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.
	4/9/2013	Jamaica ER-BRF 015-1 (23)

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

COPIES	NUMBER	DESCRIPTION	CODE
1		Structural Steel Shop Drawings	H
1		WPS - FC-1001-A-1	H
1		WPS - FC-1003-A-1	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. Allen

GENERAL NOTES

1 CONSTRUCTION SPECIFICATIONS:

ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISION.

2 MATERIAL SPECIFICATIONS:

UNLESS NOTED, ALL NEW STRUCTURAL STEEL CONFORM TO AASHTO M270 GRADE 50W (ASTM A709-50W).

HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325) $\frac{7}{8}$'' DIA.
IN $\frac{15}{16}$'' DIAMETER HOLES (U.N).

TYPE 3 SHALL BE USED FOR UNPAINTED CONNECTIONS.

3. FABRICATION:

BOLT HOLES SHALL BE FABRICATED TO THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 11.4.8, EXCEPT THAT HOLES SHALL NOT BE PUNCHED FULL SIZE.

STUDS ARE FURNISHED AND FIELD APPLIED BY OTHERS.

IDENTIFICATION MARKS ON UNPAINTED STEEL SHALL BE IMPRESSED INTO THE MEMBER (WITH A LOW-STRESS STAMP) IN A NON-STRESSED OR LOW STRESSED AREA OF THE MEMBER.

TIGHT FIT (WELDED ENDS ONLY). 50% OF THE PROJECTED BEARING AREA SHALL BE IN CONTACT WITHIN (0.02") WITH A PERMISSIBLE VARIATION OF ($\frac{1}{16}$") FOR THE REMAINING 50% OF THE PROJECTED AREA.

GRIND TO BEAR. 75% OF THE PROJECTED AREA SHALL BE IN CONTACT WITHIN (0.01") WITH A PERMISSIBLE VARIATION OF ($\frac{1}{32}$")
FOR THE PROJECTED AREA.

CURVE GIRDERS:

2011 STANDARD SPECIFICATIONS: 506.12 (b) CURVED GIRERS.
WELDED GIRDERS WITH RADII LESS THAN (230m) 750 ft SHALL BE FABRICATED BY CUTTING THE FLANGE PLATES TO THE REQUIRED CURVATURE. EACH PLATE SHALL BE FLAME CUT SIMULTANEOUSLY ON BOTH EDGES TO REDUCE UNBALANCED SHRINKAGE STRESSES.
THE FLANGE PLATE LENGTHS BETWEEN SHOP SPLICES SHALL NOT BE LESS THAN (6m) 20 ft.
WEB PLATES SHALL BE ALIGNED TO THE CENTER OF THE FLANGE PLATES.
IF THE FINAL CURVATURE IS NOT AS SPECIFIED AFTER THE FLANGE HAVE BEEN WELDED TO THE WEB, THE GIRDER SHALL BE CORRECTED BY APPLICATION OF HEAT IN ACCORDANCE WITH AN APPROVED PROCEDURE.

4 WELDING:

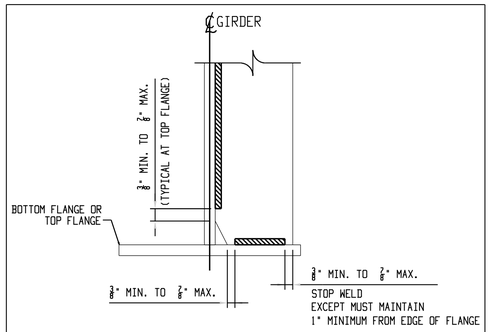
THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D.1.5 BRIDGE WELDING CODE AND WITH THE SPECIFICATIONS SHOWN BESIDE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.

WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESS. ALL WELDS ARE CONTINUOUS U.N.

NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.

5 CLEANING:

ALL STEEL THAT WILL REMAIN UNPAINTED SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a)



TYPICAL WELD DETAIL

6 FIELD CONNECTIONS:

ALL FIELD CONNECTIONS SHALL BE MADE WITH $\frac{7}{8}$'' DIAMETER HIGH STRENGTH BOLTS AASHTO M164 (ASTM A325) TYPE 3, IN $\frac{15}{16}$'' DIAMETER HOLES UNLESS OTHERWISE NOTED. INSTALLED PER 506.19(c) AND SPECIAL PROVISIONS.

BOLTS SHALL HAVE
-HEAVY HEX. NUT, M291 (ASTM A5563) DH3
-HEX. HEAD
-ONE FLAT WASHER(U.N.O.) AASHTO M293 (ASTM F436)
EACH (WASHER TO BE PLACED UNDER TURNED ELEMENT).

PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWING.

BOLTS INSTALLED WITH THE STEM VERTICAL SHALL HAVE THE HEADS UP.
BOLTS INSTALLED WITH THE STEM HORIZONTAL SHALL HAVE THE HEADS TOWARDS THE WEATHER UNLESS CLEARANCE RESTRICTIONS DICTATE OTHERWISE.

7 EASE EDGE:
ALL SHARP CORNERS AND EDGES THAT ARE MARRED, CUT, OR ROUGHENED IN HANDLING SHALL BE ROUNDED TO A $\frac{1}{16}$" RADIUS BY GRINDING. 506.12(d)

8 BRIDGE FINAL POSITION:
-GIRDER WEBS AND CROSS FRAMES SHALL BE PLUMB IN FINAL POSITION
-CONNECTIONS ALIGNMENT BETWEEN STIFFENERS AND DIAPHRAGMS ARE OPTIMIZED FOR A BRIDGE UNDER FULL DEFLECTION (SERVICE CONDITION).

No	REVISION	DATE	BY	VER.
B	GENERAL REVISION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
GENERAL NOTES

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: FEBRUARY 2013	DRAWING NO: GN1

UP01195

	SYMBOL	TAIL TEXT	SUBCONTRACTOR 1 (XXX)	SUBCONTRACTOR 2 (XXX)	SUBCONTRACTOR 3 (XXX)
WELD.1	G / 3/4 / 0 / 60 / G	S-1005			
WELD.2	G / 7/8 / 0 / 60 / G	S-1005			
WELD.3	G / 1 1/2 / 0 / 60 / G	S-1005			
WELD.4	G / 60 / 0 / 1 / 1 / 0 / 60 / G	S-1005-A			
WELD.5	G / G	S-1011			
WELD.6	5/16 / 5/16	S-1009			
WELD.7	5/16 / 5/16	S-1001-A FC-1001-A B			
WELD.8	5/16 / 5/16	S-1001-A FC-1001-A S-1009			
WELD.9	B / 1/4 / 1/4 / SEAL WELD	FC-1001-A-1 B B FC-1003-A-1 B			
WELD.10					

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-13-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

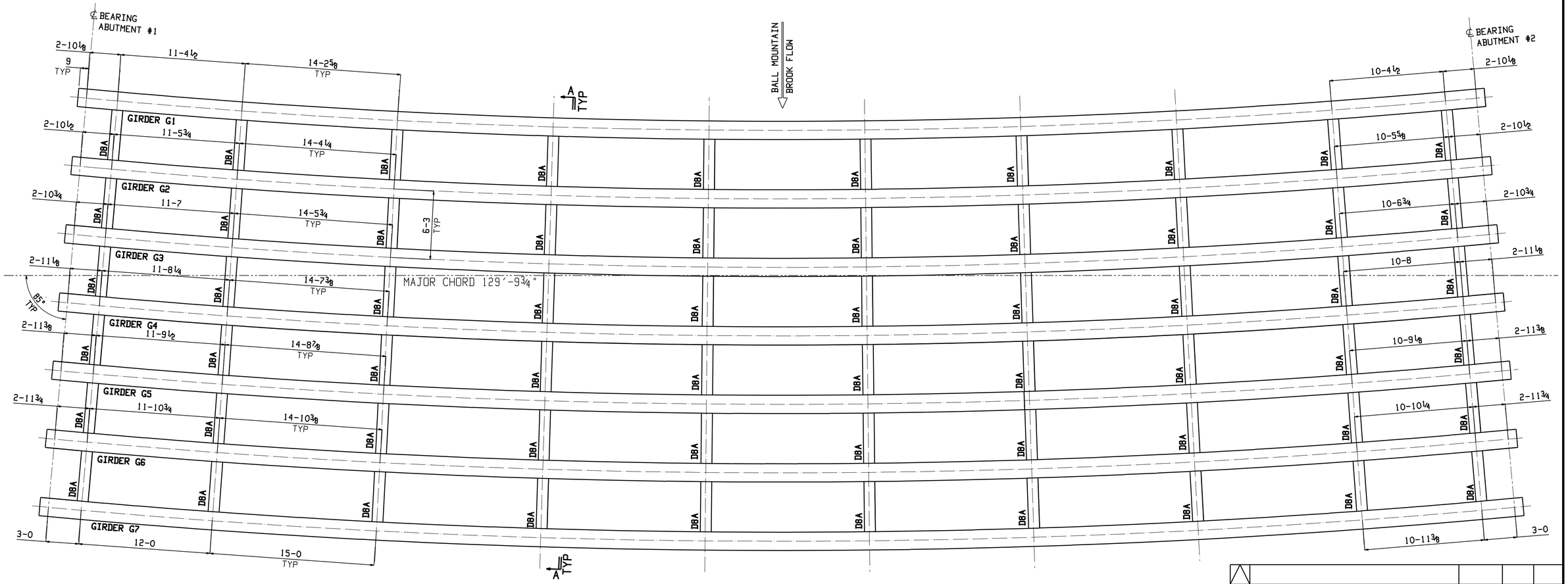
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WELDING PROCEDURES

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	MARCH 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: S1



PLAN VIEW

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER APPROVAL	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

HEADS OF BOLTS MUST BE LOCATED ON TNE EXTERIOR SIDE OF THE SPAN

P.S. THE NUTS TO BE INSTALLED ON THE LESS SEEN SIDE OF THE STRUCTURE

*** THIS DRAWING IS TO BE USED FOR MARKS AND BOLTS ONLY AND MUST BE READ IN CONJUNCTION WITH THE CONTRACT DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION SEQUENCING OR AS AN ERECTION PROCEDURE.

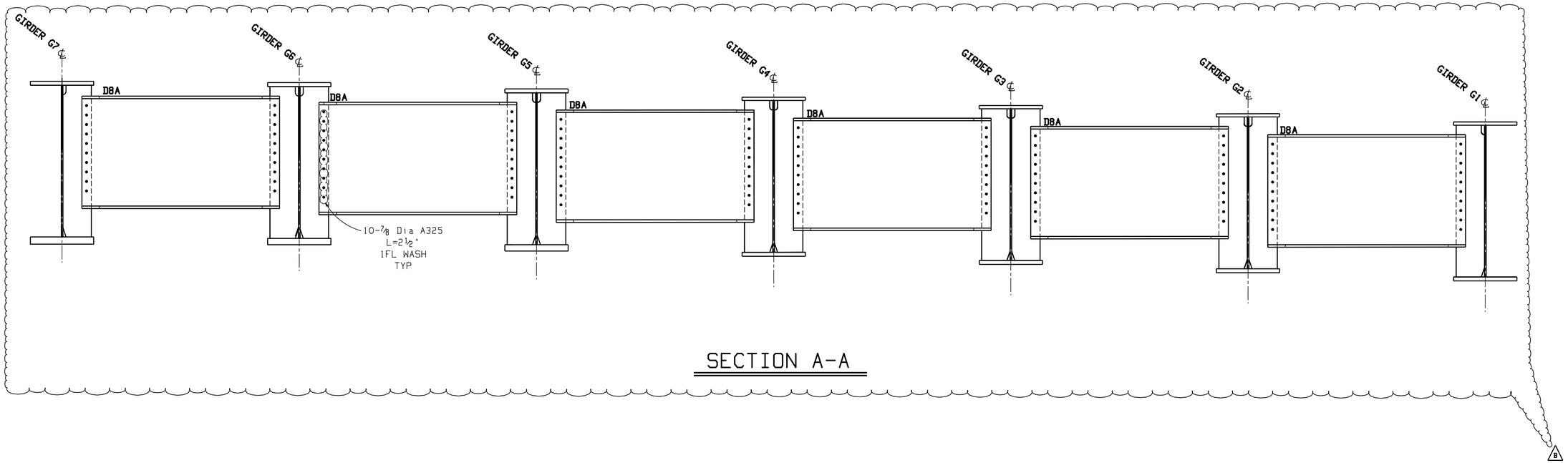
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: ERECTION PLAN

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P.LESSARD	DATE: MARCH 2013	DRAWING NO: E1



SECTION A-A

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
ERECTION SECTION

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY:	DATE:	DRAWING NO:
P.LESSARD	MARCH 2013	E2

HEADS OF BOLTS MUST BE LOCATED ON TNE EXTERIOR SIDE OF THE SPAN

P.S. THE NUTS TO BE INSTALLED ON THE LESS SEEN SIDE OF THE STRUCTURE

*** THIS DRAWING IS TO BE USED FOR MARKS AND BOLTS ONLY AND MUST BE READ IN CONJUNCTION WITH THE CONTRACT DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION SEQUENCING OR AS AN ERECTION PROCEDURE.

Total weight (lbs): 32847

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G1	ONE	GIRDER					32847.3	1	1
G1	1	.GIRDER		128-7 1/4			1671.8		
TFA1	1	PL1x20	A70950W2	45-7 1/8		100-1	3102.9		
TFB1	1	PL1x20	A70950W2	83-0 1/16		100-1	5649.0		
WA1	1	PL 1/2x48	A70950W2	83-0		100-2	6778.3		
WB1	1	PL 1/2x48	A70950W2	45-8 1/8		100-2	3730.3		
BFA1	1	PL1 1/4x20	A70950W2	45-5 13/16		100-3	3869.3		
BFB1	1	PL1 1/4x20	A70950W2	83-0 3/16		100-3	7062.1		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9c	1	PL 1/4x3 5/16	A70950	1-1 1/4		101-3	3.1		
B x9d	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

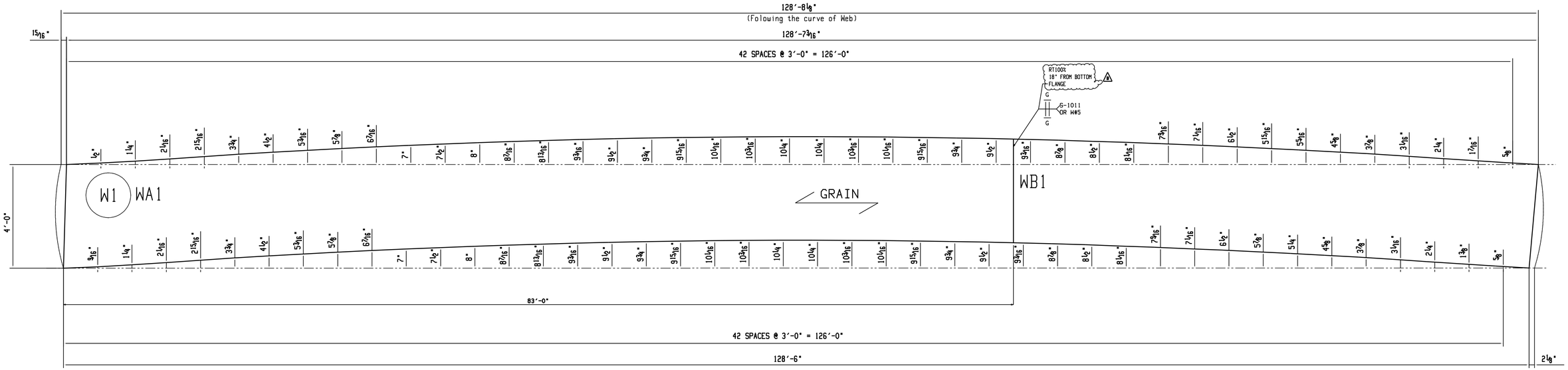
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G1

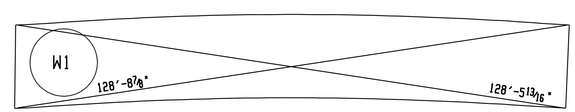
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 1-00



ONE WEB PLATE W1

W1 = PL 1/2"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

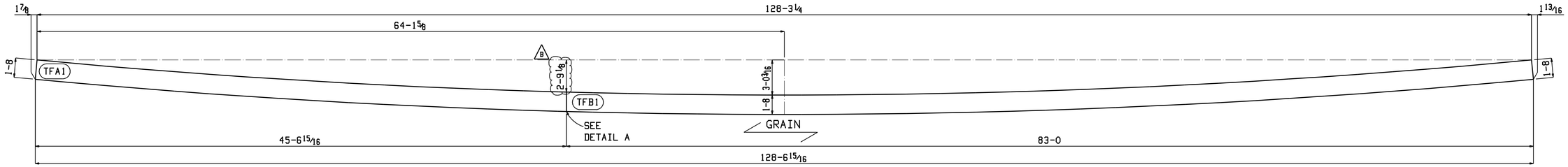
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G1

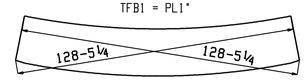
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

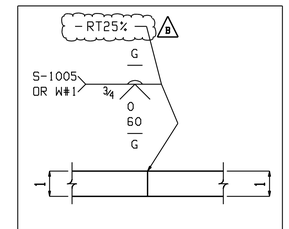
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 1-01



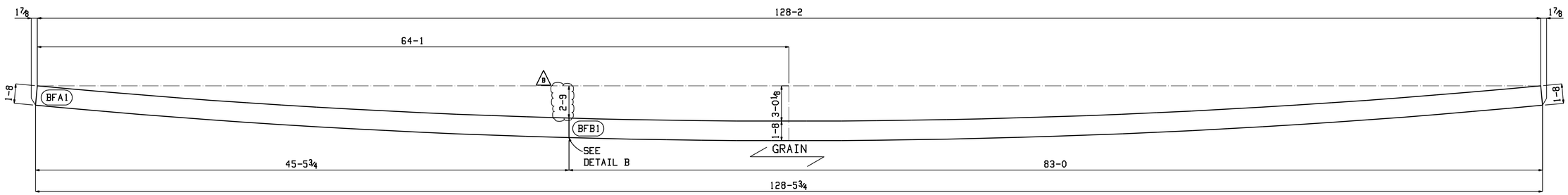
ONE TOP FLANGE TF1

TFA1 = PL1"
TFB1 = PL1"



