STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Fifth Edition 2010.

DESIGN LOADING

Live Load ..... HL - 93 Modified

LIST OF DRAWINGS

Title Sheet 1
Delivery Locations 2
Framing Plan & Notes 3
Floorbeams 4,5
Stringers 6
Gusset Plates 7

PASSADUMKEAG
PENOBSCOT COUNTY
HATHAWAY BRIDGE
OVER
PASSADUMKEAG STREAM
GOULDS RIDGE RD.
PROJECT NO. 20504.00
PROJECT LENGTH 0.000 mi.
BRIDGE NO. 3505

STRUCTURAL STEEL FABRICATION

MATERIALS

Structural Steel:
- All Material (except as noted) ..... ASTM A36
- High Strength Bolts ..... ASTM A 325, Type 3

BASIC DESIGN STRESSES

Structural Steel:
- ASTM A36 ..... F_y = 36,000 psi
- ASTM A 325 ..... F_μ = 120,000 psi

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER: 3/5/15
CHIEF ENGINEER: 3-4-15

STATE OF MAINE — BRENT A. SNOVDEN — No. 4838 — LICENSED PROFESSIONAL ENGINEER
SIGNATURE
4838
P.E. NUMBER
3-3-2015
DATE

PROJECT INFORMATION
PROGRAM
PROJECT MANAGER
DESIGNER
CONSULTANT
PROJECT RESIDENT
CONTRACTOR
PROJECT COMPLETION DATE

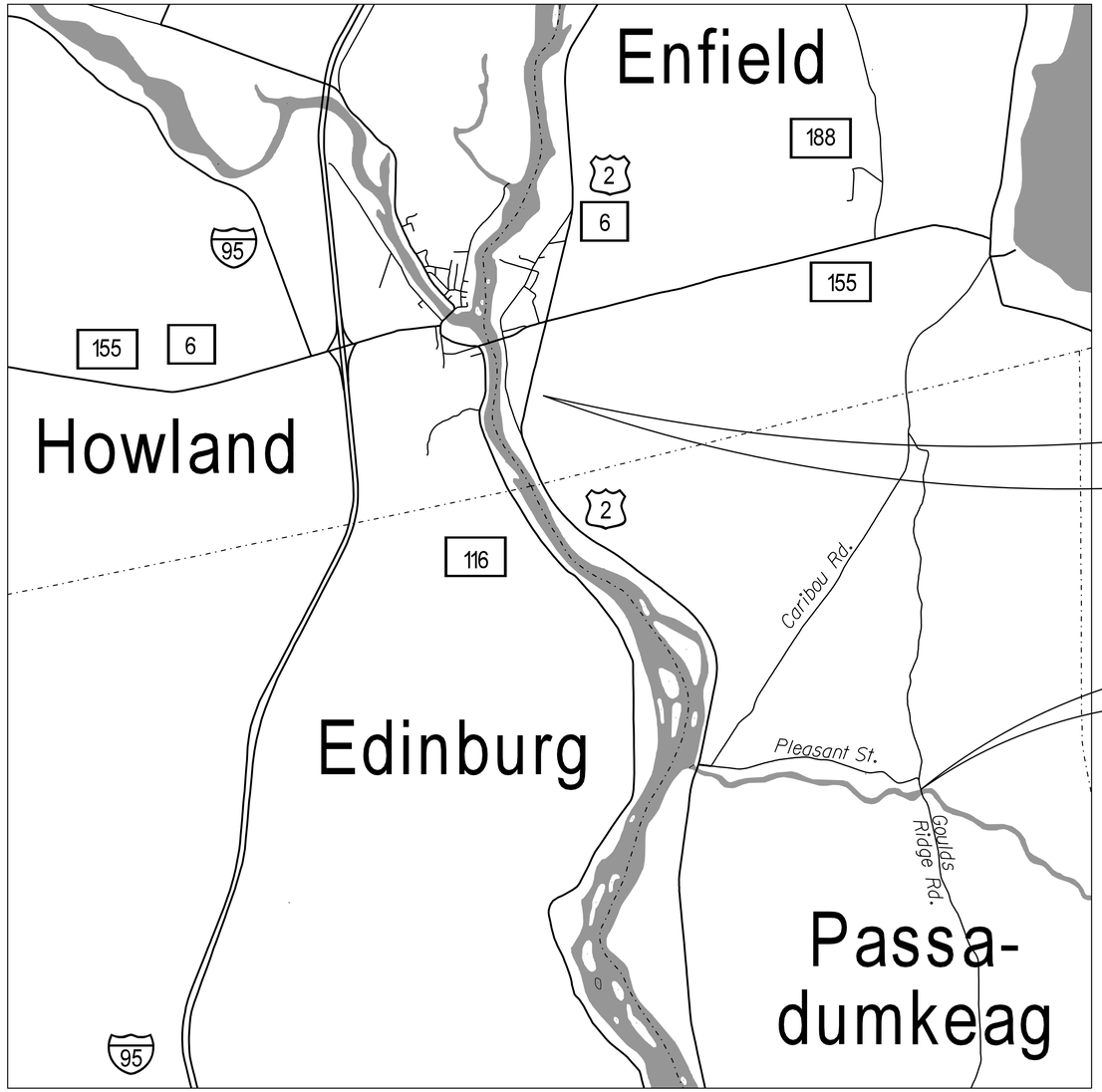
PASSADUMKEAG
HATHAWAY BRIDGE
TITLE SHEET

