MILLER CONSTRUCTION, INC.

P.O. BOX 86 ASCUTNEY BLVD WINDSOR, VERMONT 05089-0086
TELEPHONE (802) 674-5525 / FAX (802) 674-5245

TRANSMITTAL

TO: Kristin Higgins Vermont Agency of Transportation	DATE	PROJECT NO.
	7/10/2013	Jamaica ER-BRF 015-1 (23)

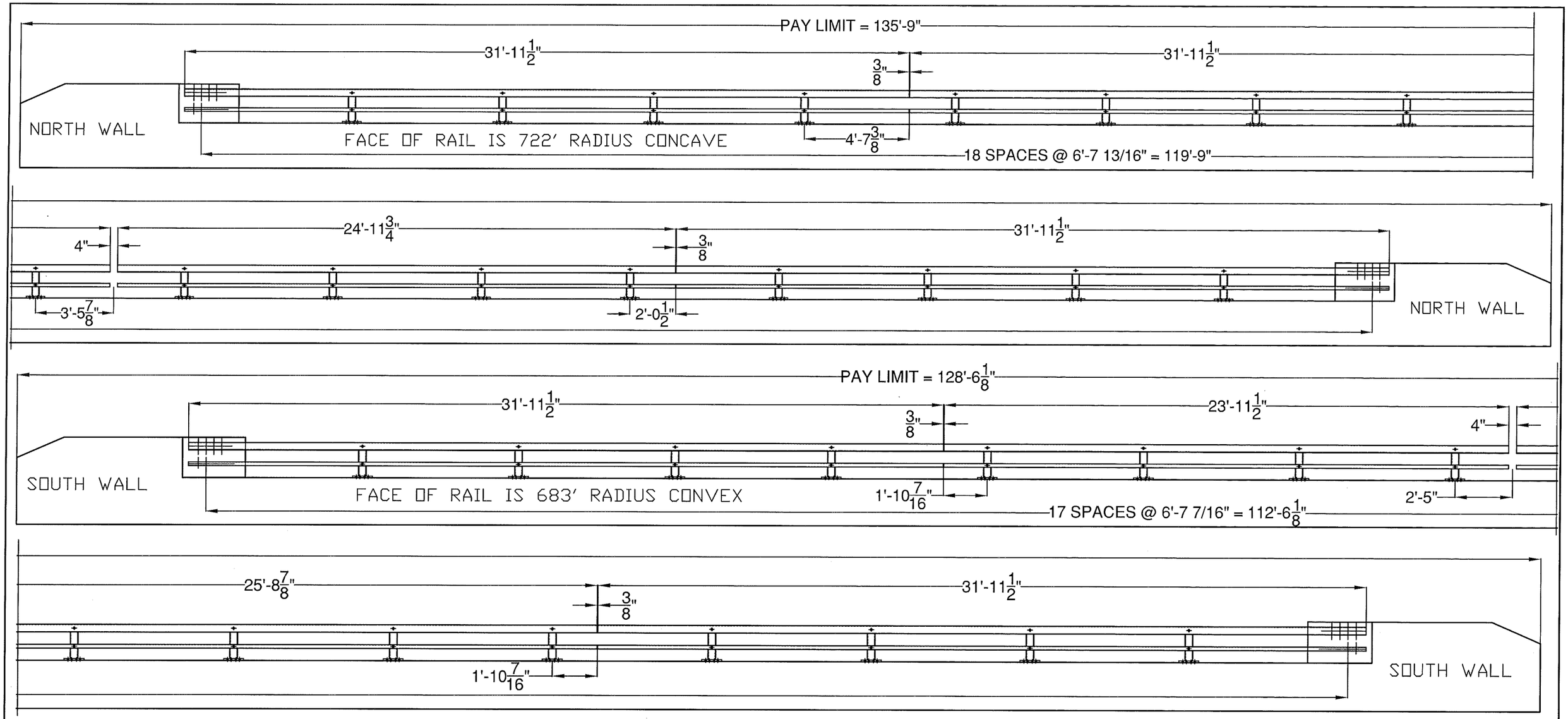
XX WE ENCLOSE THE FOLLOWING: _____ UNDER SEPARATE COVER WE ARE SENDING THE FOLLOWING

COPIES	NUMBER	DESCRIPTION	CODE
1		Rail Shop Drawings - Revised	H

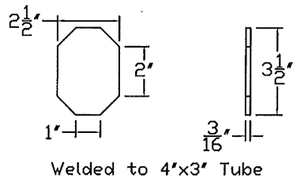
CODE:

A FOR INITIAL APPROVAL
B FOR FINAL APPROVAL
C APPROVED AS NOTED-RESUBMISSION REQUIRED
D APPROVED AS NOTED-RESUBMISSION NOT REQUIRED
E DISAPPROVED-RESUBMIT
F QUOTATION REQUESTED
G APPROVED
H FOR APPROVAL
I AS REQUESTED OR REQUIRED
J FOR USE IN ERECTION
K LETTER FOLLOWS
L FOR FIELD CHECK
M FOR YOUR USE

BY: Paul J. Miller



NOTE: NORTH RAIL TO BE SHOP CURVED W/ 722' CONCAVE RADIUS. SOUTH RAIL TO BE SHOP CURVED W/ 683' CONVEX RADIUS.



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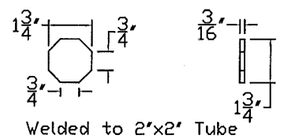

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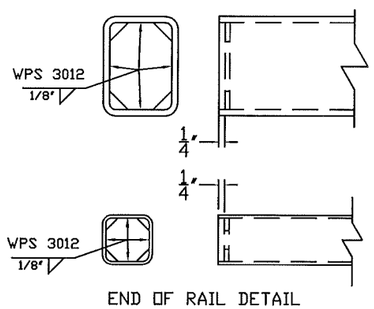


END OF RAIL DETAIL

ITEM #: 525.45

FR Lafayette - JAMAICA, EM13-016

SHEET 1 OF 3

APPROVED BY:

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

REV	NO.	DATE	DESCRIPTION	BY
	1	7/1/13	REVISE PER 6/28/13 EMAIL	E.P.

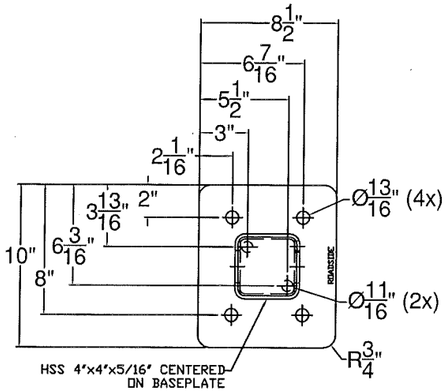
REV	NO.	DATE	DESCRIPTION	BY

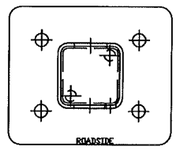
ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

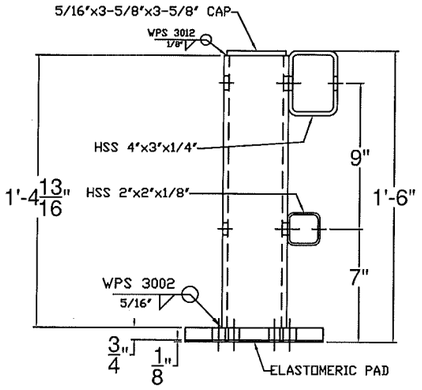
AISC CERTIFIED FABRICATOR

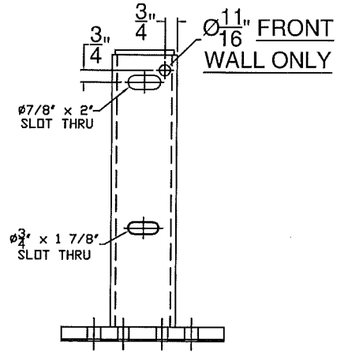
DRAWN	E.P.	5/30/13
CHECKED	D.L.	5/31/13
APPROVED	.	.
SCALE	SCHEMATIC	

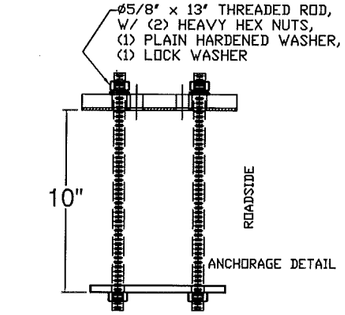
DRAWING NO. FR LAFAYETTE - JAMAICA

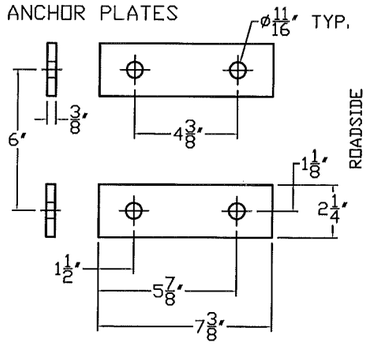








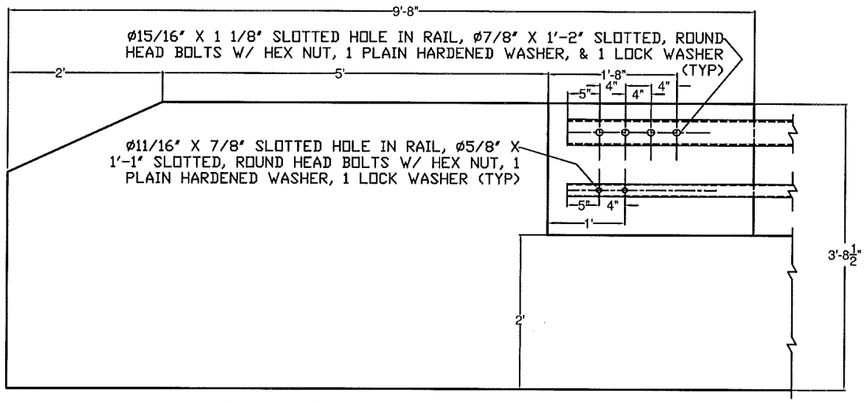




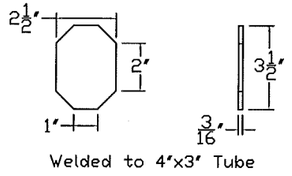
BILL OF MATERIAL		
QTY	DESCRIPTION	ASTM DESIGNATION
33	TWO RAIL POST & BASEPLATE ASSEMBLY	A572 Gr. 50 CVN
5	4" X 3" X 1/4" RAIL @ 31'-11 1/2"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 24'-11 3/4"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 23'-11 1/2"	A500 Gr. B
1	4" X 3" X 1/4" RAIL @ 25'-8 7/8"	A500 Gr. B
5	2" X 2" X 1/8" RAIL @ 31'-11 1/2"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 24'-11 3/4"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 23'-11 1/2"	A500 Gr. B
1	2" X 2" X 1/8" RAIL @ 25'-8 7/8"	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., & F.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