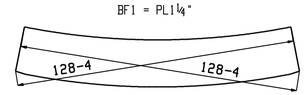


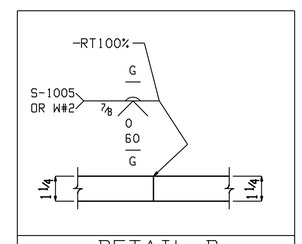
DETAIL A
SHOP SPLICE PL1"



ONE BOTTOM FLANGE BF1

BF1 = PL1 1/4"





DETAIL B
SHOP SPLICE PL1 1/4"

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

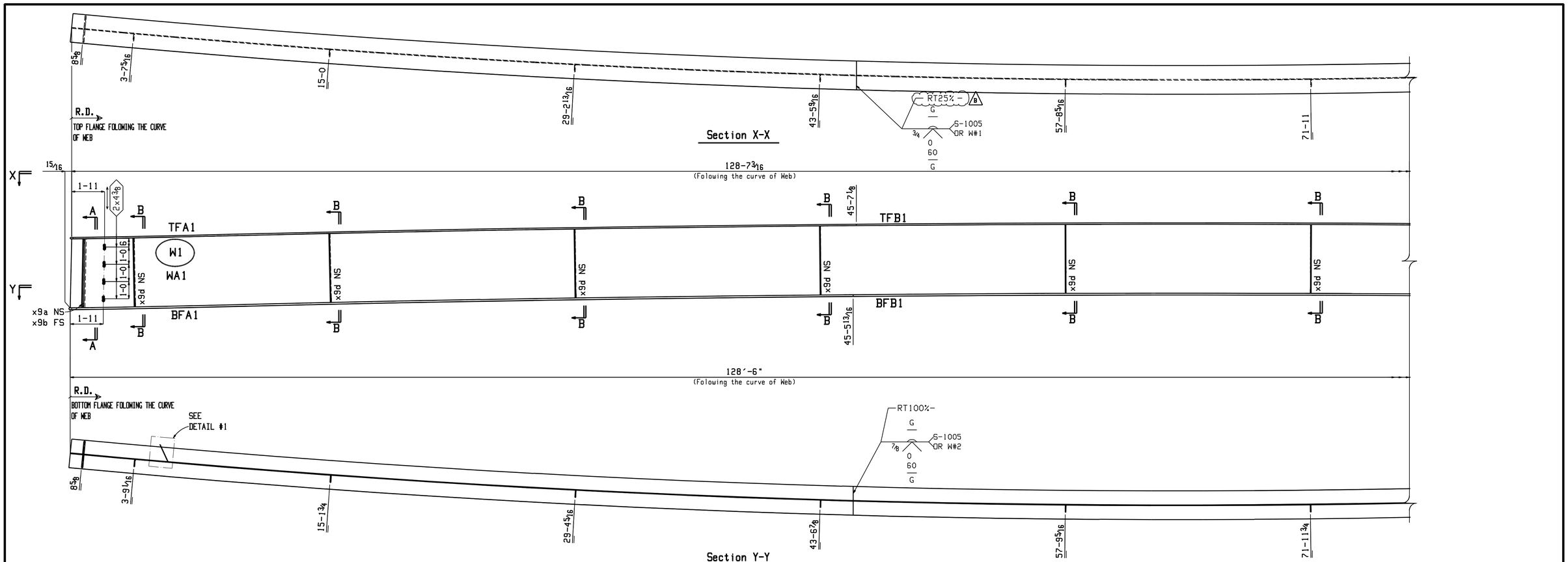
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

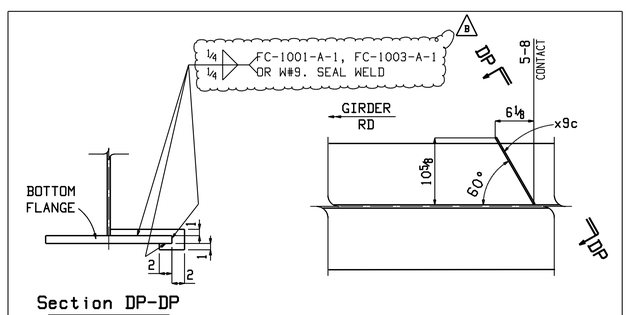
PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
FLANGES GIRDER G1

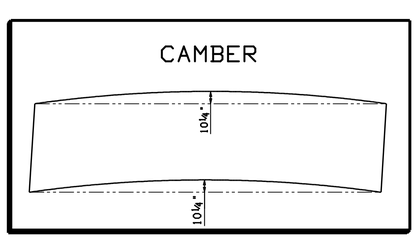
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

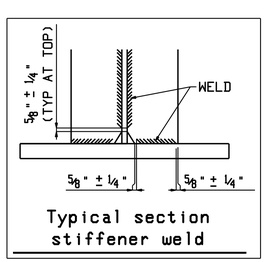
DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 1-02



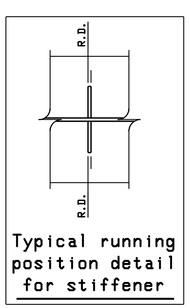


DETAIL #1





Typical section stiffener weld



Typical running position detail for stiffener

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION TOP	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

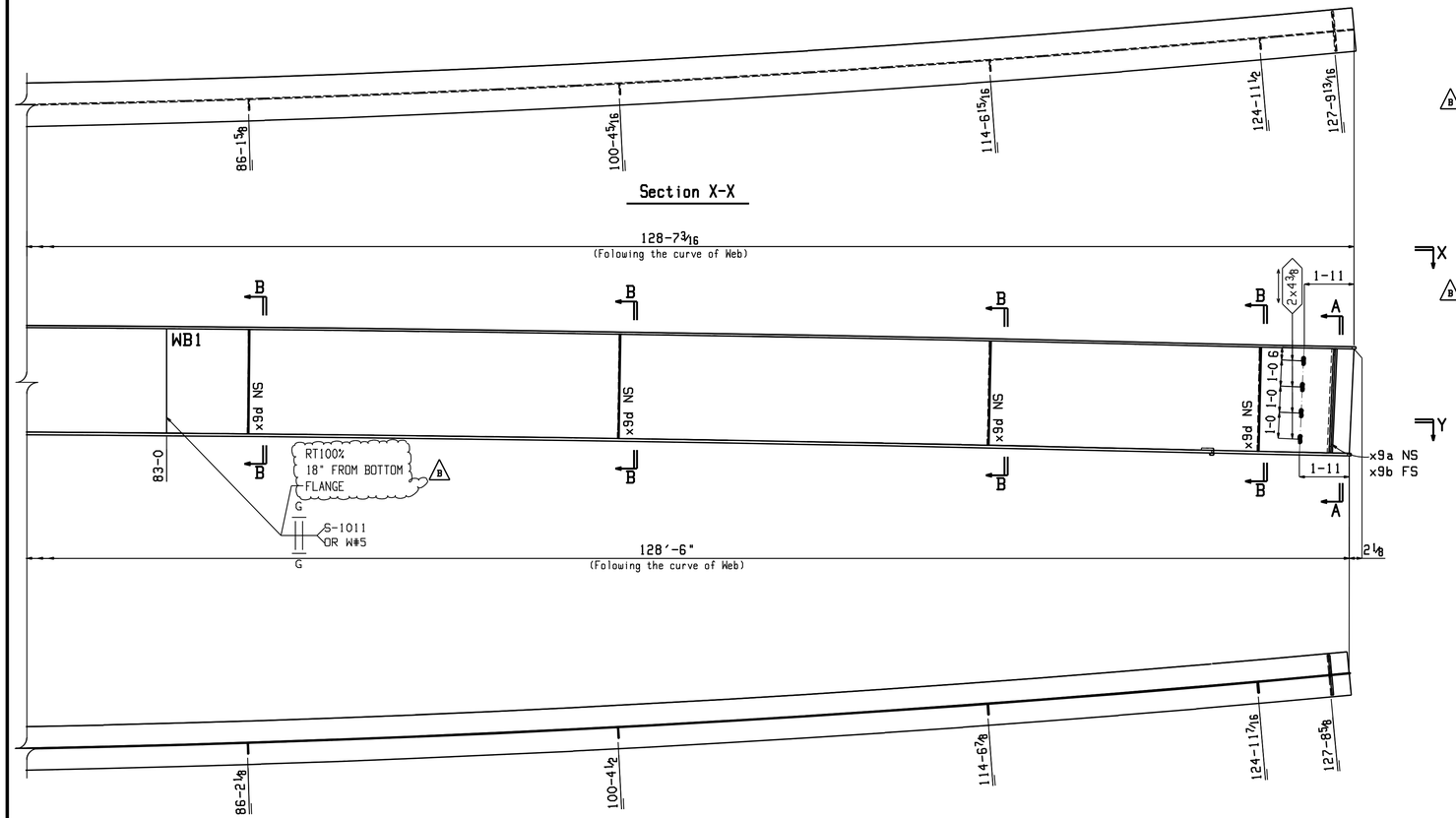
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30 BRIDGE NO 30 TOWN OF JAMAICA

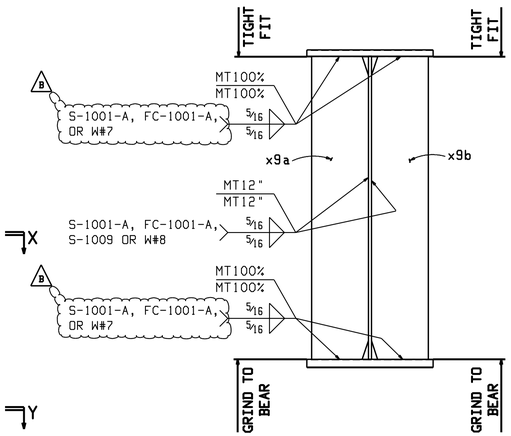
TITLE: MAIN GIRDER G1

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

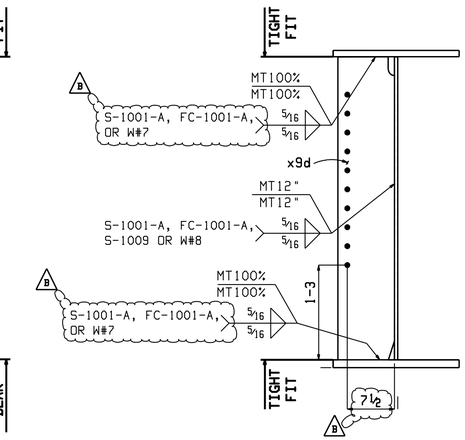
DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 1-03



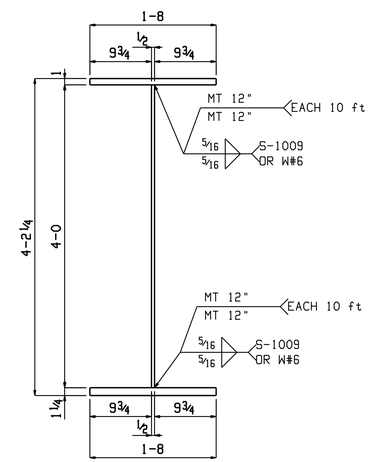
ONE GIRDER G1



Section A-A



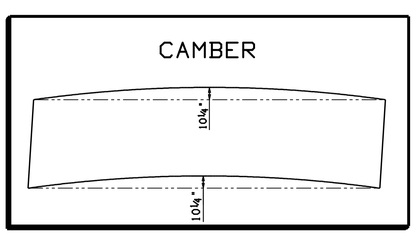
Section B-B

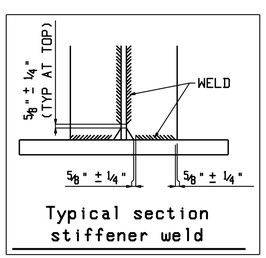


Typical Section

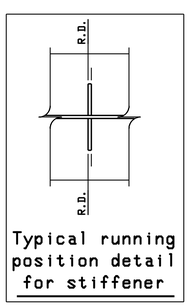
No	REVISION	DATE	BY	VER.
B	RESUBMIT AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.





Typical section stiffener weld



Typical running position detail for stiffener

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G1

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 1-04

Total weight (lbs): 32057

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G2	ONE	GIRDER					32057.4	1	1
G2	1	.GIRDER		129-9 5/8					
TFA2	1	PL1x20	A70950W2	46-9 1/8		100-4	3182.3		
TFB2	1	PL1x20	A70950W2	83-0 1/16		100-4	5649.0		
WA2	1	PL 1/2x48	A70950W2	83-0		100-5	6778.3		
WB2	1	PL 1/2x48	A70950W2	46-10 1/16		100-5	3825.2		
BFA2	1	PL1 1/4x20	A70950W2	46-7 3/4		100-6	3968.1		
BFB2	1	PL1 1/4x20	A70950W2	83-0 1/8		100-6	7061.6		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
B x9d	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		
B x9e	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

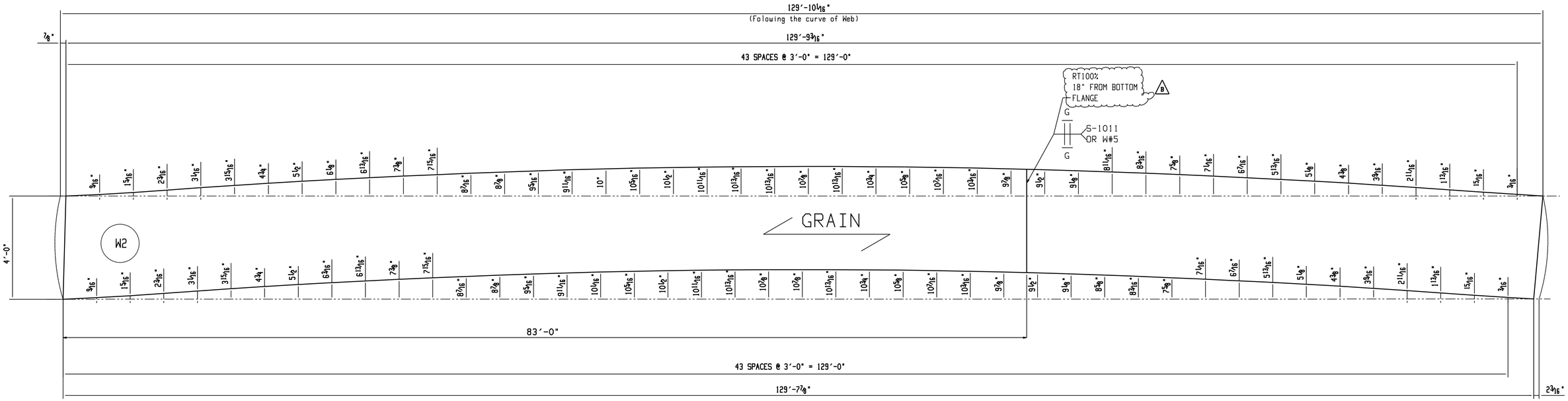
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G2

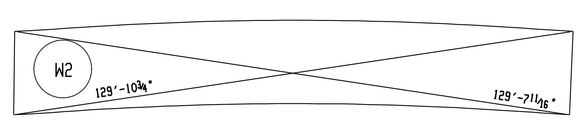
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 2-00



ONE WEB PLATE W2

W2 = PL 1/2"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

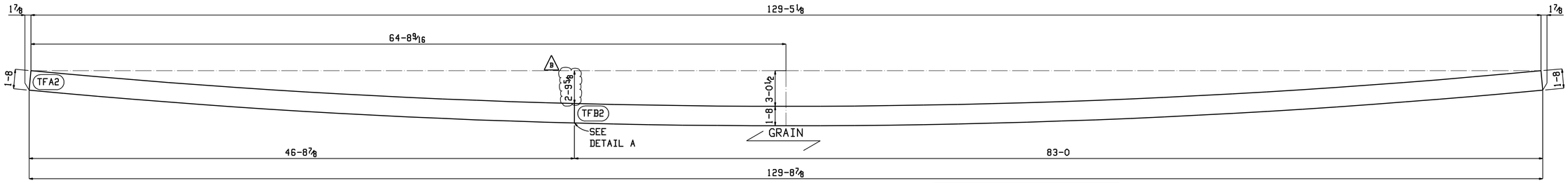
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G2

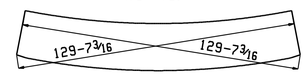
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

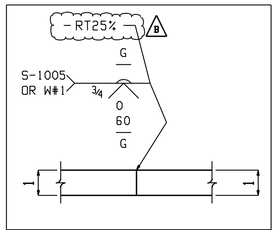
DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 2-01



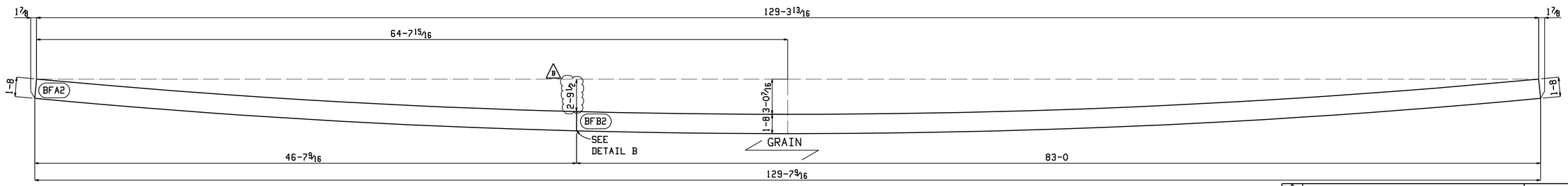
ONE TOP FLANGE TF2

TF2 = PL1"



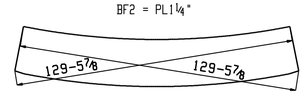


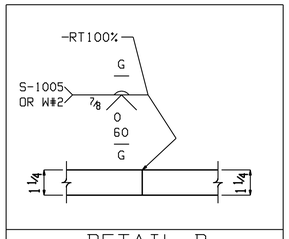
DETAIL A
SHOP SPLICE PL1"



ONE BOTTOM FLANGE BF2

BF2 = PL1 1/4"





DETAIL B
SHOP SPLICE PL1 1/4"

