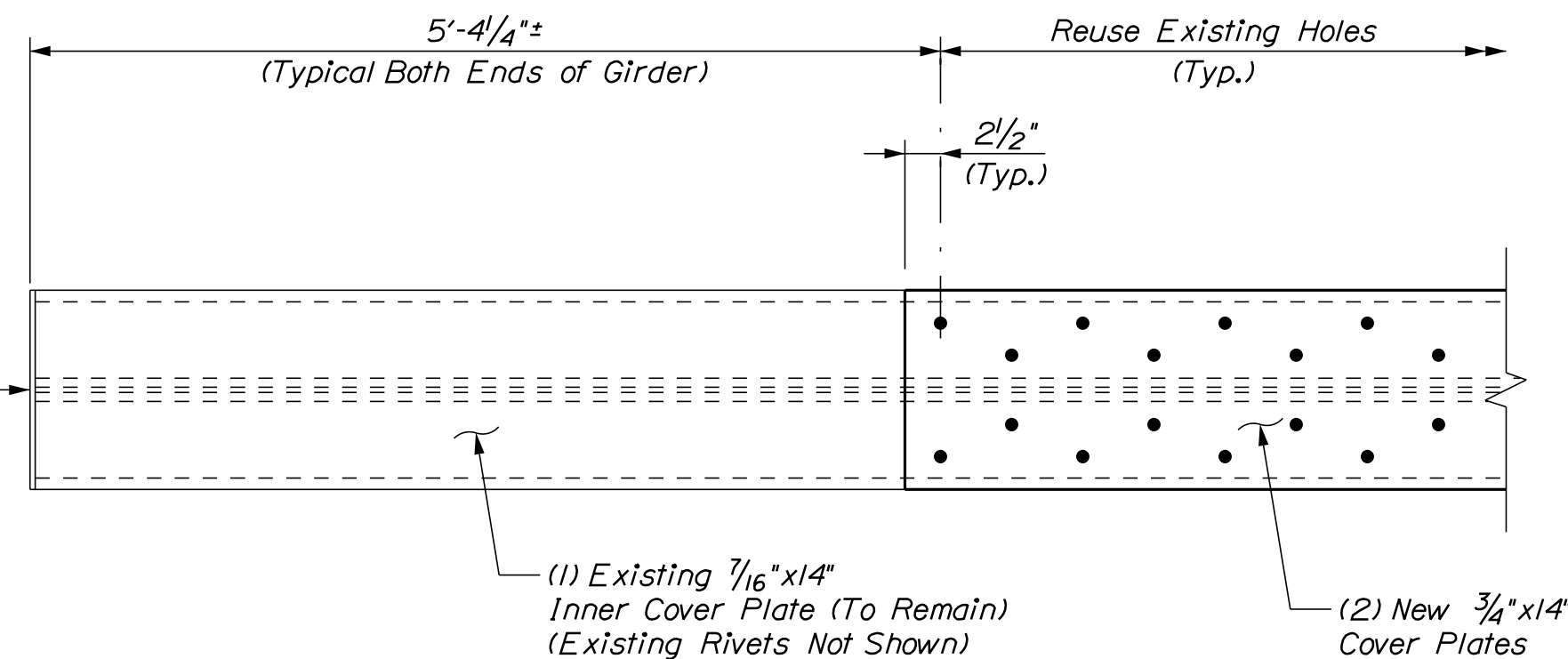
LEGEND:

- Field Drilled Hole
- Reuse Existing Hole

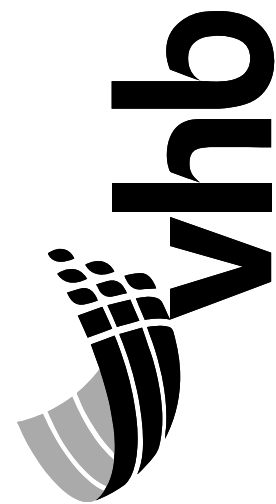
NOTES

- See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.
- All existing L4x4x1/2 shelf angles shall be replaced with new L6x4x7/8 shelf angles of the same length and hole spacing except at bridge end.
- Repairs shown are typical for Bridge No. 7777 (M.P. 154.59) and Bridge No. 7779 (M.P. 164.74)

Dimensions in these plans shall not be used for fabrication purposes. All necessary dimensions and configurations shall be determined from actual field measurements by the Contractor. See Sheet 4 of 4 for Existing Plans.

