



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Paul R. LePage
GOVERNOR

David Bernhardt
COMMISSIONER

January 5, 2018
Subject: Barrel Bridge Replacement
State WIN: 018957.00
Location: **York**
Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to the Bid Documents:

In the Plan Set:

On SHEET NUMBER 1 OF 31, TITLE SHEET, under the heading, MATERIALS - Micropile Casing, **DELETE** "OR ASTM A 252, Grade 3". Make this change in pen and ink.

REMOVE SHEET NUMBER 24 OF 31, NEXT BEAM DETAILS I, and **REPLACE** with the attached, revised SHEET NUMBER 24 OF 31, NEXT BEAM DETAILS I.

REMOVE SHEET NUMBER 28 OF 31, END DIAPHRAGM REINFORCING, and **REPLACE** with the attached, revised SHEET NUMBER 28 OF 31, END DIAPHRAGM REINFORCING.

The following questions have been received:

Question: What type/grade is the reinforcing in the NEXT beams?

Response: Mild steel reinforcement in the NEXT beams shall be Plain Reinforcing Steel meeting the requirements of ASTM A 615/A 615M, Grade 60. $F_y = 60,000$ psi.

Question: What is the overall length of the NEXT beams? Can't find a dimension past Center Line of bearing.

Response: The NEXT beams shall have a 6" extension past the center line of bearing of the bridge at both abutments, resulting in an overall length of 76'-0". Please see revised plan sheet 28 for clarification.

Question: Can you confirm the overall length of the 36F NEXT beams on this project? There do not seem to be any dimensions showing how much the beam extends past the Centerline Bearing points on Abutment 1 and 2.

Response: See previous response.



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Question: Estimated quantity sheet calls out precast approach slabs. There is no drawing for the precast approach slabs.

Response: Precast approach slab details are shown on Plan sheet 23. For details not shown on the Plans, see Standard Detail 502(02).

Question: On Sheet 24 of 31 there is a note indicating that there are #4 bars not shown in the stems of the NEXT beams. Can you confirm how many bars will be in each stem as there does not seem to be any detail showing a quantity of these bars?

Response: There are no additional #4 bars in the NEXT beam stems, please see revised sheet 24 for clarification. The NEXT beam reinforcement as shown in the details on sheet 25, is correct.

Question: Is the reinforcing in the NEXT beams plain finish?

Response: Yes, the reinforcing in the NEXT beams is plain reinforcing steel.

Question: What are the lap splice lengths for the #6 & #7 mechanical couplers? 2 foot-6 inches for the #6's & 2 foot-9 inches for the #7's?

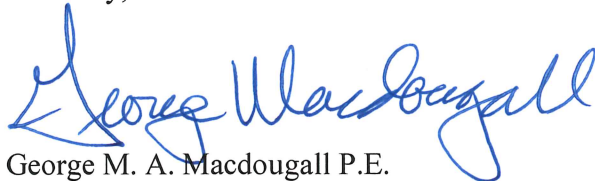
Response: The lap splice lengths for Mechanical Couplers for #6 and #7 stainless bars are 2'-6" and 3'-1" respectively. Please see Standard Specification subsection 503.207 Splicing, for clarification. Standard lap splice lengths for non-mechanical coupler splices, are defined on Plan sheet 22.

Question: Is unrestricted 24 hours a day 7 days a week work allowed during the 40 day shutdown period?