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

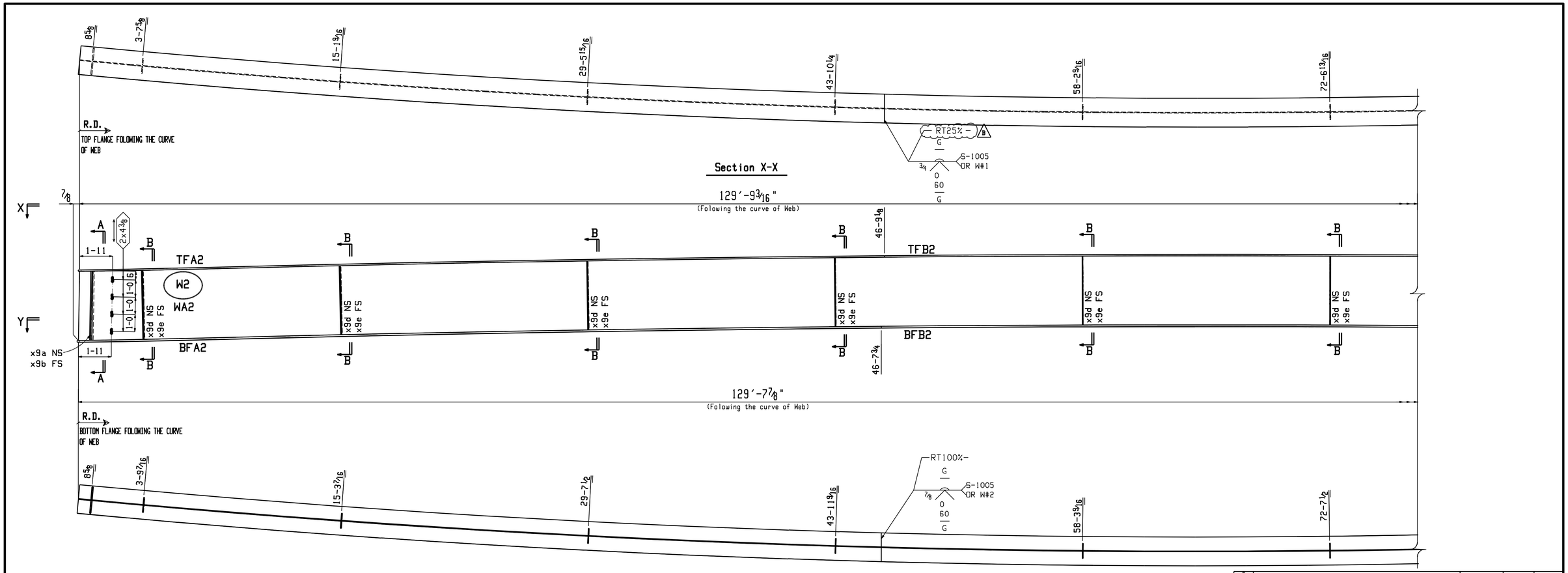
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
FLANGES GIRDER G2

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 2-02

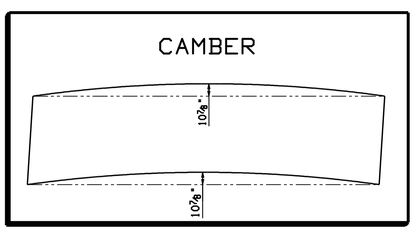


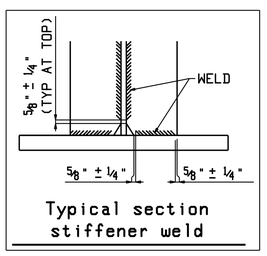
ONE GIRDER G2

GENERAL NOTE: SEE GN1

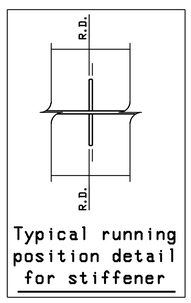
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION TOP CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

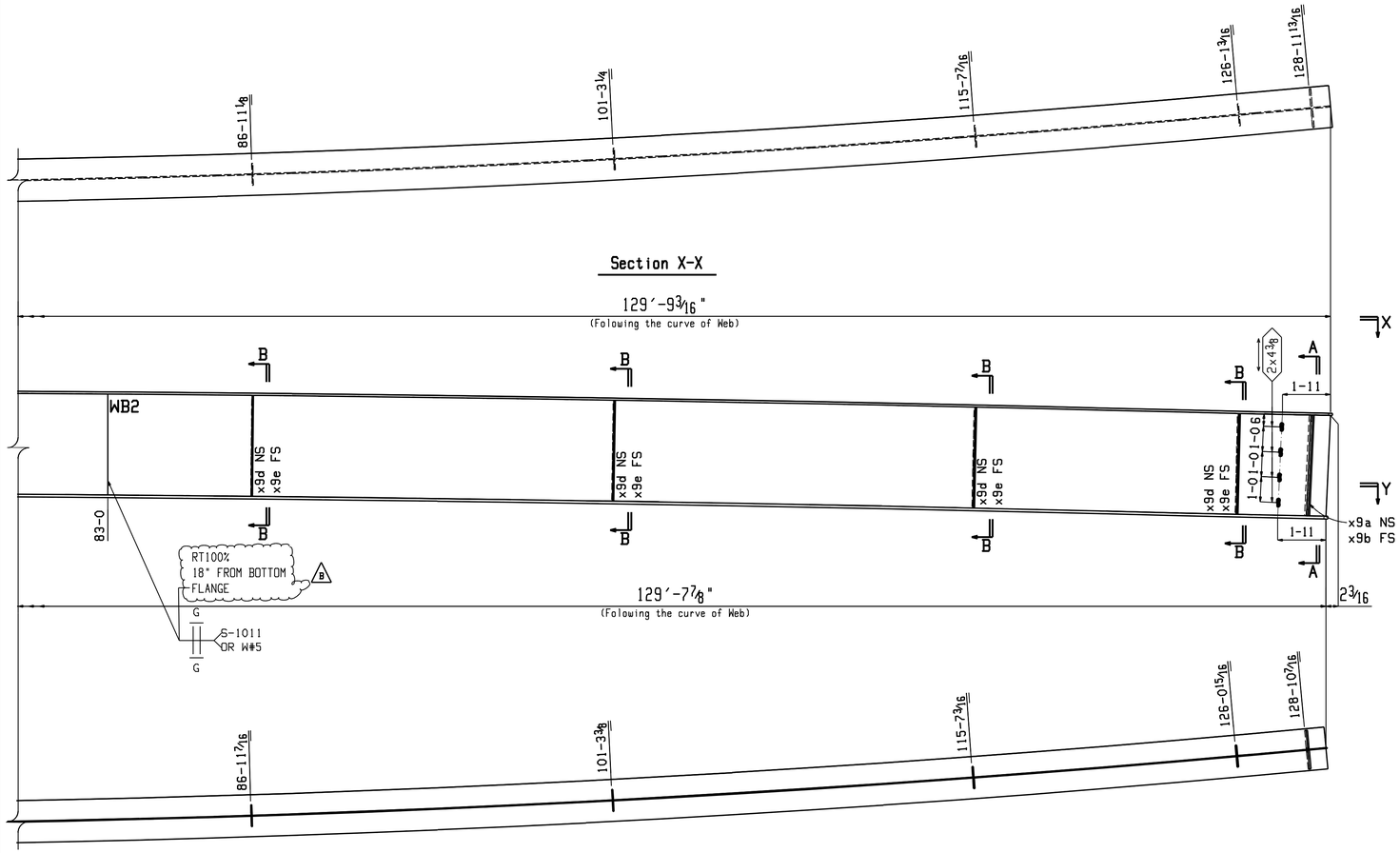
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G2

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

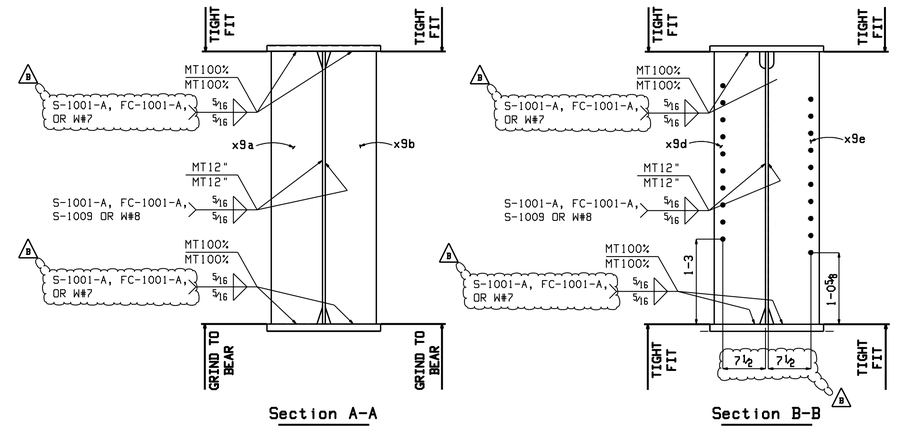
DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 2-03



Section X-X

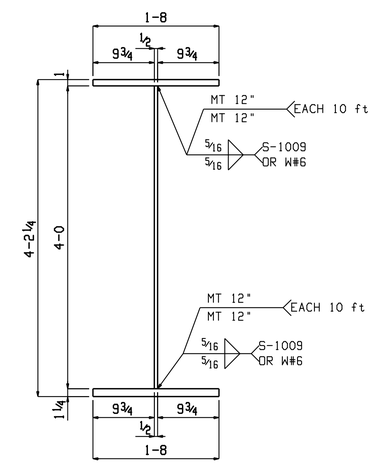
Section Y-Y

ONE GIRDER G2



Section A-A

Section B-B

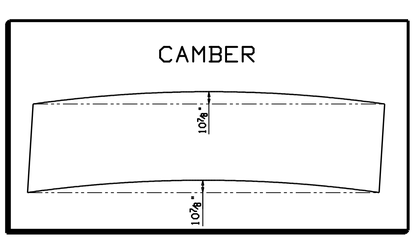


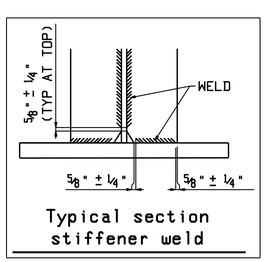
Typical Section

GENERAL NOTE: SEE GN1

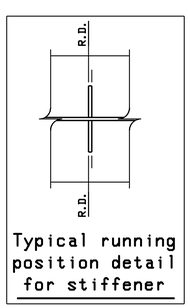
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G2

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 2-04

Total weight (lbs): 32329

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G3	ONE	GIRDER					32328.8	1	1
G3	1	.GIRDER		130-11 9/16					
TFA3	1	PL1x20	A70950W2	47-11 1/16		100-7	3261.3		
TFB3	1	PL1x20	A70950W2	83-0 1/16		100-7	5649.0		
WA3	1	PL 1/2x48	A70950W2	83-0		100-8	6778.3		
WB3	1	PL 1/2x48	A70950W2	47-11 15/16		100-8	3919.6		
BFA3	1	PL1 1/4x20	A70950W2	47-9 7/16		100-9	4065.2		
BFB3	1	PL1 1/4x20	A70950W2	83-0 1/4		100-9	7062.5		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
B x9d	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		
B x9e	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

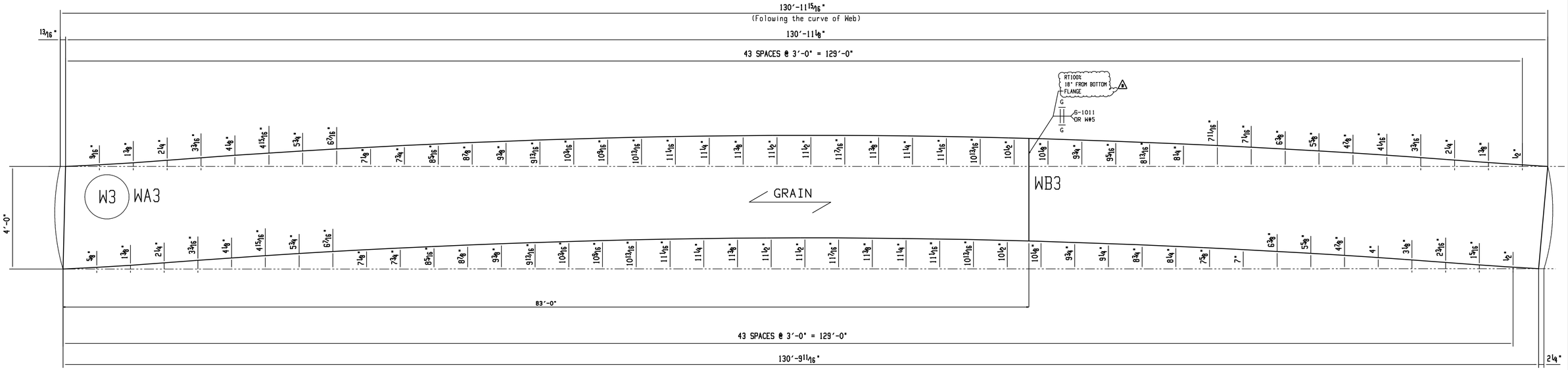
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G3

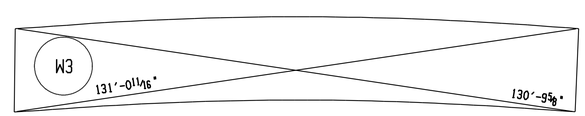
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 3-00



ONE WEB PLATE W3

WA3 = PL1/2"
WB3 = PL1/2"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

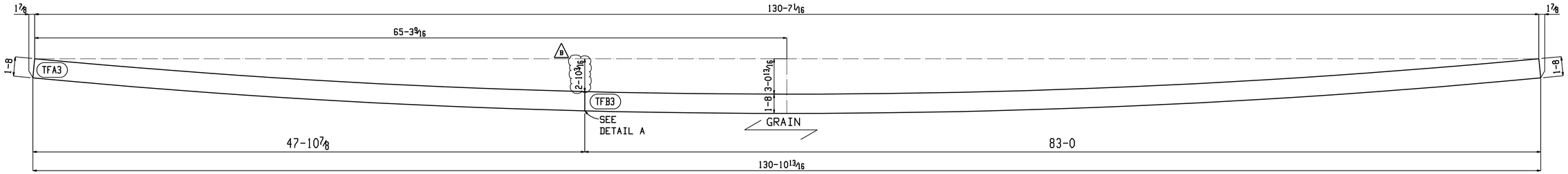
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G3

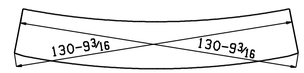
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

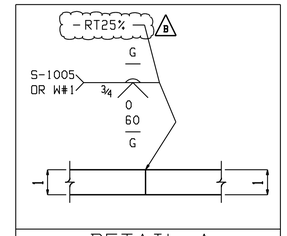
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 3-01



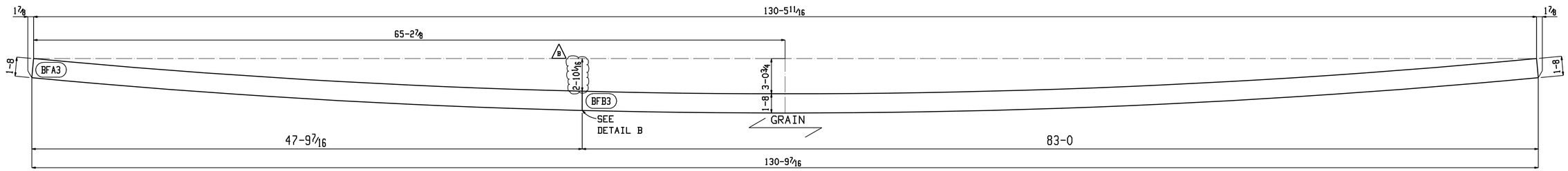
ONE TOP FLANGE TF3

TF3 = PL1"



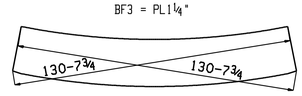


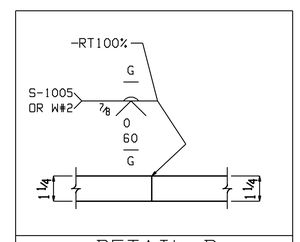
DETAIL A
SHOP SPLICE PL1"



ONE BOTTOM FLANGE BF3

BF3 = PL1 1/4"





DETAIL B
SHOP SPLICE PL1 1/4"

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

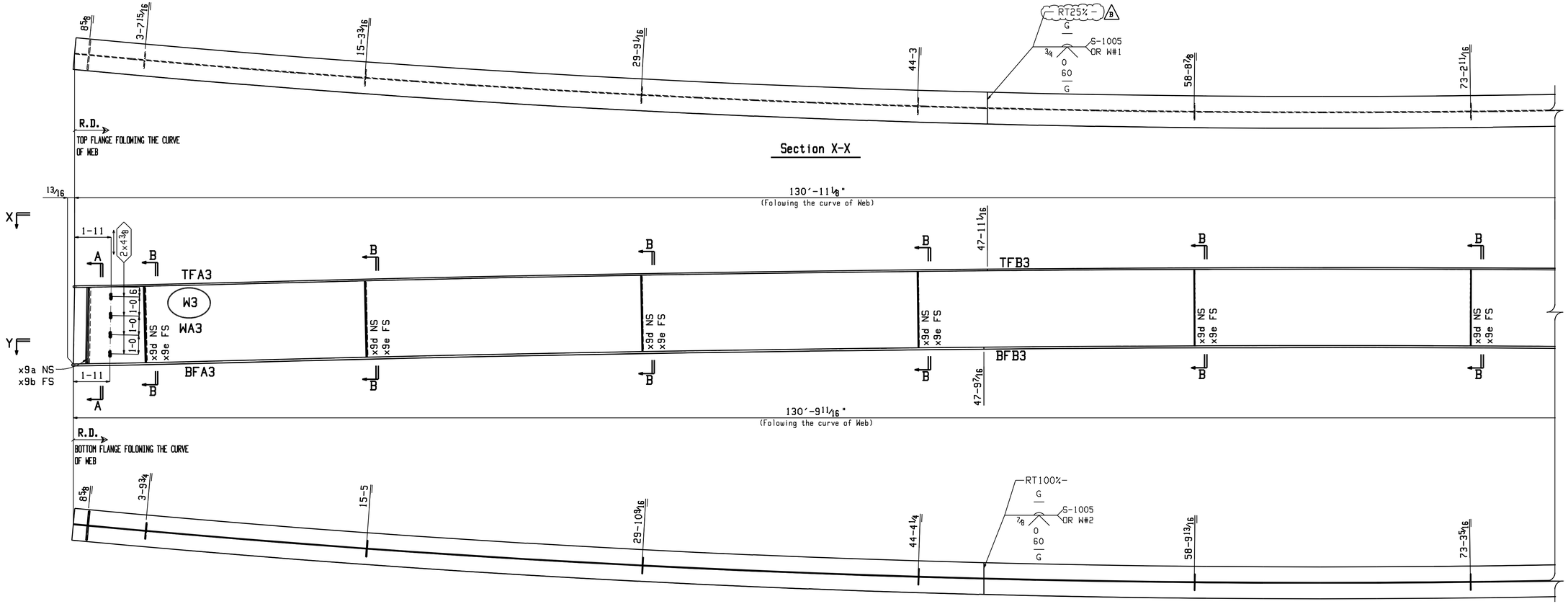
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
FLANGES GIRDER G3