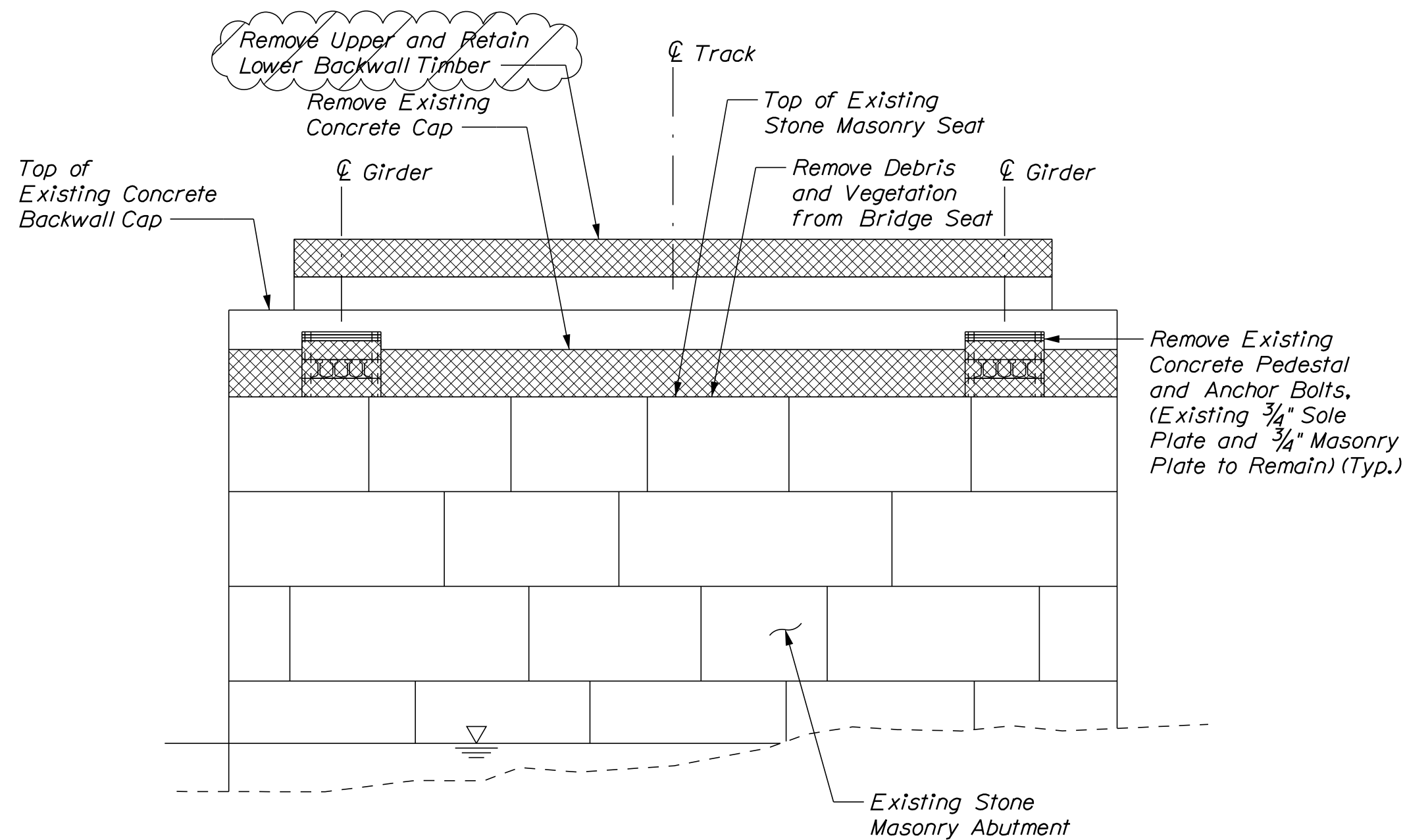


PROPOSED TOP AND BOTTOM FLANGE COVER PLATE DETAIL
(Top Flange Shown, Bottom Flange Similar)
(Bent Plate on Top Corner of Girder Not Shown)
Scale: 1" = 1'-0"