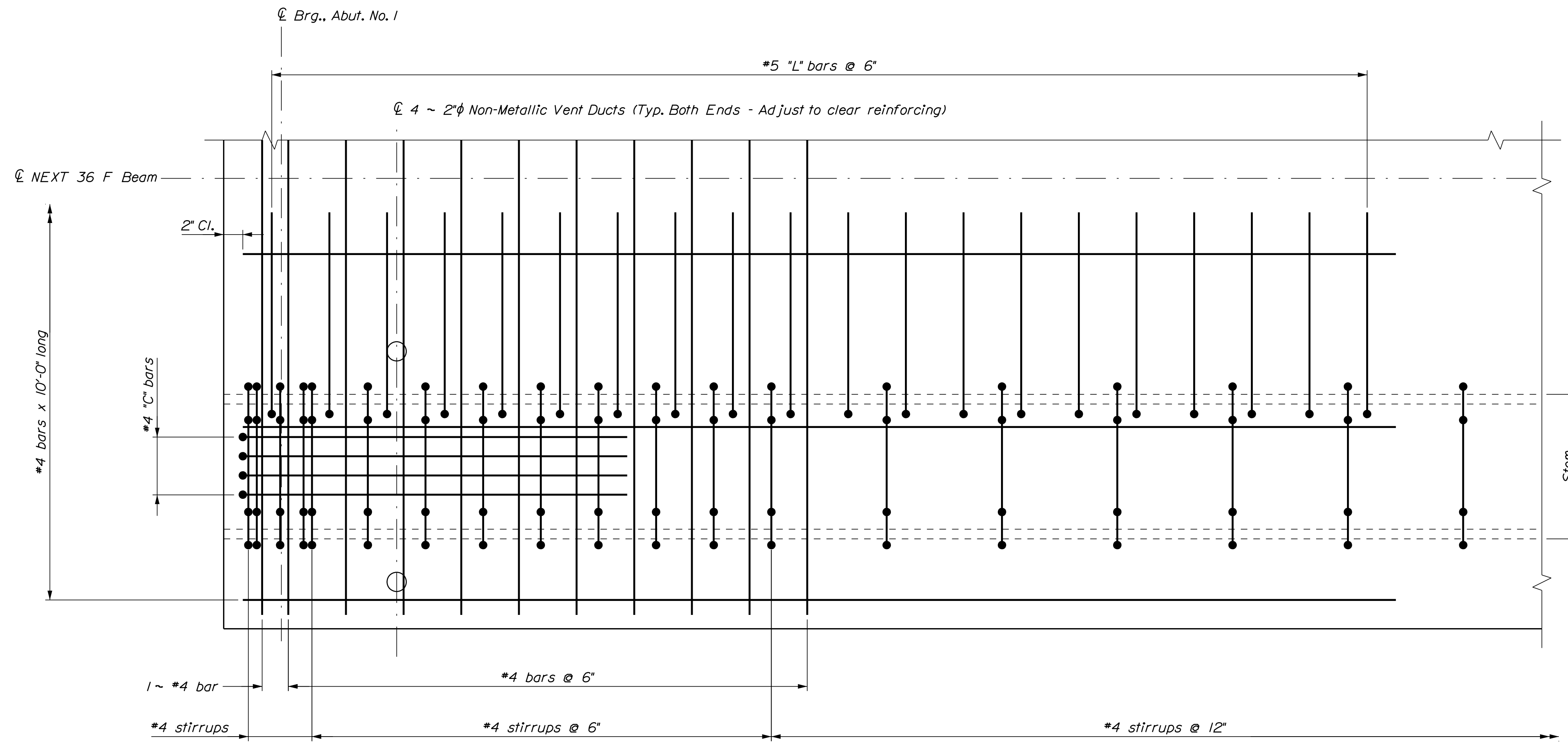
Response: Night work is allowed for this project per the Standard Specification and Special Provision 107 – Allowable Work Times. Sunday work is not included in the Contract.

Consider these changes and information prior to submitting your bid on **January 10, 2018**.