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 3-02



Section Y-Y

ONE GIRDER G3

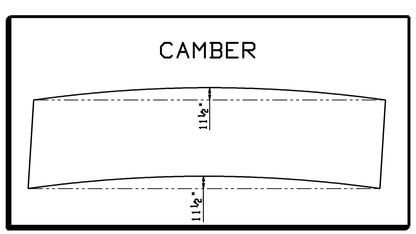
No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION TOP CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

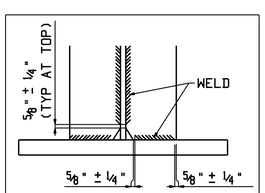
NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

GENERAL NOTE: SEE GN1

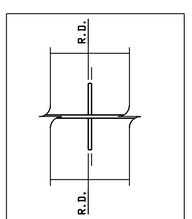
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

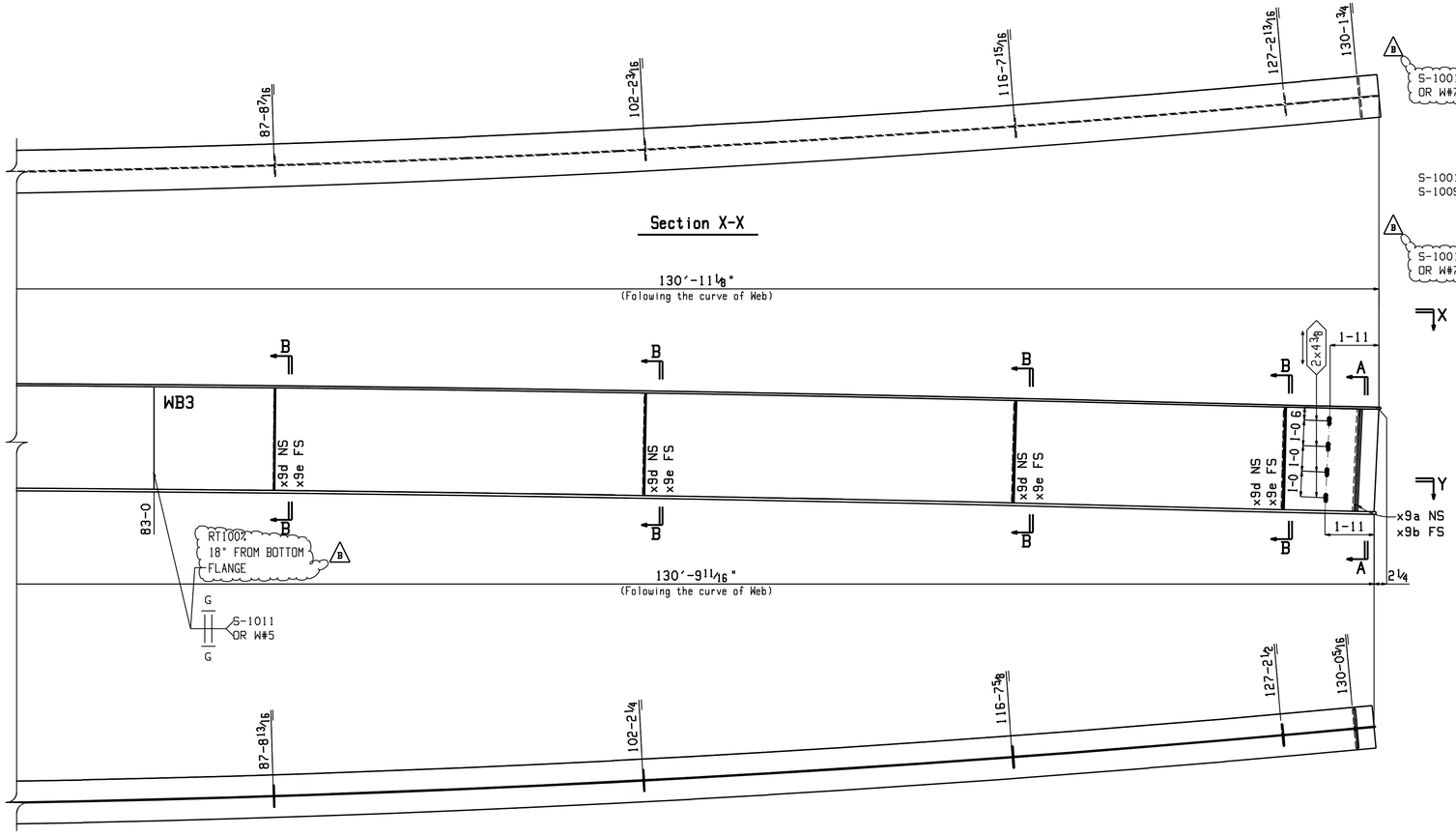
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G3

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

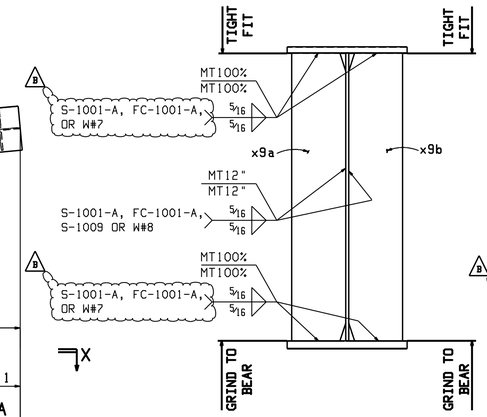
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 3-03



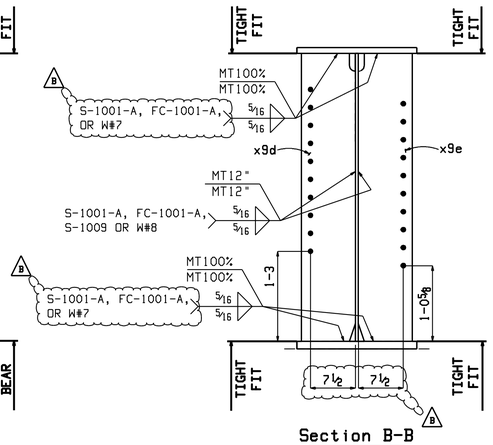
Section X-X

Section Y-Y

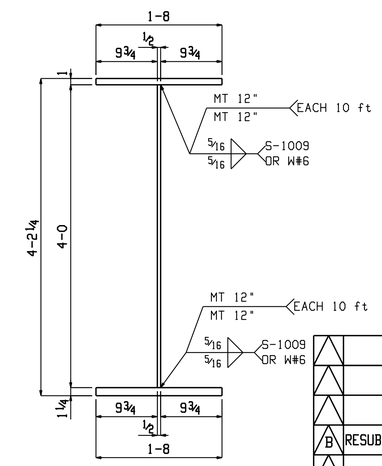
ONE GIRDER G3



Section A-A



Section B-B

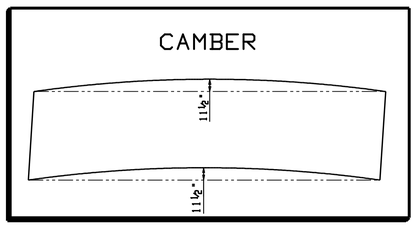


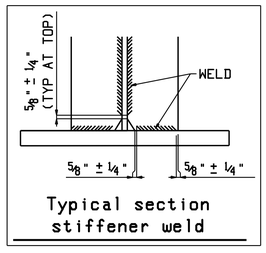
Typical Section

GENERAL NOTE: SEE GN1

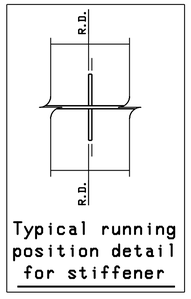
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G3

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 3-04

Total weight (lbs): 32601

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G4	ONE	GIRDER					32601.4	1	1
G4	1	.GIRDER		132-1 3/8					
TFA4	1	PL1x20	A70950W2	49-1		100-10	3340.4		
TFB4	1	PL1x20	A70950W2	83-0 1/8		100-10	5649.3		
WA4	1	PL 1/2x48	A70950W2	83-0		100-11	6778.3		
WB4	1	PL 1/2x48	A70950W2	49-1 7/8		100-11	4014.4		
BFA4	1	PL1 1/4x20	A70950W2	48-11 7/16		100-12	4164.4		
BFB4	1	PL1 1/4x20	A70950W2	83-0 1/8		100-12	7061.6		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
B x9d	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		
B x9e	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

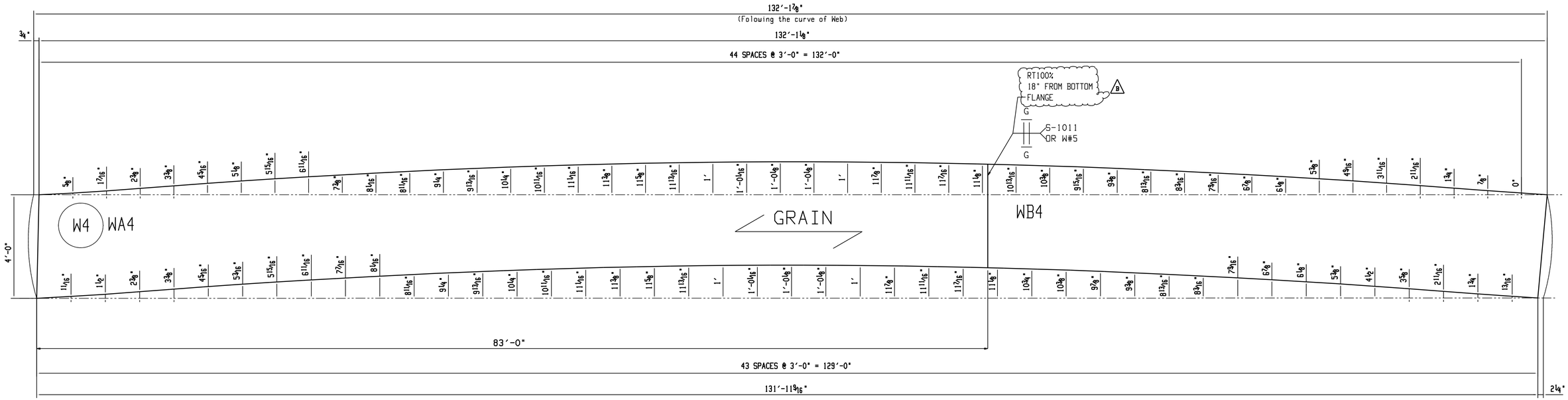
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G4

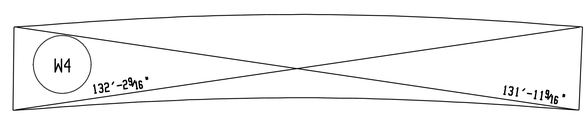
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 4-00



ONE WEB PLATE W4

WA4 = PL 1/2"
WB4 = PL 1/2"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

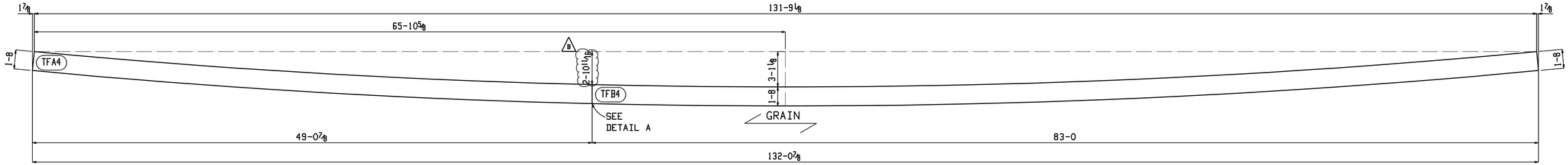
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G4

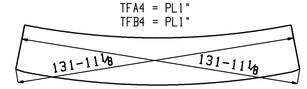
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

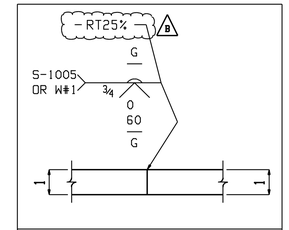
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 4-01



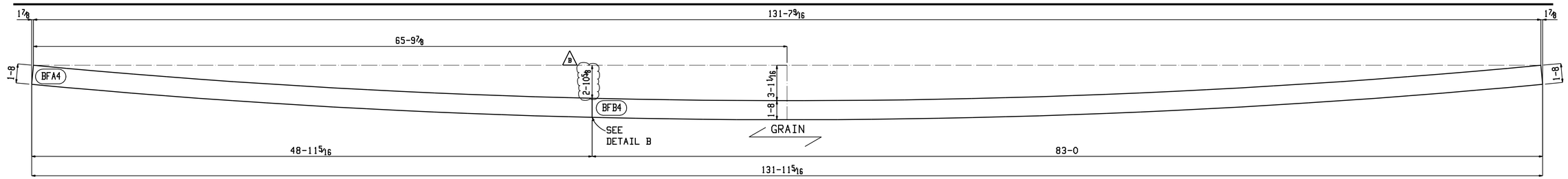
ONE TOP FLANGE TF4

TFA4 = PL1"
TFB4 = PL1"



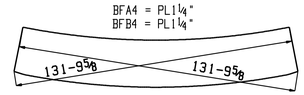


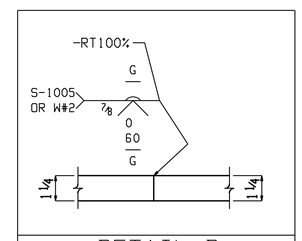
DETAIL A
SHOP SPLICE PL1"



ONE BOTTOM FLANGE BF4

BFA4 = PL1 1/4"
BFB4 = PL1 1/4"





DETAIL B
SHOP SPLICE PL1 1/4"

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

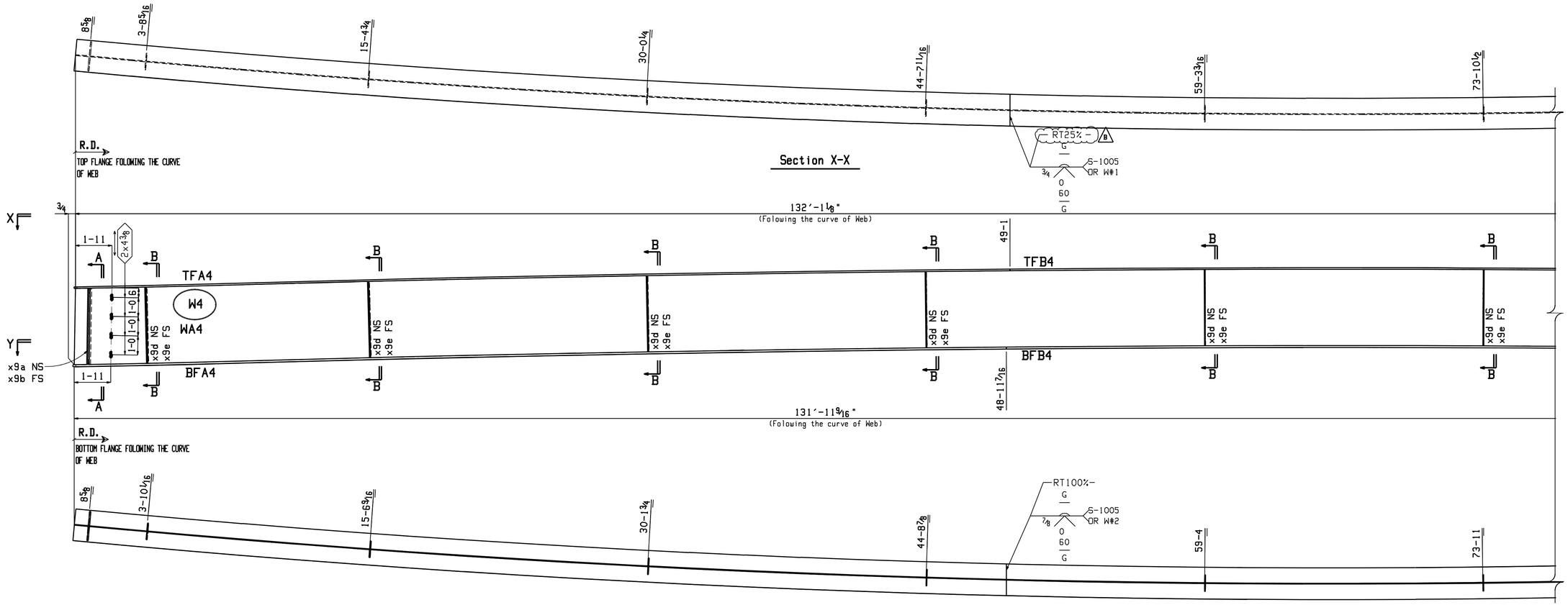
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
FLANGES GIRDER G4

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 4-02



Section Y-Y

ONE GIRDER G4

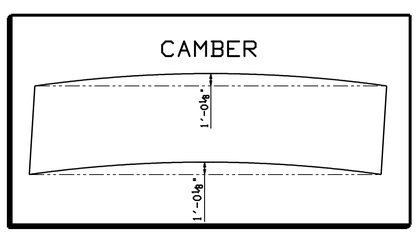
No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