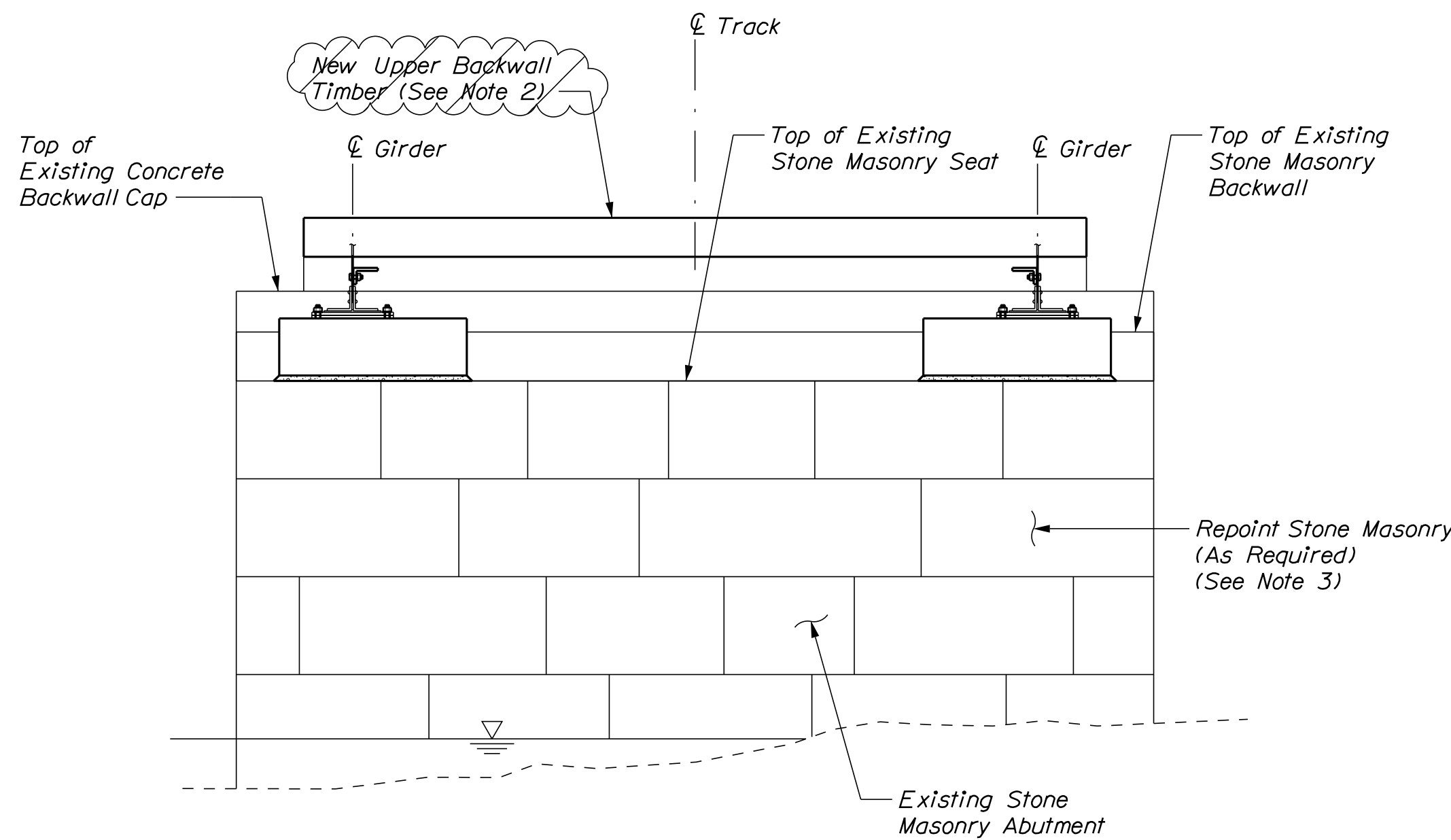


DATE	BY	CHK	DATE	BY	CHK
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	
11/2018	CSG		11/2018	CSG	

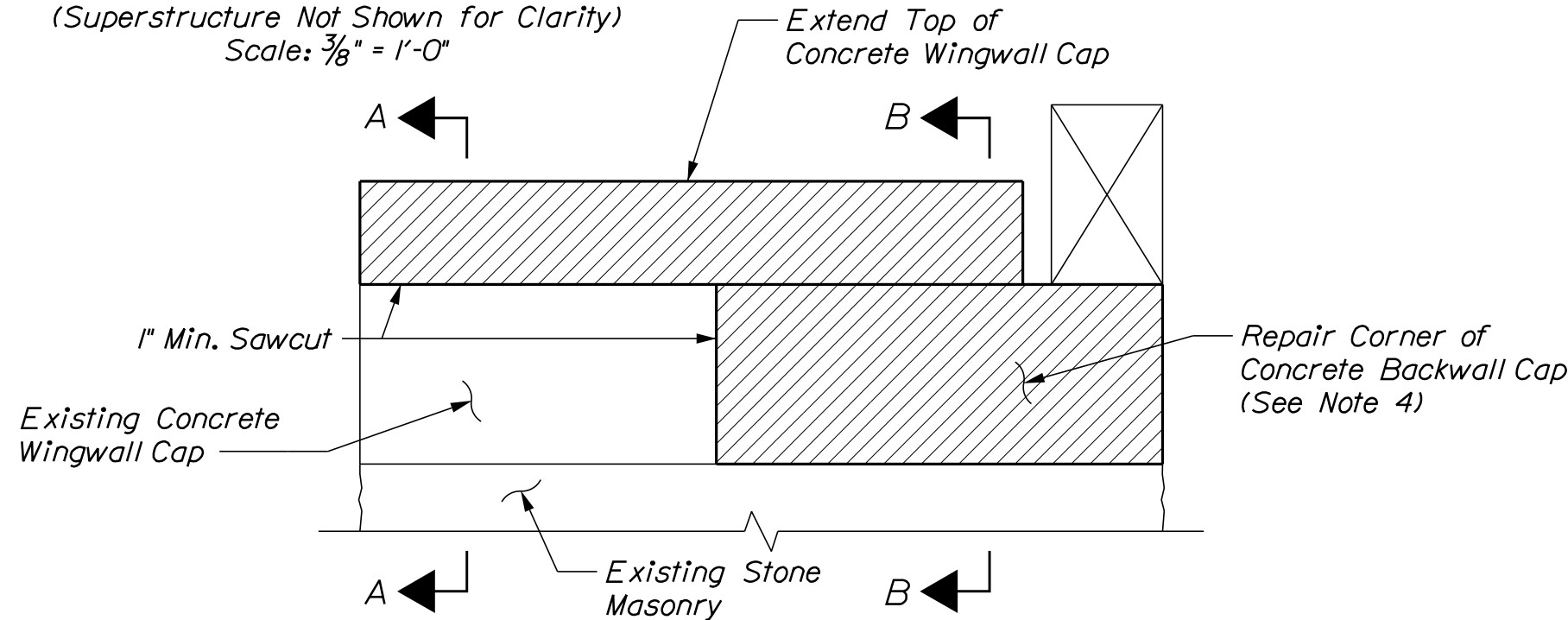
MAINE RAILROAD BRIDGE CAPACITY PROJECT - CONTRACT 2 MADAWASKA SUB. AROOSTOOK/PENOBSCOT BR. NO. 7777 (M.P. 154.59) OVER DUDLEY BROOK (2 OF 4)
--