WIN 20504.00

20504.00

SHEET NUMBER
1
OF 7

Filename:\00\BRIDGE\MSTA\001_Title.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015



Site No. 1 - MaineDOT Maint. Lot
869 Main Rd. Enfield, ME

Site No. 2 - Hathaway Bridge
over Passadumkeag River

DELIVERY NOTES

1. Delivery of fabricated materials will be made to either Site #1 or to Site #2. Contact Joe Prescott 207-592-1853 to determine proper site for elivery after materials have been fabricated.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

20504.00

BRIDGE NO. 3505 WIN 20504.00 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	B. SNOWDEN	B. NICHOLS
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

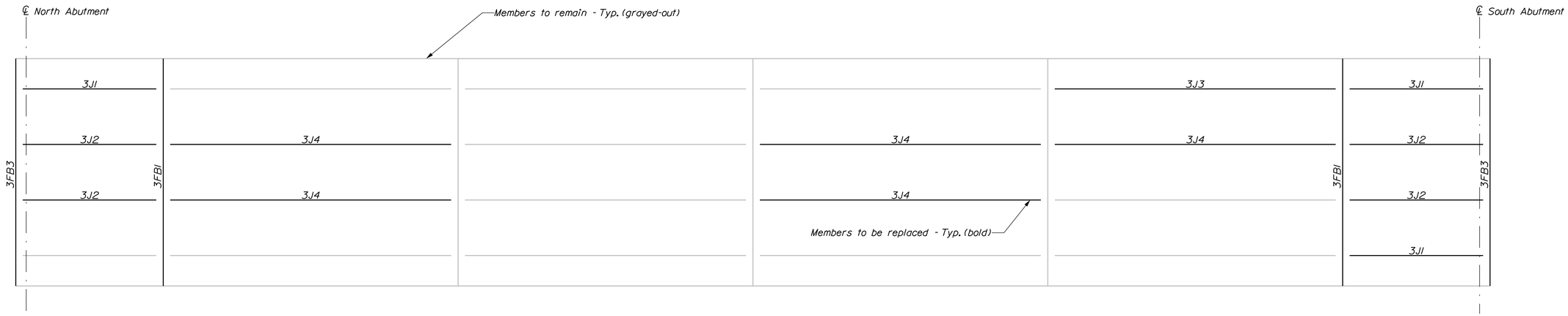
DATE

HATHAWAY BRIDGE
PASSADUMKEAG STREAM
PASSADUMKEAG PENOBSCOT COUNTY

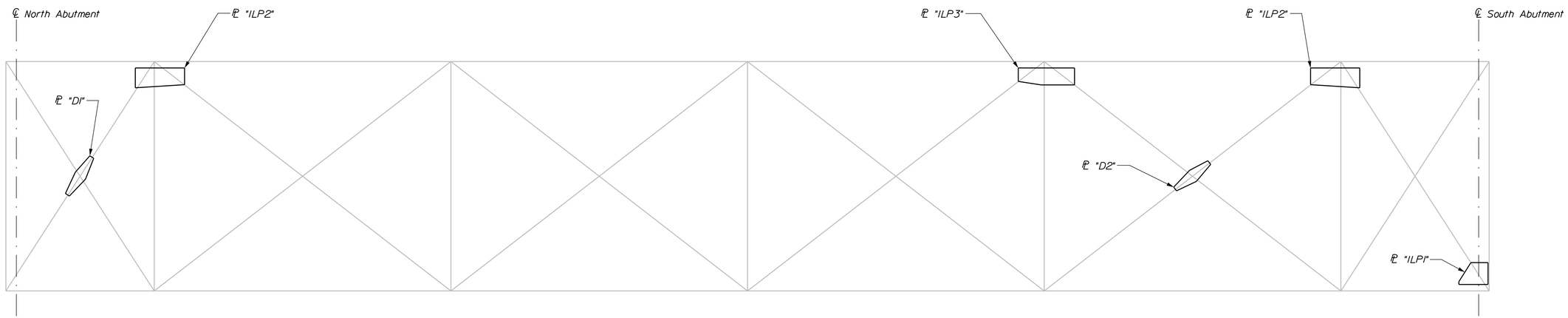
DELIVERY LOCATIONS

SHEET NUMBER
2
OF 7

Filename: ...\00\BRIDGE\MSTA\002_Notes.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015



FRAMING MEMBER REPLACEMENT PLAN



GUSSET PLATE REPLACEMENT PLAN

STRUCTURAL STEEL NOTES

1. All holes to be 7/8" ϕ for 3/4" bolts unless otherwise noted.

2. All fasteners shall be ASTM A325, Type 1, Galv. Each fastener assembly shall include 2 washers.

