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Barton, VT 05822
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www.jpsicard.com

Submittal Data Sheet

Submittal #: 7

Submission #: 1

Date: 4/28/2016

Project Name: Irasburg IM Deck (46)

Owner: Vermont Agency of Transportation

Engineer: VTrans

Contractor: J.P. Sicard, Inc.

Item Number: Bridge Railing 525.33 / Steel Beam Guardrail 621.20 / Guardrail Approach Section 621.72

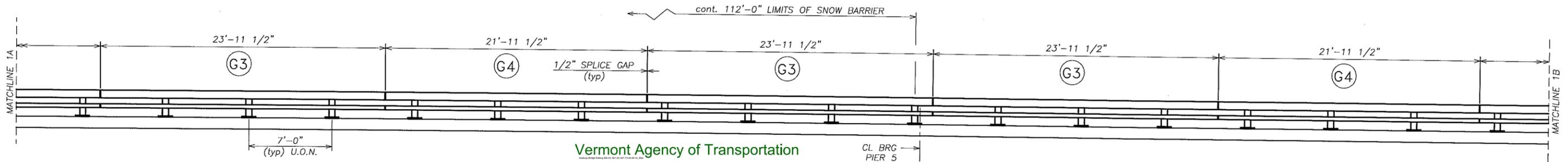
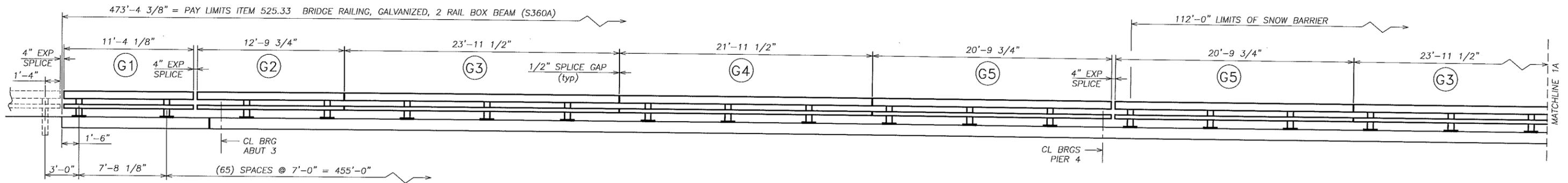
Supplier: J.P. Sicard, Inc.

Description of Item: Bridge Rail, Approach Rail (Galvanized 2 Rail Box Beam) / Steel Beam Guardrail
+ Welding Procedure

Substitution: NO

Engineers Review Comments:

Submitted By: Brad Drake
Title: Project Manager
Company: JP Sicard, Inc.



Vermont Agency of Transportation

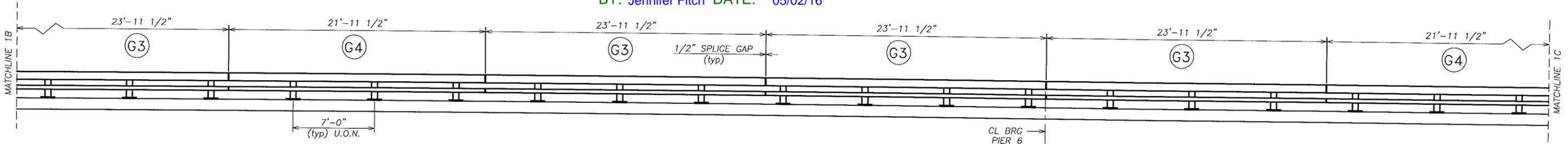
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ON: April 28, 2016

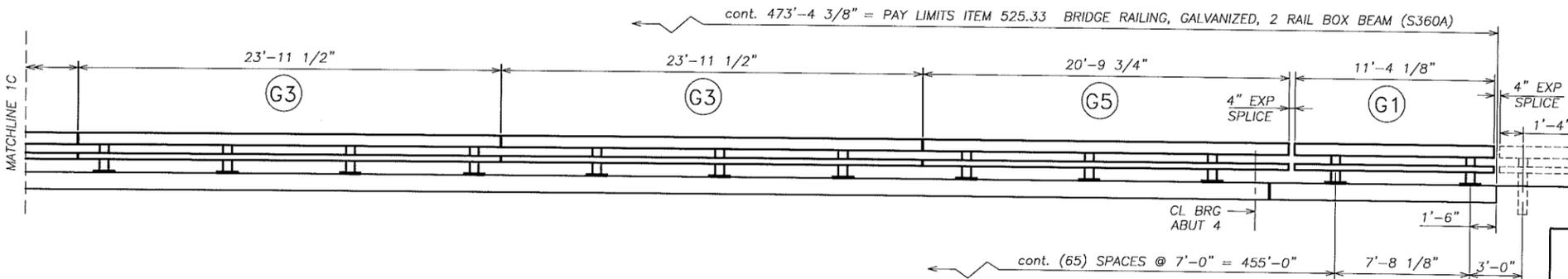
and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 05/02/16



NORTHWEST SIDE RAILING ELEVATION
 LOOKING AT TRAFFIC FACE OF RAILING
 FACING NORTHWEST FROM CENTERLINE OF ROAD



SHOP DRAWING REVIEW

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED REVISE AND RESUBMIT APPROVED AS NOTED

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CLD Consulting Engineers
 540 Commercial Street
 Manchester, NH 03101
 603-888-8223

Job Number: 150223
 Reviewed by: SRB
 Date: 04/29/2015

No.	Remarks	Date
0	Initial submittal	4/28/16
REVISIONS - APPLIES TO SET		

HIGHWAY SAFETY CORP
 GLASTONBURY, CT
 860-633-9445

ITEM 525.33 BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM (S-360A)
 ITEM 621.72 GUARDRAIL APPROACH, GALV 2 RAIL BOX BEAM (S-360B)

TOWN OF IRASBURG, VERMONT
 INTERSTATE 91 (PRINCIPAL ARTERIAL) BRIDGE NO. 107 N
 ORLEANS COUNTY 1M DECK (46)