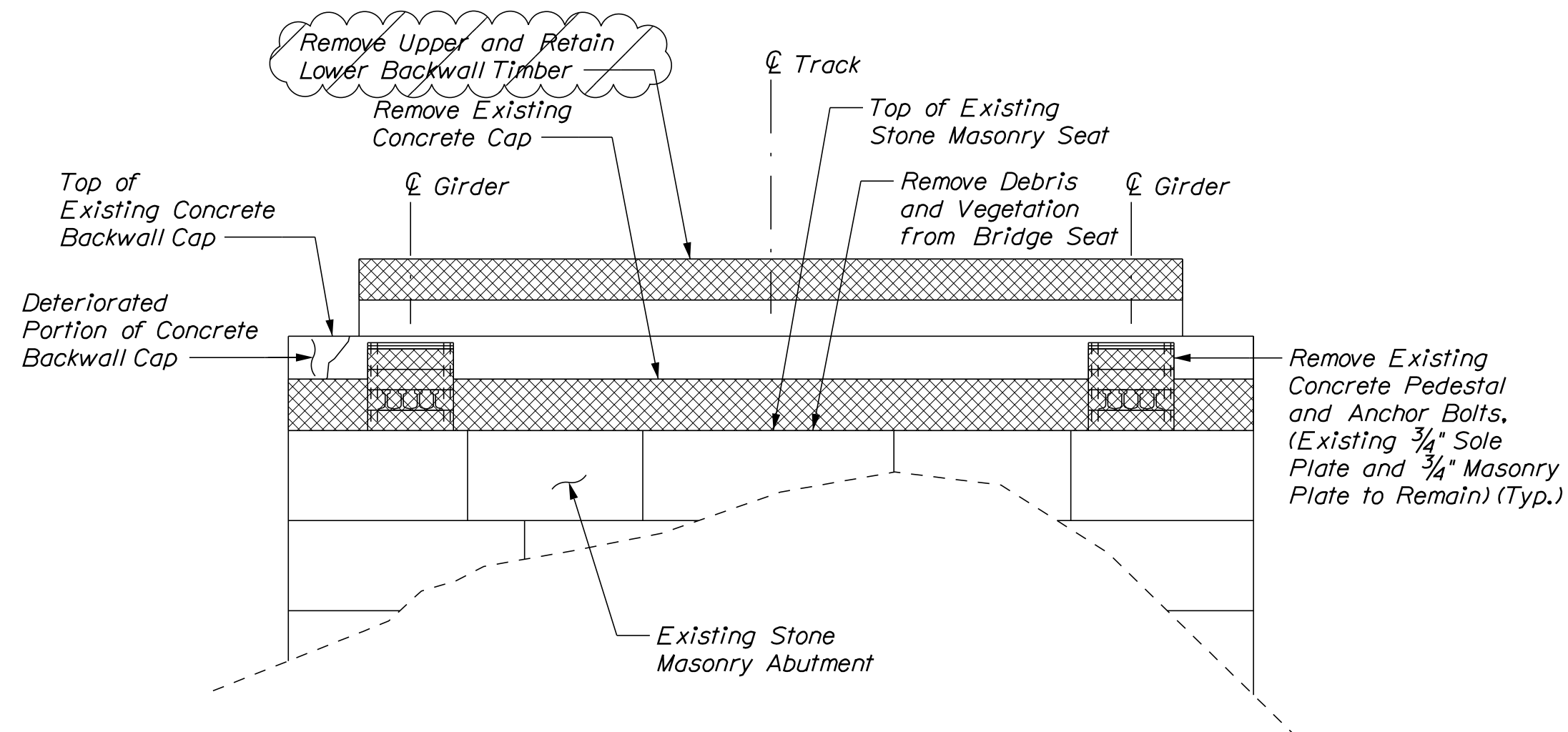
EXISTING SOUTH ABUTMENT ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