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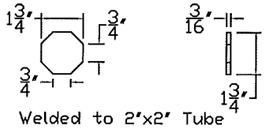

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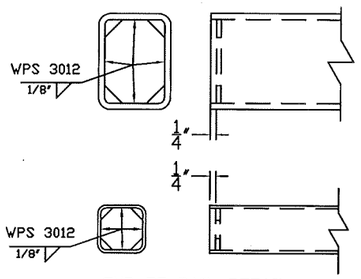


END OF RAIL DETAIL

ITEM #: 525.45

FR Lafayette - JAMAICA, EM13-016

SHEET 2 OF 3

APPROVED BY:

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					V				

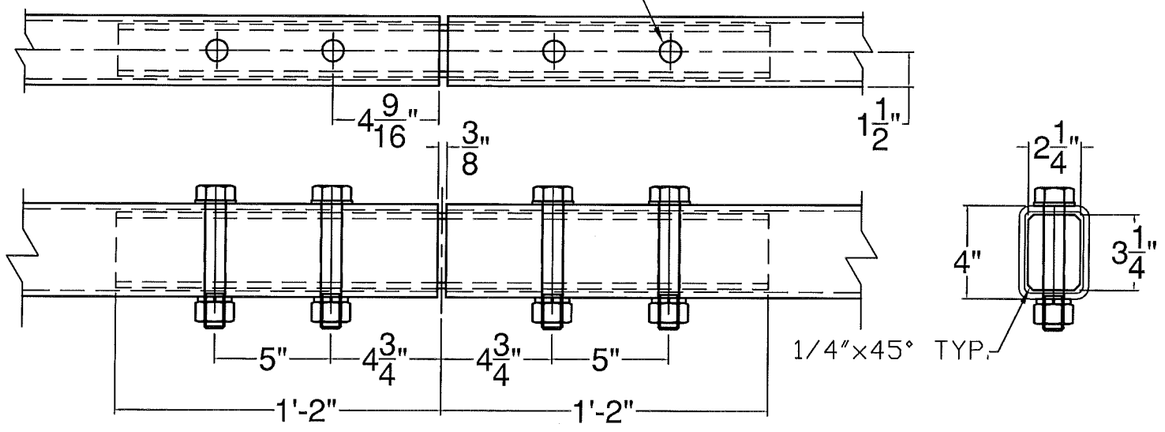
ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail:dlong@elderlee.com
Tel:315-789-6670 Fax:315-789-6615

CERTIFIED FABRICATOR

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

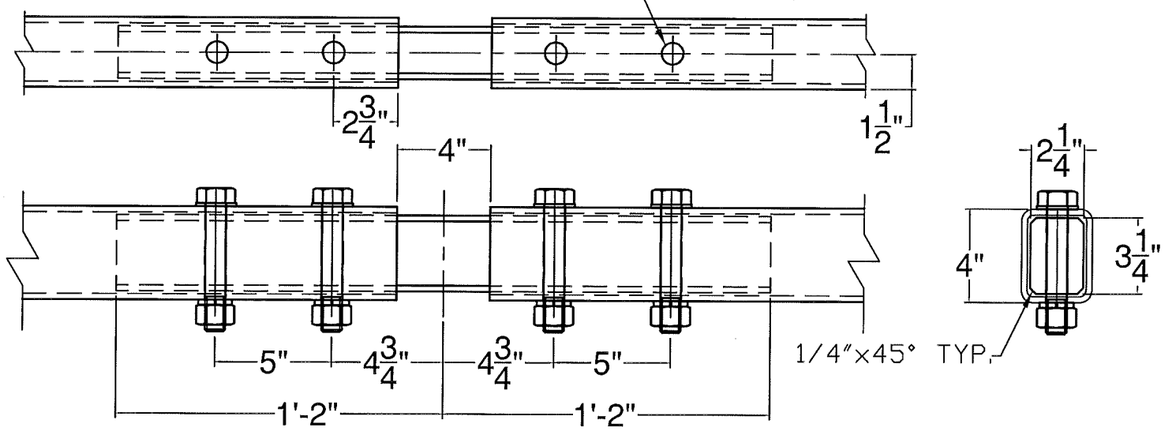
ø15/16" THRU TUBE & SPLICE BAR,
ø7/8"X5 1/2" HEX BOLT & NUT,
W/ (1) PLAIN HARDENED WASHER &
(1) LOCK WASHER (4 PLACES)

TOP RAIL FIXED SPLICE DETAIL



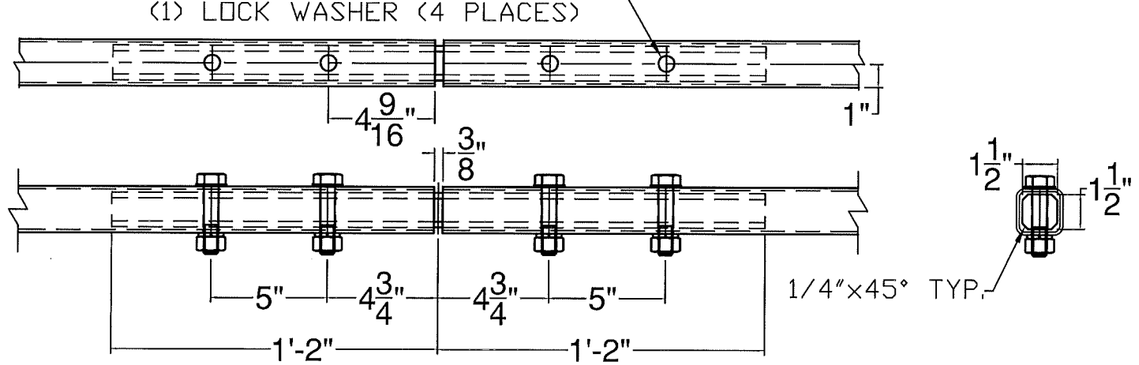
ø15/16" THRU TUBE & SPLICE BAR,
ø7/8"X5 1/2" HEX BOLT & NUT,
W/ (1) PLAIN HARDENED WASHER &
(1) LOCK WASHER (4 PLACES)

TOP RAIL EXPANSION SPLICE DETAIL



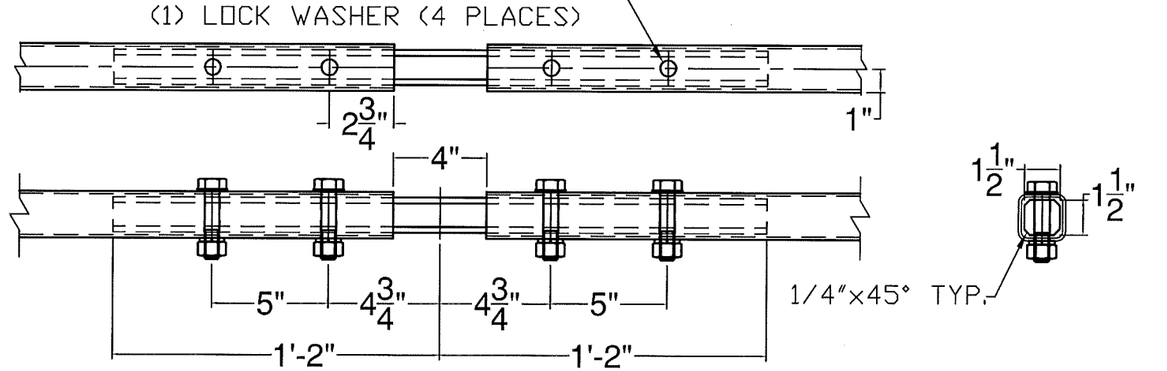
ø11/16" THRU TUBE & SPLICE BAR,
ø5/8"X3" HEX BOLT & NUT,
W/ (1) PLAIN HARDENED WASHER &
(1) LOCK WASHER (4 PLACES)

BOTTOM RAIL FIXED SPLICE DETAIL



ø11/16" THRU TUBE & SPLICE BAR,
ø5/8"X3" HEX BOLT & NUT,
W/ (1) PLAIN HARDENED WASHER &
(1) LOCK WASHER (4 PLACES)

BOTTOM RAIL EXPANSION SPLICE DETAIL



ITEM #: 525.45

FR Lafayette - JAMAICA, EM13-016

SHEET 3 OF 3

APPROVED BY:

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

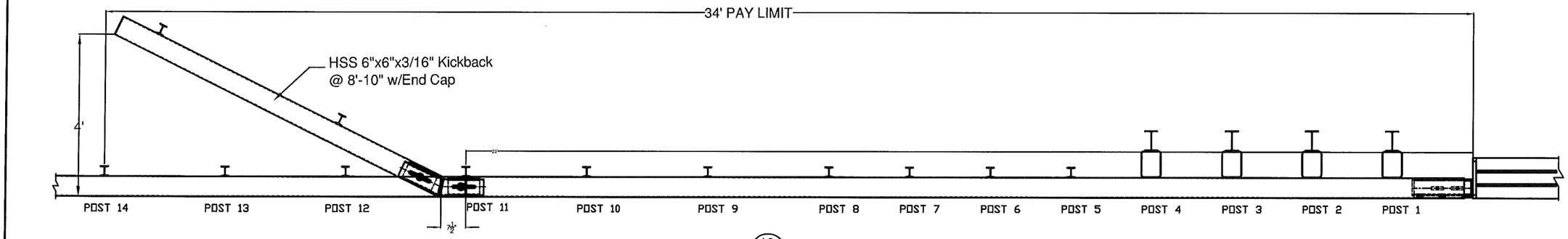
REV	NO.	DATE	DESCRIPTION	BY
	1	7/1/13	REVISE PER 6/28/13 EMAIL	E.P.