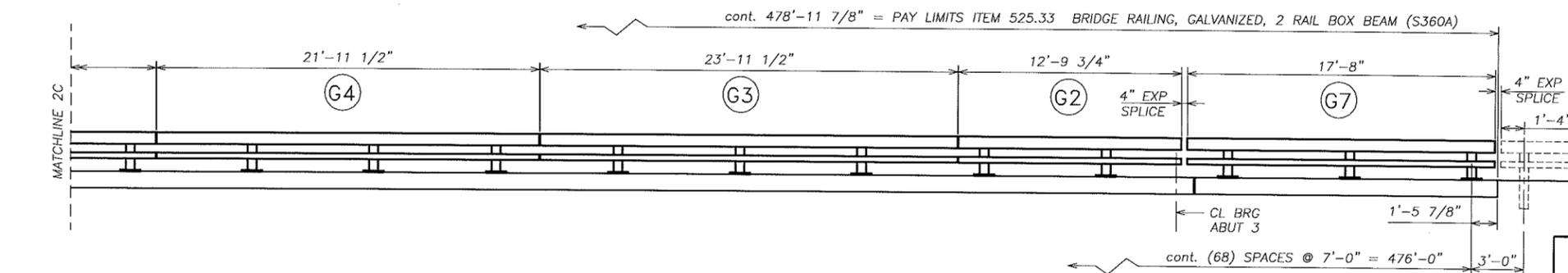
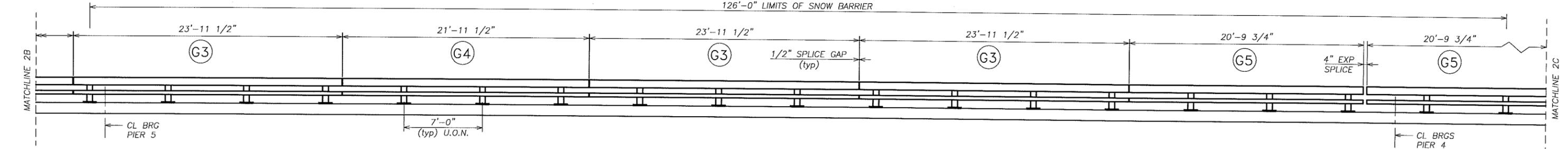
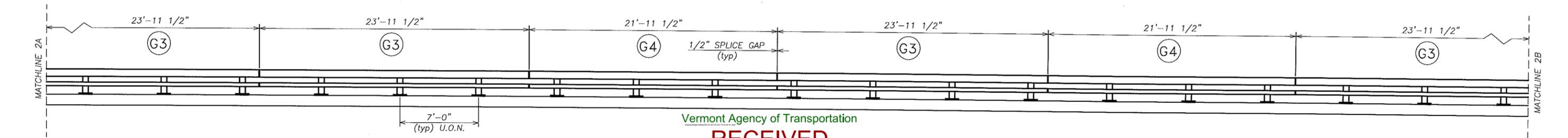
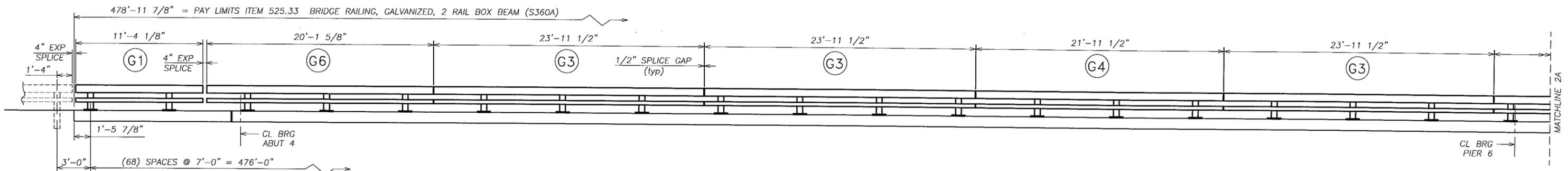
GENERAL CONTRACTOR: LAFAYETTE

DATE: 04-27-16

SCALE: NONE SIZE: D

CERTIFIED FABRICATOR

HSC JOB NO. 2103
 SHEET NO. 1 of 5



Vermont Agency of Transportation
RECEIVED
 ON: April 28, 2016
 and Checked for
CONFORMANCE
 BY: Jennifer Fitch DATE: 05/02/16

SOUTHEAST SIDE RAILING ELEVATION
 LOOKING AT TRAFFIC FACE OF RAILING
 FACING SOUTHEAST FROM CENTERLINE OF ROAD

SHOP DRAWING REVIEW

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CLD Consulting Engineers
 540 Commercial Street
 Manchester, NH 03101
 603-868-8223