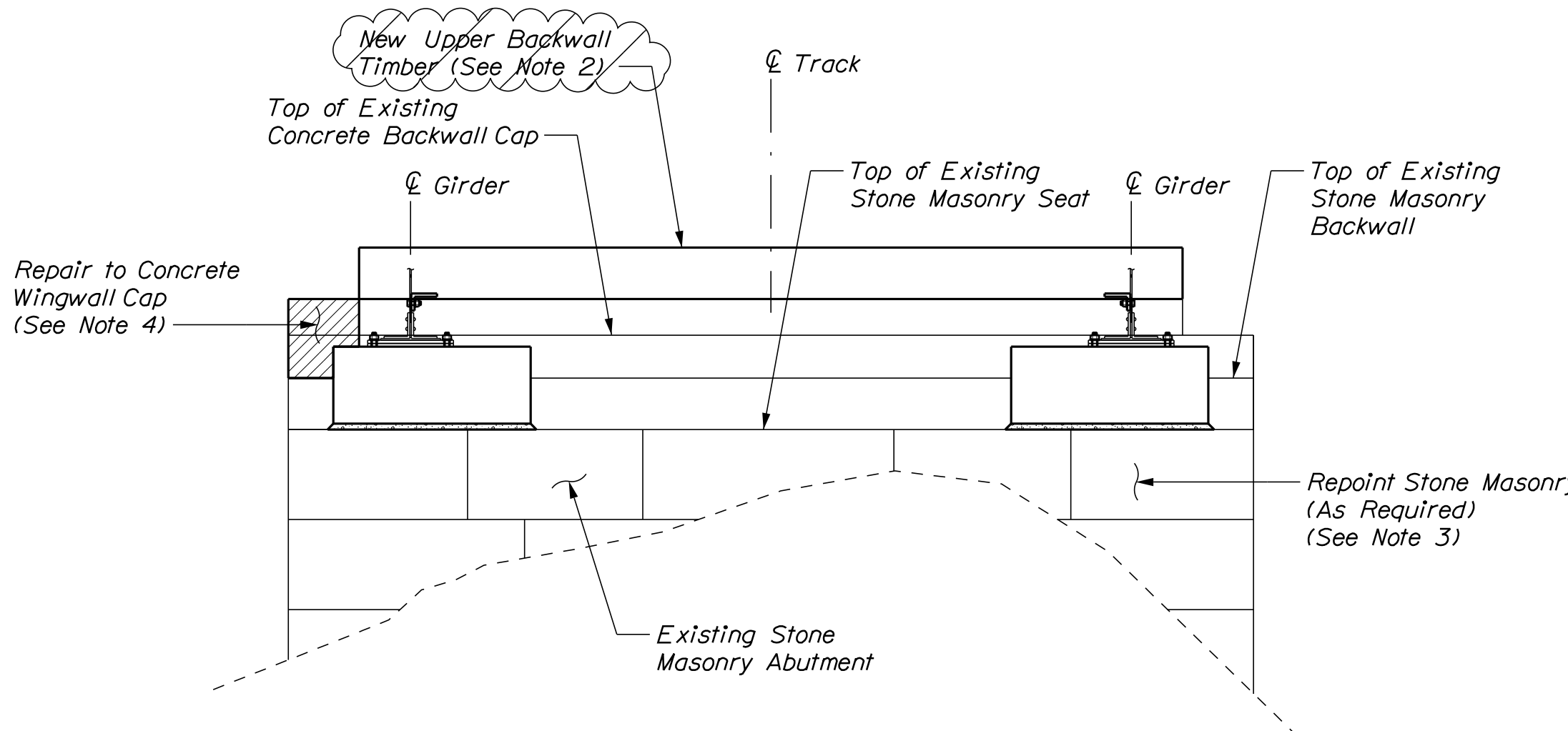
PROPOSED SOUTH ABUTMENT ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



PROPOSED NORTHWEST WINGWALL ELEVATION
Not To Scale



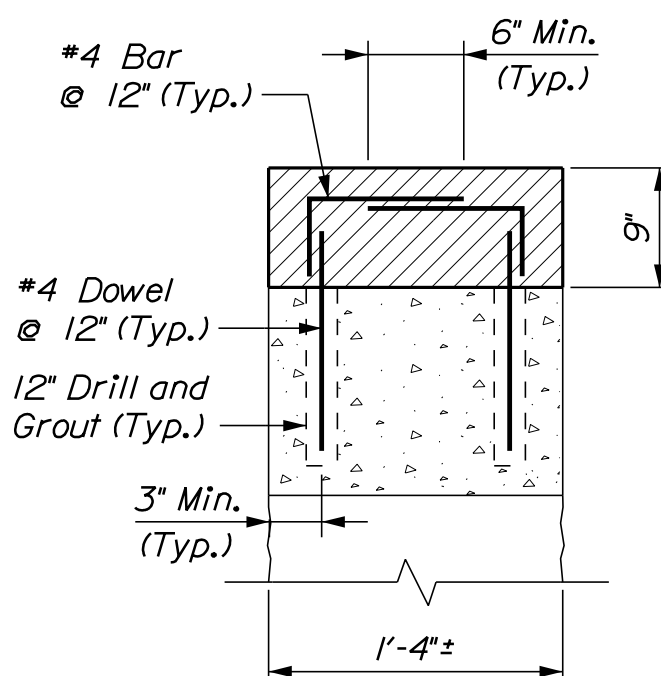
EXISTING NORTH ABUTMENT ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"



