



GENERAL NOTES:

- 1) ALL RAILING IS TO BE FABRICATED AND ERECTED ACCORDING TO SECTION 621 OF THE STANDARD SPECIFICATIONS.
- 2) BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
- 3) PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.
- 4) BOX BEAM TUBE AND STEEL POST MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.
- 5) ANY BENDING OF RAIL SHALL BE DONE AT THE FABRICATION PLANT. RADII GREATER THAN 16' TO BE CURVED ON A TUBE BENDING MACHINE, RADII EQUAL OR LESS THAN 16' TO BE "PIE CUT" AND WELDED. CURVED RAILING WILL HAVE AN 18" LENGTH ON EACH END STRAIGHT TO ACCOMADATE SPLICES. "PIE CUTS ARE LOCATED SO AS TO NOT CONFLICT WITH POST FASTENING HOLES. PIE CUTS WILL BE WELDED ACCORDING TO PROCEDURE WPS-8003.

BILL OF MATERIALS (EACH CORNER)

ITEM #	QTY.	COMPONENT #	DESCRIPTION	MATERIAL (ASTM)
1	3	0013.57021	S3 X 5.7 POST, PUNCH 8' W/SPD @ 63' LG	ASTM A572 Gr. 50
2	3	0013.57025	S3 X 5.7 POST, PUNCH 8', & 20' W/SPD @ 63' LG	ASTM A572 Gr. 50
3	2	0013.57060	S3 X 5.7 END POST W/SPD @ 3'-8" LG	ASTM A572 Gr. 50
4	4	0013.09001	W6 X 9 POST @ 7' W/SPD & 5/8" HOLES	ASTM A572 Gr. 50
5	4	0013.57010	S3 X 5.7 POST, PUNCH 8' & 20', W/8X32" SPADE @7'	ASTM A572 Gr. 50
6	1	0033.80403	3 X 5' BTM TRANS RAIL W/5'-0" KB, EXP END	A500 Gr. B
7	1	0033.00640	HSS 5X5 TUBE SPLICE @27' LG W/ 1/4" SHIMS	A500 Gr. B / A572 Gr 50
8	2	0033.00730	HSS 5x5 EXP TUBE SPLICE @ 36' LG W/ 1/4" SHIMS	A500 Gr. B / A572 Gr 50
9	1	0033.00930	BR EXP BAR SPLICE 2-1/8" X 4-1/4" @ 36" LG	ASTM A36
10	19	0054.00050	REG BB SHELF ANGLES @ 4-1/2'	ASTM A36
12	1	0054.00074	HSS 5 X 5 X 5/16" DBL BEND TUBE SPL @ 27' LG,	A500 Gr. B / A572 Gr 50
13	3	0054.00563	6 X 8 X 1/4" TRANS. TUBE B/D @ 6' LG	A500 Gr. B
14	3	0054.00565	6 X 8 X 1/4" TRANS. TUBE B/D @ 3' LG	A500 Gr. B
15	1	0054.09000	6 X 6 X 3/16" BB @ 9'-0" KICKBACK, W/ CAP, & 13" MITER	A500 Gr. B / A36
16	1/2	0054.18000	6 X 6 X 3/16" BB @ (9'-0" THIS PAY ITEM), DRILL 3" CC	A500 Gr. B
17	1	0054.90092	6 X 6 X 3/16" BB TOP TRANS @ 20'-9 5/8" LG W/EXP END	A500 Gr. B
18	1	0054.90093	6 X 6 X 3/16" BB BTM TRANS @ 21'-4 5/8" LG W/EXP END	A500 Gr. B
19	17	0080.03355	3/8" X 7 1/2" BOLT, NUT, & 2 FW	A307, A563 DH, F436
20	19	0080.04100	1/2" X 1-1/2" BOLT, NUT, & FW	A307, A563 DH, F436
21	22	0080.04120	1/2" X 1-1/2" BOLT, NUT, 2 FW & LW	A307, A563 DH, F436
22	4	0080.06255	3/4" X 4-1/2" BOLT, NUT, 2 FW	A325, A563 DH, F436
23	14	0080.06340	3/4" X 7-1/2" BOLT, NUT, 2 FW	A325, A563 DH, F436
24	6	0080.06370	3/4" X 8" CARR BOLT, NUT, FW & LW	A307, A563 DH, F436

ITEM #	FUNCTION
19	BOLT RAIL (ITEMS #'S 16, 17, & 18) TO SHELF ANGLE (ITEM #10)
20	BOLT SHELF ANGLE (ITEM #'S 10 & 11) TO POST #'S 1, 2, 3, & 5
21	BOLT BLOCK-OUTS (ITEM #'S 13 & 14) TO HEAVY POST
22	(4) PER SPLICE BAR (ITEM #9), & (2) PER ITEM #12
23	(4) PER SPLICE TUBING (ITEM #'S 7 & 8)
24	BOLT RAIL (ITEMS #'S 6,17, & 18 TO BLOCK-OUTS (ITEM #'S 13 & 14) [WHERE FASTENED]

APPLICABLE NOTES IN THE BRIDGE RAIL DRAWING SHALL ALSO BE APPLICABLE ON THESE DRAWINGS

APPROVED: Approval of the design and construction of the bridge rail system is hereby approved. This review shall not mean that the Designer is responsible for the design or construction of the bridge rail system. The Designer shall be responsible for the design and construction of the bridge rail system. The Designer shall be responsible for the design and construction of the bridge rail system.

DATE: 02/15/17

By: Michael J. Cloutier

STANTEC

ITEM #: 621.725
 STRUCTURAL STEEL TO COMPLY W/ ASTM A6

TOLERANCE UNLESS OTHERWISE NOTED:
 FRACTIONS = ± 1/16"
 ANGLES = ± 1/2"
 DIAMETERS = ± 1/32"

GUARD RAIL TO BRIDGE RAIL TRANSITION DETAILS SHEET
 VT ROUTE 242 (RURAL MAJOR COLLECTOR) BRIDGE # 10
 TOWN OF JAY, COUNTY OF ORLEANS, VT.

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	2/8/17	REVISED PER 12/22/16 MARK-UP D.K.	D.K.				

DRAWN	D.K.	12/7/16
CHECKED	E.P.	12/7/16
APPROVED	D.L.	12/9/16
SCALE	SCHMATIC	
DRAWING NO. F.R. LaFAYETTE-JAY T		

ELDERLEE, INC.
 OAKS CORNERS, NEW YORK 14518
 email: dlong@elderlee.com / epeek@elderlee.com
 Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR
 ORTHOGRAPHIC PROJECTION