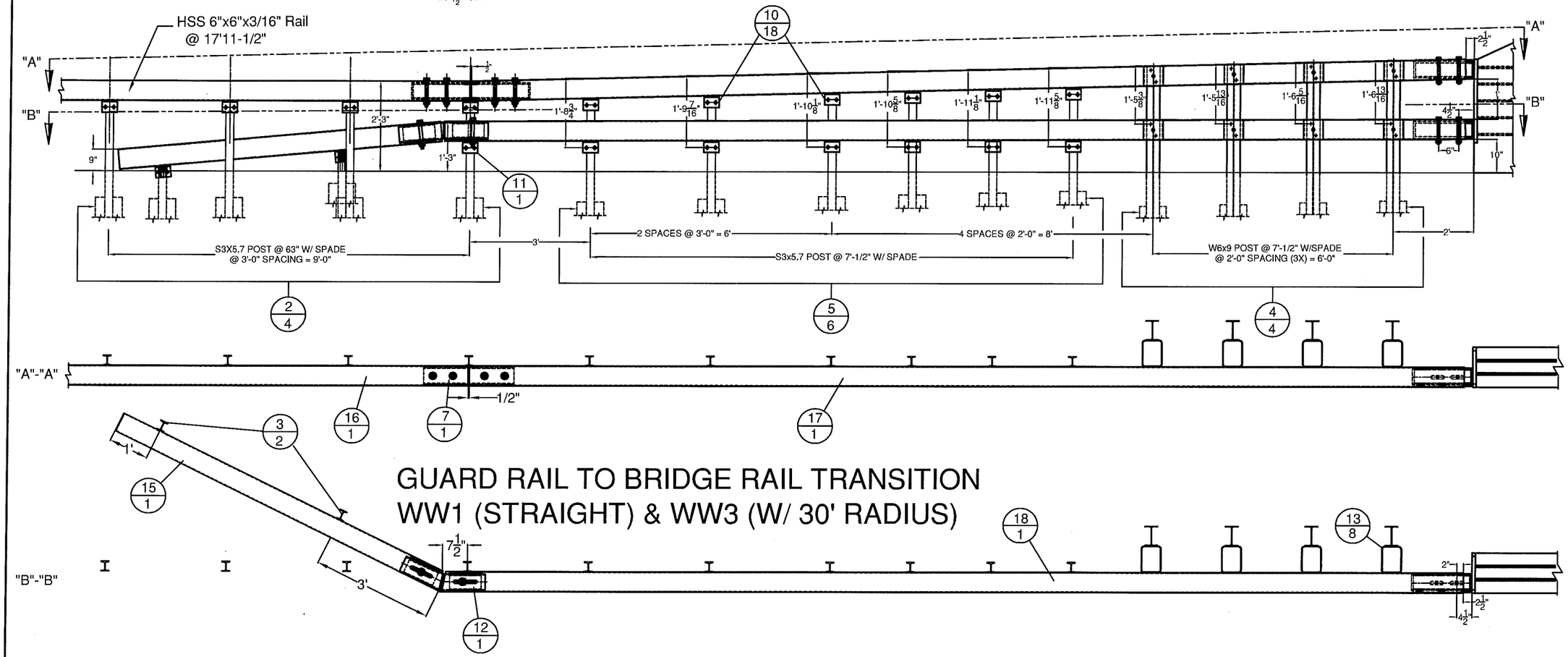
REV	NO.	DATE	DESCRIPTION	BY

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

CERTIFIED FABRICATOR

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





GUARD RAIL TO BRIDGE RAIL TRANSITION
WW1 (STRAIGHT) & WW3 (W/ 30' RADIUS)

RAIL BENDING PROCEDURE:
RADII GREATER THAN 16' TO BE CURVED ON A TUBE BENDING MACHINE, RADII LESS THAN 16' TO BE "PIE CUT" AND WELDED.

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 1 OF 8

APPROVED BY:

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 E V	NO.	DATE	DESCRIPTION	BY
	1	7/8/13	REVISED PER 6/28/13 MARK UP	E.P.

R E V	NO.	DATE	DESCRIPTION	BY

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

CERTIFIED FABRICATOR

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

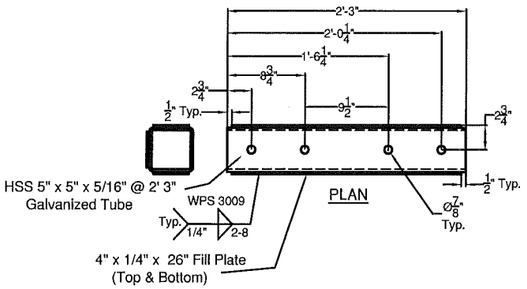
BILL OF MATERIALS, (EACH) WW1 & WW3 CORNERS

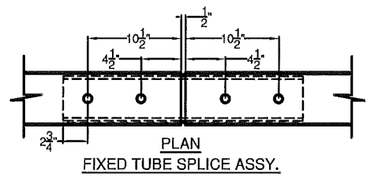
ITEM #	QTY.	DESCRIPTION	MATERIAL (ASTM)
2	3	3' I-POST, PUNCH 8', W/SPD @ 63' LG	A572 Gr. 50
2A	1	3' I-POST, PUNCH 8', & 20' W/SPD @ 63' LG	A572 Gr. 50
3	2	3' I-END POST W/SPD @ 3'-8' LG	A572 Gr. 50
4	4	W6X9 POST @ 7'-1/2' W/SPD & 5/8" HOLES (SPACING VARIES)	A572 Gr. 50
5	6	3' I-POST, HOLES 8' & VARIES', w/8X31 1/2' SPADE @7'-1/2'	A572 Gr. 50
7	1	HSS 5X5 TUBE SPLICE @27' LG w/ 1/4' SHIMS	A500 Gr. B / A572 Gr 50
10	18	REG BB SHELF ANGLES @ 4-1/2'	A572 Gr. 50
11	1	DWY BB SHELF ANGLES @ 4-1/2'	A572 Gr. 50
12	1	HSS 5X5 DBL BEND TUBE SPL @ 28' LG	A500 Gr. B / A572 Gr 50
13	8	HSS 6X8' TRANS. TUBE B/O @ 6' LG	A500 Gr. B
15	1	HSS 6X6' BB @ 8'-10" KICKBACK, w/ CAP	A500 Gr. B / A36
16	0.5	HSS 6X6' BB @ 17'-11 1/2', DRILL 3' CC	A500 Gr. B
17	1	HSS 6X6' BB TOP TRANS @ 24'-9 1/4' LG	A500 Gr. B
18	1	HSS 6X6' BB BTM TRANS @ 25'-5 3/16' LG	A500 Gr. B
19	17	3/8' X 7 1/2' BOLT, NUT, & 2 FW	A307, A563, F436
20	19	1/2' x 1-1/2' BOLT, NUT, & FW	A307, A563, F436
21	16	9/16' x 1-1/2' BOLT, NUT, 2 FW & LW	A307, A563, F436, ASME B18.21.1
23	8	3/4' X 7-1/2' BOLT, NUT, 2 FW & LW	A325, A563, F436, ASME B18.21.1
24	8	7/8' X 7 1/2' CARR BOLT, NUT, FW & LW	A307, A563, F436, ASME B18.21.1
25	2	3/4' X 7 1/2' BOLT, NUT, 2 FW, & LW	A325, A563, F436, ASME B18.21.1
26	1	PARAPET WALL CONNECTION	A572 Gr.50, A615 Gr.60, A500 Gr. B

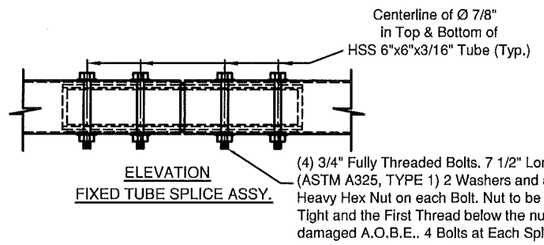
NOTE: ITEMS 16, 17 & 18 TO HAVE 30' RADIUS FOR WINGWALL #3

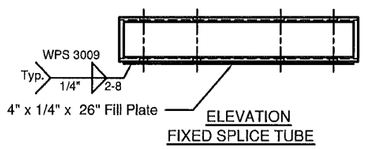
HARDWARE NOTES

ITEM #	FUNCTION
19	BOLT RAIL TO SHELF ANGLE (ITEM #10)
20	BOLT SHELF ANGLE (ITEM #'S 10 & 11) TO POST
21	BOLT BLOCK-OUTS (ITEM # 13) TO HEAVY POST (ITEM # 4)
23	(4) PER SPLICE TUBING (ITEM # 7), & (4) PER PARAPET WALL CONNECTION (ITEM # 26)
24	BOLT RAIL (ITEMS #'S 17, & 18 TO BLOCK-OUTS (ITEM # 13) [WHERE FASTENED]
25	BOLT DOUBLE BEND SPLICE TUBE (ITEM #12) TO RAIL (ITEM #18) & KICKBACK (ITEM #15) & ITEM #11)









(ITEM # 7)