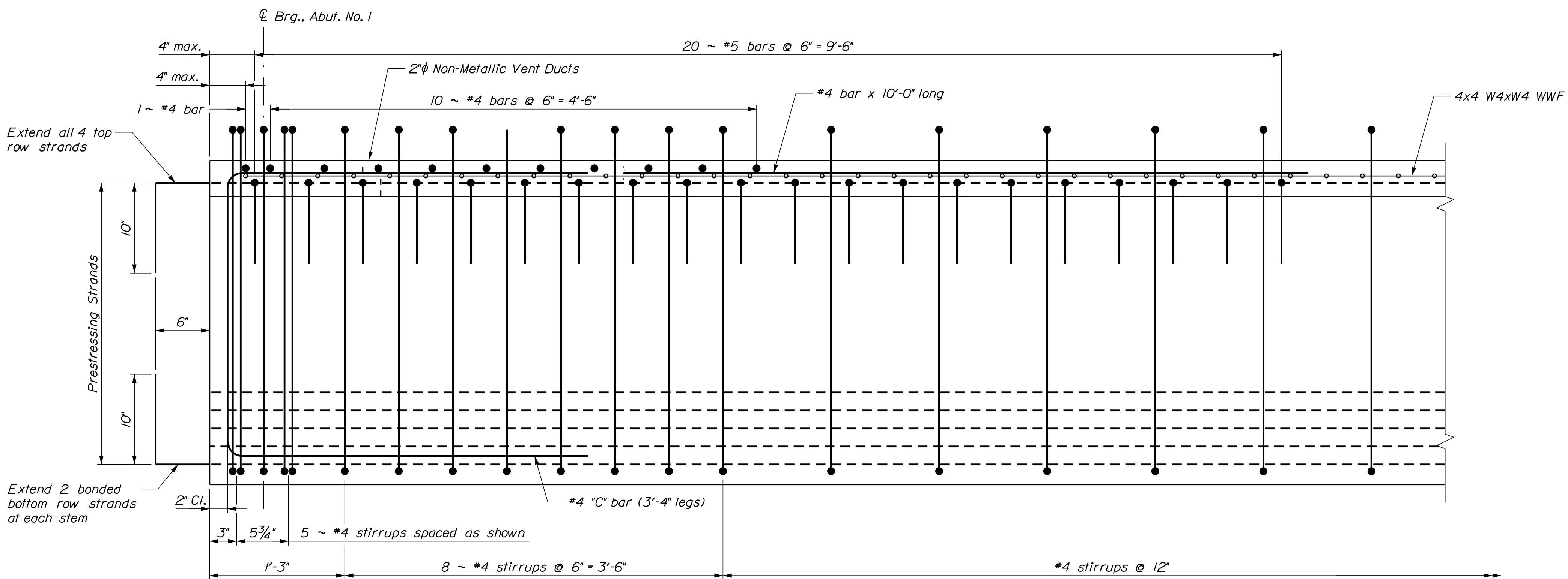
Sincerely,



George M. A. Macdougall P.E.
Contracts & Specifications Engineer



NEXT 36 F BEAM PLAN Δ
 Welded wire fabric and prestressing strands not shown for clarity Δ