3.. Apply one coat of primer paint as specified in theMaineDOT Standard Specification November 2014 Edition under Section 506 Zinc Rich Coating System, prior to shipping.

BOLT SCHEDULE

Qty	Length	Connection
80	2 3/4"	"3FB1" connection angles to Truss
16	2 1/4"	"3FB1" connection angles to Truss
88	2 3/4"	"3FB1" to Floorbeam Connection Angles
64	2 1/2"	Stringer Conn. Angles to "3FB1" (Upper)
16	2 1/4"	Stringer Conn. Angles to "3FB1" (Lower)
32	2 1/4"	"3FB3" Top Flange to Truss
48	2"	"3FB3" Web to Truss
64	2 1/4"	Stringer Connection Angles to "3FB3"
116	2 1/2"	Stringers to Stringer Connection Angles
18	2"	Hanger struts to Stringers
5	2 1/4"	Plate "ILP1" to Floorbeam
4	2"	Plate "ILP1" to Truss bottom chord
6	2"	Plate "ILP1" to lateral brace
16	2 1/4"	Plate "ILP2" to Floorbeam
20	2"	Plate "ILP2" to Truss bottom chord
24	2"	Plate "ILP2" to lateral brace
8	2 1/4"	Plate "ILP3" to Floorbeam
11	2"	Plate "ILP3" to Truss bottom chord
10	2"	Plate "ILP3" to lateral brace
15	2"	Plate "D1" to lateral brace
15	2"	Plate "D2" to lateral brace

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

20504.00

WIN 20504.00

BRIDGE NO. 3505

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	B. NICHOLS	
CHECKED-REVIEWED	B. SNOWDEN	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