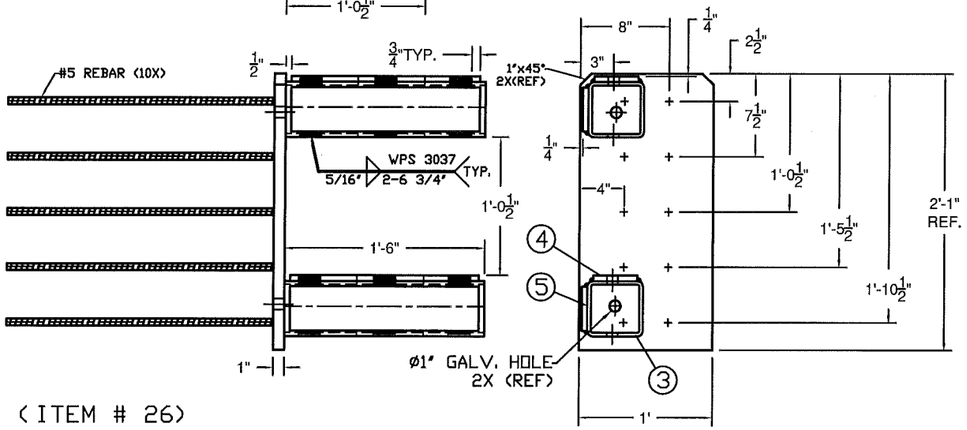
SPLICE TUBE - FIXED

BILL OF MATERIALS

ITEM #	QTY	DESCRIPTION	ASTM #
1	1	DBL TUBE WALL PLATE - 1' X 12' x 25'	ASTM A572 Gr. 50
2	10	RAW, ø5/8' REBAR @ 36'	A615, Gr. 60
3	2	5' X 5' X 5/16' TUBE W/ SLOTS @ 18'	ASTM A500 Gr. B
4	2	SHIM PL 1/2' X 4' X 17' W/ SLOTS	ASTM A36(ASTM A709 Gr. 36)CVN
5	2	SHIM PL 1/2' X 4' X 17' (W/O SLOTS)	ASTM A36(ASTM A709 Gr. 36)CVN

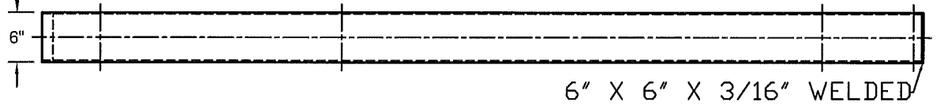
PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE SPLICE TUBES AND FILL PLATES

'Left Shown'
Wing Wall 1 = 'Left'
Wing Wall 2 = 'Right'
Wing Wall 3 = 'Right'
Wing Wall 4 = 'Left'

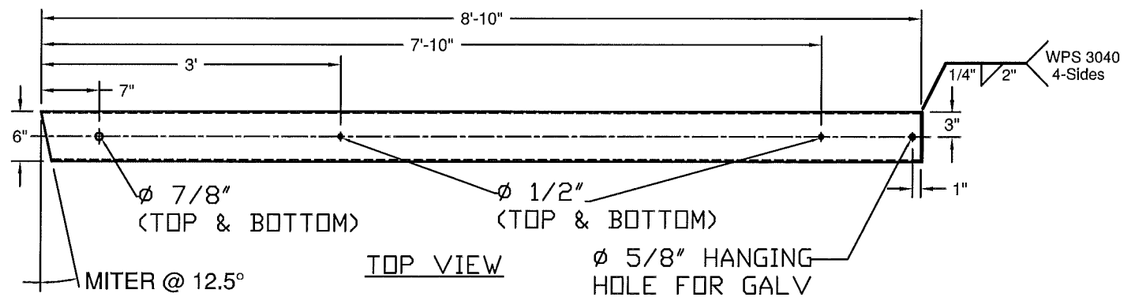


(ITEM # 26)

BACK VIEW



6" X 6" X 3/16" WELDED
END CAP, W/CUT CORNERS



TOP VIEW

(ITEM # 15)

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 2 OF 8

APPROVED BY:

BRIDGE RAIL DETAILS SHEET

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

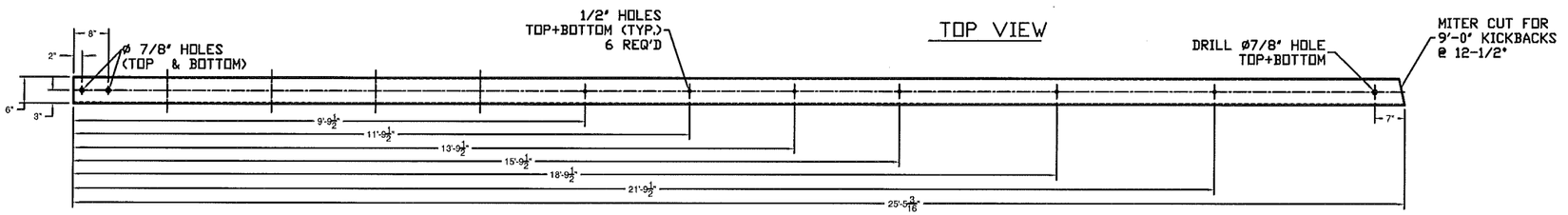
TOWN OF JAMAICA, WINDHAM COUNTY, VT RTE 30 (MINOR ARTERIAL), BRIDGE NO : 30

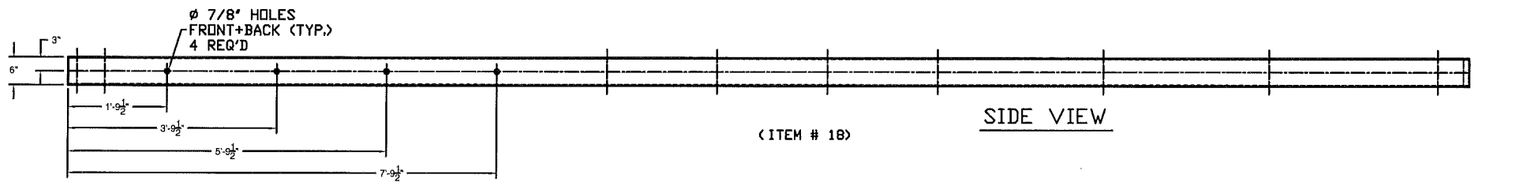
R E V	NO.	DATE	DESCRIPTION	BY	R E V	NO.	DATE	DESCRIPTION	BY
	1	7/8/13	REVISED PER 6/28/13 MARK UP	E.P.					

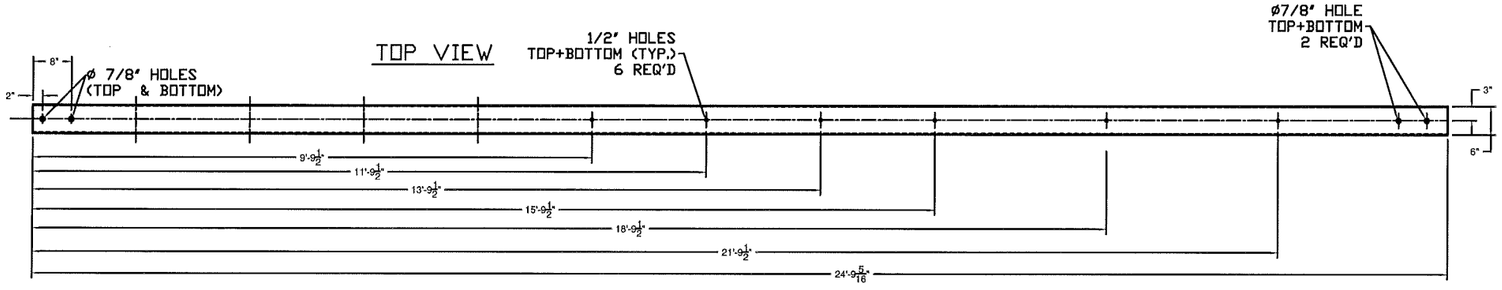
ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
E-Mail: dlong@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

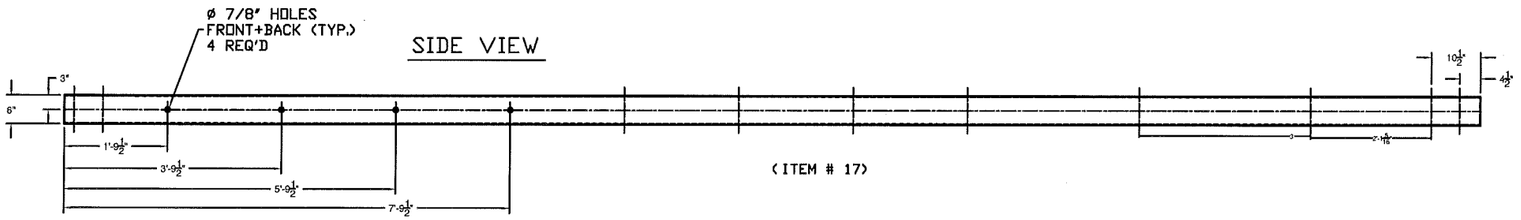
CERTIFIED FABRICATOR

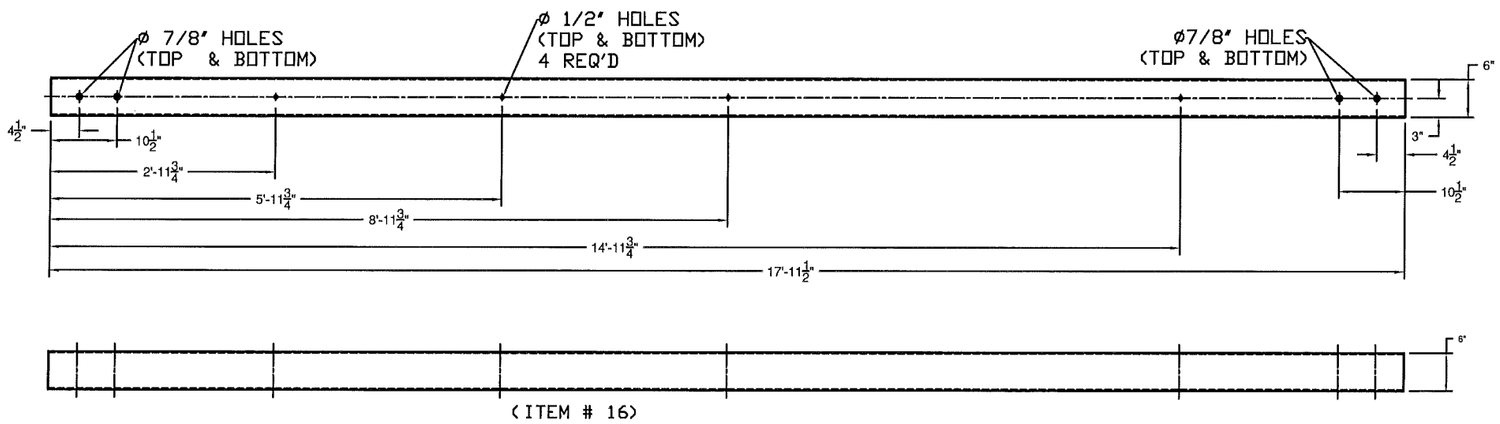
DRAWN	E.P.	5/30/13
CHECKED	D.L.	5/31/13
APPROVED	.	.
SCALE	SCHEMATIC	
DRAWING NO.	FR LAFAYETTE - JAMAICA	

