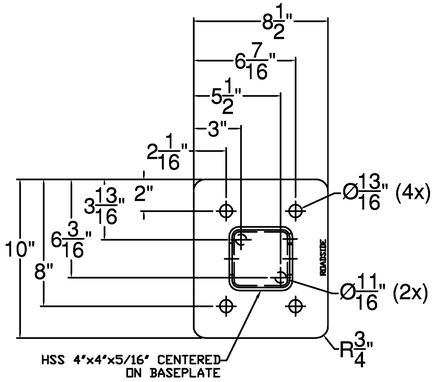
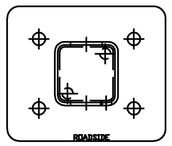
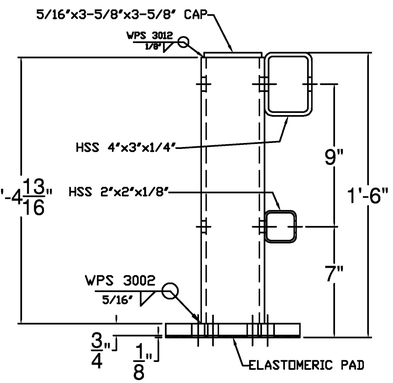
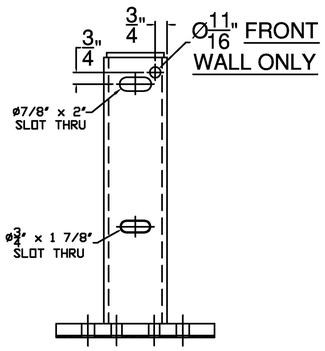
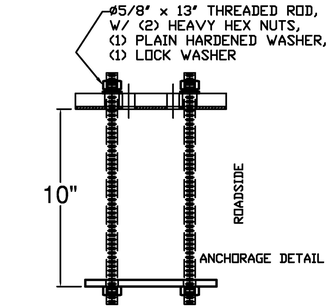
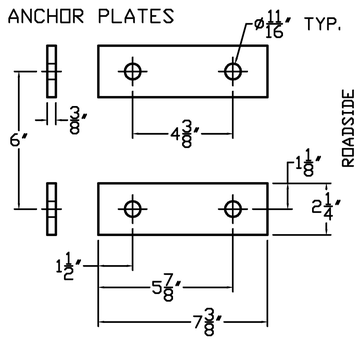