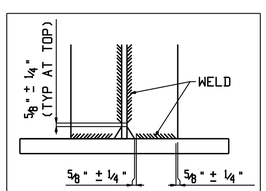
NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

GENERAL NOTE: SEE GN1

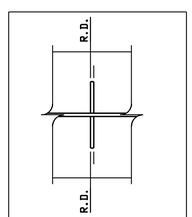
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

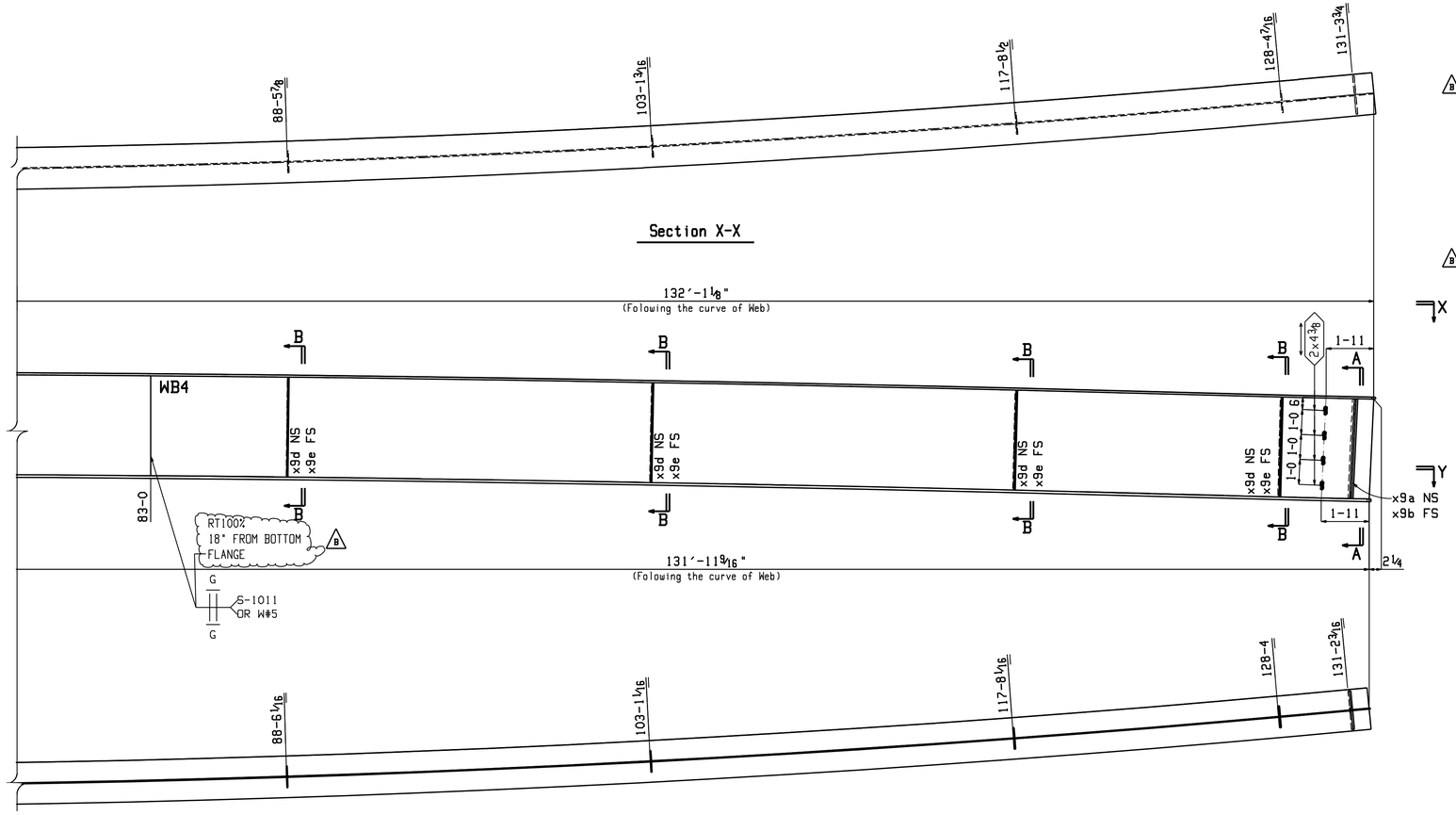
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G4

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

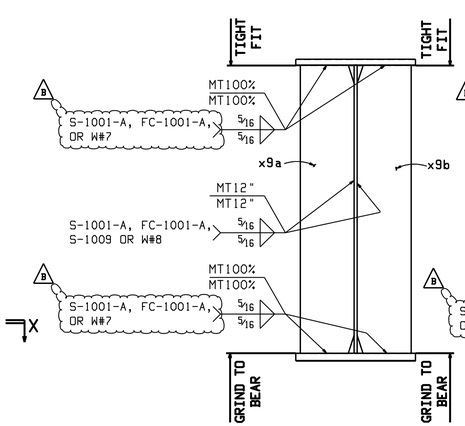
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 4-03



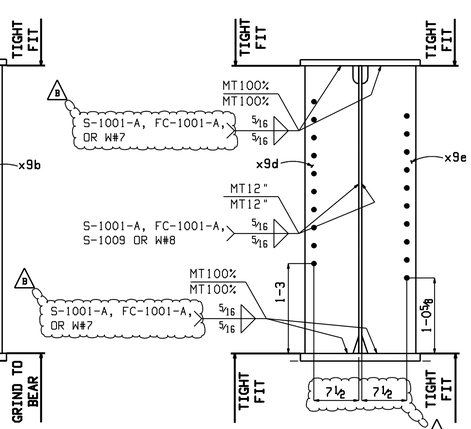
Section X-X

Section Y-Y

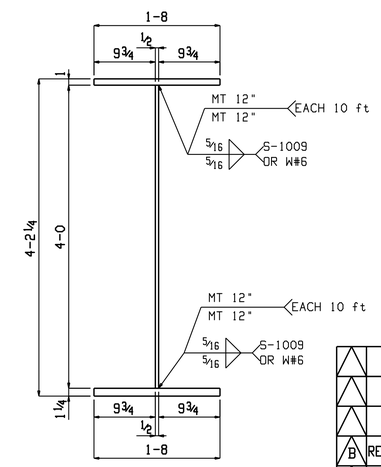
ONE GIRDER G4



Section A-A



Section B-B

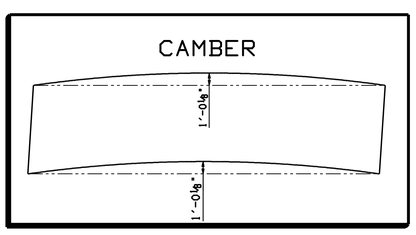


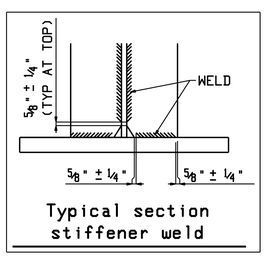
Typical Section

GENERAL NOTE: SEE GN1

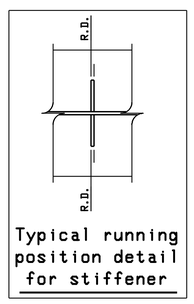
HOLES: 15⁄16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G4

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 4-04

Total weight (lbs): 41937

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G5	ONE	GIRDER					41936.7	1	1
G5	1	.GIRDER		133-3 5/16					
TFA5	1	PL1 1/4x20	A70950W2	50-3 1/16		100-13	4275.2		
TFB5	1	PL1 1/4x20	A70950W2	83-0 1/16		100-13	7061.2		
WA5	1	PL 1/2x48	A70950W2	83-0		100-14	6778.3		
WA5	1	PL 1/2x48	A70950W2	50-3 13/16		100-14	4109.3		
BFA5	1	PL2x20	A70950W2	52-1 5/16		100-15	7092.7		
BFB5	1	PL2x20	A70950W2	81-0 3/16		100-15	11027.1		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
B x9d	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		
B x9g	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

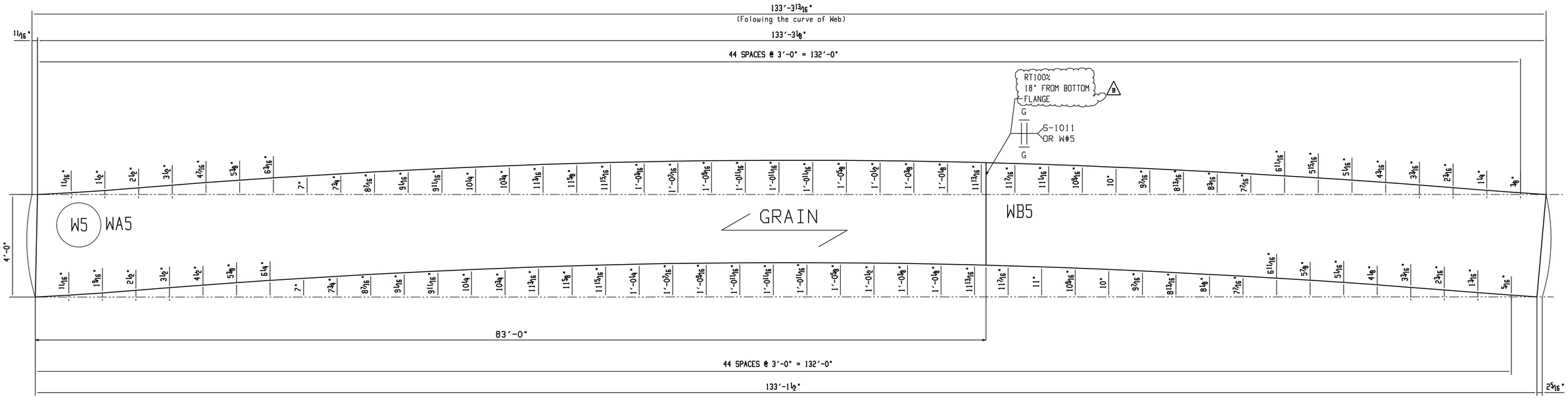
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G5

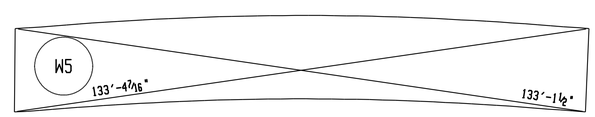
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 5-00



ONE WEB PLATE W5

WA5 = PL 1/2"
WB5 = PL 1/2"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

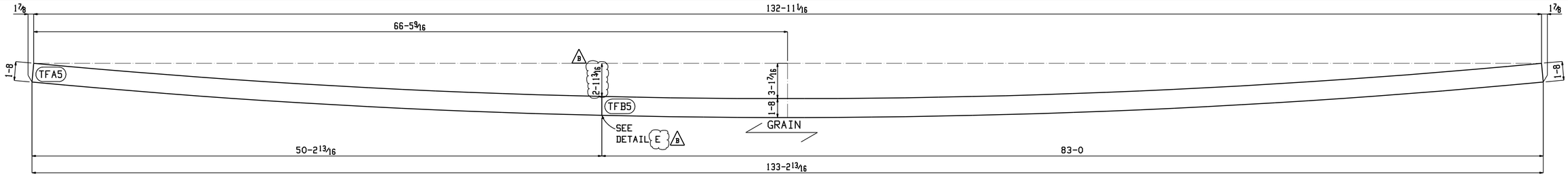
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G5

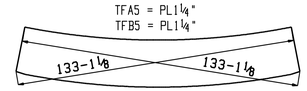
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

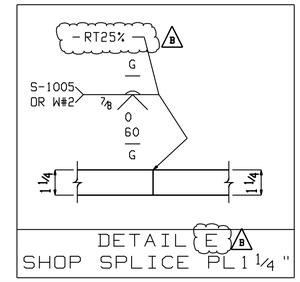
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 5-01

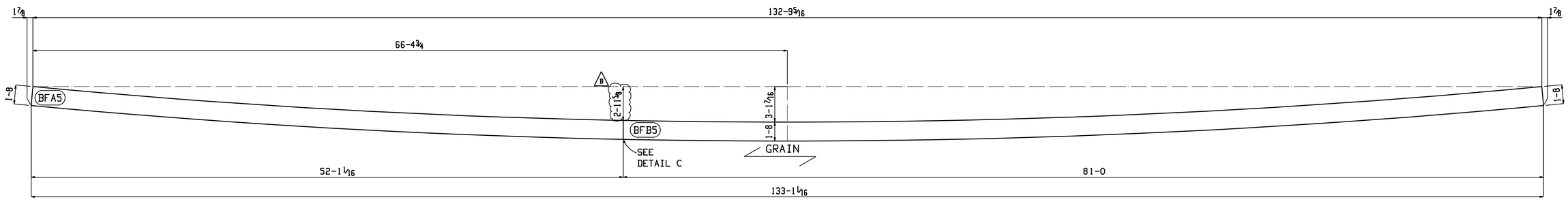


ONE TOP FLANGE TF5

TFA5 = PL1 1/4"
TFB5 = PL1 1/4"

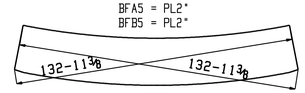


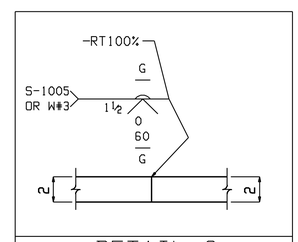




ONE BOTTOM FLANGE BF5

BFA5 = PL2"
BFB5 = PL2"





No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

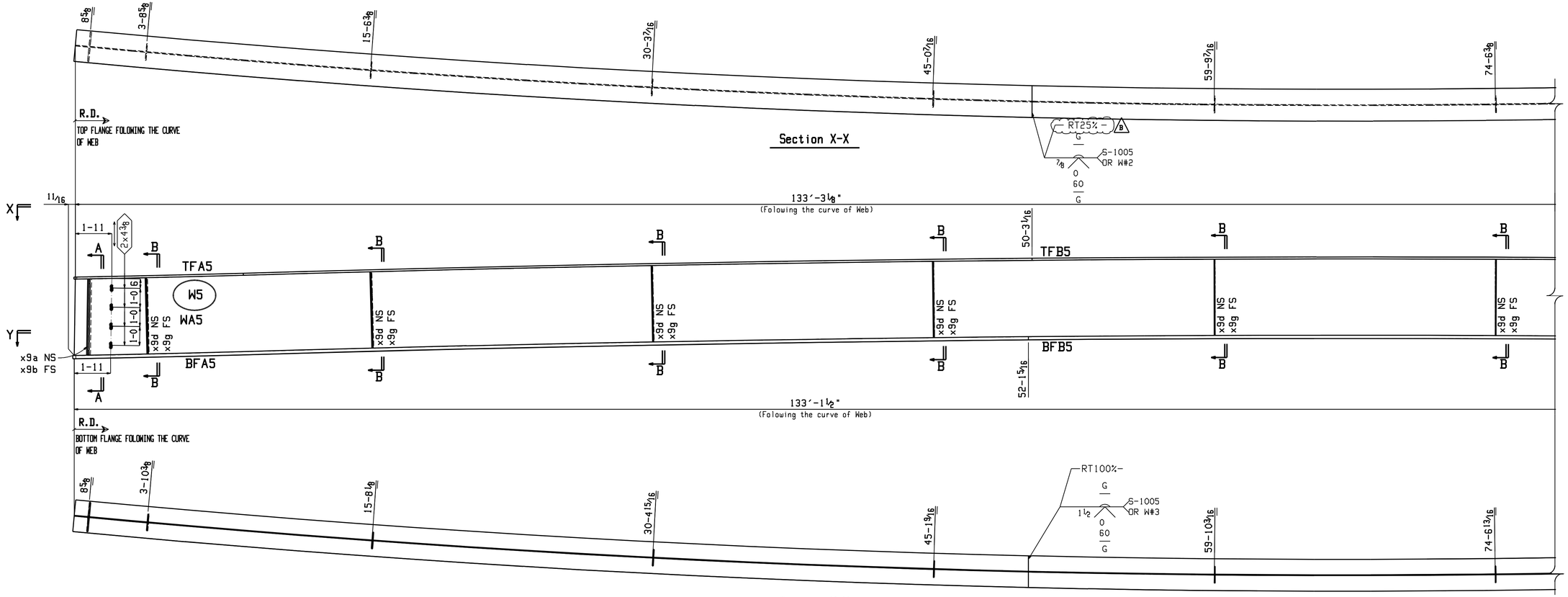
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G5

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 5-02

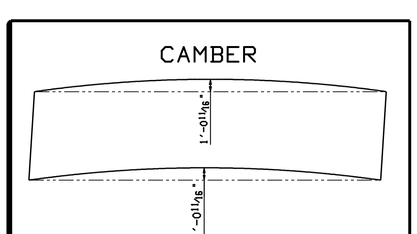


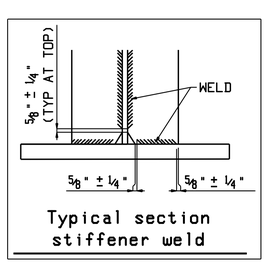
ONE GIRDER G5

GENERAL NOTE: SEE GN1

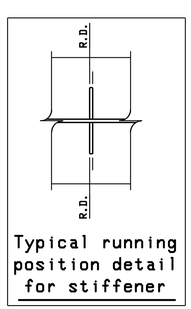
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

