

NORTH RAILING, FACING NORTH, SOUTH RAILING SIMILAR

"W" PANEL NOT SHOWN FOR DRAWING CLARITY

Vermont Agency of Transportation

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May 21, 2014

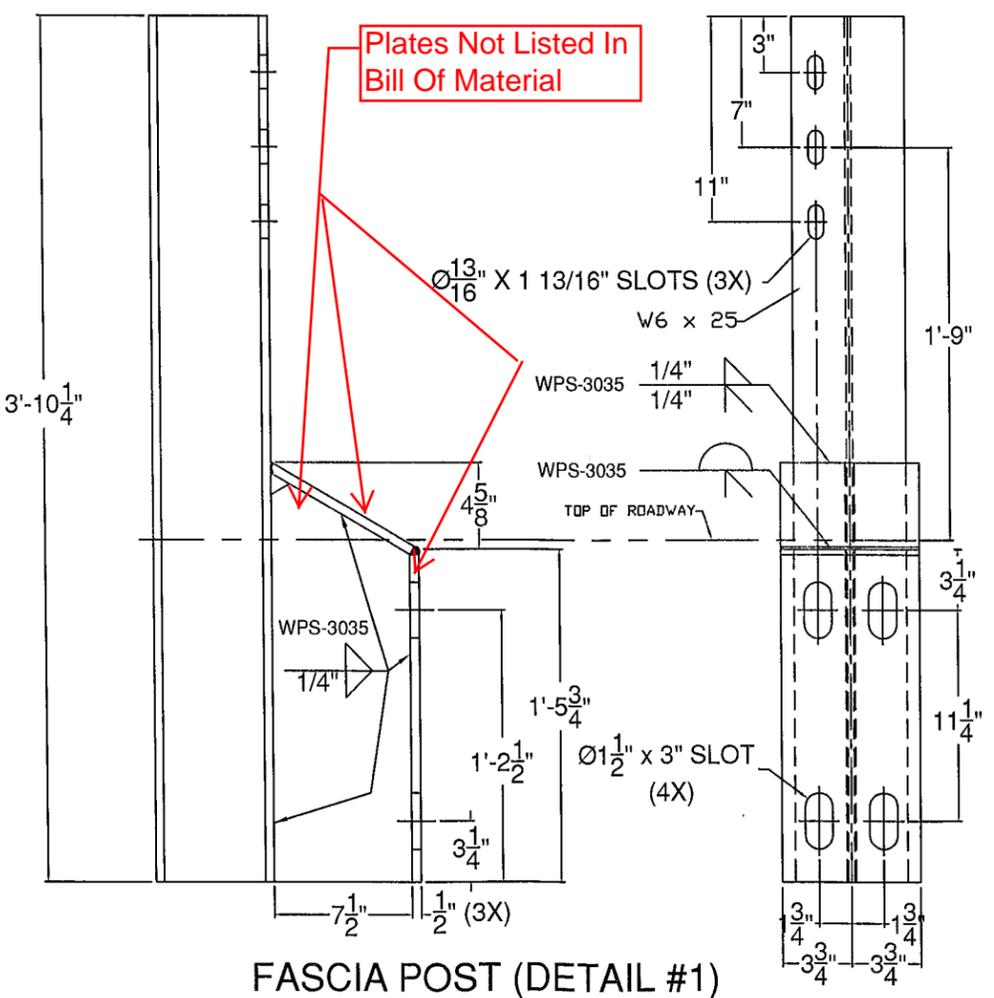
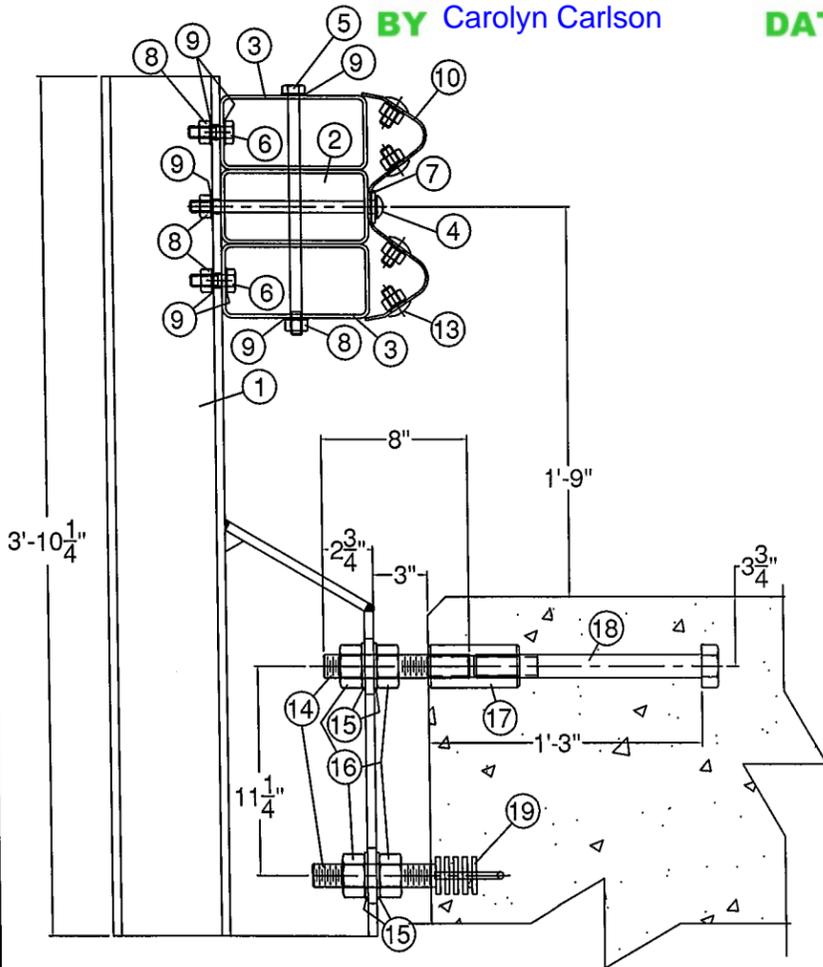
RESUBMIT No Approved AsNoted