Job Number: T50223
 Reviewed by: SRB
 Date: 04/29/2015

HIGHWAY SAFETY CORP
 GLASTONBURY, CT
 860-633-9445

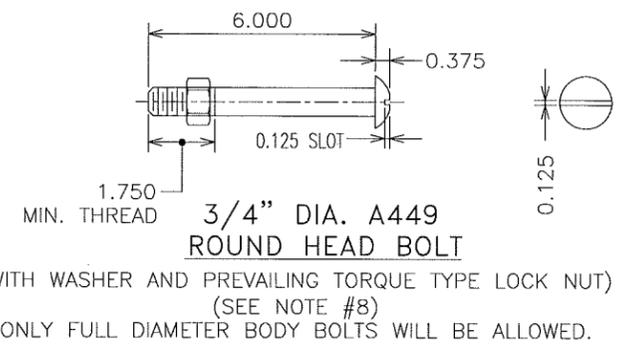
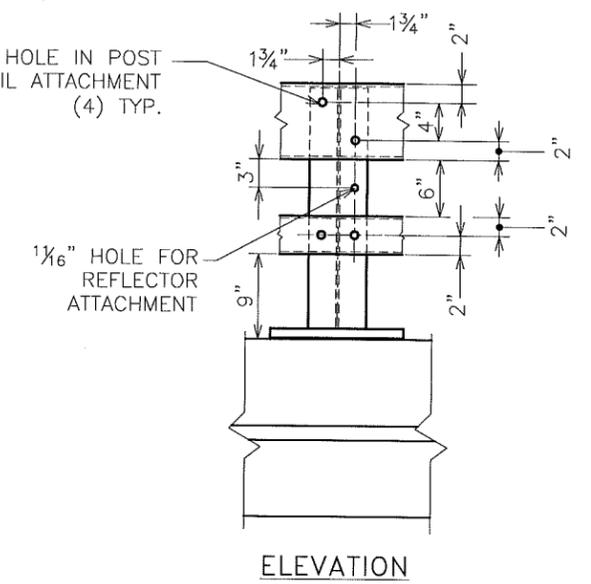
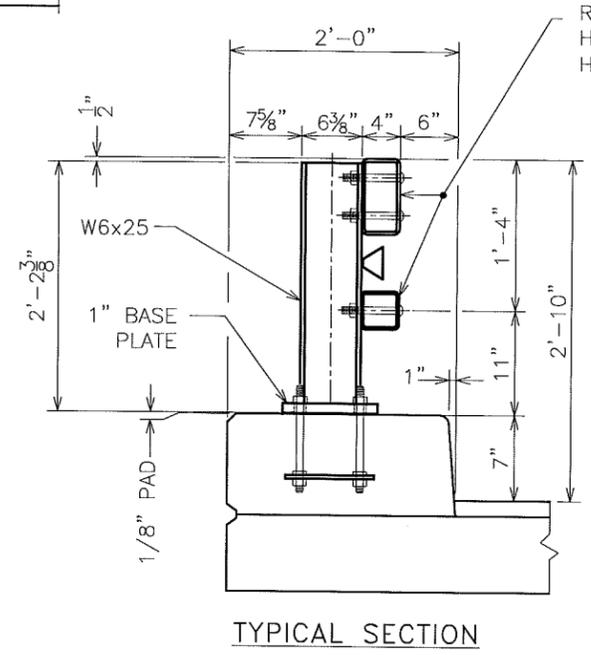
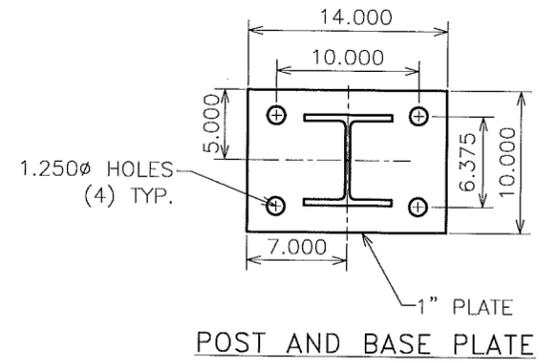
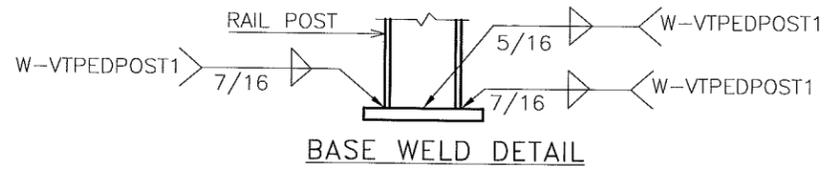
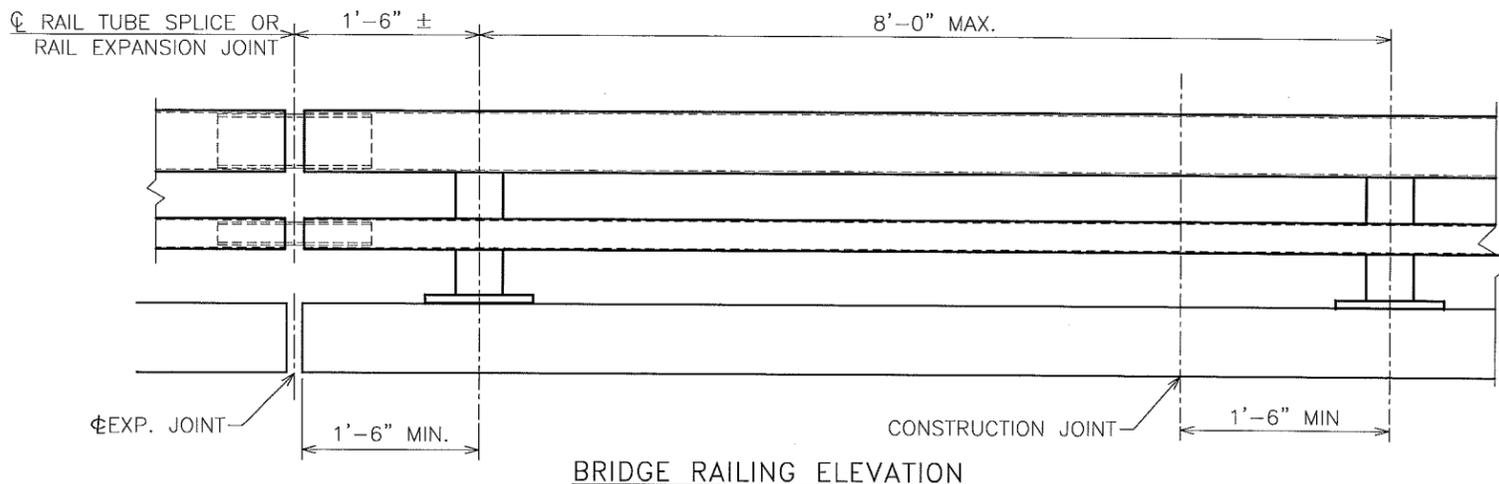
ITEM 525.33 BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM (S-360A)
 ITEM 621.72 GUARDRAIL APPROACH, GALV 2 RAIL BOX BEAM (S-360B)

TOWN OF IRASBURG, VERMONT
 INTERSTATE 91 (PRINCIPAL ARTERIAL) BRIDGE NO. 107 N
 ORLEANS COUNTY IM DECK (46)