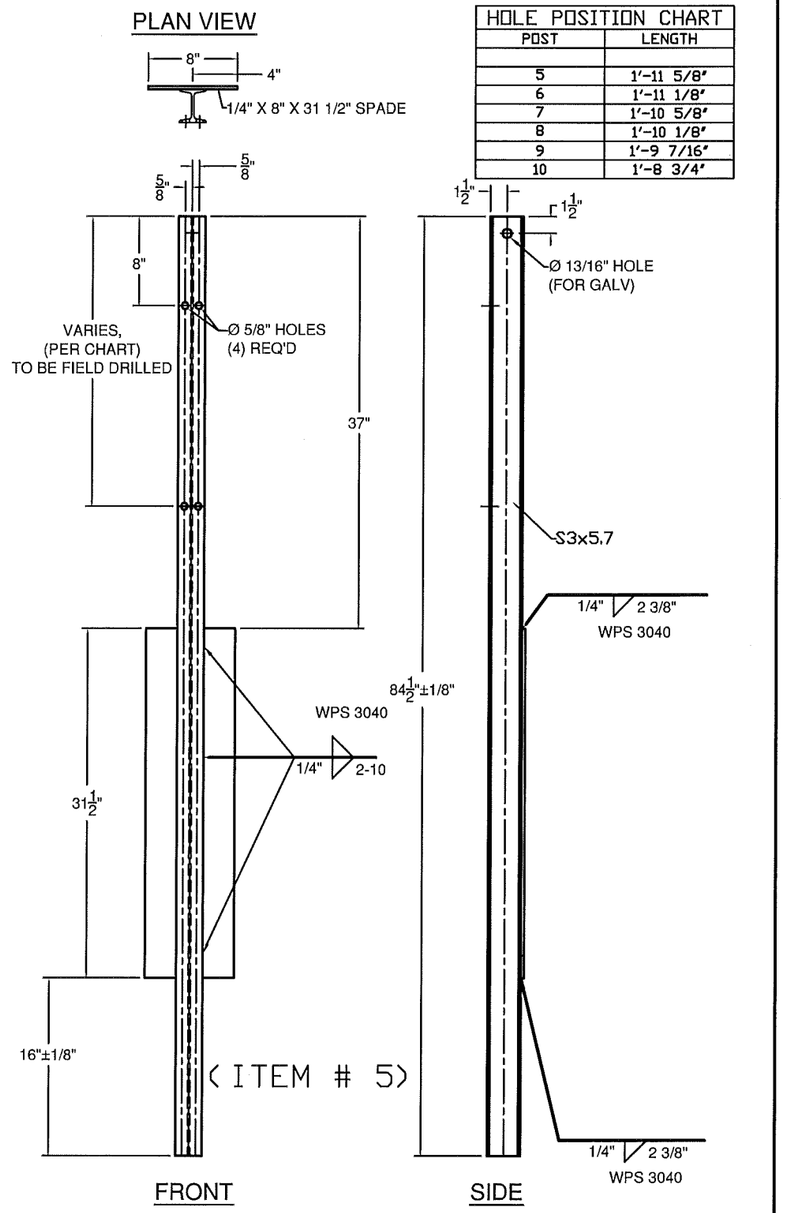












HOLE POSITION CHART	
POST	LENGTH
5	1'-11 5/8"
6	1'-11 1/8"
7	1'-10 5/8"
8	1'-10 1/8"
9	1'-9 7/16"
10	1'-8 3/4"

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 3 OF 8

APPROVED BY:

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

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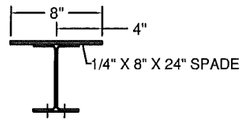
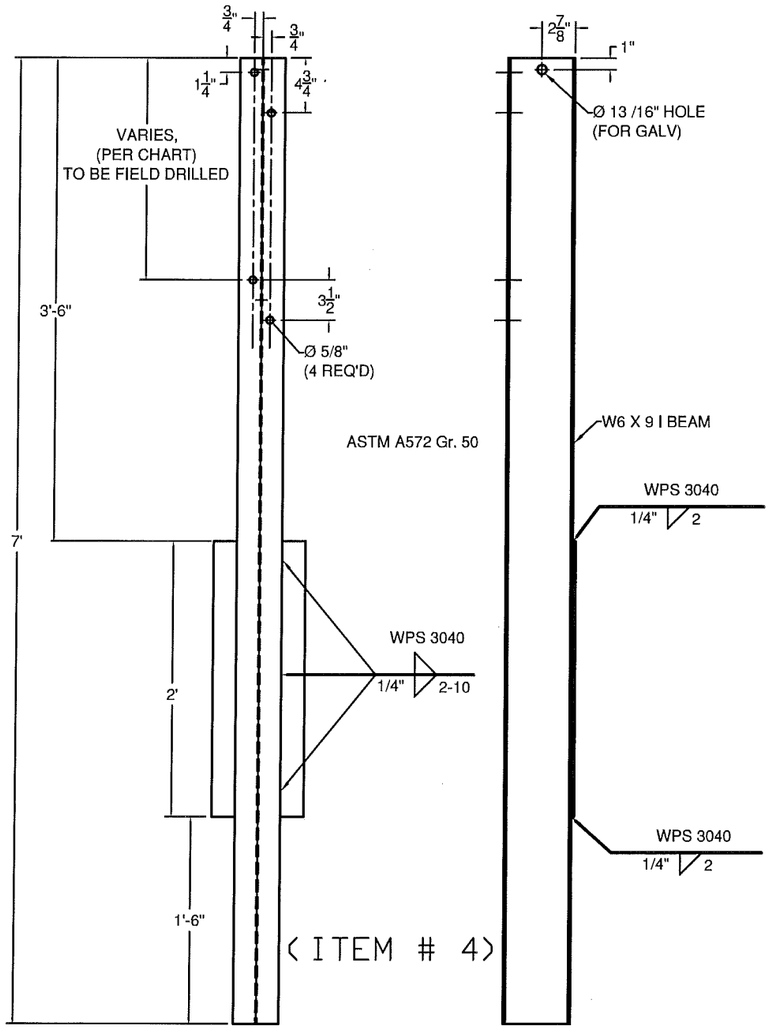
DRAWING NO.	FR LAFAYETTE - JAMAICA	

PLAN VIEW

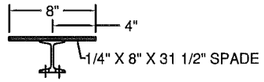


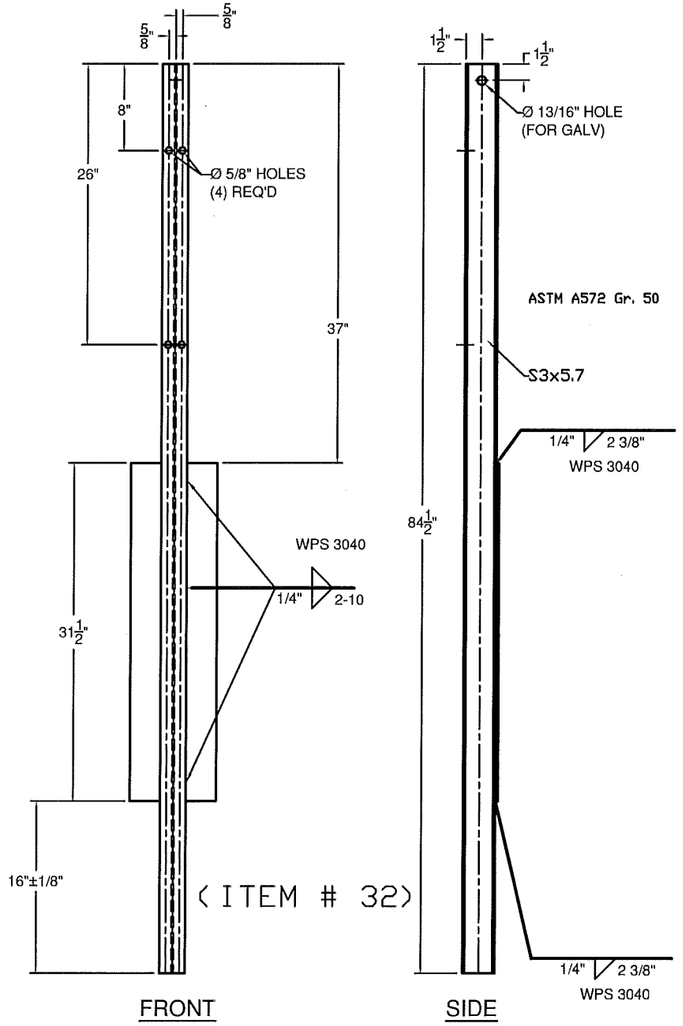
HOLE POSITION CHART	
POST	LENGTH
1	1'-6 13/16"
2	1'-6 5/16"
3	1'-5 13/16"
4	1'-5 5/16"