BY Carolyn Carlson DATE 6/19/2014

All Material Needs to be Galvanized

BILL OF MATERIAL

DET#	QTY	PART	DESCRIPTION	ASTM DESIGNATION
1	16		W6x25 FASCIA POST @ 3'-10 1/4'	ASTM A572 Gr. 50
2	2	0033.91108	HSS8x4x3/16" TUBING @ 33'-2"	ASTM A500 Gr. B
2	2		HSS8x4x3/16" TUBING @ 25'-5 1/4"	ASTM A500 Gr. B
3	40	0033.90045	HSS8x4x3/16" TUBE BLOCKOUT @ 6"	ASTM A500 Gr. B
4	20	0080.15553	5/8"x10" CARRIAGE BOLT	ASTM A307
5	20	0080.15595	5/8"x13" HEX BOLT	ASTM A307
6	48	0080.15036	5/8"x2" HEX BOLT	ASTM A307
7	20	0080.15913	3/16"x1 3/4"x3" SPECIAL WASHER	ASTM A572 Gr. 50
8	80	0080.15900	5/8" HEX NUT	ASTM A307
9	148	0080.15910	5/8" FLAT WASHER	ASTM A307
10	10	6043.00012	10 GAUGE "W" BEAM @ 12' 6"	AASHTO M180, TYPE 4
11	4		W6X25 PDST @ 6'-0" D.A. (PDST #1)	ASTM A572 Gr. 50
12	6		DELINEATOR - TO BE SUPPLIED BY FR LAFAYETTE	ALUMINUM
13	96	0080.15013	5/8"x1-1/4" SPLICE BOLT (PANEL ASS'Y)	ASTM A307
13	96	0080.15905	5/8"x1-1/4" RECESSED NUT (PANEL ASS'Y)	ASTM A307
14	64	0042.21408	1 1/4"x8" STUD	ASTM A449
15	128	0080.19922	5/16"x2 1/2"x3 1/2" FASCIA PLATE WASHERS	ASTM A572 Gr. 50
16	128	0080.19918	1 1/4" HEX NUT	AASHTO M164
17	32	0080.19921	1 1/4" x 5" COUPLER NUT W/ RT. HAND MACH. THD.	AASHTO M164
18	32	0042.21412	1 1/4" x 12" MACHINE BOLT, THREAD LEN. @ 3"	ASTM A449
19	16	0080.18980	TYPE "B" ANCHOR (FERRULE ASSEMBLY)	PER S-367A
20	2	0033.90074	C7x9.8 CHANNEL SPLICE @ 2'-6 1/2"	ASTM A36