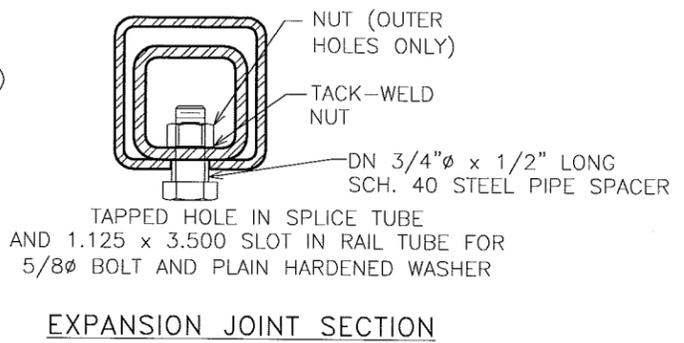
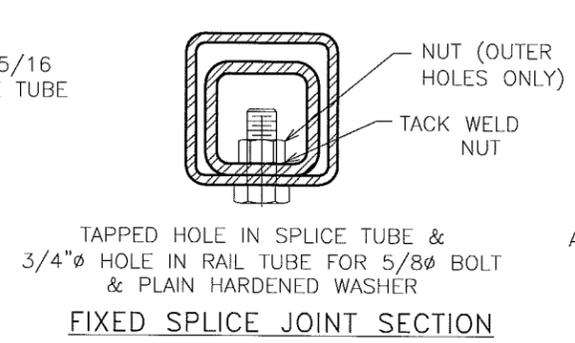
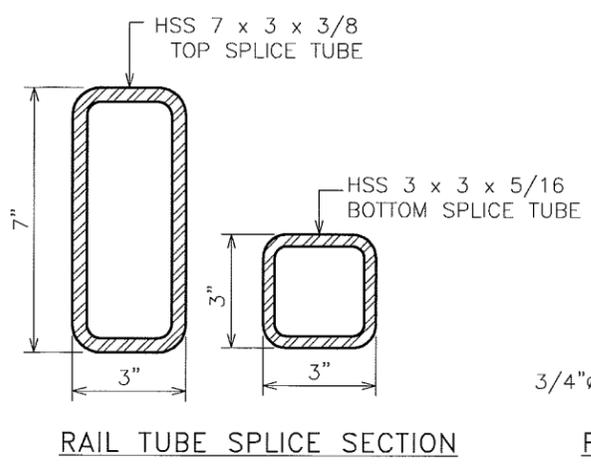
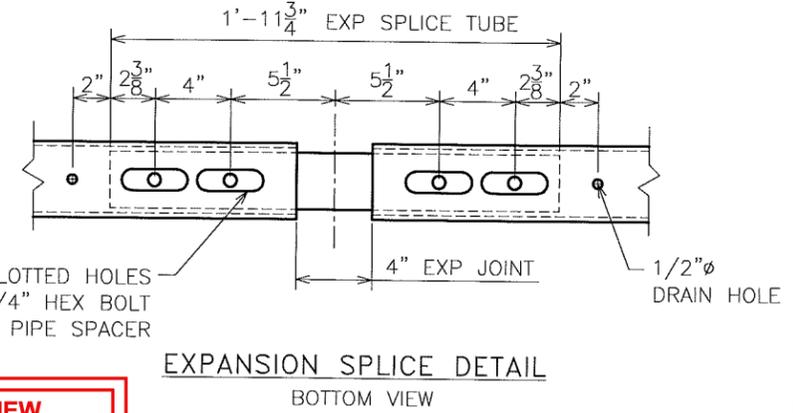
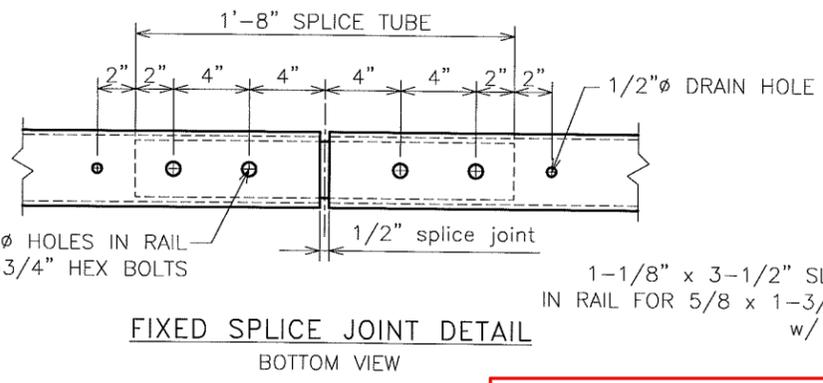
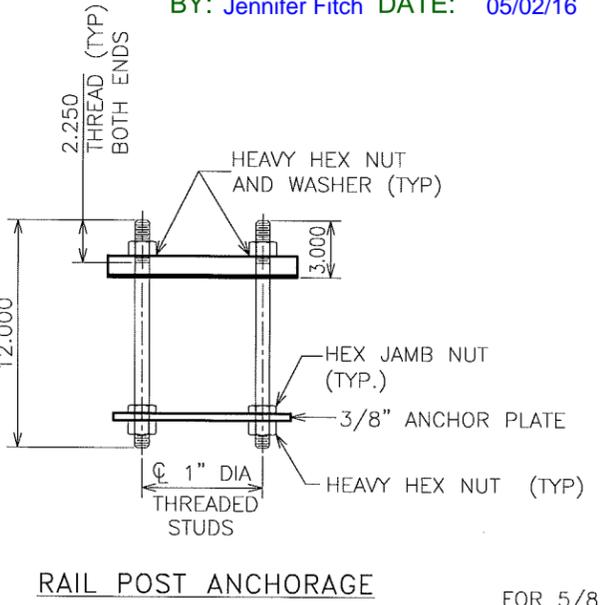
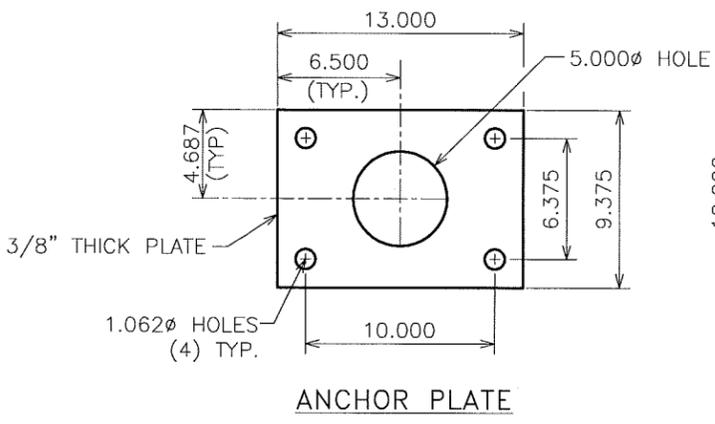
CERTIFIED FABRICATOR

GENERAL CONTRACTOR: LAFAYETTE
 HSC JOB NO.: 2103
 SHEET NO.: 2 of 5

DATE: 04-27-16 SCALE: NONE SIZE: D



Vermont Agency of Transportation
RECEIVED
ON: **April 28, 2016**
and Checked for
CONFORMANCE
BY: Jennifer Fitch DATE: 05/02/16



SHOP DRAWING REVIEW

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CLD Consulting Engineers
540 Commercial Street
Manchester, NH 03101
603-888-8223

Job Number: 150223
Reviewed by: SRB
Date: 04/29/2015

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 525.33 BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM (S-360A)

TOWN OF IRASBURG, VERMONT
INTERSTATE 91 (PRINCIPAL ARTERIAL) BRIDGE NO. 107 N
ORLEANS COUNTY IM DECK (46)

GENERAL CONTRACTOR: LAFAYETTE

DATE: 04-27-16 SCALE: NONE SIZE: D

CERTIFIED FABRICATOR

HSC JOB NO. 2103
SHEET NO. 3 of 5

BILL OF MATERIAL

Vermont Agency of Transportation

RECEIVED

ON: **April 28, 2016**

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 05/02/16

NOTES:

- ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
 - PRIOR TO GALVANIZING, ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1/16" RADIUS AND BE FREE OF BURRS.
 - ALL POSTS SHALL BE SET NORMAL TO GRADE.
 - SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO (2) RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
 - RAIL TUBE EXPANSION JOINT SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SUPERSTRUCTURE EXPANSION JOINTS. EXPANSION JOINT WIDTH SHALL BE 4" AT 45°F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
 - HOLES IN RAILS FOR RAIL TUBE ATTACHMENT SHALL BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
 - RAIL POST ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ONE-EIGHTH TURN.
 - RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY ASTM A449 ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE. HOLES IN POSTS SHALL BE 1/16" LARGER THAN THE BOLT SIZE.
 - ANY BENDING OR CURVING OF RAIL SHALL BE DONE IN A FABRICATION PLANT IN ACCORDANCE WITH SUBMITTED PROCEDURES.
 - THE MINIMUM DISTANCE FROM A POST TO AN EXPANSION JOINT SHALL BE SUCH TO MAINTAIN MINIMUM EDGE DISTANCE OF 5" FROM ANY ANCHOR STUD TO THE END OF THE SLAB, OR TO THE EXPANSION JOINT RECESS POUR, IF ONE IS USED.
 - A DELINEATOR (SEE VAOT STANDARD DRAWING G-1 FOR DETAILS) SHALL BE INSTALLED AT NEAREST POST TO 30 FT SPACING. 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 SHALL BE INCIDENTAL TO OTHER ITEMS.
 - THIS RAILING MEETS THE REQUIREMENTS FOR A TL-4 SERVICE LEVEL.
- MATERIALS**
 RAIL TUBES.....ASTM A500 GRADE B OR ASTM A501
 RAIL POSTS AND BASE PLATES.....ASTM A709/A709M, GRADE 50
 ALL OTHER SHAPES AND PLATES.....ASTM A709/A709M, GARDE 36
 ANCHOR STUDS.....ASTM A449
 ALL OTHER BOLTS (UNLESS NOTED).....AASHTO M164, TYPE1
- NUTS FOR AASHTO M164 BOLTS AND FOR ANCHOR STUDS SHALL COMPLY WITH AASHTO M291 (ASTM A563).
- WASHERS SHALL COMPLY WITH AASHTO M293 (ASTM F436) SPECIFCATIONS.
- 1/8" PAD SHALL COMPLY WITH STANDARD SPECIFICATION SUBSECTION 731.01 OR 731.02.
- RAIL POSTS AND BASE PLATES SHALL BE TESTED FOR IMPACT PROPERTIES IN ACCORDANCE WITH ASTM A370 CHARPY IMPACT TESTING USING TYPE A SPECIMEN.

Qty	mk	Description	Spec.
952.35 LF		ITEM 525.33 BRIDGE RAILING, GALVANIZED, 2 RAIL BOX BEAM	
137		BRIDGE RAILING POST W6 x 25 x 2'-2.375" OAH WITH 1 x 10 x 14 BASE PLATE (GLV)	A709 gr 50
36		SPLICE TUBE (FOR 8X4 RAIL) HSS 7 x 3 x 3/8 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	A500 gr B
36		SPLICE TUBE (FOR 4X4 RAIL) HSS 3 x 3 x 5/16 x 1'-8.000" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	A500 gr B
6		EXP SPLICE (FOR 8X4 RAIL) HSS 7 x 3 x 3/8 x 1'-11.750" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	A500 gr B
6		EXP SPLICE (FOR 4X4 RAIL) HSS 3 x 3 x 5/16 x 1'-11.750" OAL w/ TAPPED HOLES & 2 WELDED NUTS (GLV)	A500 gr B
3	G1	RAIL TUBE HSS 8 x 4 x 5/16 x 11 ft - 4.125 in OAL - EXP splice both ends (GLV)	A500 gr B
2	G2	RAIL TUBE HSS 8 x 4 x 5/16 x 12 ft - 9.75 in OAL - FIX splice 1 end, EXP splice 1 end (GLV)	A500 gr B
22	G3	RAIL TUBE HSS 8 x 4 x 5/16 x 23 ft - 11.5 in OAL - FIX splice both ends (GLV)	A500 gr B
10	G4	RAIL TUBE HSS 8 x 4 x 5/16 x 21 ft - 11.5 in OAL - FIX splice both ends (GLV)	A500 gr B
5	G5	RAIL TUBE HSS 8 x 4 x 5/16 x 20 ft - 9.75 in OAL - FIX splice 1 end, EXP splice 1 end (GLV)	A500 gr B
1	G6	RAIL TUBE HSS 8 x 4 x 5/16 x 20 ft - 1.625 in OAL - FIX splice 1 end, EXP splice 1 end (GLV)	A500 gr B
1	G7	RAIL TUBE HSS 8 x 4 x 5/16 x 17 ft - 8 in OAL - EXP splice both ends (GLV)	A500 gr B
3	G1	RAIL TUBE HSS 4 x 4 x 1/4 x 11 ft - 4.125 in OAL - EXP splice both ends (GLV)	A500 gr B
2	G2	RAIL TUBE HSS 4 x 4 x 1/4 x 12 ft - 9.75 in OAL - FIX splice 1 end, EXP splice 1 end (GLV)	A500 gr B
22	G3	RAIL TUBE HSS 4 x 4 x 1/4 x 23 ft - 11.5 in OAL - FIX splice both ends (GLV)	A500 gr B
10	G4	RAIL TUBE HSS 4 x 4 x 1/4 x 21 ft - 11.5 in OAL - FIX splice both ends (GLV)	A500 gr B
5	G5	RAIL TUBE HSS 4 x 4 x 1/4 x 20 ft - 9.75 in OAL - FIX splice 1 end, EXP splice 1 end (GLV)	A500 gr B
1	G6	RAIL TUBE HSS 4 x 4 x 1/4 x 20 ft - 1.625 in OAL - FIX splice 1 end, EXP splice 1 end (GLV)	A500 gr B
1	G7	RAIL TUBE HSS 4 x 4 x 1/4 x 17 ft - 8 in OAL - EXP splice both ends (GLV)	A500 gr B
137		ANCHOR SPACER PLATE PL 0.375 x 13.000 x 9.375	A709 gr 36
548		ANCHOR STUD DBL END PART THREAD - 1" DIA x 12.000 w/ 2.250" THD EACH END (GLV)	A449
1096		HEAVY HEX NUT 1" (GLV)	A563 DH
548		ROUND WASHER (SAE) - 1" DIA SMALL (GLV)	F436
548		JAM NUT 1" (GALV)	A563 DH
548		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. FULL BODY (GLV)	A449 / A325
548		LOCK NUT 3/4" (GLV)	A563 DH
548		ROUND WASHER (SAE) 3/4" (GLV)	F436
336		HEX HEAD BOLT 5/8" DIA x 1.75" LG. (GLV)	A325
336		ROUND WASHER (SAE) 5/8" (GLV)	F436
48		SPACER PIPE - GALVANIZED 3/4" SCH. 40 x 1/2" LONG (GLV)	A53 gr B
137		BEARING PAD 0.125" THICK x 10.000 x 14.000 (NEOPRENE 80 duro +/-10)	aashto M251