HATHAWAY BRIDGE
PASSADUMKEAG STREAM
PASSADUMKEAG PENOBSCOT COUNTY

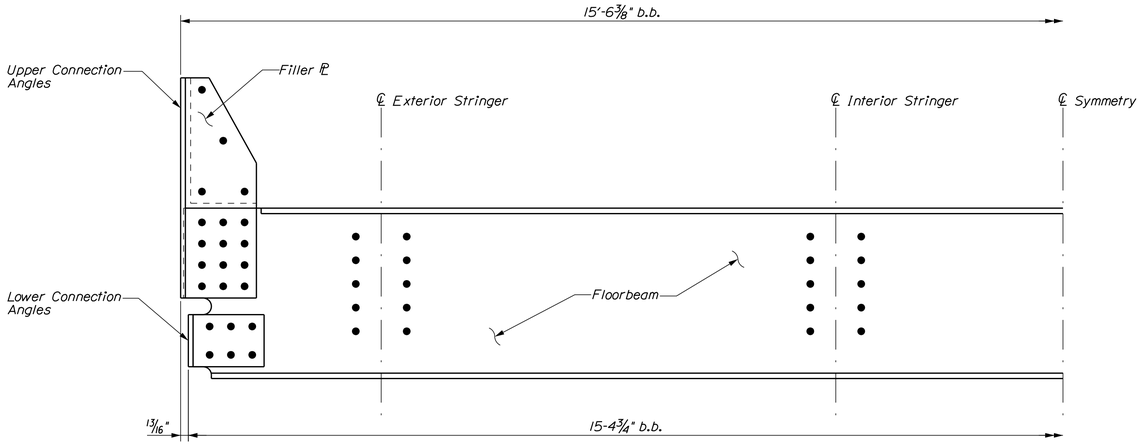
FRAMING PLAN

SHEET NUMBER

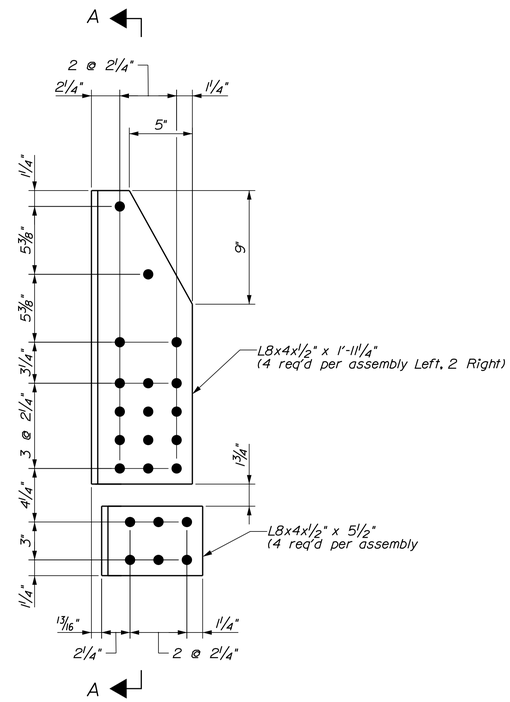
3

OF 7

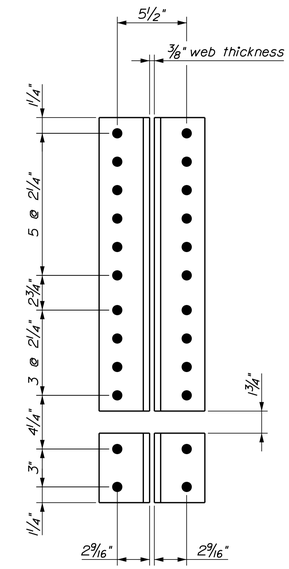
Filename: ...\MSTA\003_FramingPlan.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015