- NOTES:
- ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
 - TYPE B ANCHOR INSERTS OF A DIFFERENT TYPE MAY BE PROVIDED, IF APPROVED BY THE ENGINEER.
 - GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16"
 - ALL POSTS SHALL BE SET NORMAL TO GRADE.
 - SPLICES FOR THE STEEL BEAM GUARDRAIL SHALL LAP IN THE DIRECTION OF TRAFFIC.
 - A RAILING JOINT SPLICE SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SUPERSTRUCTURE EXPANSION JOINTS.
 - SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE INSTALLED AT 30 FOOT SPACING OR THE NEAREST POST. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT.
 - THE 1/2" EXPANSION JOINT SHOWN IN THE RAILING ELEVATION IS DESIGNED FOR BRIDGE LENGTHS UP TO 80 FEET, ANY LONGER SPANS WILL HAVE TO BE MODIFIED TO ACCOUNT FOR THEIR MOVEMENT.
 - FOR RADIUS LESS THAN 950 FEET, HSS8x4 TUBES SHALL BE SHOP BENT TO FIT THE APPLICABLE CURVE.
 - THE MINIMUM DISTANCE FROM THE LAST POST TO THE END OF SLAB IS 1'-6".
 - FERRULES SHALL BE 12L14 COLD DRAWN CARBON STEEL.
 - HOLES IN RAIL FOR RAIL TUBE ATTACHMENT WILL BE SHOP DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
 - THIS RAILING MEETS THE REQUIREMENTS FOR A TL-2 SERVICE LEVEL.