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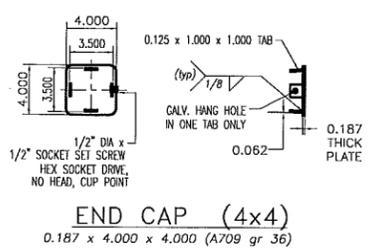
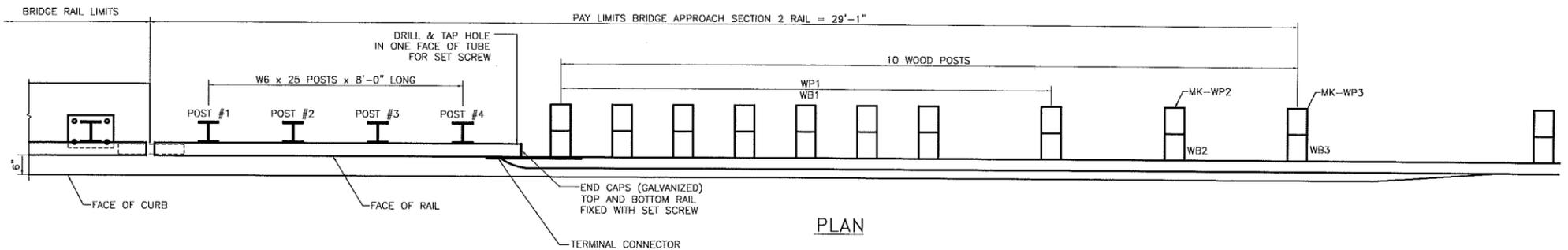
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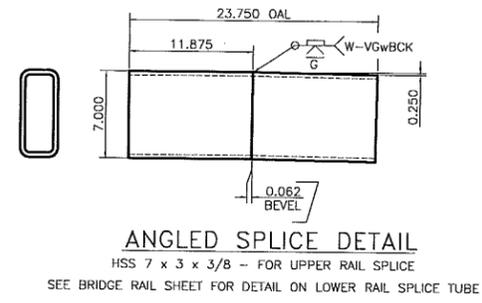
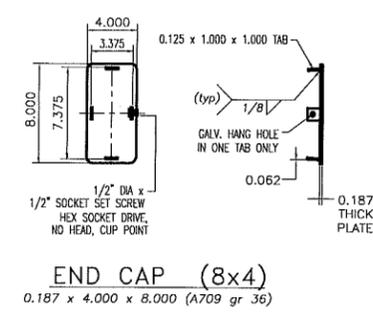
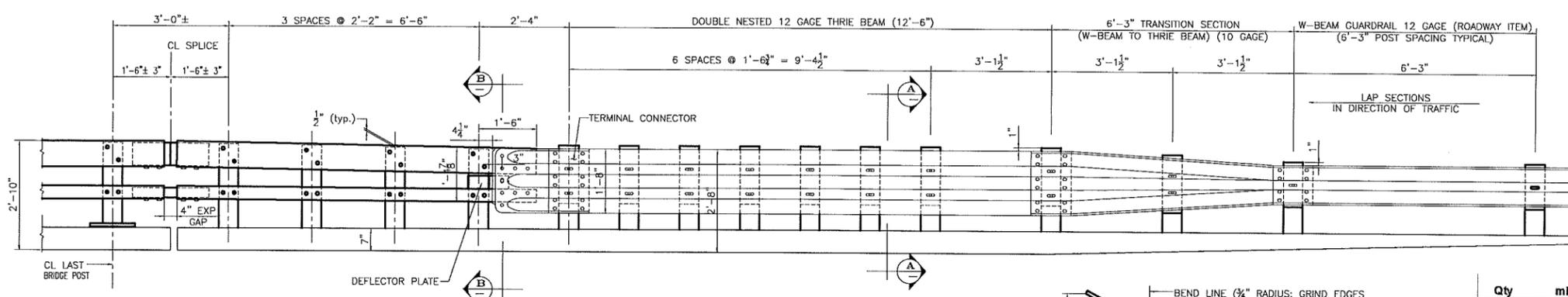
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HIGHWAY SAFETY CORP	
GLASTONBURY, CT 860-633-9445	
ITEM 525.33 BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM (S-360A)	
TOWN OF IRASBURG, VERMONT INTERSTATE 91 (PRINCIPAL ARTERIAL) BRIDGE NO. 107 N ORLEANS COUNTY IM DECK (46)	
CERTIFIED FABRICATOR	HSDC JOB NO. 2103
GENERAL CONTRACTOR	SHEET NO. 4 of 5
SUB CONTRACTOR LAFAYETTE	DRAWN PAR
CHECKED	DATE 04-27-16
SCALE NONE	SIZE D

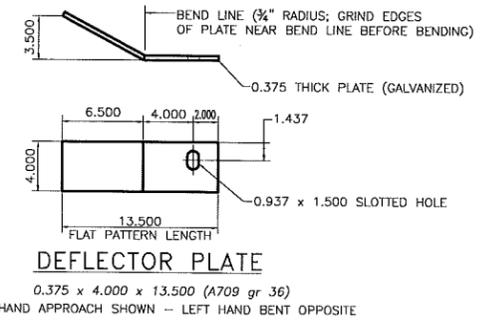


- NOTES:
- PAYMENT FOR GUARDRAIL APPROACH SECTION - GALVANIZED 2 RAIL, SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, THE DEFLECTOR PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
 - ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
 - TUBE AND STEEL POST MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL UNLESS OTHERWISE NOTED.
 - APPROACH RAIL BOLTS SHALL BE ASTM A307 GRADE A AND NUTS SHALL BE ASTM M291 (ASTM 563 GRADE A OR BETTER (GALVANIZED)). WASHERS SHALL BE ASTM F844.
 - WELD TOP SPLICE BAR TO FIT BEND. USE COMPLETE PENETRATION WELD (B-U2).