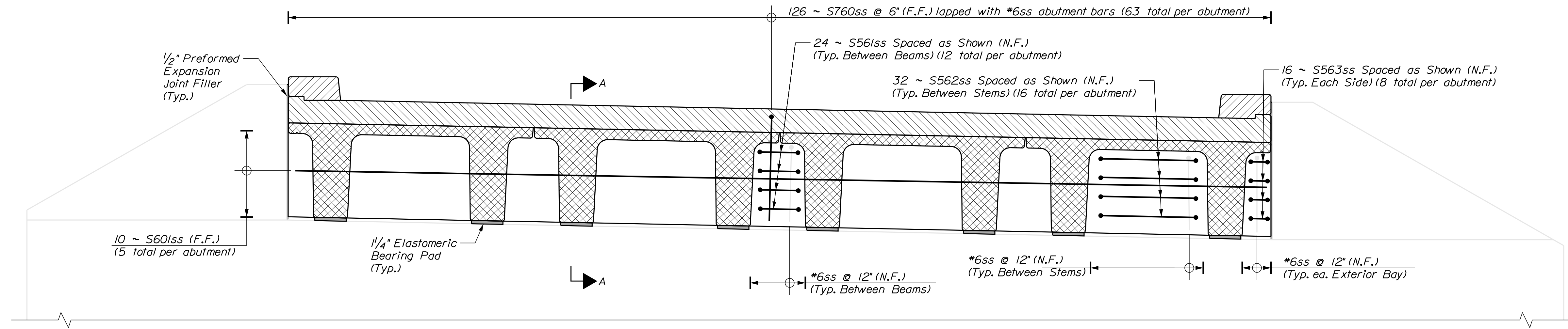


NEXT 36 F BEAM ELEVATION

PRECAST NEXT BEAM NOTES

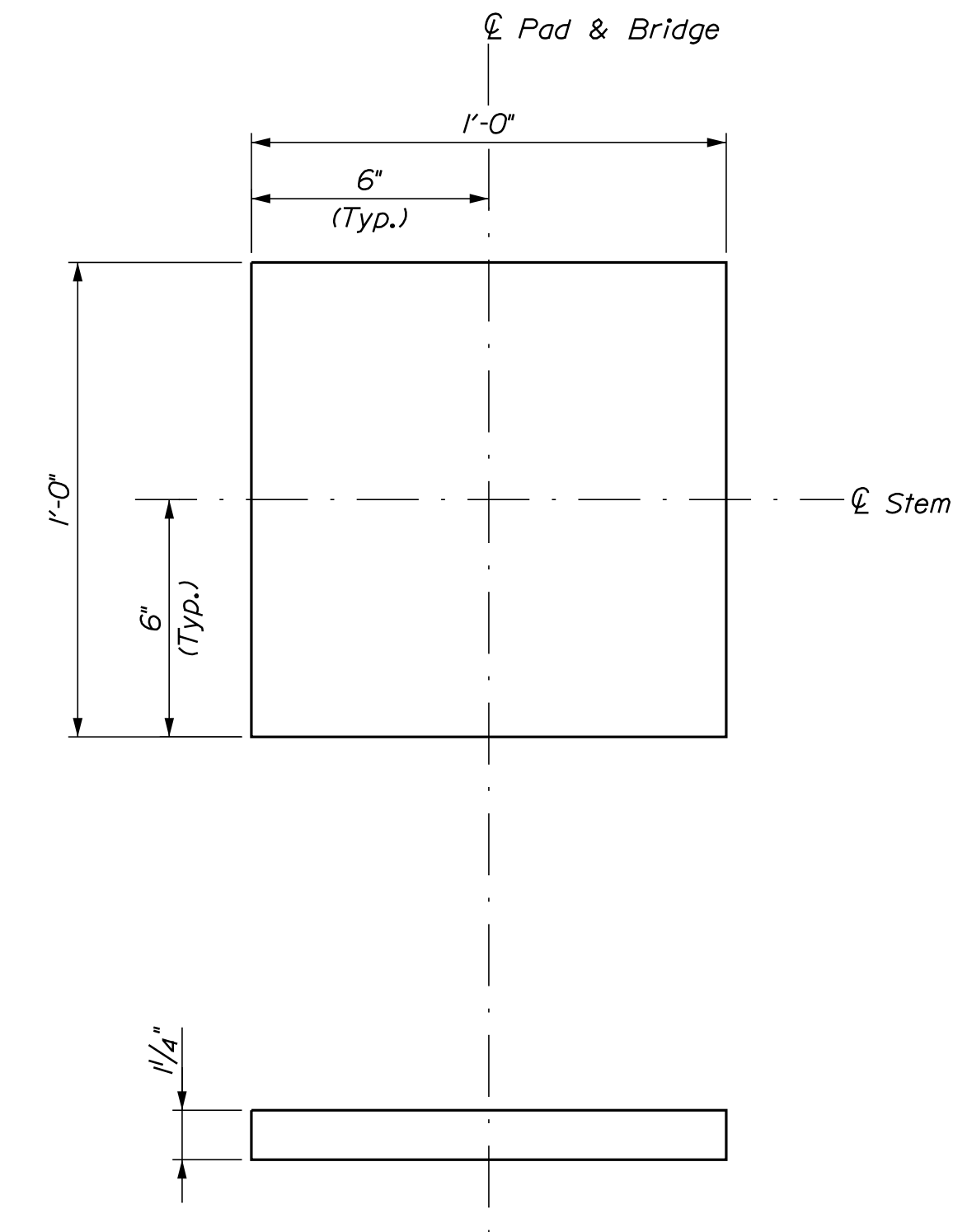
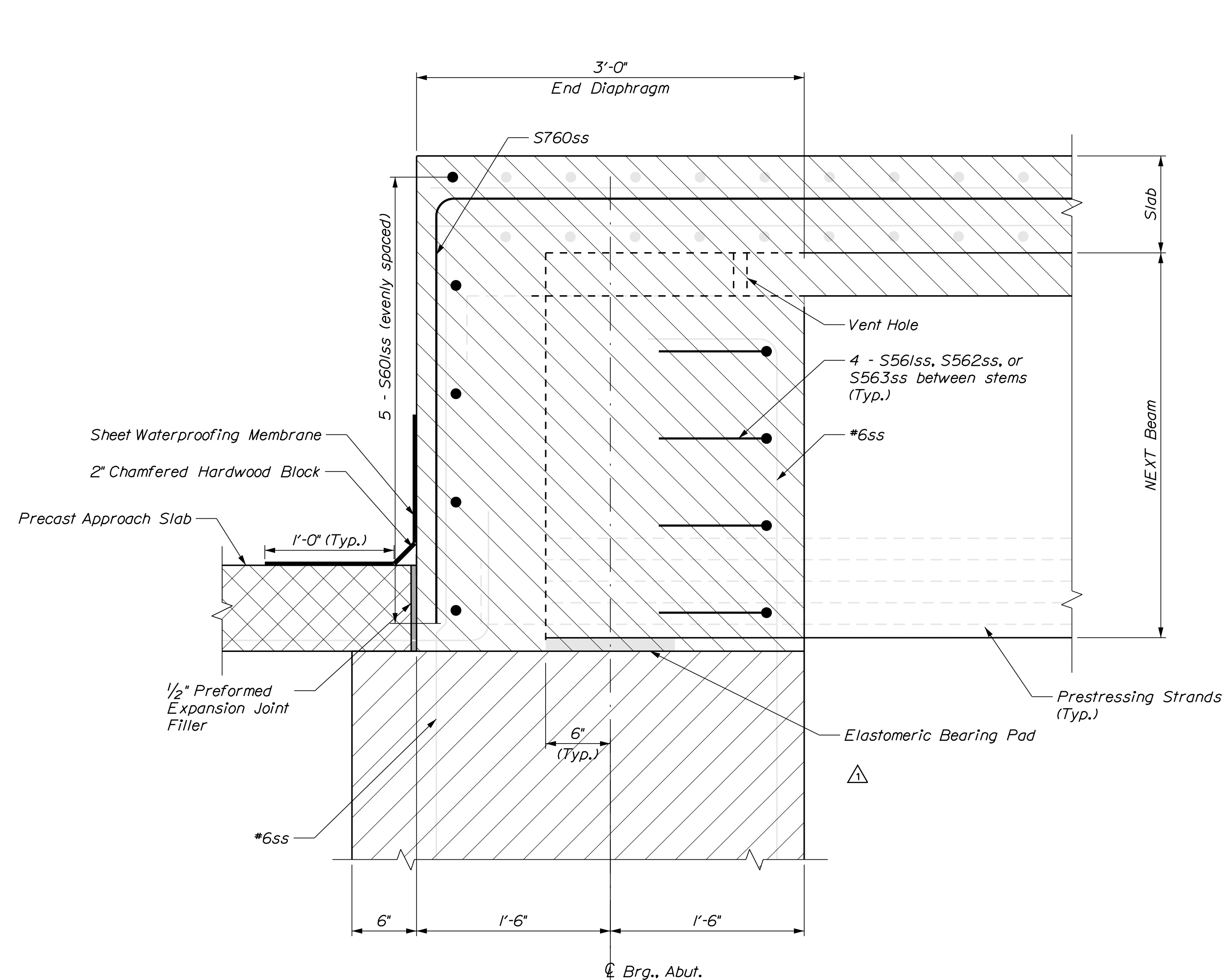
1. NEXT F Beams are a non - proprietary shape developed by PCI NORTHEAST (PCINE). Standardized section properties and details may be found at <http://www.pcine.org>.
2. The estimated camber at release is $1\frac{5}{16}$ inches and the estimated camber at erection is $2\frac{7}{8}$ inches. Refer to Special Provision Section 535, Precast, Prestressed Concrete Superstructure - Camber.
3. Prestressing strands shall be 0.6 inch diameter. The tensioning force is 44 kips per prestressing strand, including the top strands.
4. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
5. Do not drill or use power actuated tools on the prestressed beams.
6. The top surface of the upper flange of the prestressed beams shall be raked to a surface roughness of $\frac{1}{4}$ inch, except at 10-ft. increments along the centerline of each beam. At these locations a flattened area of sufficient size shall be left to facilitate taking elevations for setting bottom of slab elevations.
7. A maximum of 50 percent of the strands in the bottom 5 rows may be debonded 6 inches from the end of the beam. All 4 top row strands shall be fully bonded.
8. A mat of mild reinforcing steel, #4 bars @ 12 inches in both directions, may be substituted for the welded wire fabric. Reinforcing steel shall be ASTM A 615, Grade 60.
9. Lifting loops and temporary/storage/shipping dunnage shall be a maximum of 2 feet from each beam end.
10. Corrosion inhibitor shall be added to the precast concrete mixture at a rate of 5.5 Gal/CY