Galvanized

ITEM #: 525.44

SHEET 1 OF 2

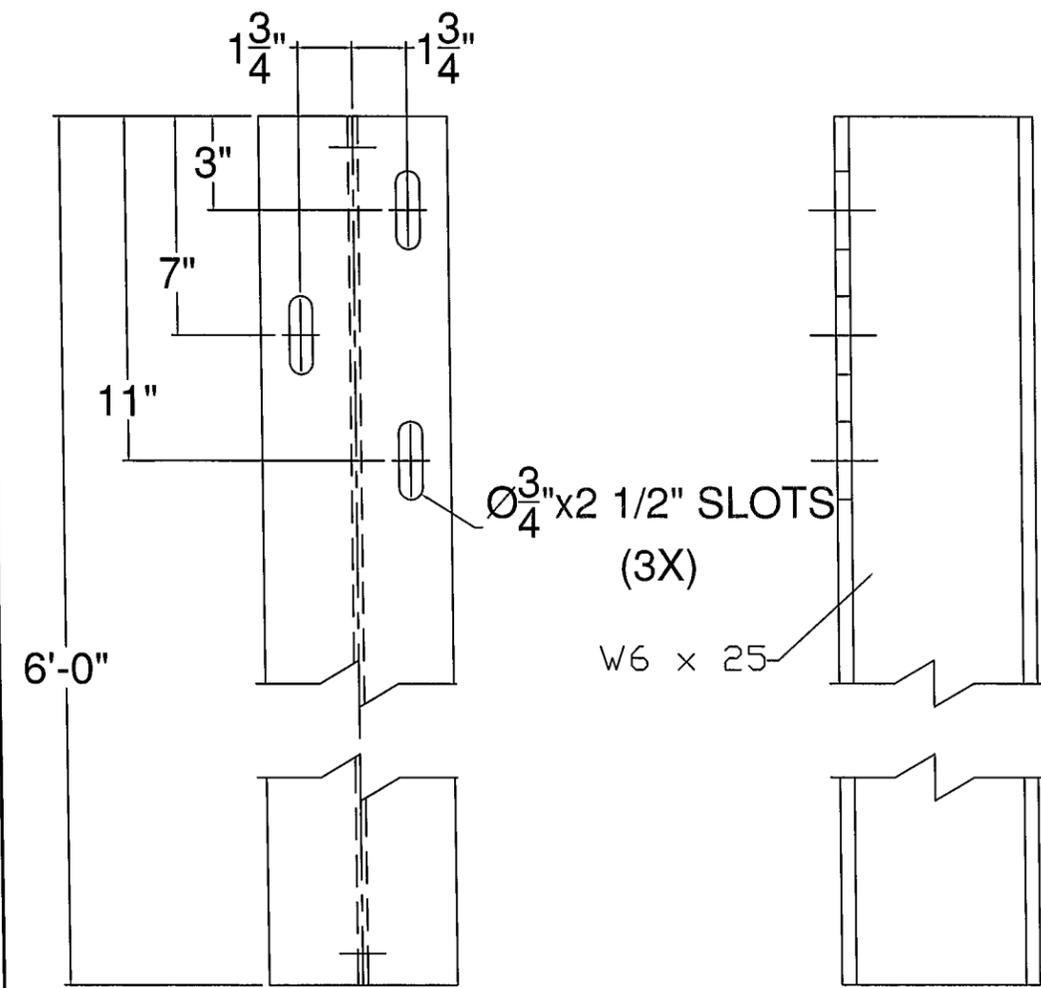
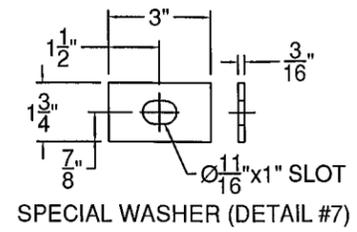