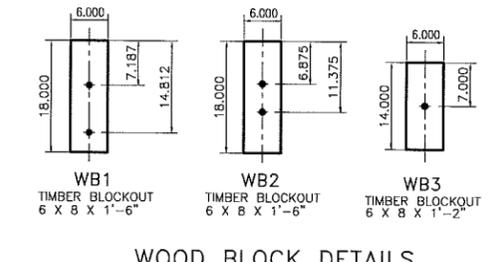
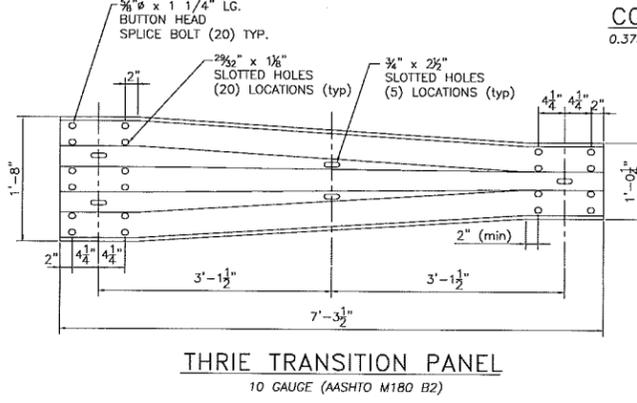
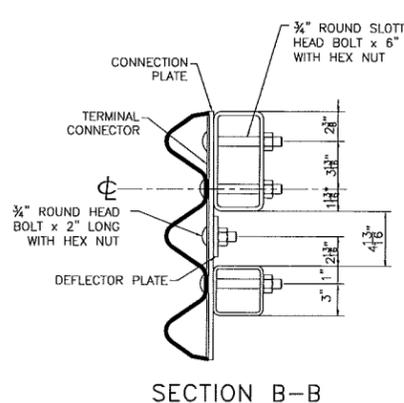
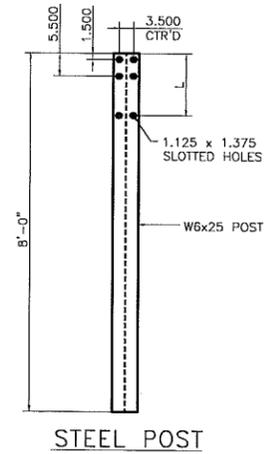
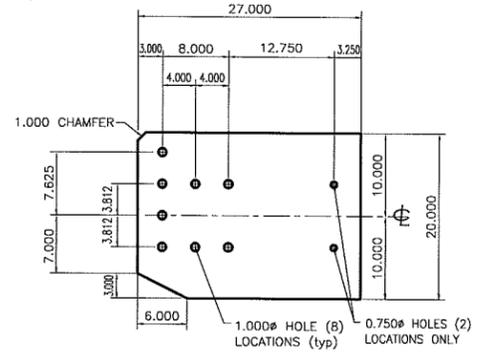
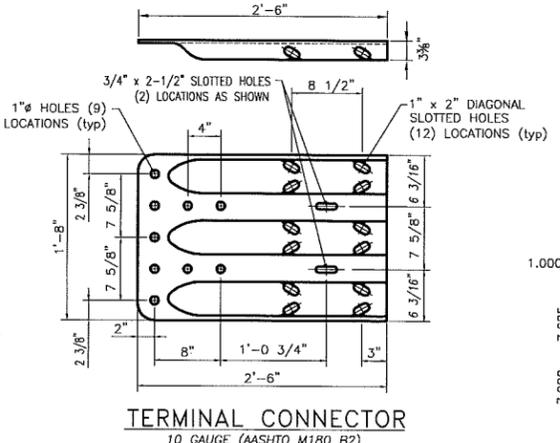
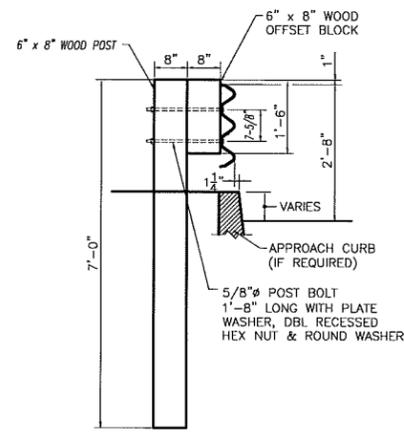


LEADING END (RIGHT) IS SHOWN
DEPARTURE END (LEFT) SIMILAR BUT OPPOSITE HAND

Vermont Agency of Transportation
RECEIVED
ON: **April 28, 2016**
and Checked for
CONFORMANCE
BY: Jennifer Fitch DATE: 05/02/16



Qty	mk	Description	Spec.
4 EA		ITEM 621.72 GUARDRAIL APPROACH SECTION, GALVANIZED, 2 RAIL BOX BEAM	
4	01	W6x25 APPROACH POST - #1 x 8'-0" OAL (GALV)	A709 gr 50
4	02	W6x25 APPROACH POST - #2 x 8'-0" OAL (GALV)	A709 gr 50
4	03	W6x25 APPROACH POST - #3 x 8'-0" OAL (GALV)	A709 gr 50
4	04	W6x25 APPROACH POST - #4 x 8'-0" OAL (GALV)	A709 gr 50
4		UPPER RAIL APPROACH TUBE HSS 8 x 4 x 5/16 x 9'-4.000" w/ 3.500 SLOTS FOR 4" EXP GAP (GALV)	A500 gr B
4		LOWER RAIL APPROACH TUBE HSS 4 x 4 x 5/16 x 9'-4.000" w/ 3.500 SLOTS FOR 4" EXP GAP (GALV)	A500 gr B
4		CONNECTION PLATE PL 0.375" x 20.000" x 27.000" (GALV)	A709 gr 36
2		DEFLECTOR PLATE (RIGHT) PL 0.375 x 4.000 x 13.375 (GALV)	A709 gr 36
2		DEFLECTOR PLATE (LEFT) PL 0.375 x 4.000 x 13.375 (GALV)	A709 gr 36
4		END CAP FOR 8x4 TUBE 0.187 THICK PLATE 8.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
4		END CAP FOR 4x4 TUBE 0.187 THICK PLATE 4.000 x 4.000 w/ WELDED TABS (GALV)	A709 gr 36
4		(ANGLED) SPLICE TUBE (EXPANSION) FOR 8x4 UPPER RAIL HSS 7 x 3 x 3/8 x 1'-11.750" OAL (GALV)	A500 gr B
4		SPLICE TUBE (EXPANSION) FOR 4x4 LOWER RAIL HSS 3 x 3 x 5/16 x 1'-11.750" OAL (GALV)	A500 gr B
32		WOOD POST (WP1) 6 x 8 x 7'-0"	TIMBER
32		WOOD BLOCKOUT (WB1) 6 x 8 x 1'-6"	TIMBER
4		WOOD POST (WP2) 6 x 8 x 7'-0"	TIMBER
4		WOOD BLOCKOUT (WB2) 6 x 8 x 1'-6"	TIMBER
4		WOOD POST (WP3) 6 x 8 x 7'-0"	TIMBER
4		WOOD BLOCKOUT (WB3) 6 x 8 x 1'-2"	TIMBER
4		THRIE FLAT LIP BRIDGE SHOE (MODIFIED) 10 GA. GALV	aashto M180 B2
4		THRIE TRANSITION PANEL 6'-3" / 3'-1 1/2" 10 GA. GALV.	aashto M180 B2
8		THRIE PANEL 12'-6" / 1'-6 3/4" 12 GA. GALV.	aashto M180 A2
92		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 6" LG. (GLV) w/ LOCK NUT & FLAT WASHER	A449
4		ROUND HEAD POST BOLT slot or wrench head - no shoulder 3/4" DIA x 2" LG. (GLV) w/ HEX NUT	A449
8		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-8" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
68		ROUND HEAD POST BOLT - oval shoulder 5/8" DIA x 1'-6" LG. (GALV) w/ DBL RECESS NUT, FLAT WASHER	A307
32		HEX HEAD BOLT 5/8 x 1-3/4" (GALV) w/ FLAT WASHER	A325
128		PANEL SPLICE BOLT 5/8 x 1-1/4" (GALV) w/ DOUBLE RECESSED NUT	A307
76		RECTANGULAR PLATE WASHER 0.187 x 1.750 x 3.000 (GALV)	A709 gr 36
32		SPACER PIPE - GALVANIZED 3/4" SCH. 40 x 1/2" LONG (GLV)	A53 gr B