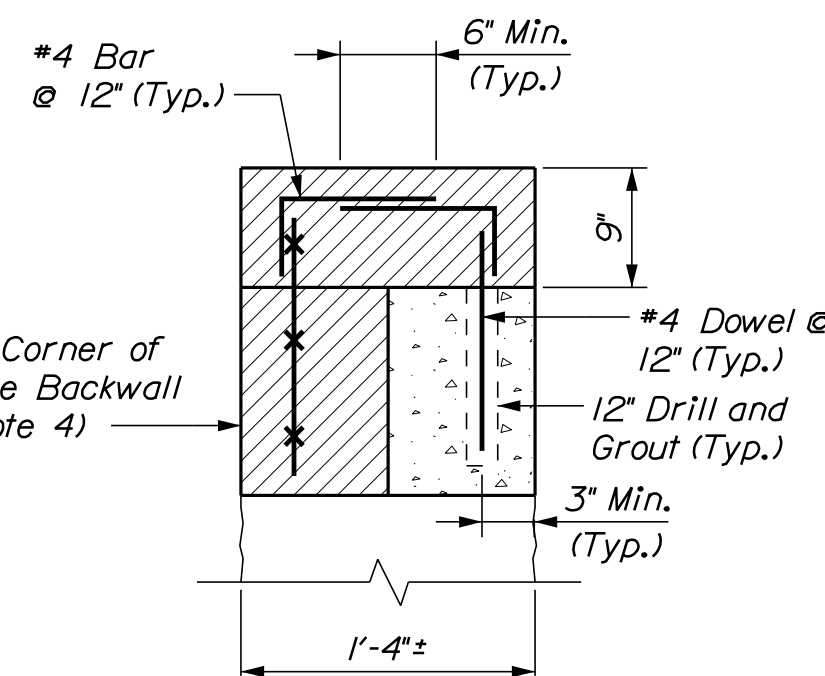
PROPOSED NORTH ABUTMENT ELEVATION
(Superstructure Not Shown for Clarity)
Scale: 3/8" = 1'-0"

ESTIMATED CONCRETE REPAIR QUANTITIES

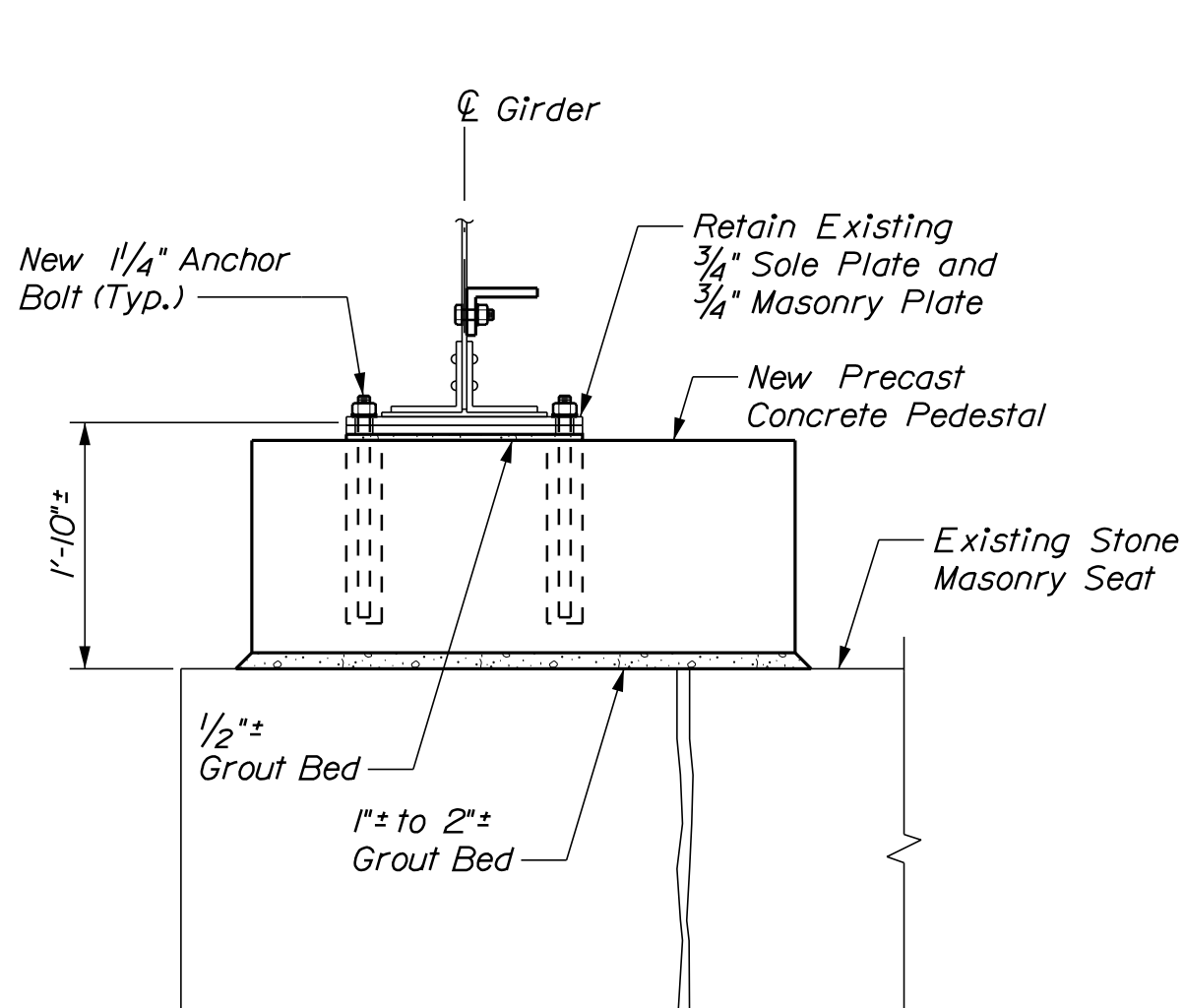
Wingwall and Backwall Rehabilitation Concrete (See Note 6) 1.0 CY *
* Includes 0.5 CY additional repair quantity as a contingency