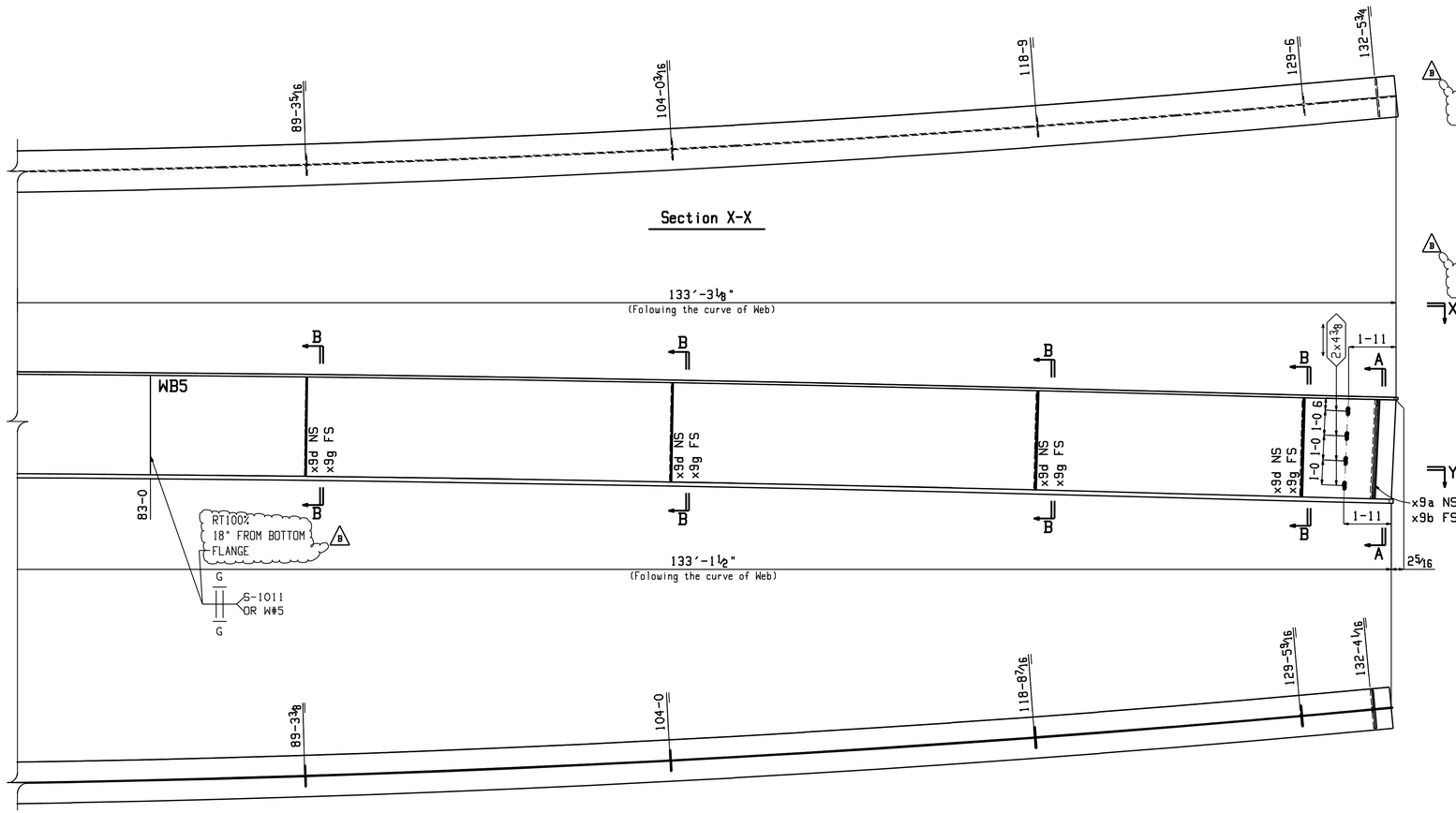
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

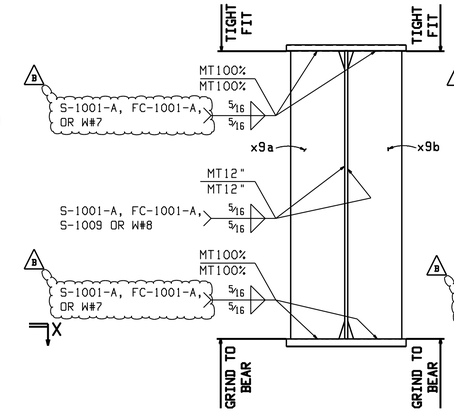
PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

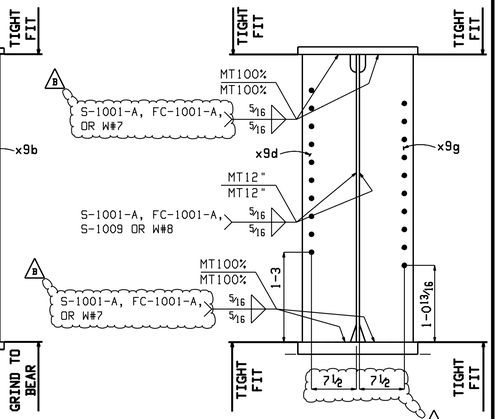
TITLE: MAIN GIRDER G5

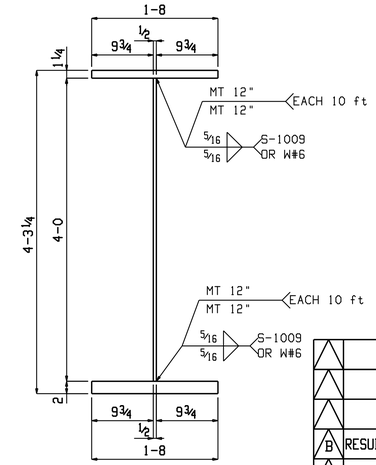
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 5-03









Typical Section

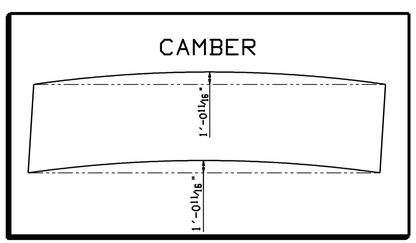
No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

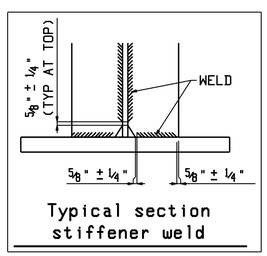
NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

GENERAL NOTE: SEE GN1

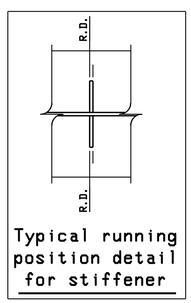
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G5

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 5-04

Total weight (lbs): 44034

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G6	ONE	GIRDER					44033.9	1	1
G6	1	.GIRDER		134-5 3/16			1747.6		
TFA6	1	PL1 1/4x20	A70950W2	51-5		100-16	4374.0		
TFB6	1	PL1 1/4x20	A70950W2	83-0 1/16		100-16	7061.2		
WA6	1	PL 1/2x48	A70950W2	83-0		100-17	6778.3		
WB6	1	PL 1/2x48	A70950W2	51-5 5/8		100-17	4203.3		
BFA6	1	PL2x20	A70950W2	53-3 3/16		100-18	7250.0		
BFB6	1	PL2x20	A70950W2	81-0 1/8		100-18	11026.4		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	184.0		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	184.0		
B x9d	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		
B x9k	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

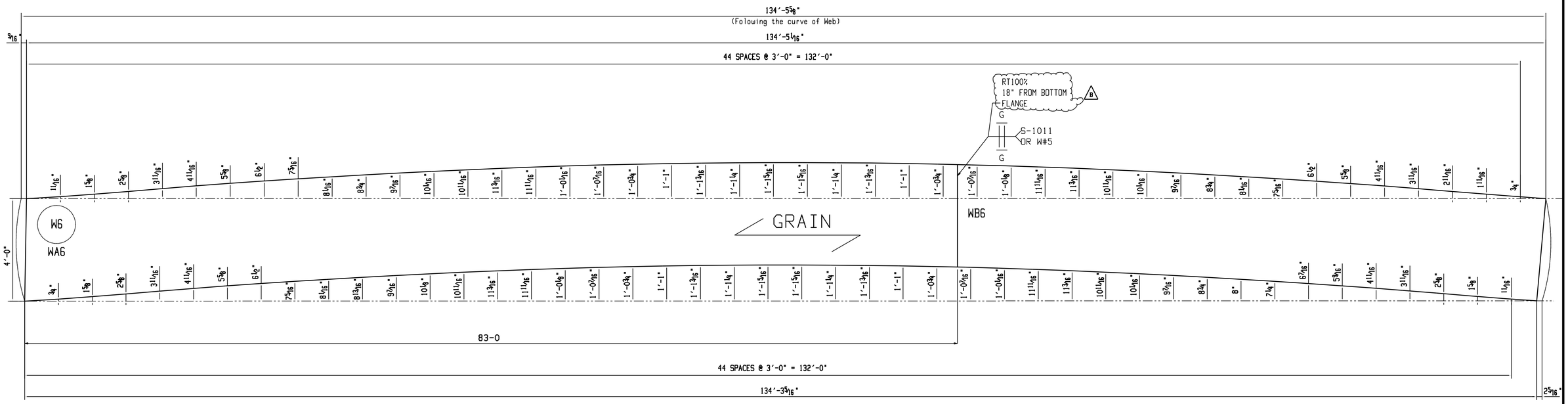
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30 BRIDGE NO 30 TOWN OF JAMAICA

TITLE: MAIN GIRDER G6

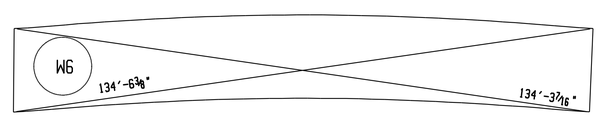
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 6-00



ONE WEB PLATE W6

WA6 = PL½"
WB6 = PL½"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

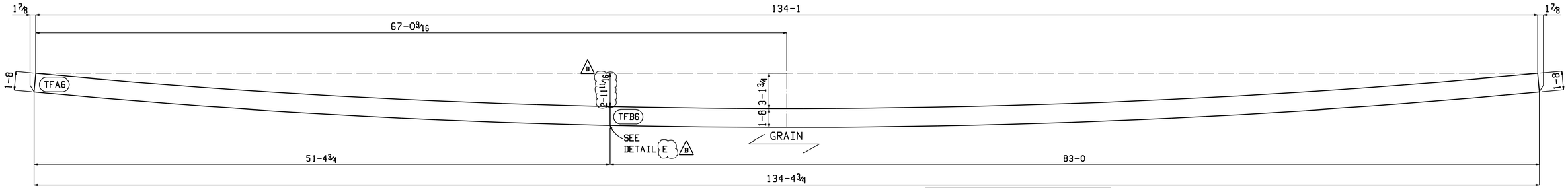
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G6

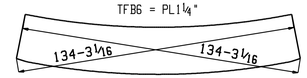
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

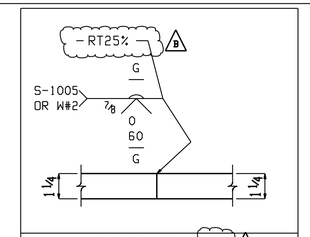
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 6-01



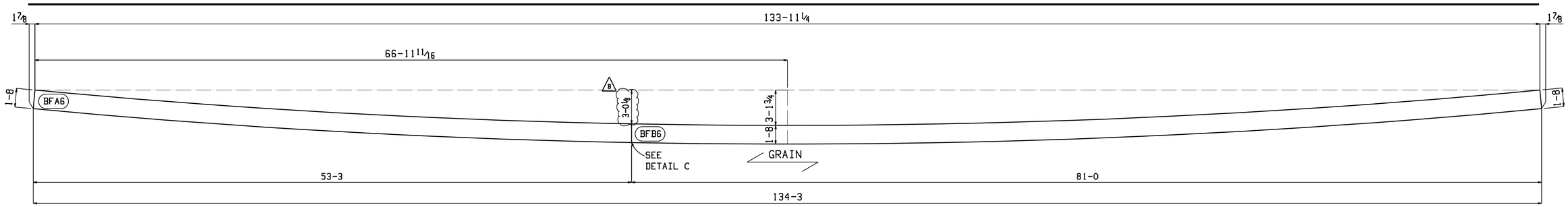
ONE TOP FLANGE TF6

TFA6 = PL1 1/4"
TFB6 = PL1 1/4"



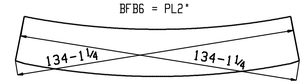


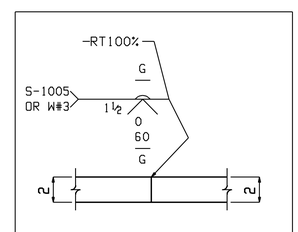
DETAIL E
SHOP SPLICE PL1 1/4"



ONE BOTTOM FLANGE BF6

BFA6 = PL2"
BFB6 = PL2"





DETAIL C
SHOP SPLICE PL2"

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

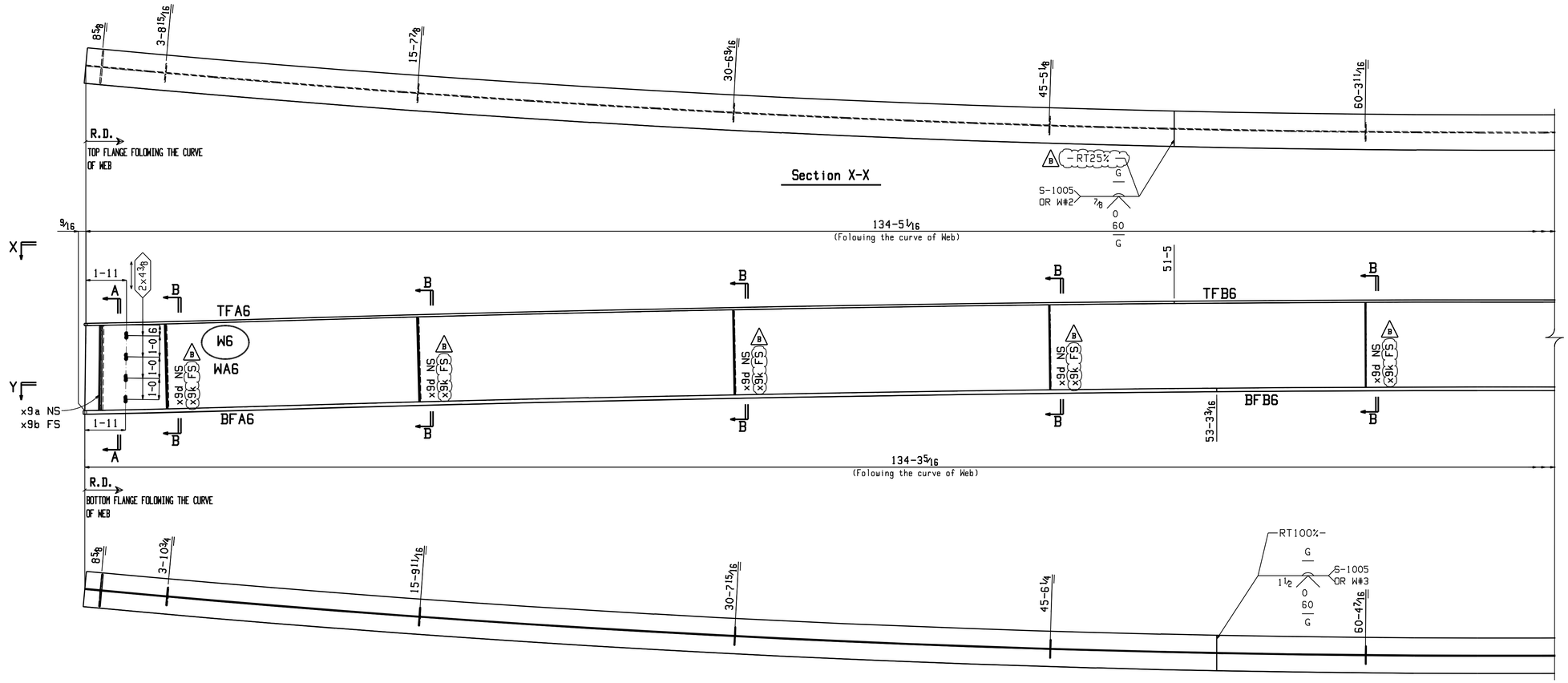
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: FLANGES GIRDER G6

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 6-02



ONE GIRDER G6

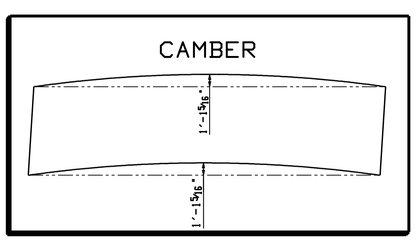
No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION TOP	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

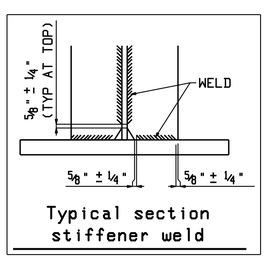
NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

GENERAL NOTE: SEE GN1

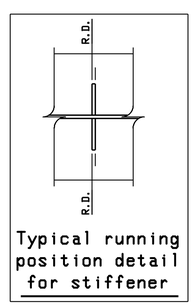
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