FRONT SIDE

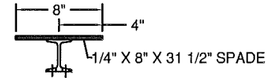
PLAN VIEW



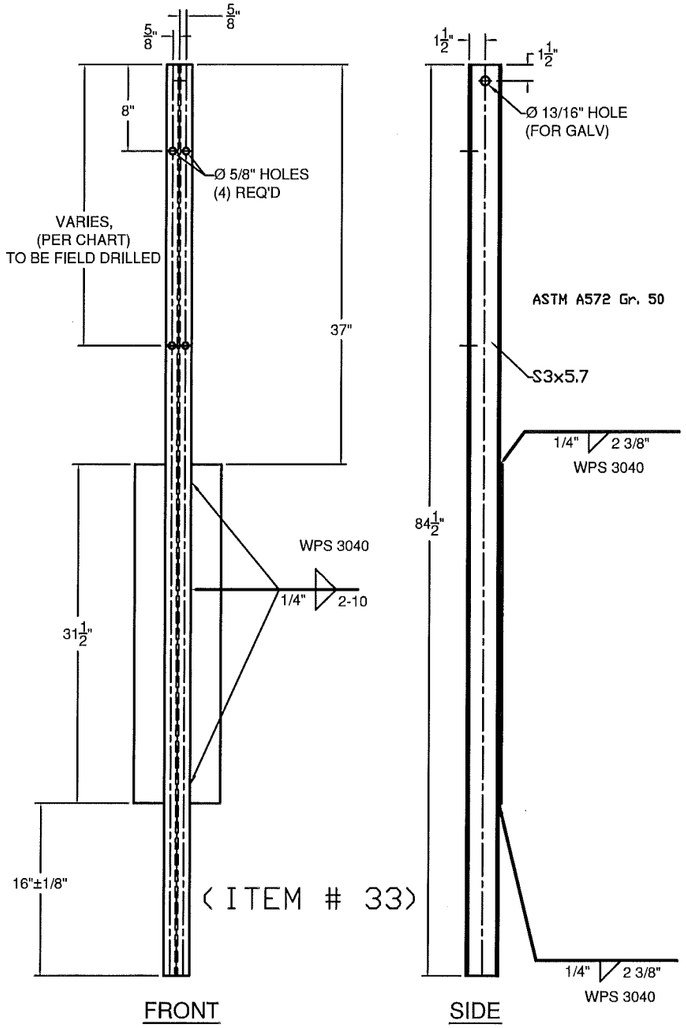


FRONT SIDE

PLAN VIEW



HOLE POSITION CHART	
POST	LENGTH
9	2'-0 15/16"
10	1'-11 11/16"
11	1'-10 7/16"
12	1'-9 3/16"



FRONT SIDE

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 4 OF 8

APPROVED BY:

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

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Tel: 315-789-6670 Fax: 315-789-6615

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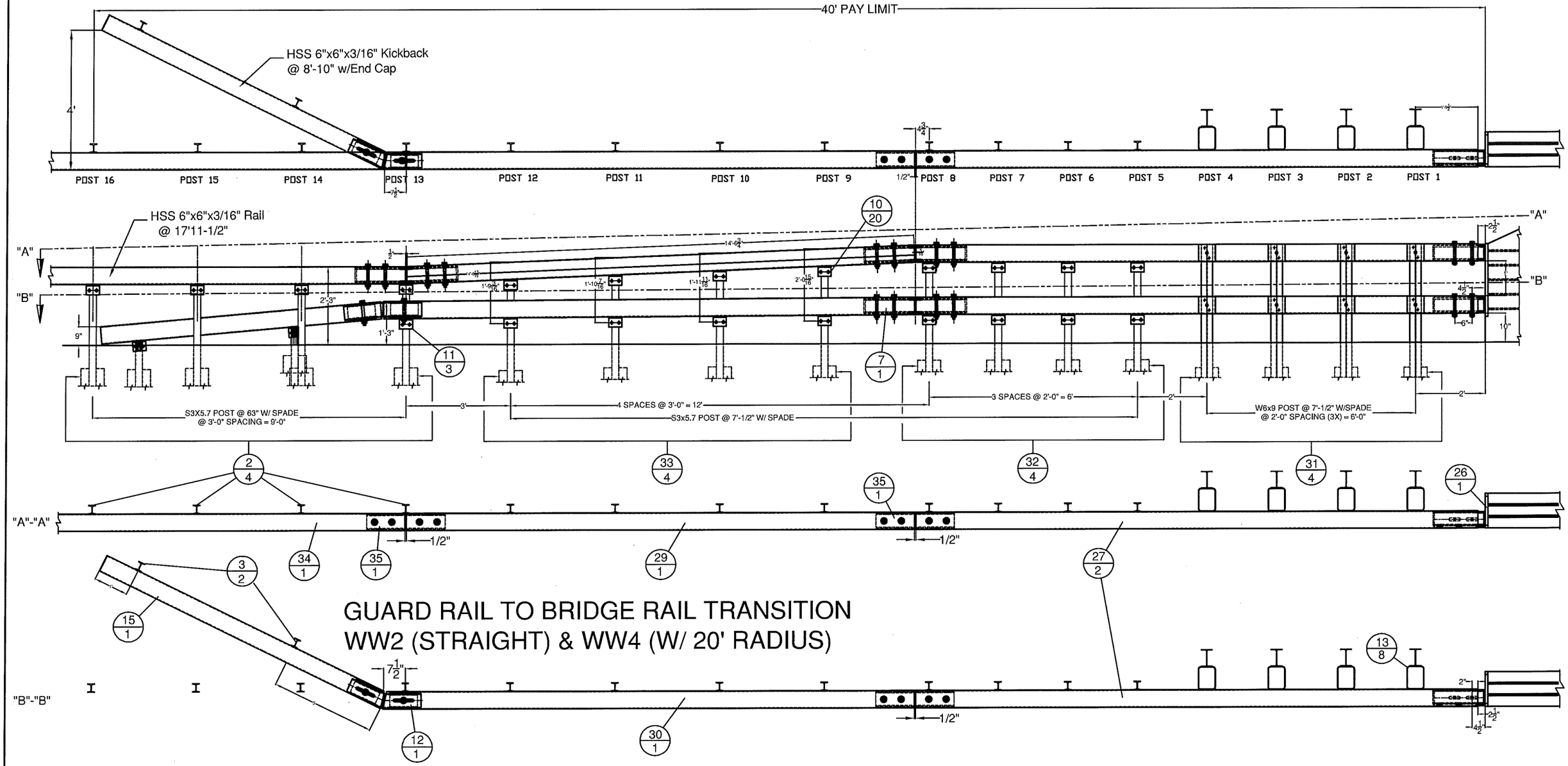
DRAWING NO.	FR LAFAYETTE - JAMAICA	



GUARD RAIL TO BRIDGE RAIL TRANSITION
WW2 (STRAIGHT) & WW4 (W/ 20' RADIUS)

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 5 OF 8

APPROVED BY:

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

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SCALE	SCHEMATIC	
DRAWING NO.	FR LAFAYETTE - JAMAICA	

BILL OF MATERIALS, (EACH) WW2 & WW4 CORNERS

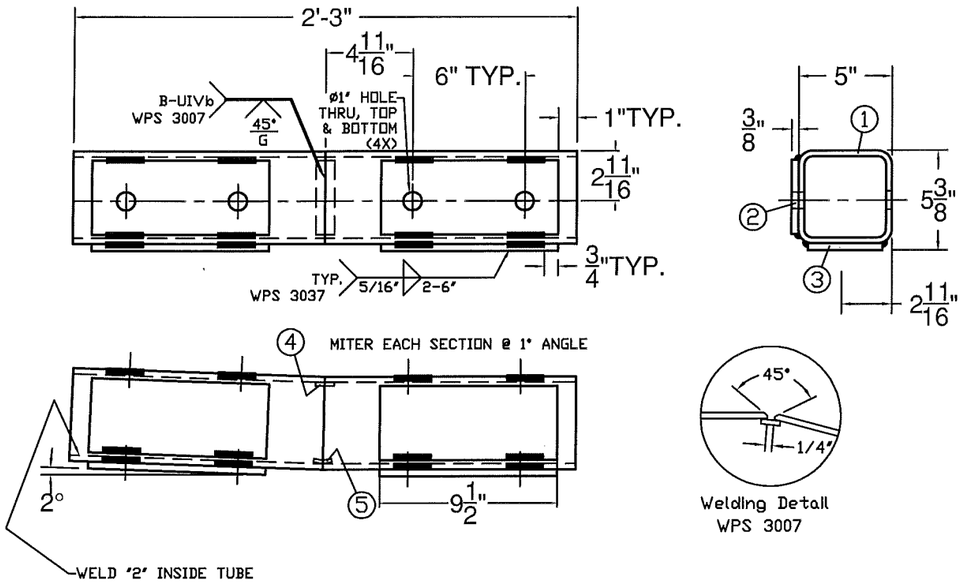
ITEM #	QTY.	DESCRIPTION	MATERIAL (ASTM)
2	4	3" I-POST, PUNCH 8", & 20" W/SPD @ 63" LG	A572 Gr. 50
3	2	3" I-END POST W/SPD @ 3'-8" LG	A572 Gr. 50
7	1	HSS 5X5 TUBE SPLICE @27" LG W/ 1/4" SHIMS	A500 Gr. B / A572 Gr 50
10	20	REG BB SHELF ANGLES @ 4-1/2"	A572 Gr. 50
11	3	DWY BB SHELF ANGLES @ 4-1/2"	A572 Gr. 50
12	1	HSS 5X5 DBL BEND TUBE SPL @ 28" LG	A500 Gr. B / A572 Gr 50
13	8	HSS 6X8" TRANS. TUBE B/O @ 6" LG	A500 Gr. B
15	1	HSS 6X6" BB @ 9'-0" KICKBACK, W/ CAP	A500 Gr. B / A36
19	19	3/8" X 7 1/2" BOLT, NUT, & 2 FW	A307, A563, F436
20	19	1/2" x 1-1/2" BOLT, NUT, & FW	A307, A563, F436
21	16	9/16" x 1-1/2" BOLT, NUT, 2 FW & LW	A307, A563, F436, ASME B18.21.1
23	8	3/4" X 7-1/2" BOLT, NUT, 2 FW & LW	A325, A563, F436, ASME B18.21.1
24	8	7/8" X 7-1/2" CARR BOLT, NUT, FW & LW	A307, A563, F436, ASME B18.21.1
25	2	3/4" X 7-1/2" BOLT, NUT, 2 FW, & LW	A325, A563, F436, ASME B18.21.1
26	1	PARAPET WALL CONNECTION	A572 Gr.50, A615 Gr.60, A500 Gr. B
27	2	HSS 6X6" BB EXT. RAIL @ 16'-2 1/16"	A500 Gr. B
29	1	HSS 6X6" BB TOP TRANS @ 14'-6 3/4" LG	A500 Gr. B
30	1	HSS 6X6" BB TOP TRANS @ 15'-2 11/16" LG	A500 Gr. B
31	4	W6X9 POST @ 7'-1/2" W/SPD & 5/8" HOLES	A572 Gr. 50
32	4	3" I-POST, PUNCH 8" & 26", W/8X31 1/2" SPADE @7'-1/2"	A572 Gr. 50
33	4	3" I-POST, PUNCH 8" & VARIES", W/8X31 1/2" SPADE @7'-1/2"	A572 Gr. 50
34	0.5	HSS 6X6" BB @ 17'-11 1/2", DRILL 3" CC	A500 Gr. B
35	2	HSS 5X5 2° BEND TUBE SPL @ 27" LG	PER BOM

