



CONSTRUCTION LEADERS

LETTER OF TRANSMITTAL	
DATE: February 5, 2015	PCL JOB NO: 5515002
ATTN: Kristin Higgins, P.E.	TRANSMITTAL NO: 007

To: **State of Vermont Agency of Transportation**
 One National Life Drive
 Montpelier, VT 05633-5001
 (802) 828-0053

Re: Hartford Lateral Slide
 Project No.: IM 091-2(79)
 Contract ID.: 12A132

County: Windsor

PCL FILE NO: 5515002-6

WE ARE SENDING Attached _____ Under separate cover via Email & SP the following:
 Shop drawings _____ Prints _____ Plans _____ Samples _____ Specifications
 _____ Copy of Letter _____ Change Order _____ Other

COPIES	SPEC.	REVISION	DESCRIPTION
1	506	1	Structural Steel Shop Drawings

TRANSMITTED for as checked below:

For approval _____ Approved as submitted _____ Resubmit 1 Copies for approval
 _____ For your use _____ Approved as noted _____ Submit _____ Copies for distribution
 _____ As requested _____ Returned for corrections _____ Return _____ Corrected prints
 _____ For review and comment

Remarks:

The attached shop drawings have been revised per the Agency's comments dated 1/30/2015. This submittal supersedes all information previously submitted under the same document number (003.1). Therefor please disregard the previous submittal. In addition, PCL has verified the location of the stiffeners for the lateral slide support and the locations were revised in this submittal.

Please return an email of this approved submittal to Erich Heymann (ewheymann@pcl.com) and Jeremy Mackling (jmackling@pcl.com).

We request the review and return of this submittal within **7 days**. As aware the structural steel is a long lead item and it critical to the construction schedule. Please advise if this request cannot be met so we can plan accordingly.

By: **Erich Heymann**, Project Engineer

COPY TO: Project Files



CONSTRUCTION LEADERS

SUBMITTAL NO. : 003.1
Structural Steel Shop Drawings

Item No.	Specification	Description
1	506	Structural Steel Shop Drawings

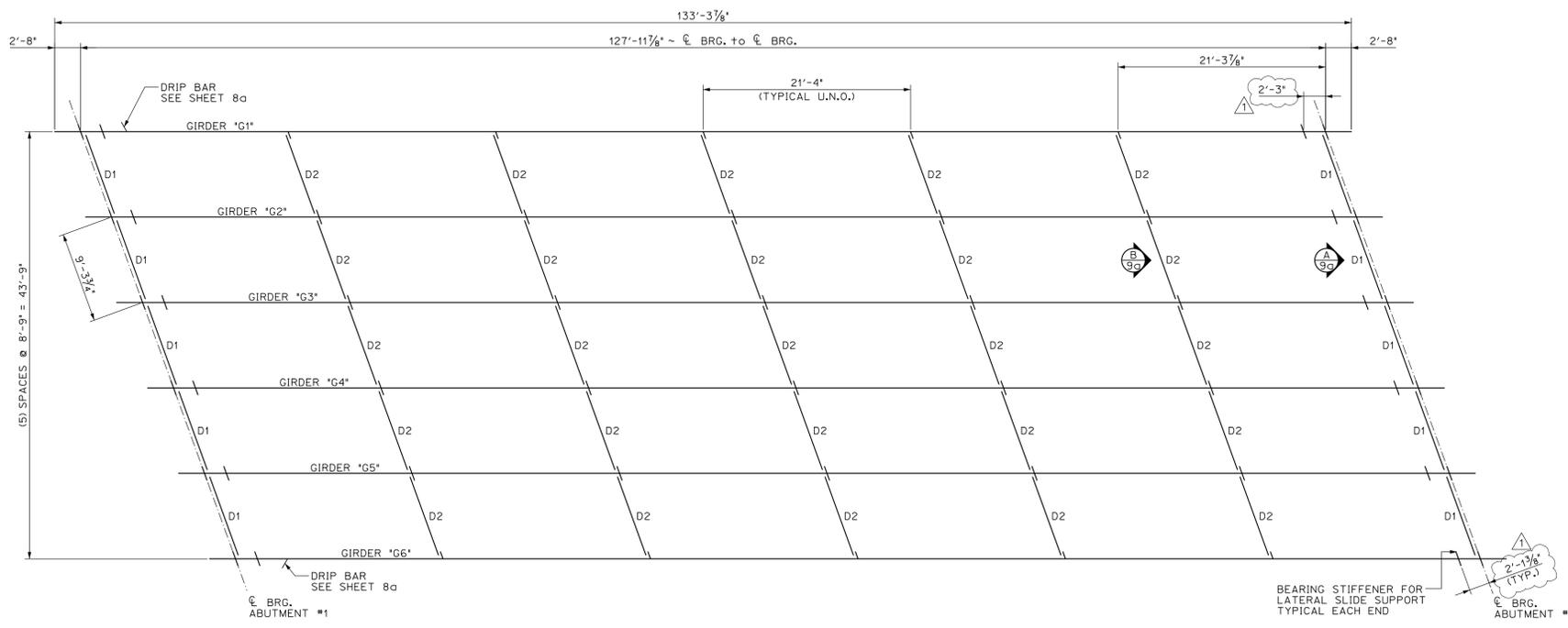
PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132

OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION

ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION

CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.