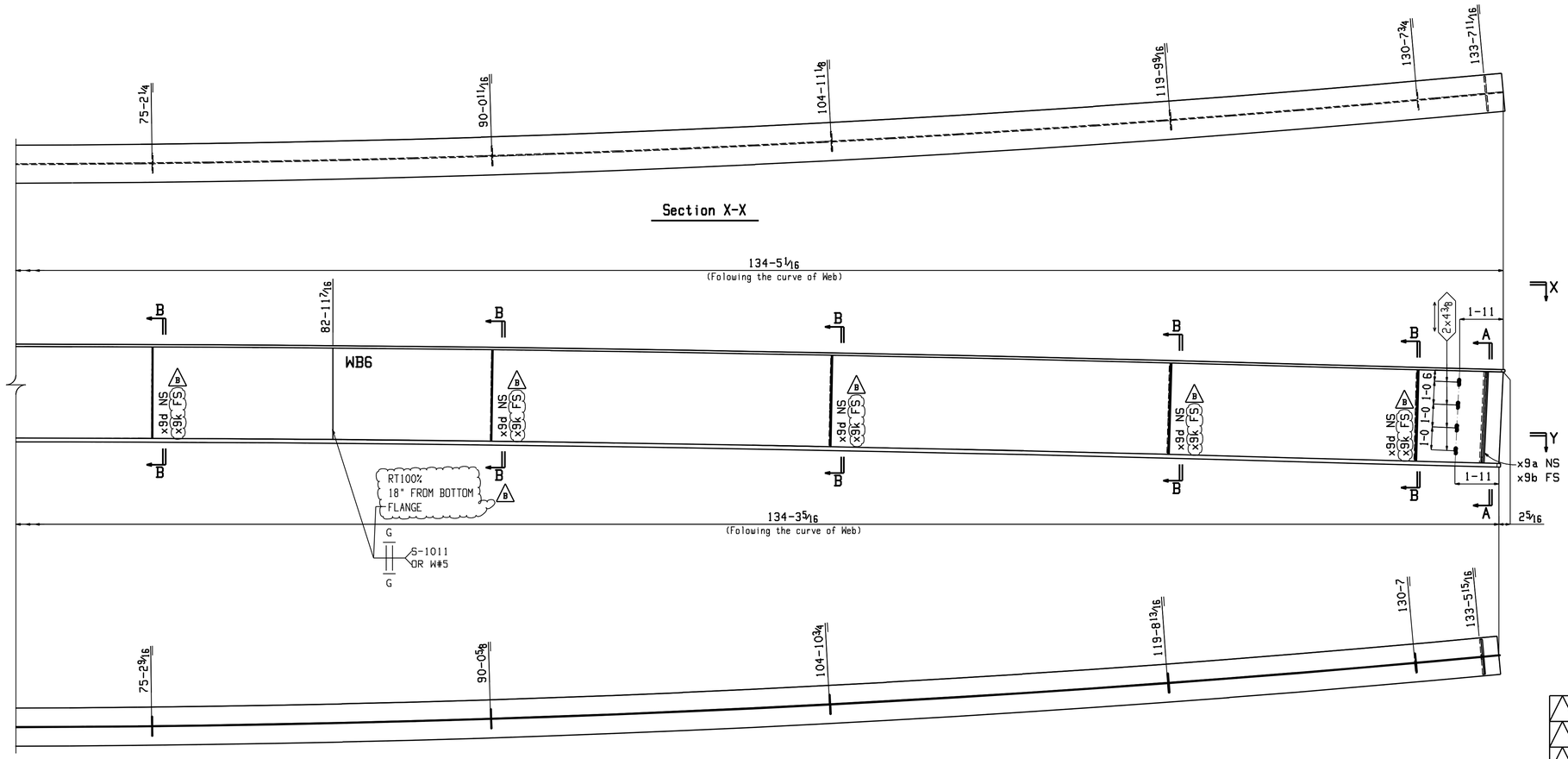
STRUCTAL Bridges
a division of CANAM GROUP Inc.
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312

PROJECT: VERMONT RTE 30 BRIDGE NO 30 TOWN OF JAMAICA

TITLE: MAIN GIRDER G6

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 6-03

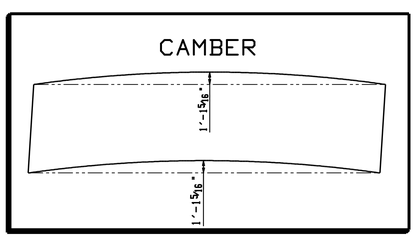


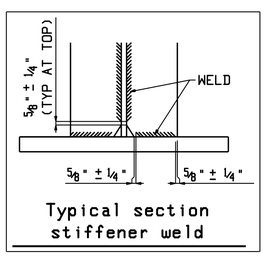
ONE GIRDER G6

GENERAL NOTE: SEE GN1

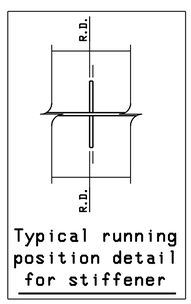
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

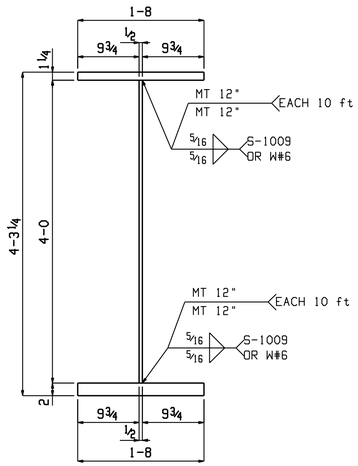
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

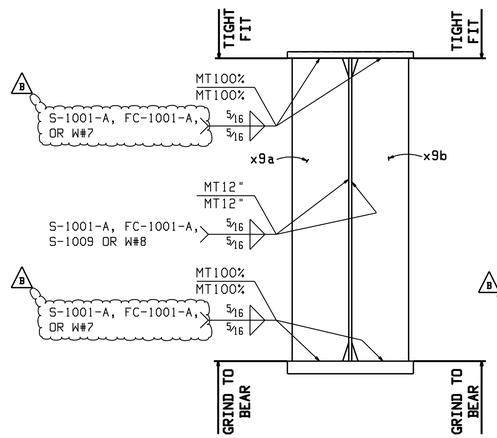
TITLE: MAIN GIRDER G6

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

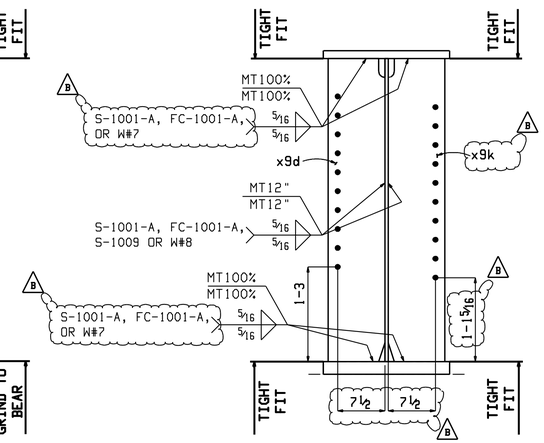
DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY:	DATE:	DRAWING NO:
P. LESSARD	MARCH 2013	6-04



Typical Section



Section A-A

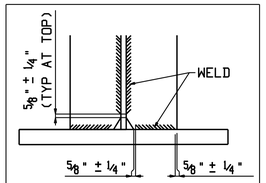


Section B-B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1



Typical section stiffener weld

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G6

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 6-05

Total weight (lbs): 46097

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G7	ONE	GIRDER					46096.7	1	1
G7	1	.GIRDER	A70950W2	135-7 1/8			1762.7		
TFA7	1	PL1 1/4x20	A70950W2	52-6 7/8		100-19	4472.4		
TFB7	1	PL1 1/4x20	A70950W2	83-0 3/16		100-19	7062.1		
WA7	1	PL 1/2x48	A70950W2	83-0		100-20	6778.3		
WB7	1	PL 1/2x48	A70950W2	52-7 9/16		100-20	4298.1		
BFA7	1	PL2 1/4x20	A70950W2	32-7 1/8		100-21	4990.9		
BFB7	1	PL2 1/4x20	A70950W2	70-2 15/16		100-21	10756.2		
BFC7	1	PL2 1/4x20	A70950W2	32-7 1/8		100-21	4990.9		
x9a	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	183.9		
x9b	2	PL 3/4x9	A70950W2	4-0 1/16	MT & B	101-1	184.0		
B x9m	10	PL 1/2x9	A70950W2	4-0		101-2	612.5		
x9h	1	PL 1/4x4 15/16	A70950W	1-1 1/8		101-4	4.6		

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL
   -"A70950W2" MEANS ASTM A709 GRADE 50WT ZONE 2
   IMPACT TEST REQUIREMENT FOR 0 TO 2" THICKNESS (-15ft-lb @ 40°F)
   IMPACT TEST REQUIREMENT FOR OVER 2" THICKNESS (-20ft-lb @ 40°F)

B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	MTL CLARIFICATION AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

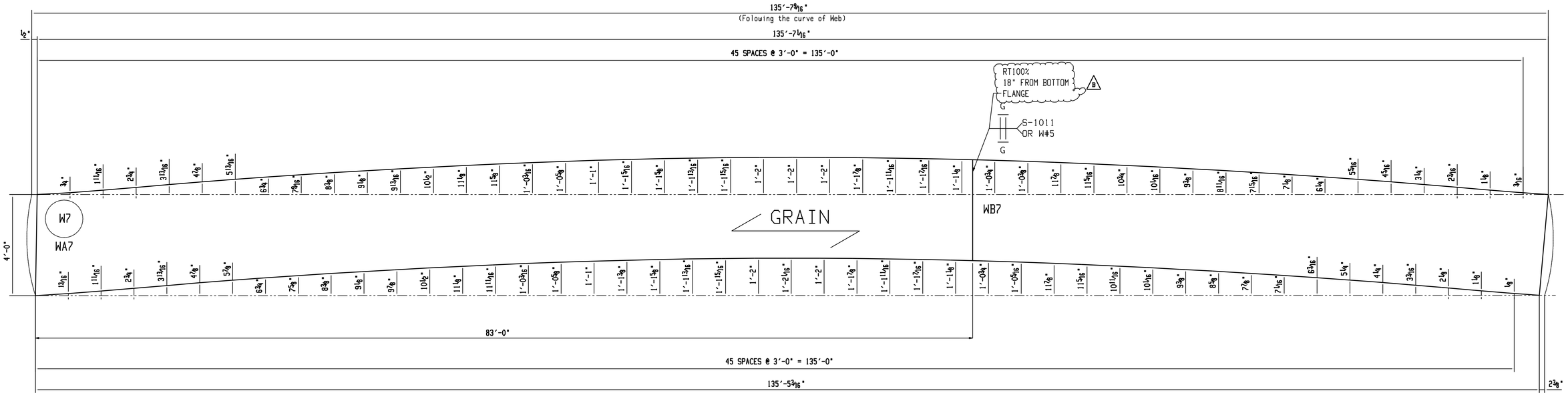
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G7

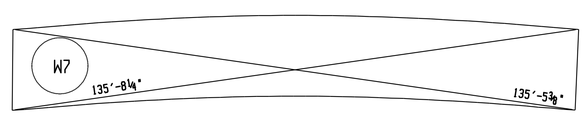
REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 7-00



ONE WEB PLATE W7

WA7 = PL 1/2"
WB7 = PL 1/2"



No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGED	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

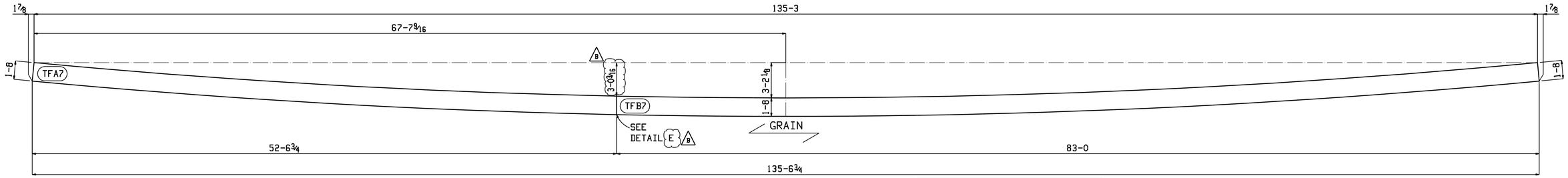
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
WEB GIRDER G7

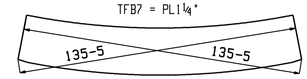
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

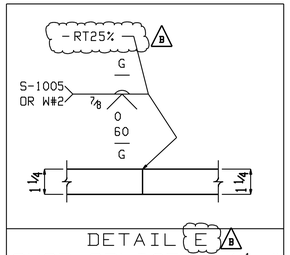
DRAWN BY:	DATE:	CONTRACT NO:
Manon Roux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 7-01



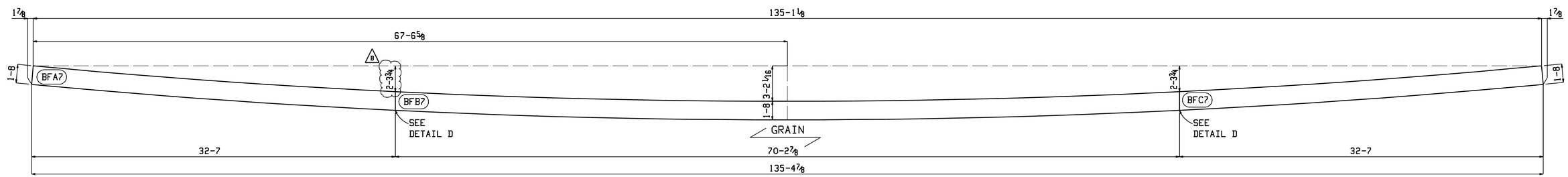
ONE TOP FLANGE TF7

TFA7 = PL1 1/4"
TFB7 = PL1 1/4"



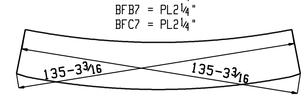


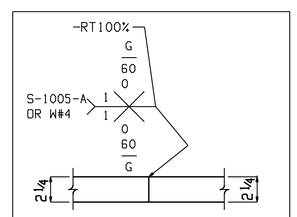
DETAIL E B
SHOP SPLICE PL1 1/4"



ONE BOTTOM FLANGE BF7

BFA7 = PL2 1/4"
BFB7 = PL2 1/4"
BFC7 = PL2 1/4"





DETAIL D
SHOP SPLICE PL2 1/4"

No	REVISION	DATE	BY	VER.
B	RESUBMITED INSPECTION CHANGE	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

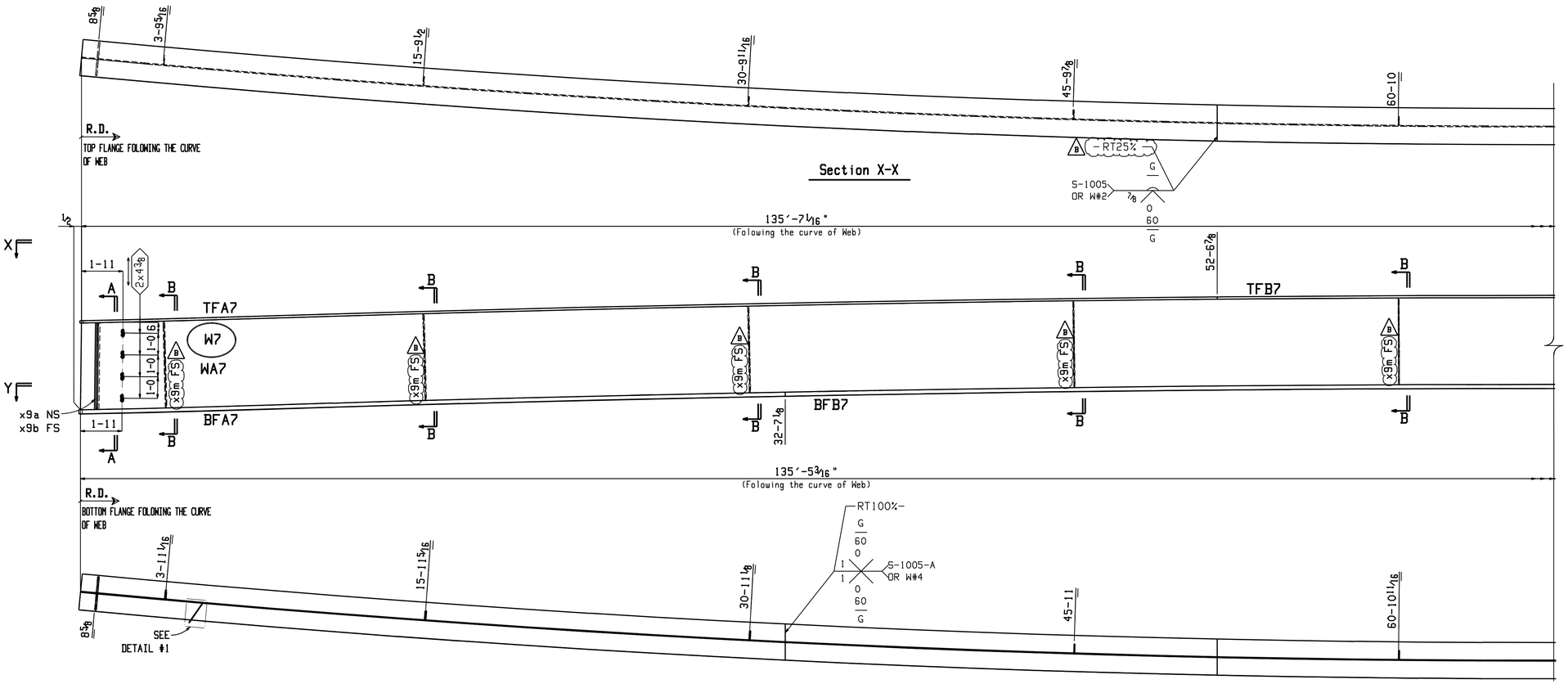
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

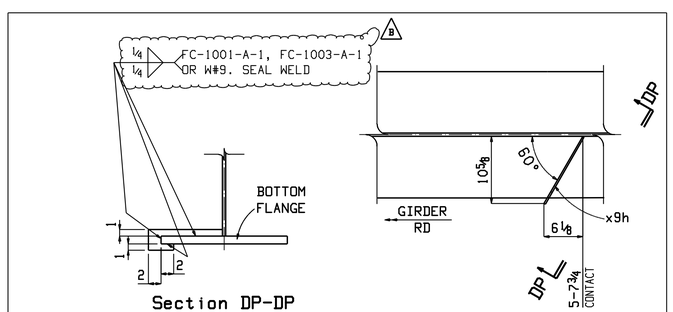
PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
FLANGES GIRDER G7

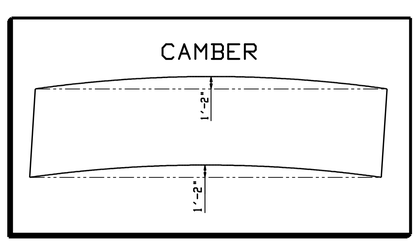
REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

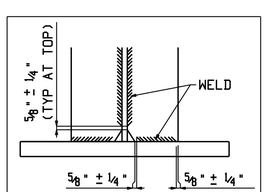
DRAWN BY:	DATE:	CONTRACT NO:
Manon Rioux	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 7-02



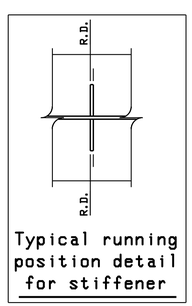


DETAIL #1





Typical section stiffener weld



Typical running position detail for stiffener

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION TOP	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