BILL OF MATERIALS (ITEM # 35)

ITEM #	QTY	DESCRIPTION	ASTM
1	1	5x5x5/16" TUBE @ 27"	A500 Gr. B
2	2	SHIM PL 3/8x4 @ 9 1/2" W/ HOLES	A572 Gr. 50
3	2	SHIM PL 3/8x4 @ 9 1/2"	A572 Gr. 50
4	3	IN-PR BACKER, 3/16"x1"x4"	A36
5	1	FORMED BACKER PLATE 3/16"x1"x4"	A36

NOTE: REQUIRES ONE AS SHOWN, ONE WITH BEND IN OPPOSITE DIRECTION

NOTE: PART IS SYMETRICAL

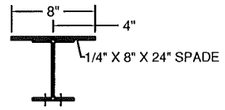


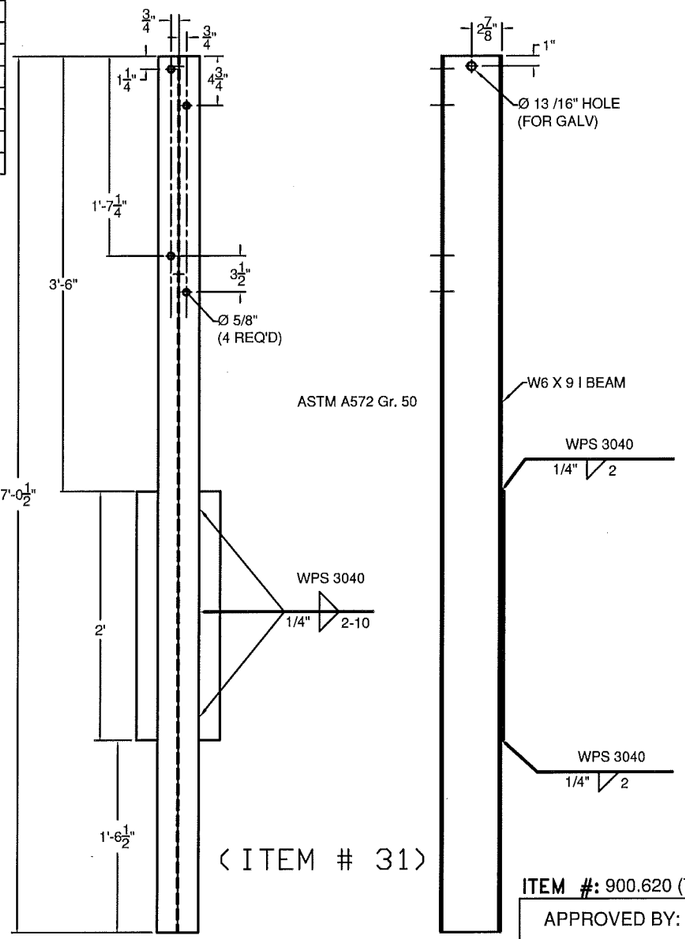
Welding Detail
WPS 3007

HARDWARE NOTES

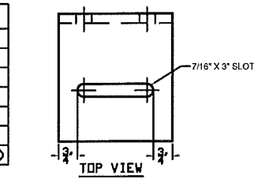
ITEM #	FUNCTION
19	BOLT RAIL TO SHELF ANGLE (ITEM #10)
20	BOLT SHELF ANGLE (ITEM #'S 10 & 11) TO POST
21	BOLT BLOCK-OUTS (ITEM # 13) TO HEAVY POST (ITEM # 31)
23	(4) PER SPLICE TUBING (ITEM # 7, & 35), & (4) PER PARAPET WALL CONNECTION (ITEM # 26)
24	BOLT RAIL (ITEMS # 27, TO BLOCK-OUTS (ITEM # 13)
25	BOLT DOUBLE BEND SPLICE TUBE (ITEM #12) TO RAIL (ITEM #30) & KICKBACK (ITEM #15) & ITEM #11)

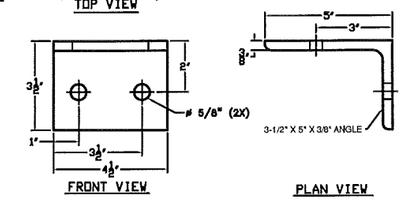
PLAN VIEW



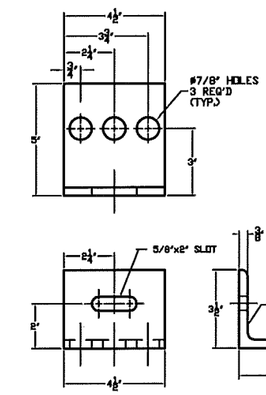


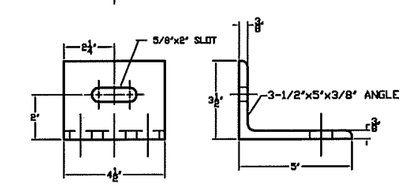
(ITEM # 31)



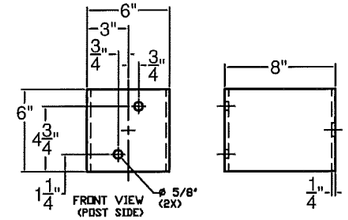


(ITEM # 10)





(ITEM # 11)



(ITEM # 13)

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

SHEET 6 OF 8

APPROVED BY:

BRIDGE RAIL DETAILS SHEET

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

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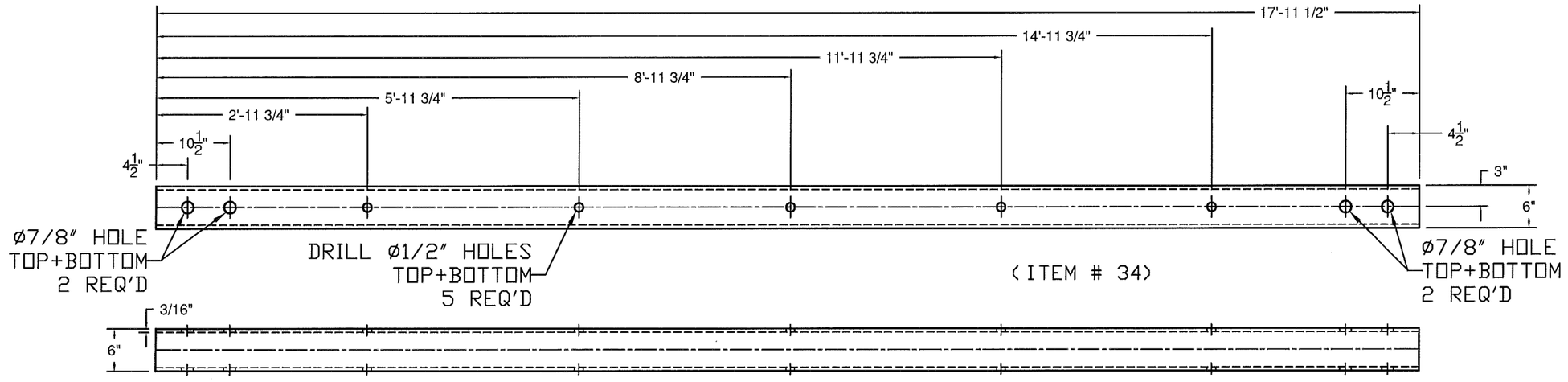
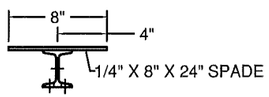
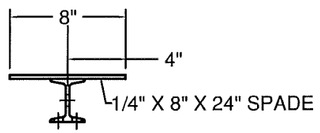


PLAN VIEW



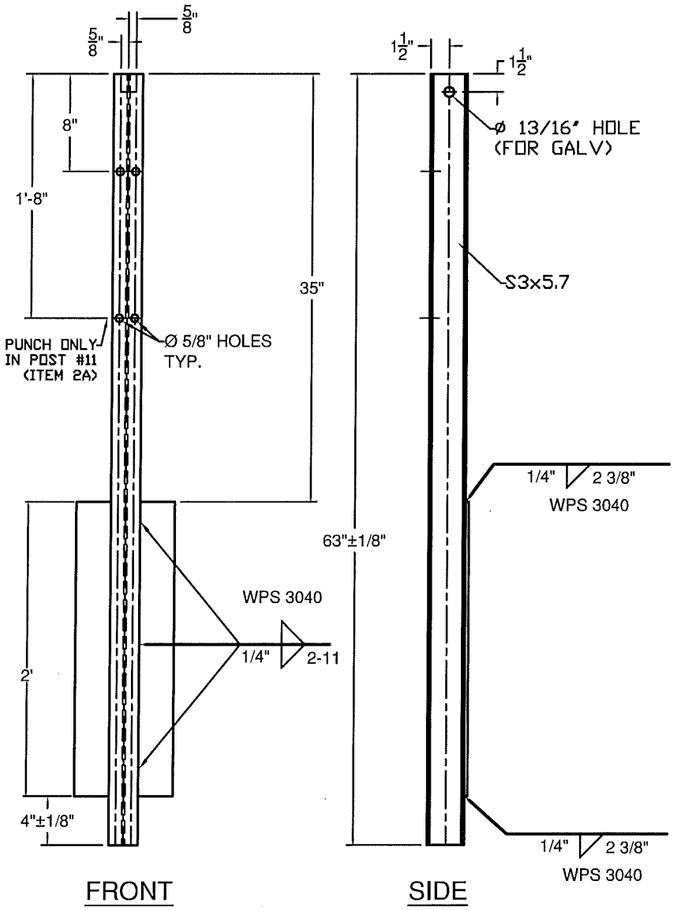
(ITEM # 2)