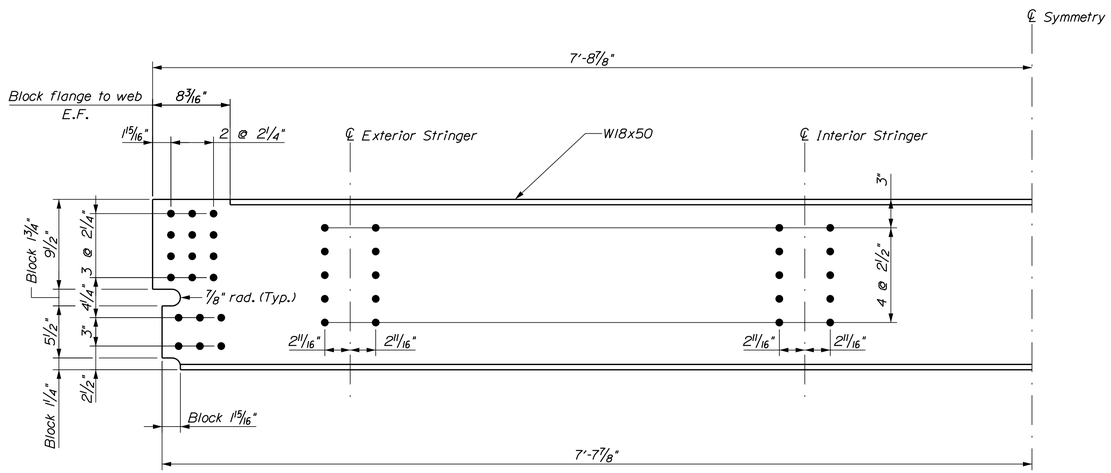
FLOORBEAM ASSEMBLY "3FB1"
2 Req'd



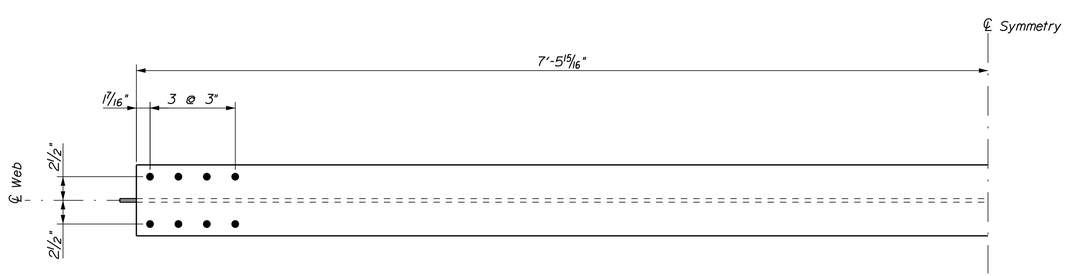
CONNECTION ANGLES



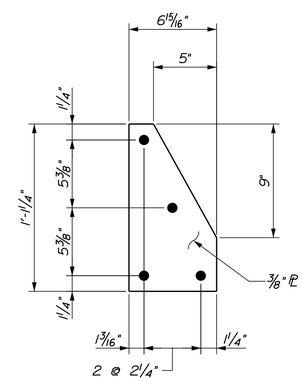
CONNECTION ANGLES
~SECTION "A-A"~



FLOORBEAM "3FB1"
1 req'd per assembly
(Symmetrical about ℄ Symmetry)



BOTTOM FLANGE "3FB1"



FILLER PL
2 req'd per assembly

Filename: ...\MSTA\004_Framing_3FB1.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

20504.00

WIN 20504.00

BRIDGE NO. 3505

BRIDGE PLANS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	B. SNOWDEN	B. NICHOLS	
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