STEEL POST CHART

No.	L
#1	1'-3.250"
#2	1'-3.000"
#3	1'-2.687"
#4	1'-2.375"

SHOP DRAWING REVIEW

REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

REJECTED REVISE AND RESUBMIT APPROVED AS NOTED

CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DID NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING THEIR WORK WITH THAT OF ALL OTHER TRADES; AND PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.

CLD Consulting Engineers
540 Commercial Street
Rochester, VT 05501
803-888-8223

Job Number: 150223
SBR
Date: 04/29/2015

HIGHWAY SAFETY CORP
GLASTONBURY, CT
860-633-9445

ITEM 621.72 GUARDRAIL APPROACH, GALV 2 RAIL BOX BEAM (S-360B)

TOWN OF IRASBURG, VERMONT
INTERSTATE 91 (PRINCIPAL ARTERIAL) BRIDGE NO. 107 N
ORLEANS COUNTY IM DECK (46)

CERTIFIED FABRICATOR

HSC JOB NO. 2103
SHEET NO. 5 of 5

GENERAL CONTRACTOR: LAFAYETTE
SUB CONTRACTOR: LAFAYETTE

DRAWN: PAR CHECKED: DATE: 04-27-16 SCALE: NONE SIZE: D

Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification A572 gr 50, A709 Gr 50

Welding process Gas Metal Arc Welding (GMAW) Spray Transfer

Manual, semi-automatic, or automatic Semi-Automatic

Position of welding Flat (1F) or Horizontal (2F)

Filler metal specification AWS A5.18

Filler metal classification ER70S-6

Electrode and manufacturer Lincoln Electric Lincoln Weld L-56

Flux and manufacturer N/A

Shielding gas 86% Argon / 14% CO2 Flow rate 39 - 45 CFH

Single or multiple pass Single or Multiple

Single or multiple arc Single

Welding current DCEP

Polarity Reverse - electrode positive

Welding progression Stringers

Root treatment clean base metal

Preheat and interpass temperature base metal up to 3/4" (50°F) ; over 3/4 thru 1-1/2" (150°F) : over 1-1/2" thru 2-1/2" (225°F)

Postweld heat treatment None

Electrode extension 3/4" ± 1/4"

SHOP DRAWING REVIEW

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<small>CLD Consulting Engineers 540 Commercial Street Manchester, NH 03101 603-668-8223</small>	Job Number: <u>150223</u>
	Reviewed by: <u>SRB</u>
	Date: <u>04/29/2016</u>

Vermont Agency of Transportation

RECEIVED

ON: April 28, 2016

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 05/02/16

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
5/16"	1	0.062"	300 A ± 30	29 V ± 2	15 ipm ± 2	
7/16"	1 & 2	0.062"	↓	↓	15 ipm ± 2	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

WPS no. W-VTPEDPOST1

Revision no. 0

Supporting PQR no. W-AWSD1511 (06-22-11)

Project Name Irasburg, VT

Fabricator Highway Safety Corporation

Prepared By: Paul Radice

Date 04-28-16

Project Number IM DECK (46)

Paul A Radice
CWI 98070221
QC1 EXP. 7/1/2016

Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

SHOP DRAWING REVIEW	
<input checked="" type="checkbox"/>	REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.
<input type="checkbox"/>	REJECTED
<input type="checkbox"/>	REVISE AND RESUBMIT
<input type="checkbox"/>	APPROVED AS NOTED
CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DID NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING THEIR WORK WITH THAT OF ALL OTHER TRADES; AND PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.	
 CLD Consulting Engineers 540 Commercial Street Manchester, NH 03101 603-888-8223	Job Number: <u>150223</u> Reviewed by: <u>GRB</u> Date: <u>04/29/2015</u>

Material specification ASTM A500 gr B

Welding process Gas Metal Arc Welding (GMAW)

Manual, semi-automatic, or automatic Semi-Automatic

Position of welding Flat (1F)

Filler metal specification AWS A5.18

Filler metal classification ER70S-6

Electrode and manufacturer Lincoln Electric Lincoln Weld L-56

Flux and manufacturer N/A

Shielding gas 86% Argon / 14% CO2 Flow rate 39 - 45 CFH

Single or multiple pass Single

Single or multiple arc Single

Welding current DCEP

Polarity Reverse - electrode positive

Welding progression Stringers

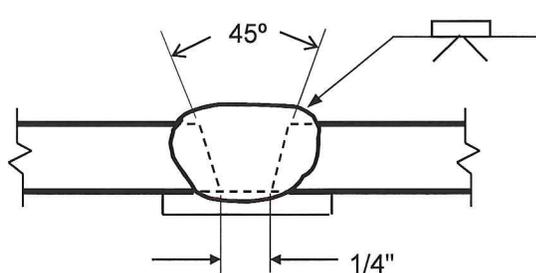
Root treatment clean base metal

Preheat and interpass temperature base metal up to 3/4" (50°F)

Postweld heat treatment None

Electrode extension 3/4" ± 1/4"

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
	1	0.063"	300 A ± 30	29 V ± 2	15 ipm ± 2	B-U2a-GF 

Vermont Agency of Transportation
RECEIVED
 ON: April 28, 2016
 and Checked for
CONFORMANCE
 BY: Jennifer Fitch DATE: 05/02/16

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

WPS no. W-VGwBCK

Revision no. 0

Supporting PQR no. W-AWSD1511 (06-22-11)

Project Name Irasburg, VT

Fabricator Highway Safety Corporation

Prepared By: Paul Radice

Date 04-28-16

Project Number IM DECK (46)

Paul A Radice
 CWI 98070221
 EC1 EXP. 7/11/2016