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		BRIDGE PLANS	
018957.00		WIN		018957.00	
BRIDGE NO. 3500		DATE		DATE	
SIGNATURE		P.E. NUMBER		DATE	
BY		DATE		DATE	
M. PARLIN		Dec. 2017		12/28/17	
DESIGN-Detailed		HNTB		NEXT Beam Plan Desc. Δ	
CHECKED-Reviewed		A. Shoro		REVISIONS 1	
DESIGN-Detailed		---		REVISIONS 2	
REVISIONS 1		---		REVISIONS 3	
REVISIONS 2		---		REVISIONS 4	
REVISIONS 3		---		FIELD CHANGES	
REVISIONS 4		---		---	
FIELD CHANGES		---		---	
BARRELL BRIDGE					
DOLLY GORDON BROOK					
YORK COUNTY					
YORK					
NEXT BEAM DETAILS I					
SHEET NUMBER					
24					
OF 31					



END DIAPHRAGM REINFORCEMENT ELEVATION

(Abutment No. 1 Shown Looking Downstation; Abutment No. 2 Opposite Hand)



ELASTOMERIC BEARING DETAIL

Elastomeric Bearing Notes:

1. The elastomer shall be 100% neoprene.
2. The shear modulus of the elastomer shall be 260 lb/in² ± 15%.
3. Elastomeric pads shall have a Shore A Durometer hardness of 70 and shall conform to the requirements of the latest edition of Section 18.2 of the AASHTO LRFD Bridge Construction Specifications.

NOTES:

1. Payment for sheet waterproofing membrane, closed cell foam, and hardwood blocks will not be made directly and shall be considered incidental to related contract items.

SECTION A-A

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	Dec. 2017	HNTB	Dec. 2017			
CHECKED-REVIEWED	Dec. 2017	HNTB	Dec. 2017			
DESIGNS-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

BARRELL BRIDGE
DOLLY GORDON BROOK
YORK COUNTY
YORK
END DIAPHRAGM
REINFORCING

SHEET NUMBER

28

OF 31