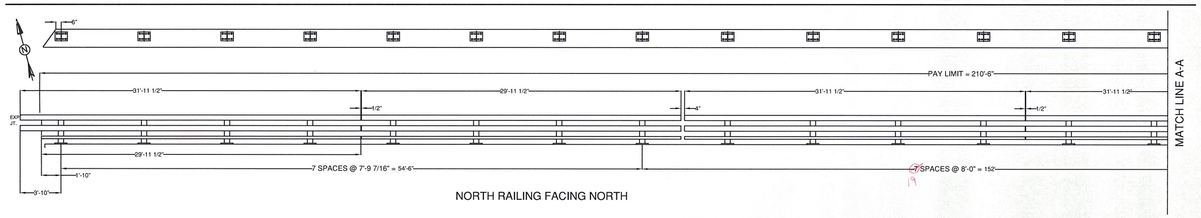
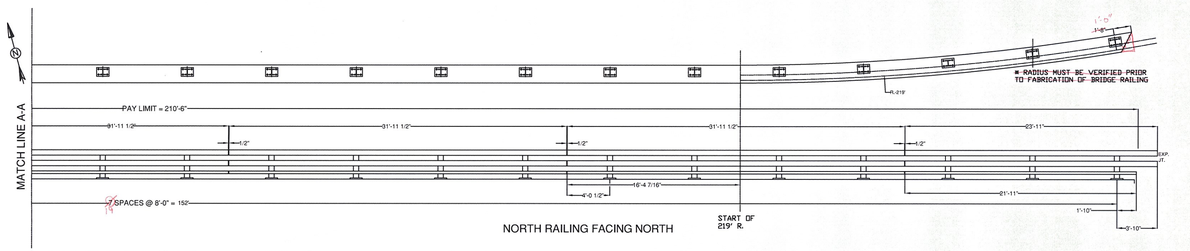
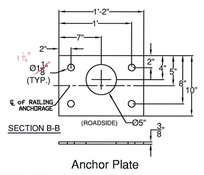


NORTH RAILING FACING NORTH



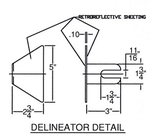
NORTH RAILING FACING NORTH

BILL OF MATERIAL--NORTH RAIL		
QTY	DESCRIPTION	ASTM DESIGNATION
27	THREE RAIL POST @ 29" DA	A572 Gr. 50
2	3" X 5" X 1/4" RAIL @ 29'-11 1/2"	A500 Gr. B
3	3" X 5" X 1/4" RAIL @ 31'-11 1/2"	A500 Gr. B
1	3" X 5" X 1/4" RAIL @ 31'-11 1/2" W/ PARTIAL 219' R.	A500 Gr. B
1	3" X 5" X 1/4" RAIL @ 21'-11" W/ 219' R.	A500 Gr. B
2	6" X 6" X 3/16" RAIL @ 29'-11 1/2"	A500 Gr. B
8	6" X 6" X 3/16" RAIL @ 31'-11 1/2"	A500 Gr. B
2	6" X 6" X 3/16" RAIL @ 31'-11 1/2" W/ PARTIAL 219' R.	A500 Gr. B
2	6" X 6" X 3/16" RAIL @ 23'-11" W/ 219' R.	A500 Gr. B
5	2-1/8" X 4-1/4" FIX. SPLICE BAR @ 2'-3"	A572 Gr. 50
1	2-1/8" X 4-1/4" EXP. SPLICE BAR @ 3'	A572 Gr. 50
10	5" X 5" X 5/16" FIX. SPLICE TUBE @ 2'-3"	A572 Gr. 50
2	5" X 5" X 5/16" EXP. SPLICE TUBE @ 3'	A500 Gr. B, A36
27	3/8" X 10" X 14" ANCHOR PLATES	A36
108	@ 1" X 15" ANCHOR STUDS	A449 Gr. 1
324	@ 1" HEAVY HEX NUTS & FLAT WASHERS	A563 & F436
108	@ 7/8" X 8" ROUND HEAD BOLT, NUT, SQ. WASHER, L.W.	A449, A563, ASME B18.2.1
27	@ 3/4" X 8" HEX BOLT, NUT, CD F.W., & L.W.	A325, A563, F436, & ASME B18.2.1
54	@ 3/4" X 2-3/4" HEX BOLT, NUT, CD F.W., & L.W.	A325, A563, F436, & ASME B18.2.1
48	@ 3/4" X 7-1/2" HEX BOLT, NUT, & CD F.W.	A325, A563, & F436
24	@ 3/4" X 4-1/2" HEX BOLT, NUT, & CD F.W.	A325, A563, & F436
27	@ 5/8" X 1-1/2" HEX BOLT, NUT, & CD F.W.	A325, A563, & F436
27	1.5" X 5" X 5/8" RAILING ANGLE	A36
27	DELINEATORS	ALUMINUM, B-209 ALLOY



SECTION B-B

Anchor Plate



DELINEATOR DETAIL

GENERAL NOTES:

1) ALL RAILING IS TO BE FABRICATED AND ERECTED ACCORDING TO SECTION 525 OF THE STANDARD SPECIFICATIONS.
2) PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
3) BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
4)RAIL TUBE EXPANSION JOINTS SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SUBSTRUCTURE EXPANSION JOINTS. EXPANSION JOINT WIDTH SHALL BE 4"@ 68°F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPATURES. TEMPERATURES
5)RETROREFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 750.09 AND SHALL BE A .063" ALUMINUM BACKING WHITE OR YELLOW REFLECTOR. WHITE IS TO BE INSTALLED ON THE DRIVERS RIGHT. FOR ONE WAY BRIDGES , YELLOW IS TO BE INSTALLED ON THE DRIVERS LEFT.
6) PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.
7) THE MINIMUM DISTANCE FROM THE POST TO AN EXPANSION JOINT SHALL BE DETERMINED BY THE MINIMUM EDGE DISTANCE OF 5" FROM ANY ANCHOR STUD TO THE END OF THE SLAB, OR THE EXPANSION JOINT RECESS POUR, IF ONE IS USED.

RECEIVED
OCT 13 2011

ITEM #: 900.640 GEN CONTR: F.R. Lafayette

APPROVED BY:
CK'D BY JLZ O'K'D BY GFR
RESUBMIT ____ APPROVED As Noted
BY RSH DATE 10/19/2011

SHEET 2 OF 3

BRIDGE RAIL DETAILS SHEET
ROUTE 12A, BR 15 & BR 22
TOWN OF ROXBURY, WASHINGTON COUNTY, VT

R	NO.	DATE	DESCRIPTION	BY
E				
V				

R	NO.	DATE	DESCRIPTION	BY
E				
V				

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail:dlong@elderlee.com
Tel:315-789-6670 Fax:315-789-6815

DRAWN	E.P.	10/1/11
CHECKED	D.L.	10/1/11
APPROVED		
SCALE	SCHEMATIC	
DRAWING NO.	FR Lafayette EM11 220	