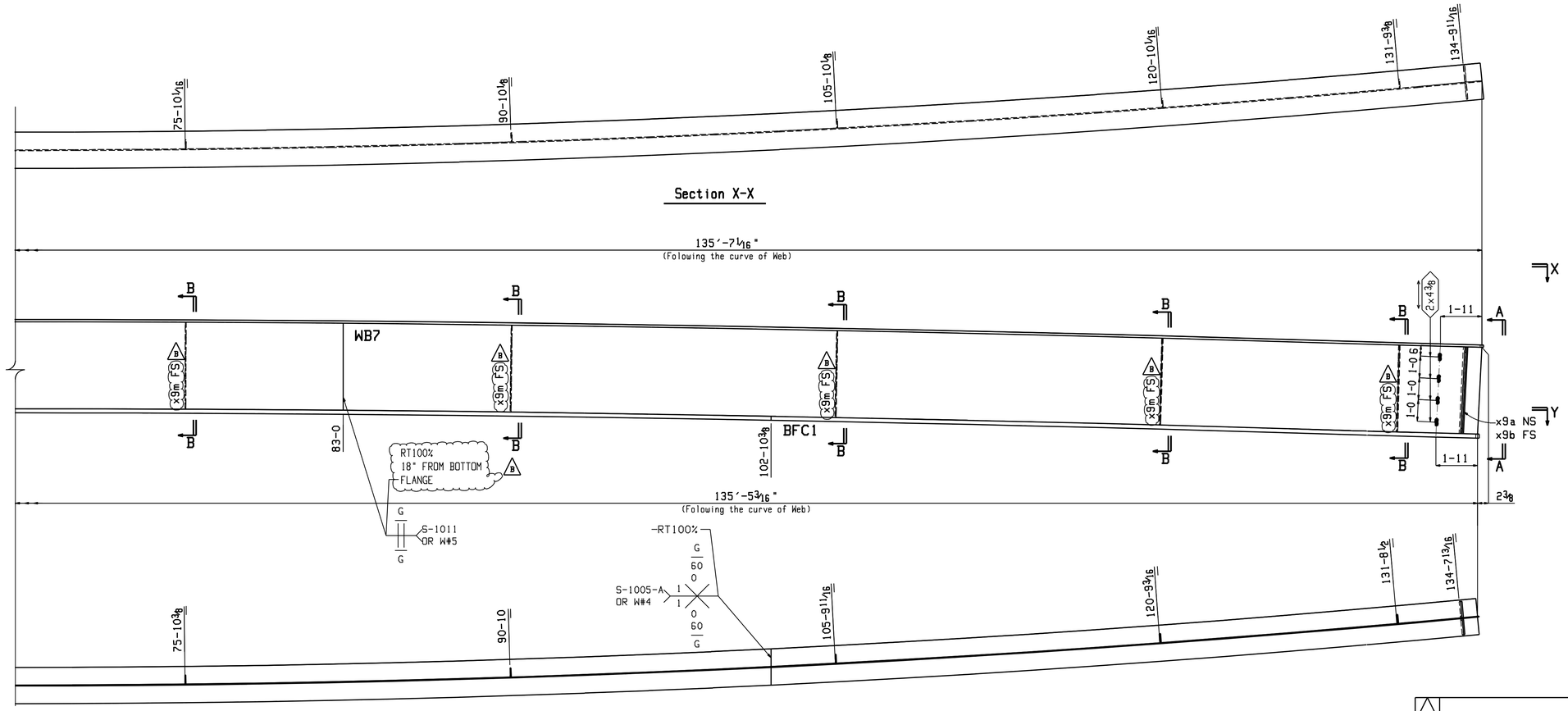
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE: MAIN GIRDER G7

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY:	DATE:	DRAWING NO:
P. LESSARD	MARCH 2013	7-03



ONE GIRDER G7

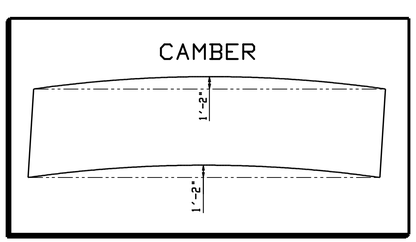
No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS + INSPECTION WEB	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

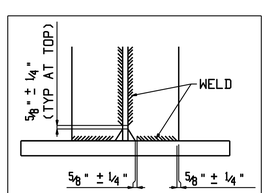
NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

GENERAL NOTE: SEE GN1

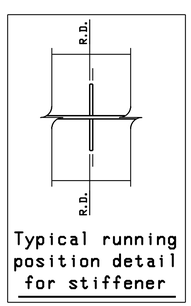
HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1





Typical section stiffener weld



Typical running position detail for stiffener

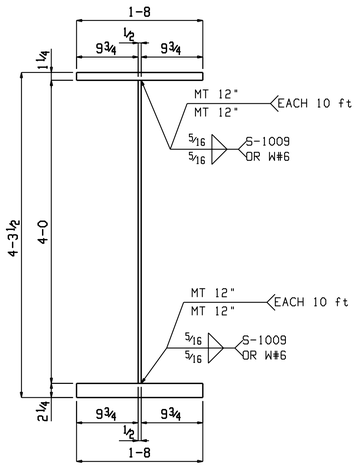
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

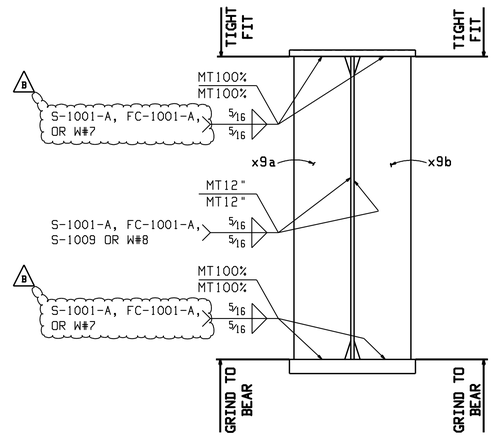
TITLE: MAIN GIRDER G7

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

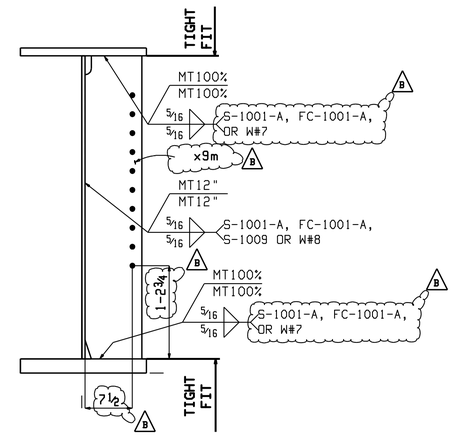
DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 7-04



Typical Section



Section A-A

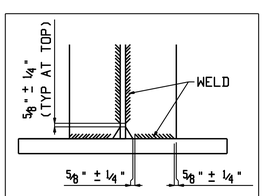


Section B-B

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1



Typical section stiffener weld

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

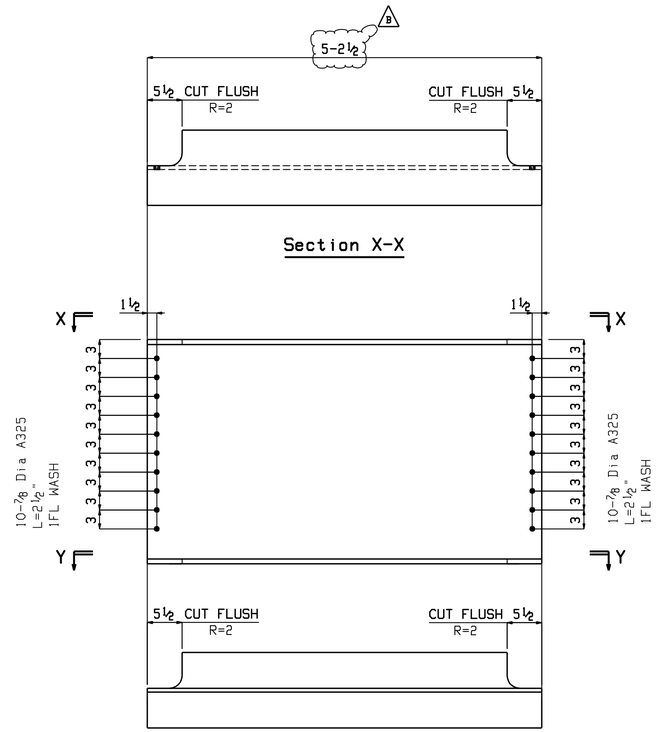
STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
MAIN GIRDER G7

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY:	DATE:	DRAWING NO:
P. LESSARD	MARCH 2013	7-05



Section Y-Y

60 DIAPHRAGMS D8A

GENERAL NOTE: SEE GN1

HOLES: 15/16 (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S1

MATERIAL:

1. ALL MAIN LOAD CARRYING MEMBER STRUCTURAL STEEL SHALL MEET THE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01)

2. WHERE INDICATED IN THE SHOP DRAWING BILL OF MATERIAL -"A70950W2" MEANS ASTM A709 GRADE 50W

Poids total (lbs):

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total Weight	Seq	Qty /Seq
D8A	60	DIAPHRAGM					42187.5	1	60
B D8A	60	W36x135	A709 50W	5-2½		102-1	42187.5		
FB		FIELD_BOLTS							
B 78F212	1200	.⅞ Dia A325 TYP3		2½	1FL WASH				

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

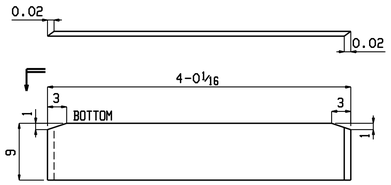
STRUCTAL Bridges
386 River Road, Claremont, NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT: VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

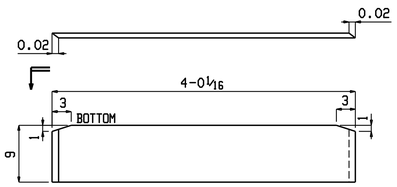
TITLE: DIAPHRAGMS

REFERENCE: PROJECT NUMBER: ER-BRF-015-1 (23)

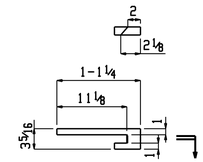
DRAWN BY:	DATE:	CONTRACT NO:
F.PELLETIER	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: 8-01



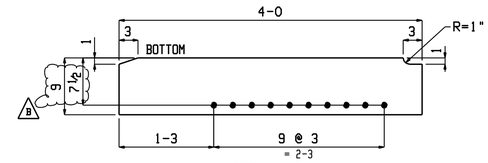
PL 3/4 x 9 x 4-0 1/16 x9a



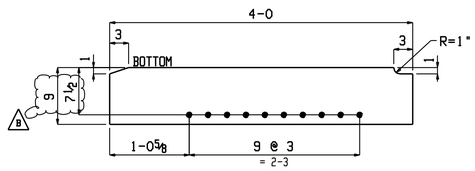
PL 3/4 x 9 x 4-0 1/16 x9b



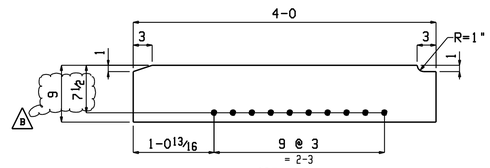
PL 1/4 x 3 5/16 x 1-1 1/4 x9c



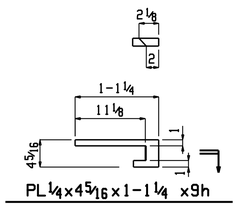
PL 1/2 x 9 x 4-0 x9d



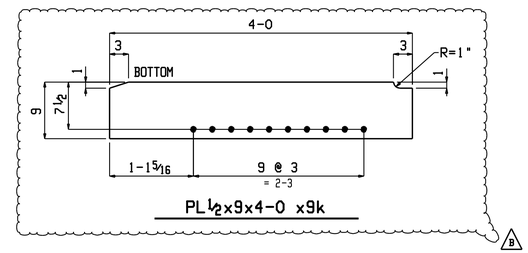
PL 1/2 x 9 x 4-0 x9e



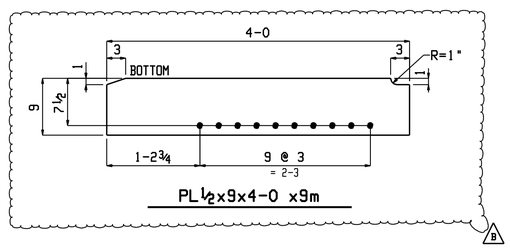
PL 1/2 x 9 x 4-0 x9g



PL 1/4 x 4 5/16 x 1-1 1/4 x9h



PL 1/2 x 9 x 4-0 x9k



PL 1/2 x 9 x 4-0 x9m

No	REVISION	DATE	BY	VER.
B	RESUBMITED AS PER COMMENTS	2013-04-08	MR	PL
A	FOR APPROVAL	2013-03-13	MR	PL

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL Bridges
386 River Road, Claremont,
NH, 03743
Tel: (603) 542-5205 Fax: (603) 542-5312
a division of CANAM GROUP Inc.

PROJECT:
VERMONT RTE 30
BRIDGE NO 30
TOWN OF JAMAICA

TITLE:
SUBMATERIALS DETAILS

REFERENCE:
PROJECT NUMBER: ER-BRF-015-1 (23)

DRAWN BY:	DATE:	CONTRACT NO:
Manon Pirou	FEBRUARY 2013	UP01195
CHECKED BY: P. LESSARD	DATE: MARCH 2013	DRAWING NO: X9

STRUCTAL BRIDGES, a division of Canam Steel Corp.

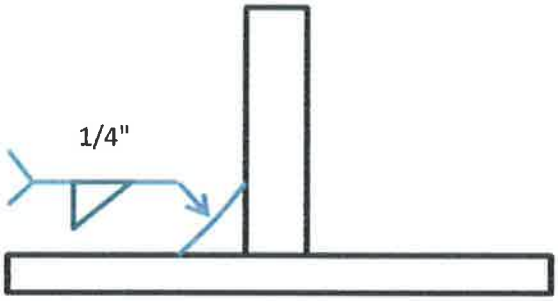
WELDING PROCEDURE SPECIFICATION

FCM AND NON FCM WELDS

WPS Number: FC-1001-A-1	Issue date:04-03-2013
Project: Jamaica VT., ER-BRF-015-1(23)	STRUCTAL job #.: UPO 1195
Base metal: ASTM A709 GR 36,50,50W, HPS 50W.	
Welding process:Flux Cored Arc Welding	
Filler metal spec. AWS,A5.29 ESAB DualShield 810X-Ni1	
Flux / shielding gas:100% CO_2	
Current and polarity: DCEP	Electrical stickout: 3/4" +/- 1/4"
Welding position: 1F and 2F	
Preheat temp..:AWS D1.5 Table 4.3 / 12.3	WPS qualification:AWS D1.5 / section 5
Heat input: 35.34 - 49.00, Kilojoules	Supporting PQR#:FCAW-PQR-50W-50W-1G-WM23, REV.1

electrode size	welding amps	current volts	travel speed
1/16"	300 - 345	27 - 29	12.25 -13.75

Joint Detail :T joint



Notes: For welding 1/4" fillet welds

Minimum preheat and interpass temperatures per AWS D1.5 Table 4.3 / 12.3

Maximum interpass temp. shall be 450°F

Thickness of thickest part at point of welding	FCM	Non FCM
up to 3/4"	125°F	50°F
3/4" to 1 1/2"	200°F	70°F
1 1/2" to 2 1/2"	300°F	150°F
over 2 1/2"	350°F	225°F

This procedure may vary due to fabrication sequence, fit up, pass size, etc. within the limits provided in the contract documents and the AWS D1.5, 2010 Bridge Welding Code.

STRUCTAL BRIDGES, a division of Canam Steel Corp.

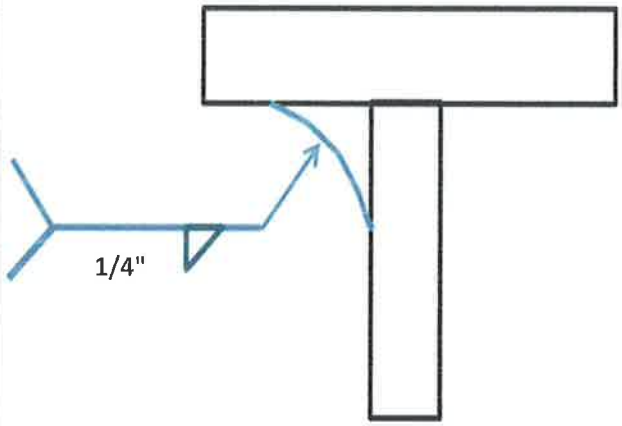
WELDING PROCEDURE SPECIFICATION

FCM AND NON FCM WELDS

WPS Number: FC-1003-A-1	Issue date:04-03-2013
Project: Jamaica VT., ER-BRF-015-1(23)	STRUCTAL job #.: UPO 1195
Base metal: ASTM A709 GR 36,50,50W, HPS 50W.	
Welding process:Flux Cored Arc Welding	
Filler metal spec. AWS,A5.29 ESAB DualShield 810X-Ni1	
Flux / shielding gas:100% CO_2	
Current and polarity: DCEP	Electrical stickout: 3/4" +/- 1/4"
Welding position: 4F	
Preheat temp..:AWS D1.5 Table 4.3 / 12.3	WPS qualification:AWS D1.5 / section 5
Heat input: 28.86-48.02, Kilojoules	Supporting PQR#:FCAW-PQR-50W-50W-4G-WM23.

electrode size	welding amps	current volts	travel speed
1/16"	240.5 - 260	24.5 - 27	10.5-12.25 I/M

Joint Detail :T joint



Notes: For welding 1/4" Fillet welds.

Minimum preheat and interpass temperatures per AWS D1.5 Table 4.3 / 12.3

Maximum interpass temp. shall be 450˚F

Thickness of thickest part at point of welding	FCM	Non FCM
up to 3/4"	125˚F	50˚F
3/4" to 1 1/2"	200˚F	70˚F
1 1/2" to 2 1/2"	300˚F	150˚F
over 2 1/2"	350˚F	225˚F

This procedure may vary due to fabrication sequence, fit up, pass size, etc. within the limits provided in the contract documents and the AWS D1.5, 2010 Bridge Welding Code.