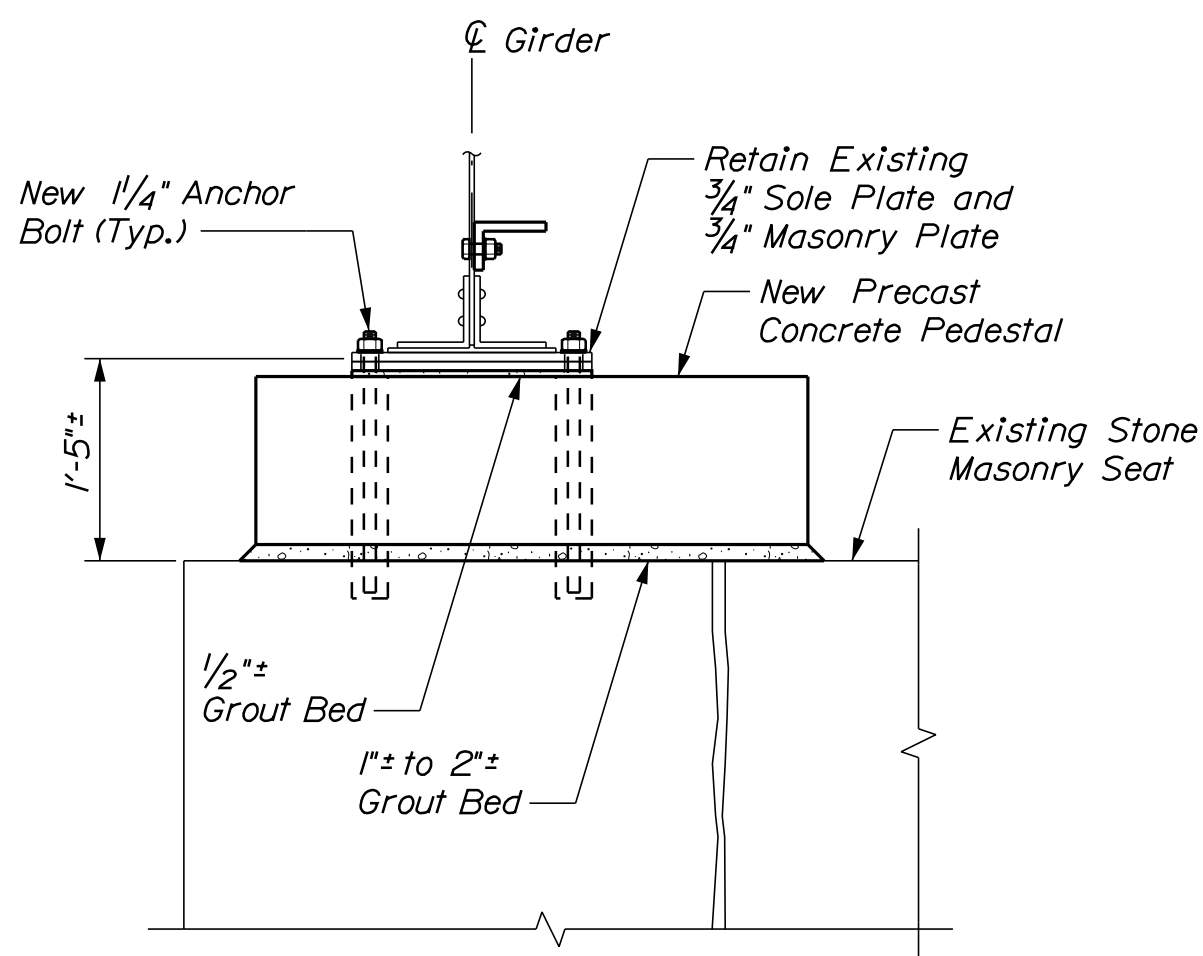
SECTION A-A
Not To Scale



SECTION B-B
Not To Scale



PROPOSED NORTHWEST BEARING AND PEDESTAL DETAIL
(Northeast Similar, but Opposite Hand)
(See Note 5)
Not to Scale



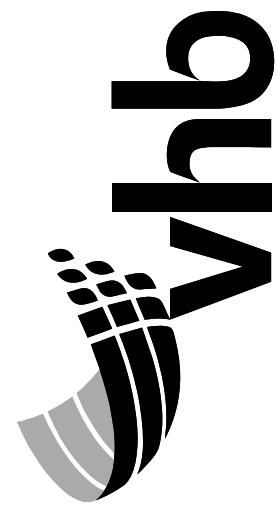
PROPOSED SOUTHEAST BEARING AND PEDESTAL DETAIL
(Southwest Similar, but Opposite Hand)
(See Note 5)
Not to Scale