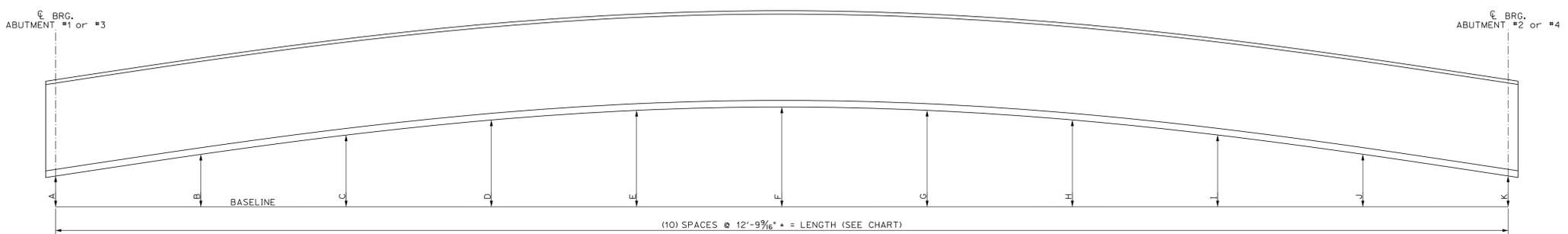
FEBRUARY 5, 2015



SOUTHBOUND FRAMING PLAN (BRIDGE 43S)
SCALE: 1/8" = 1'-0"

GENERAL FABRICATION NOTES

- MATERIAL SPECIFICATIONS**
- ALL MATERIAL SHALL BE ASTM A709 GRADE 50W (UNO). THE BOTTOM FLANGES OF THE GIRDERS FOR BRIDGE 43N SHALL CONFORM TO ASTM A709 HPS 70W.
 - ALL A709 GRADE 50 MATERIAL DENOTED "CVN" SHALL MEET THE CHARPY V-NOTCH TESTING REQUIREMENTS OF ZONE 2, H FREQUENCY: 15 FT-LB AT 40° (UP TO 2" WELDED). ITEMS SHALL CALL OUT "CVN" FOR EACH APPLICABLE ITEM IN THE BILL OF MATERIALS.
 - BOLTS SHALL BE HIGH STRENGTH BOLTS ASTM A325, TYPE 3. NUTS SHALL BE A563, GRADE C3 OR D13. WASHERS SHALL BE ASTM F436, TYPE 3.
- FABRICATION**
- DIE STAMPING IS ALLOWED IN SPECIFIC LOCATIONS WITH THE APPROVAL OF THE ENGINEER.
 - ALL EDGES OF FLAME CUT MATERIAL SUBJECTED TO CALCULATED STRESSES SHALL BE ROUNDED TO A MINIMUM RADIUS OF 1/16", OR AN EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE.
 - ALL PLATES, FLAME CUT FROM LARGER PLATES, SHALL BE CUT SO THAT THE PRIMARY DIRECTION OF ROLLING IS PARALLEL TO THE MAIN TENSILE OR COMPRESSIVE STRESS. STANDARD SPEC. 504.18, DECEMBER, 2002.
 - FLANGE PLATE MATERIAL SHALL HAVE AN EDGE HARDNESS HRC 30 AVERAGE AND MAX SINGLE HRC 35, ALLOWED STANDARD SPEC 504.22.
- WELDING**
- ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SUBSECTION 506.10.
 - NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH ANSI/AASHTO/AWS D1.5 SECTION 6. FLANGE WELDS WILL BE CALLED OUT AS BEING IN EITHER COMPRESSION OR TENSION. WEB WELDS WILL LABEL EITHER TOP OR BOTTOM AS BEING IN COMPRESSION, OR BE LABELED AS BEING IN A STRESS REVERSAL AREA.
- FLANGE SPLICES SHALL BE TESTED AS FOLLOWS:
 FLANGE SPLICES IN TENSION ~ TESTED 100%
 FLANGE SPLICES IN STRESS REVERSAL AREAS ~ TESTED 100%
 FLANGE SPLICES IN COMPRESSION ~ TESTED 25%
- WEB SPLICES SHALL BE TESTED AS FOLLOWS:
 FOR 1/6 THE DEPTH OF THE WEB (TENSION AREA) ~ TESTED 100%
 FOR THE REMAINING DEPTH OF WEB (COMPRESSION AREA) ~ TESTED 25%
 FOR 1/6 DEPTH OF THE WEB @ TOP & BTM. (STRESS REVERSAL) ~ TESTED 100%
 THE REMAINING 2/3 OF THE WEB ~ TESTED 25%
- TERMINATE STIFFENER WELDS AS SHOWN IN THE "WELD TERMINATION DETAIL" ON SHEET M1.
- FIELD CONNECTIONS**
- FIELD BOLTS SHALL HAVE A HEAVY HEX NUT, HEX HEAD, AND ONE HARD WASHER EACH.
 - PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS. ALL ERECTION MARKS, MATCH MARKS, AND WEIGHT MARKS MUST NOT BE EXPOSED IN THE FINISHED STRUCTURE.
 - HARDENED WASHERS ARE REQUIRED OVER OVERSIZED HOLES.
- CLEANING AND PAINTING**
- UNPAINTED STEEL SHALL BE BLAST CLEANED TO SSPC SP-6 TO ACHIEVE A UNIFORM WEATHERED APPEARANCE.