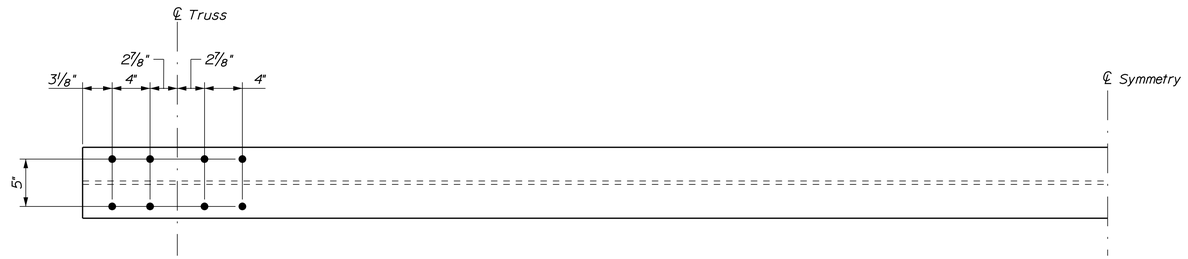
HATHAWAY BRIDGE
PASSADUMKEAG STREAM
PASSADUMKEAG PENOBSCOT COUNTY

FLOORBEAM 3FB1

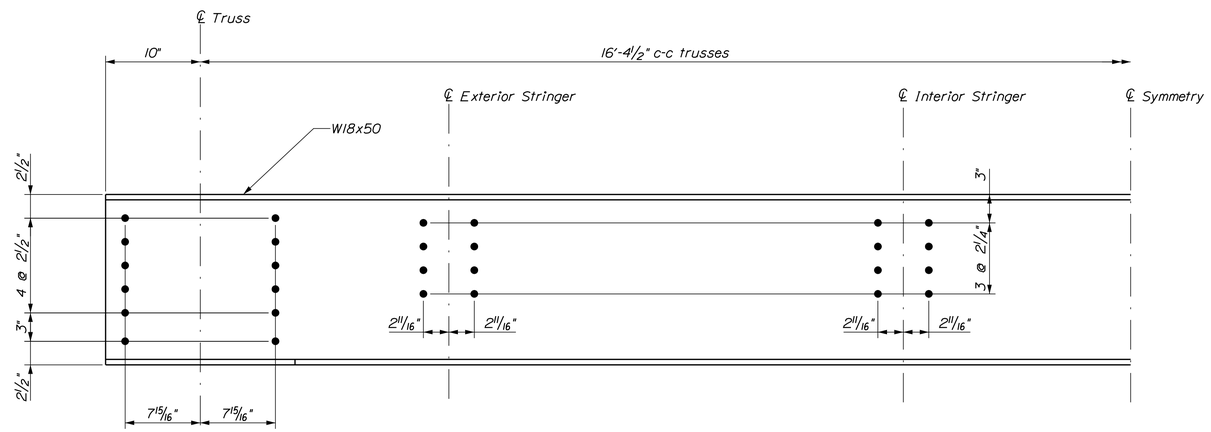
SHEET NUMBER

4

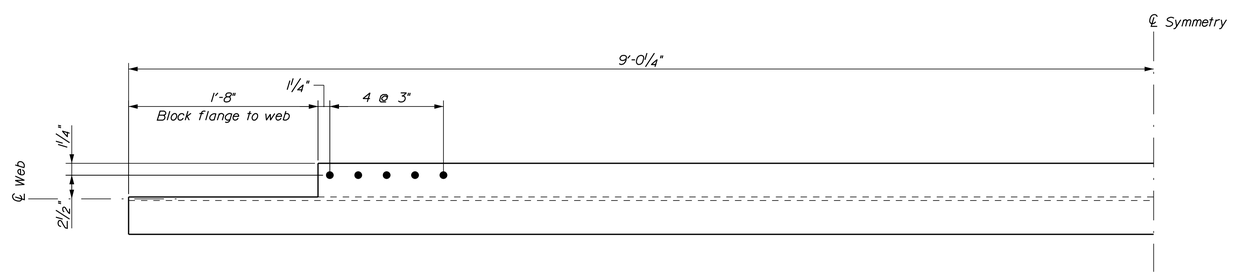
OF 7



FLOORBEAM "3FB3"
Top Flange



FLOORBEAM "3FB3"
2 req'd



FLOORBEAM "3FB3"
Bottom Flange

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

20504.00

WIN 20504.00

BRIDGE NO. 3505

BRIDGE PLANS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	B. SNOWDEN	B. NICHOLS	
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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DATE