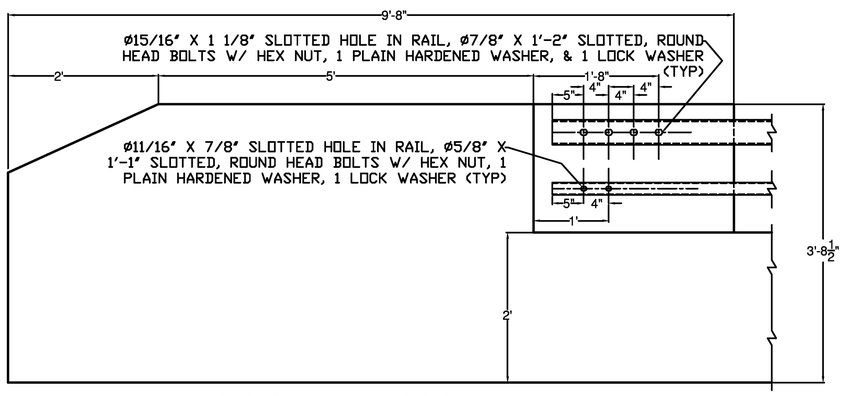


BILL OF MATERIAL		
QTY	DESCRIPTION	ASTM DESIGNATION
33	TWO RAIL POST & BASEPLATE ASSEMBLY	A572 Gr. 50 CVN
4	4" X 3" X 1/4" RAIL @ 31'-0"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 32'-11"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 25'-11 1/4"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 24'-11"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 26'-8 3/8"	A500 Gr. B
4	2" X 2" X 1/8" RAIL @ 31'-0"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 32'-11"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 25'-11 1/4"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 24'-11"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 26'-8 3/8"	A500 Gr. B
4	1-1/2" X 1-1/2" FIX. SPL BAR @ 2' 4"	A572 Gr. 50
2	1-1/2" X 1-1/2" EXP. SPL BAR @ 2' 4"	A572 Gr. 50
4	2-1/4" X 3-1/4" FIX. SPL. BAR @ 2' 4"	A572 Gr. 50
2	2-1/4" X 3-1/4" EXP. SPL. BAR @ 2' 4"	A572 Gr. 50
66	3/8" X 2 1/4" X 7 3/8" ANCHOR PLATES	A36
132	Ø 5/8" X 13" ANCHOR STUDS	A449 Gr. 1
264	Ø 5/8" HEAVY HEX NUTS & FLAT WASHERS	A563 & F436
33	Ø 5/8" X 7 1/2" ROUND HEAD BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1
33	Ø 3/4" X 8 1/2" ROUND HEAD BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1
24	Ø 5/8" X 3" HEX BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1
24	Ø 7/8" X 5 1/2" HEX BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1
8	Ø 5/8" X 13" SLOTTED, ROUND HEAD BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1
16	Ø 7/8" X 14" SLOTTED, ROUND HEAD BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1
10	Ø 5/8" X 5 1/2" HEX BOLT, NUT, F.W., & L.W.	A325, A563, F436, & ASME B18.21.1

10 - DELINEATORS - ALUMINUM
33 - 1/8" ELASTOMERIC PAD - D2240

NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
2. PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
3. ALL POSTS SHALL BE SET NORMAL TO GRADE.
4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO BRIDGE POSTS AND PREFERABLY TO AT LEAST 4 POSTS.
5. HOLES IN RAILS FOR TUBE ATTACHMENT, MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
6. BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
7. RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY ASTM A449 (TYPE I) ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE.
8. SEE STANDARD DRAWING G-I 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. PAYMENT FOR DELINEATORS SHALL BE INCIDENTAL TO OTHER ITEMS.
9. AESTHETIC TREATMENT TYPE SHALL BE APPLIED AS SPECIFIED IN THE CONTRACT PLANS. IF NONE IS SPECIFIED IT SHALL NOT BE USED. AESTHETIC TREATMENT DETAILED ON THIS SHEET MAY ALSO BE APPLIED ON THE FASCIA SIDE OF THE RAIL, IF SPECIFIED IN THE CONTRACT PLANS.
10. BRIDGE RAILING SHALL HAVE A RUBBED FINISH IN ACCORDANCE WITH SECTION 501.
11. THIS RAILING MEETS THE REQUIREMENTS FOR A NCHRP REPORT 350 TL-4 SERVICE LEVEL.
12. HOLES FOR MOUNTING DELINEATORS TO BE FIELD DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.



TYP. WINGWALL DETAIL

ITEM #: 525.45

FR Lafayette - JAMAICA, EM13-016

SHEET 2 OF 3

APPROVED BY:
Vermont Agency of Transportation
RECEIVED
CK'D BY RK/JG/GL OK'D BY JS
July 25, 2013
RESUBMIT NO Approved AsNoted
BY KH DATE 8-8-2013

BRIDGE RAIL DETAILS SHEET

EM13-006, JAMAICA ER BRF 015-1 (23)

TOWN OF JAMAICA, WINDHAM COUNTY, VT RTE 30 (MINOR ARTERIAL), BRIDGE NO : 30

R	NO.	DATE	DESCRIPTION	BY	R	NO.	DATE	DESCRIPTION	BY
E	1	7/1/13	REVISE PER 6/28/13 EMAIL	E.P.	E				
V	2	7/23/13	REVISE PER 7/23/13 EMAIL	E.P.	V				

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

AISC CERTIFIED FABRICATOR

DRAWN	E.P.	5/30/13
CHECKED	D.L.	5/31/13
APPROVED	.	.
SCALE	SCHEMATIC	
DRAWING NO.	FR LAFAYETTE - JAMAICA	