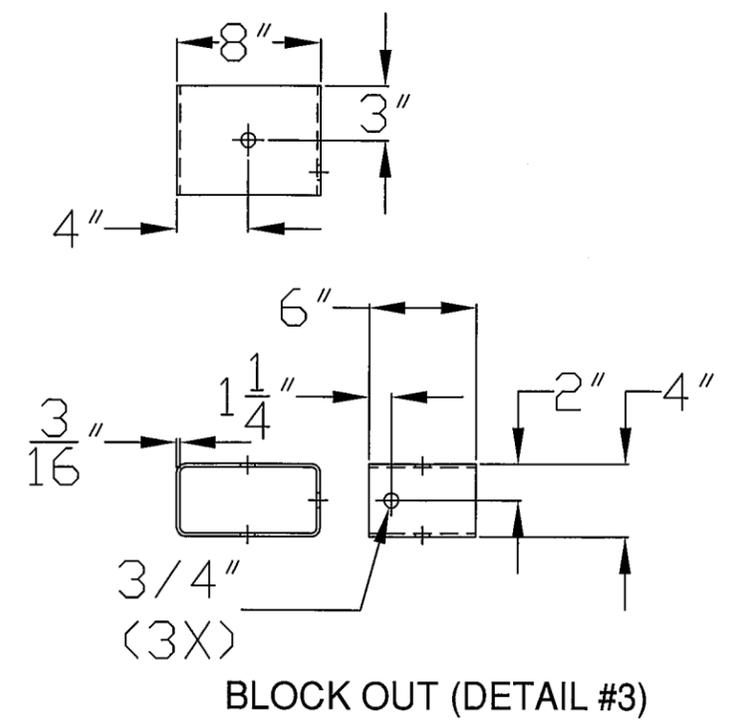
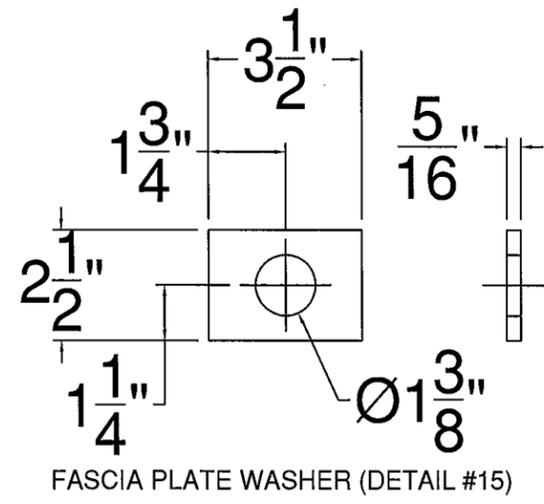
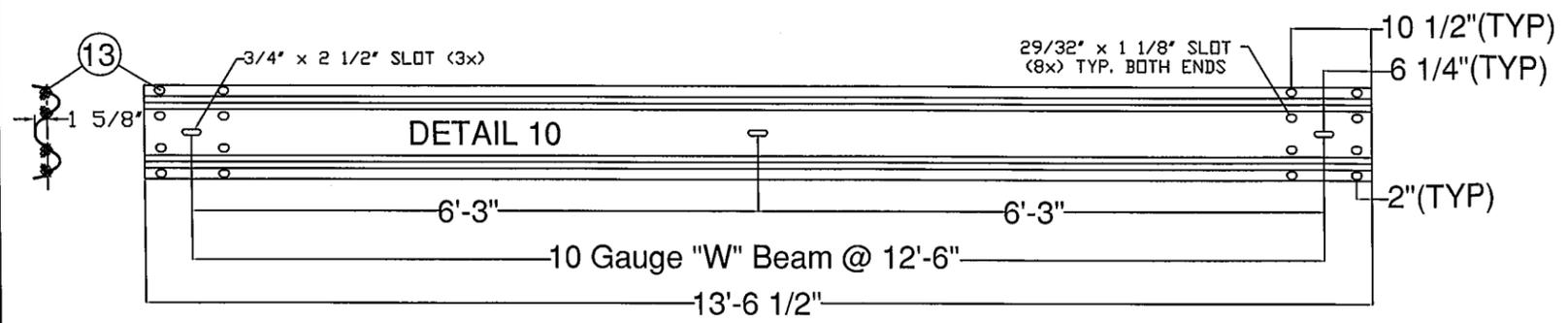
APPROVED BY:

BRIDGE RAIL DETAILS SHEET
MONTGOMERY, PROJECT BHO 1448(27), BR# 36 ROUTE T.H. 10, CLASS III
TOWN OF MONTGOMERY, COUNTY OF FRANKLIN, VERMONT

R	NO.	DATE	DESCRIPTION	BY	R	NO.	DATE	DESCRIPTION	BY
E					E				
V					V				

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com / epeek@elderlee.com
Tel: 315-789-6370, Fax: 315-789-6615

DRAWN	E.P.	5/21/14
CHECKED	D.L.	5/21/14
APPROVED		
SCALE	SCHMATIC	
DRAWING NO. FR LAFAYETTE-MONTGOMERY		

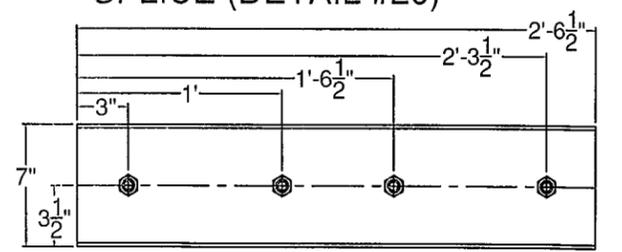
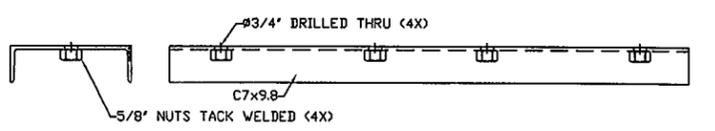
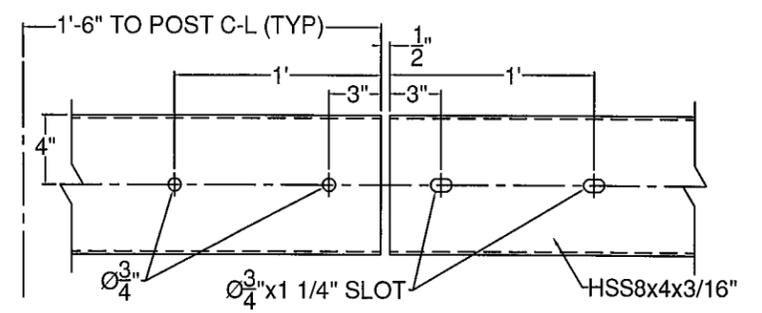
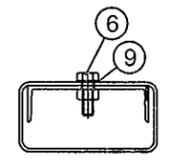
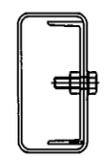


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May 21, 2014

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 BY Carolyn Carlson DATE 6/19/2014



DETAIL #11 (POST #1)

ITEM #: 525.44

SHEET 2 OF 2

APPROVED BY:

BRIDGE RAIL DETAILS SHEET
 MONTGOMERY, PROJECT BHO 1448(27), BR# 36 ROUTE T.H. 10, CLASS III
 TOWN OF MONTGOMERY, COUNTY OF FRANKLIN, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY

ELDERLEE, INC.
 OAKS CORNERS, NEW YORK 14618
 E-Mail: alony@elderlee.com / epesk@elderlee.com
 Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR

DRAWN	E.P.	5/21/14
CHECKED	D.L.	5/21/14
APPROVED		
SCALE	SCHMATIC	
DRAWING NO. FRL-LAFAYETTE-MONTGOMERY		

WELDING PROCEDURE SPECIFICATION

STOCK PQR # ELDERLEE #1

Material Specification	ASTM A588
Welding Process	FCAW
Manual or Machine	SEMAUTOMATIC
Position of Welding	FLAT
Filler Metal Specification	A5.20
Filler Metal Classification	E70 LINCOLN OUTERSHEILD
Flux	N/A
Shielding Gas	CO 2 Dew Point -40DEG F Flow Rate 50 CFM
Single or Multiple Pass	SINGLE (45 TO 63 CFM)
Single or Multiple Arc	N/A
Welding Current	DC
Polarity	DCEP
Welding Progression	STRINGER
Root Treatment	CLEAN PER D1.5
Preheat and Interpass Temperature	PER D1.5
Postheat Temperature	NONE
Heat Input	Min _____ Max _____

Seal All Welded Connections Prior To Galvanizing Where Possible

WELDING PROCEDURE

Pass no.	Electrode size	Welding Current		Travel speed	Joint detail
		Amperes	Volts		
1	3/32	390	27	12	
Variable	LIMITS	351 TO 429	25 TO 29	11 TO 13	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 3035 Contractor Elderlee, Inc.
 Revision No. _____ Authorized By RANDY SCOTT
 Date 2/14/2014

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