HATHAWAY BRIDGE
PASSADUMKEAG STREAM
PASSADUMKEAG PENOBSCOT COUNTY

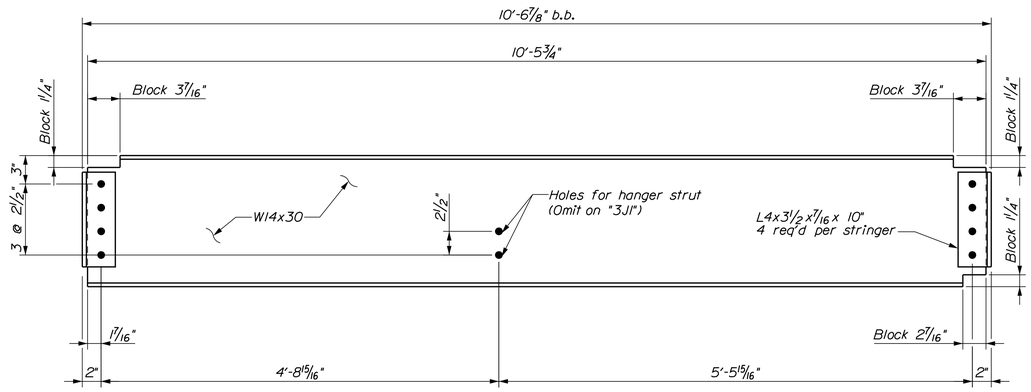
FLOORBEAM "3FB3"

SHEET NUMBER

5

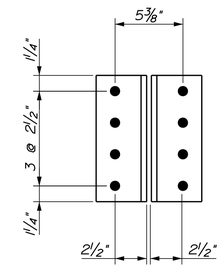
OF 7

Filename: ...\MSTA\005_Framing_3FB3.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015

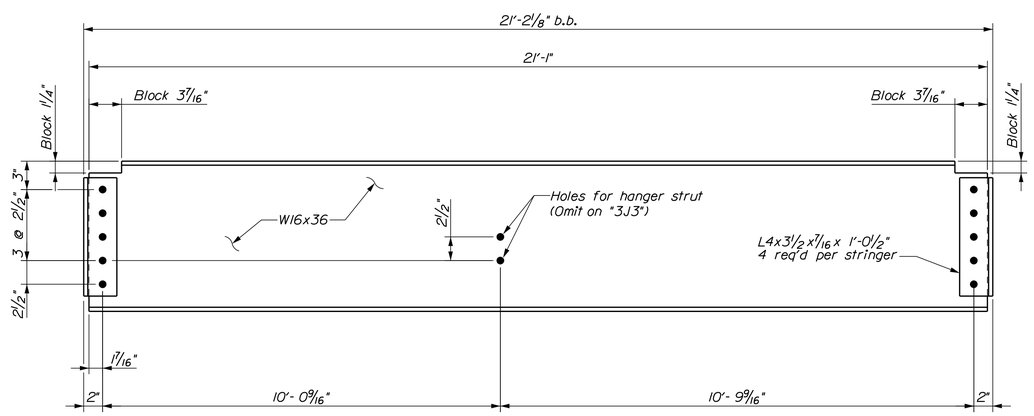


STRINGERS "3J1" & "3J2"

3J1 - 3 Req'd
3J2 - 4 Req'd

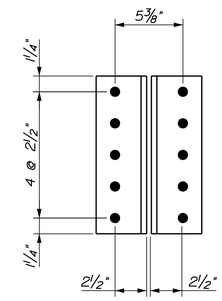


CONNECTION ANGLES
3J1 & 3J2



STRINGERS "3J3" & "3J4"

3J3 - 1 Req'd
3J4 - 5 req'd



CONNECTION ANGLES
3J3 & 3J4

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

20504.00

WIN 20504.00

BRIDGE NO. 3505

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	----------		
DESIGN-DETAILED	B. SNOWDEN	B. NICHOLS	
CHECKED-REVIEWED	-----	-----	
DESIGN2-DETAILED2	----------	----------	
DESIGN3-DETAILED3	----------	----------	
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

HATHAWAY BRIDGE
PASSADUMKEAG STREAM
PASSADUMKEAG PENOBSCOT COUNTY

STRINGERS

SHEET NUMBER

6

OF 7

Filename: ...\MSTA\006_Framing_Stringers.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015