PLAN VIEW



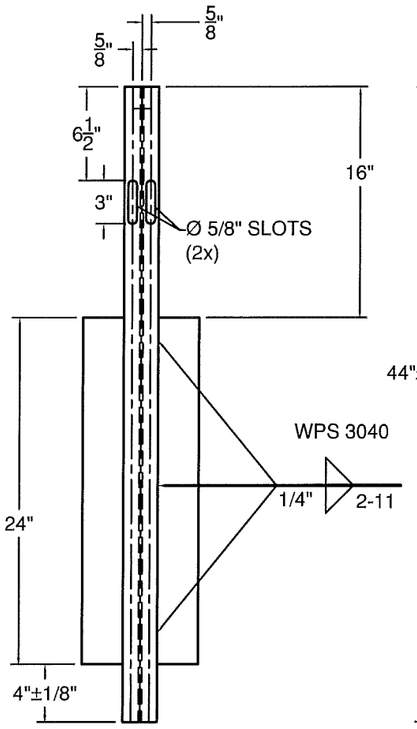
(ITEM # 3)

ASTM A572 Gr. 50



FRONT

SIDE



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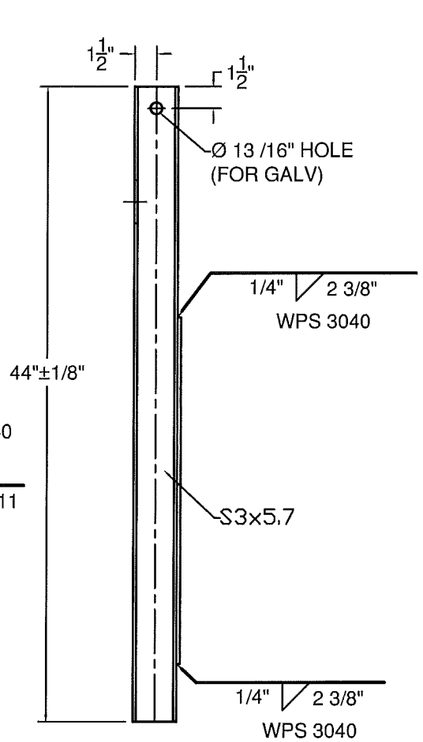

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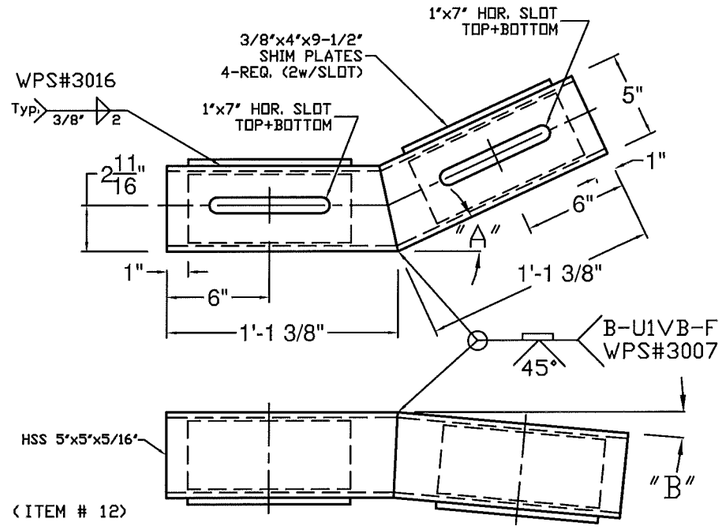

"A" – SEE PLAN FOR TURN BACK DISTANCE, SET ANGLE ACCORDINGLY.
"B" – TURN DOWN ANGLE SET BY THE 9" MEASURMENT AT THE END OF THE BOX BEAM.

ITEM #: 900.620 (TRANSITION) FR Lafayette - JAMAICA, EM13-016

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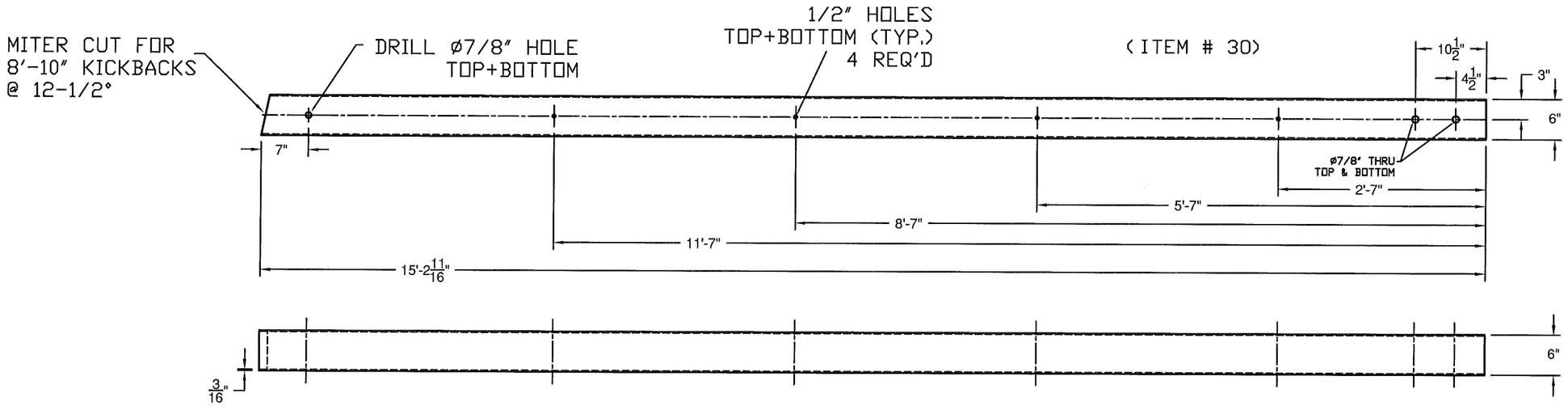

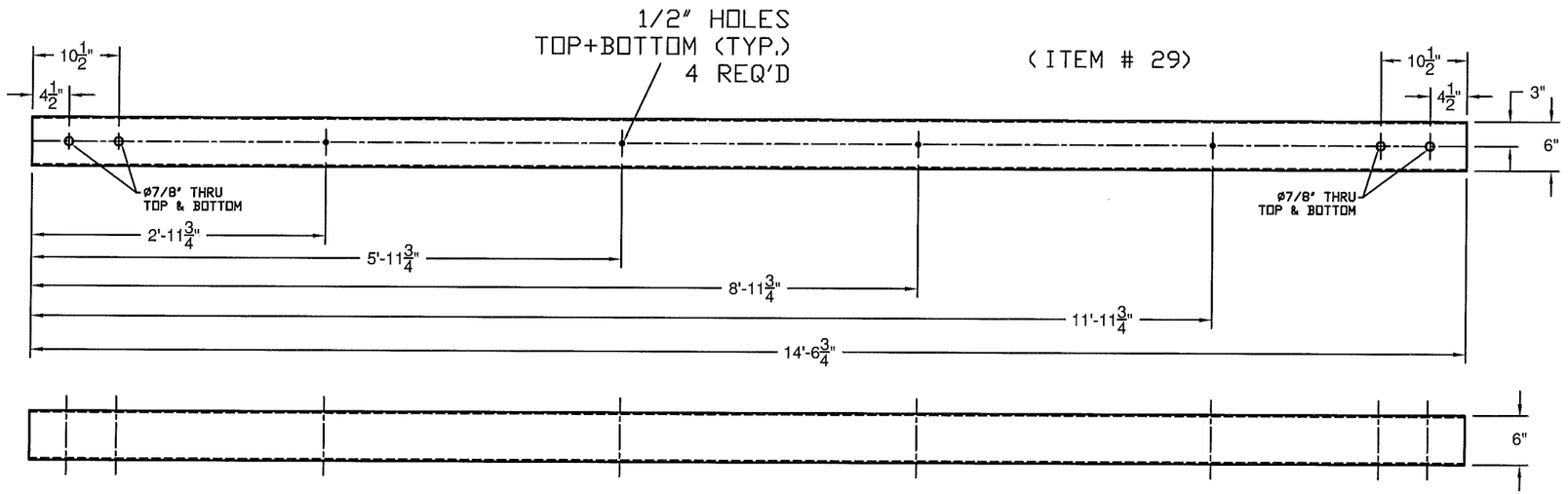

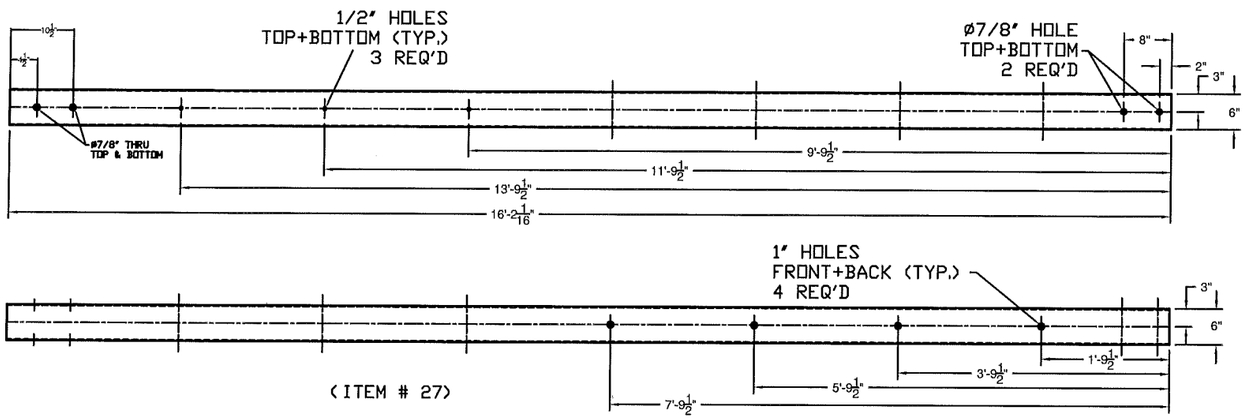

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SHEET 8 OF 8

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BRIDGE RAIL DETAILS SHEET

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