NOTES

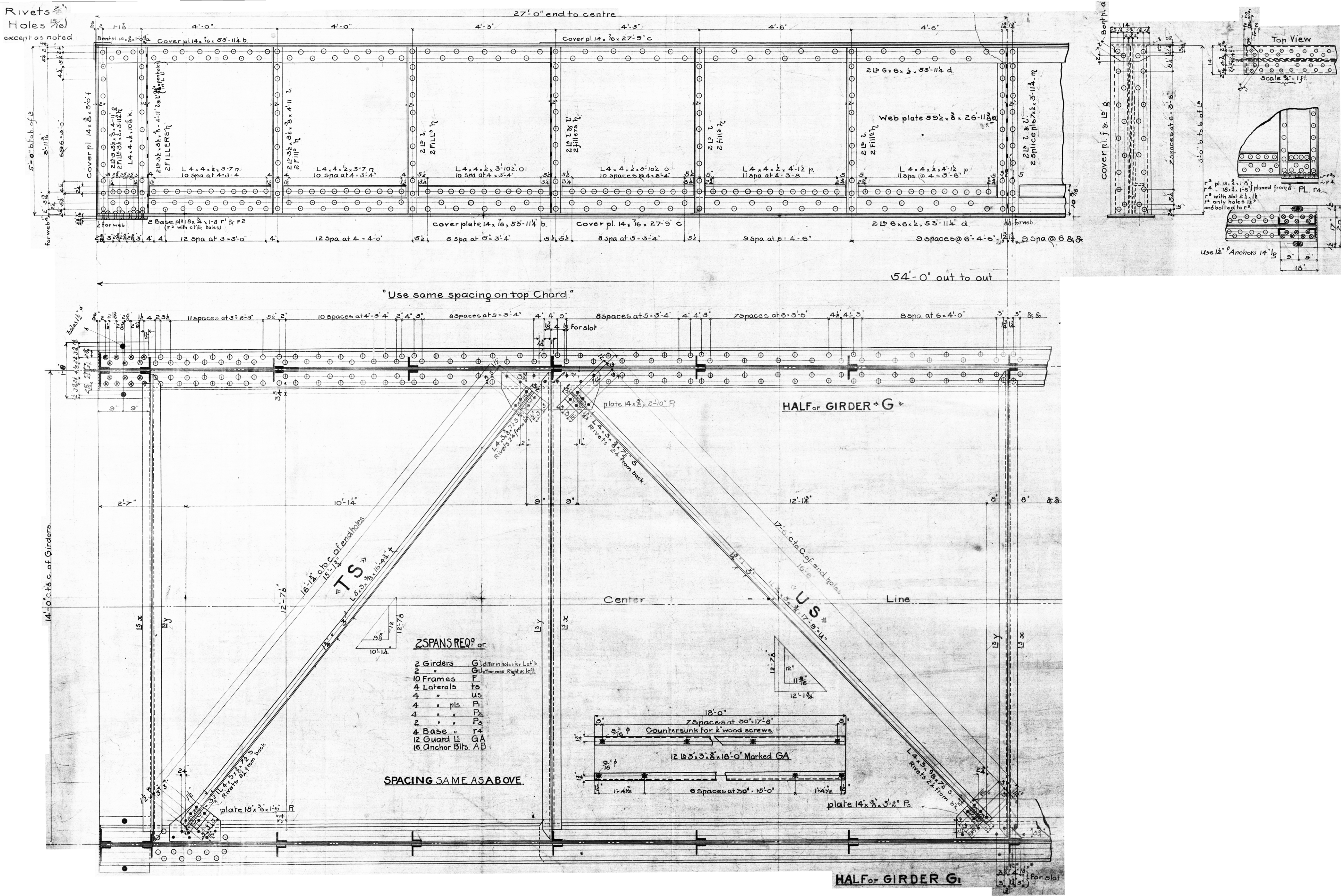
1. See General Notes Sheet for General Bridge Construction Notes and Railroad Construction Notes.
2. See Typical Repair Details Sheet (1 of 4) for Backwall Timber Replacement Details. New upper backwall timber shall be fastened to existing lower backwall timber using 16" long, 3/4" dia. lag screws spaced at 16" maximum.
3. See Typical Repair Details Sheet (3 of 4) for Masonry Repointing Details.
4. See Typical Repair Details Sheet (4 of 4) for Repair to Corner of Concrete Backwall Cap Details.
5. See Bearing and Pedestal Details Sheets for Proposed Bearing and Pedestal Details and Notes.
6. All labor, equipment, and material required to repair the top of northwest wingwall cap and the corners of concrete backwall cap shall be paid under Item 518.211 Rehabilitate Structural Concrete Substructure.

LEGEND

- Limits of Existing Bridge Removal
- Existing Concrete
- Proposed Concrete (See Note 6)



PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED	JCM	11/2018	
CHECKED-REVIEWED	GSG	11/2018	
DESIGN-DETAILED			
REVISIONS	1		
REVISIONS	2		
REVISIONS	3		
REVISIONS	4		
FIELD CHANGES			



EXISTING GIRDER HALF ELEVATION
BRIDGE NO. 7777 (M.P. 154.59) AND BRIDGE NO. 7779 (M.P. 164.74)
Not to Scale

SHEET PROVIDED FOR INFORMATION ONLY

NOTES

1. See General Notes Sheet for General Bridge Construction and Railroad Construction Notes.
2. Bridge No. 7777 (M.P. 154.59) and Bridge No. 7779 (M.P. 164.74) are built from the same existing plan and have identical superstructures.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

MAINE RAILROAD BRIDGE
CAPACITY PROJECT - CONTRACT 2
MADAWASKA SUB. AROOSTOOK/PENOBSCOT
BR. NO. 7777 (M.P. 154.59) OVER
DUDLEY BROOK (4 OF 4)

SHEET NUMBER

58

OF 74

BRIDGE NO. 7777, 7779
WIN
23486.00
BRIDGE PLANS