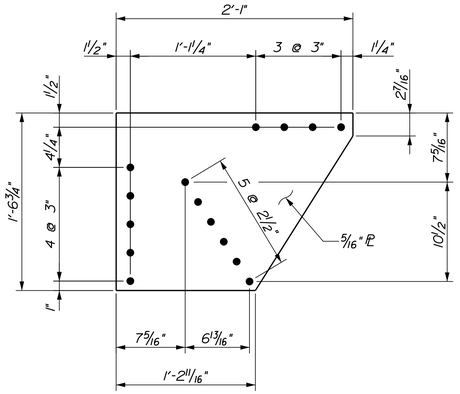
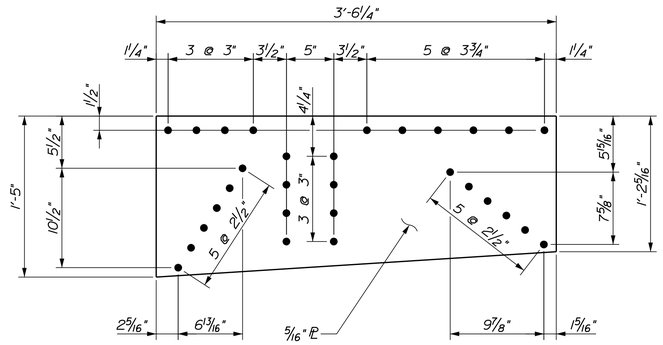


PLATE "ILP1"
1 req'd



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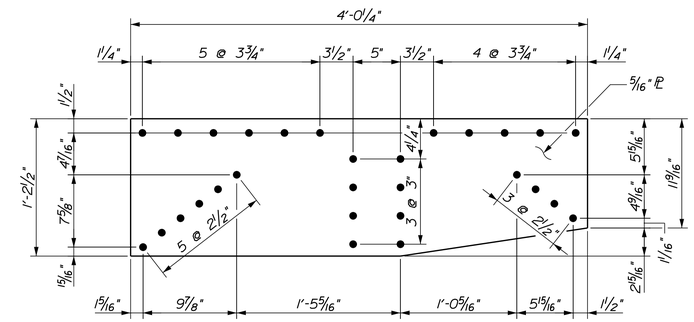
2 req'd



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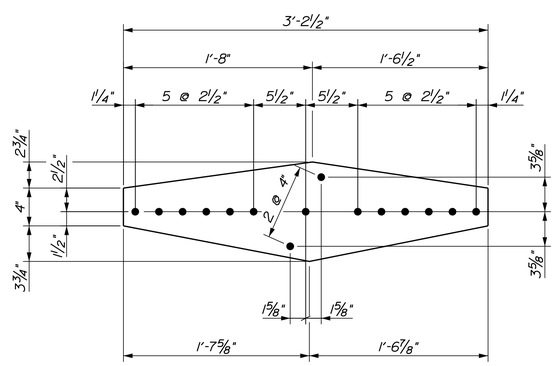

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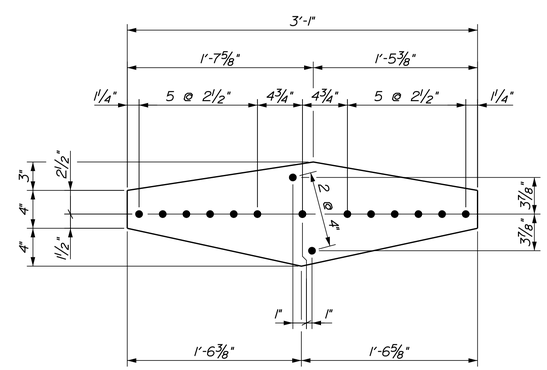

PLATE "D2"
1 req'd

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

20504.00

WIN 20504.00

BRIDGE NO. 3505

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B. SNOWDEN	B. NICHOLS	
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

HATHAWAY BRIDGE
PASSADUMKEAG STREAM
PASSADUMKEAG PENOBSCOT COUNTY

GUSSET PLATES

SHEET NUMBER

7

OF 7

Filename: ...\00\BRIDGE\MSTA\007_Plates.dgn Division: BRIDGE Username: Brian.J.Nichols Date:3/3/2015