BLOCKING DIAGRAM ~ SEE CHART
ALL DIMENSIONS ARE TO THE OUTSIDE OF BOTTOM FLANGES
NOT TO SCALE

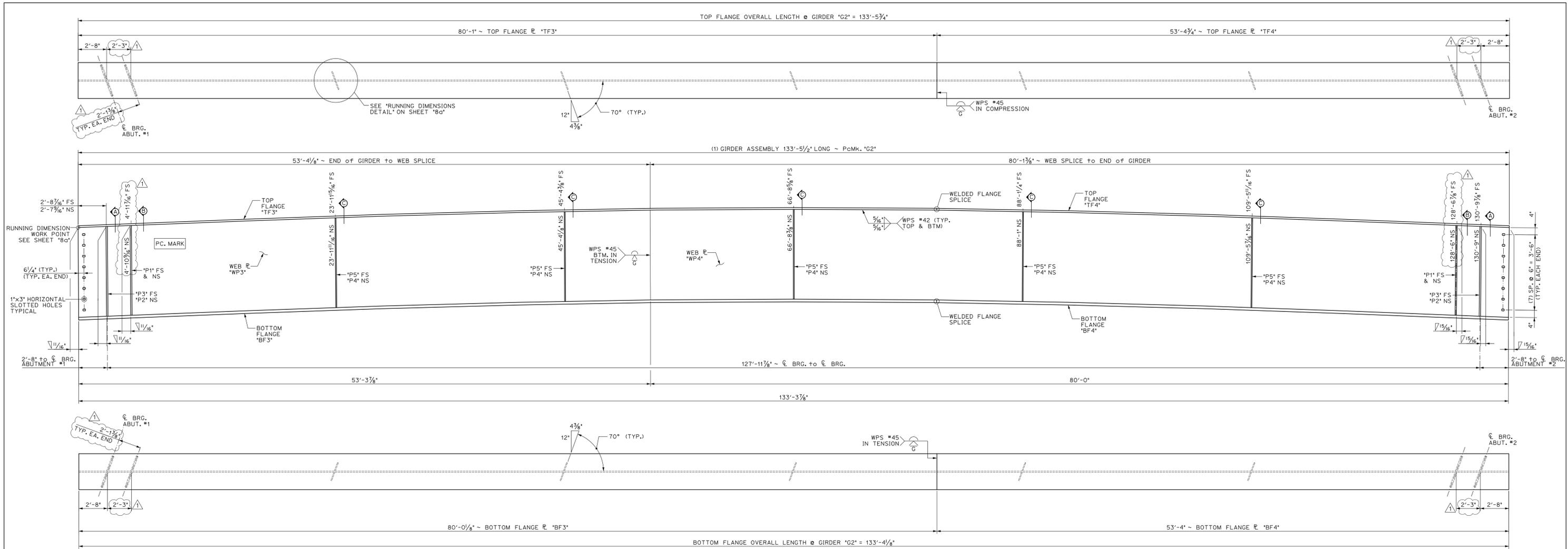
GIRDER LINE	LENGTH	ABUT. 1 CL. BRG. "A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	ABUT. 2 CL. BRG. "K"
SOUTHBOUND GIRDERS BRIDGE 43S	127'-11 7/8"	6"	9"	11 1/16"	13 3/4"	15 1/8"	15 1/2"	15 1/8"	13 3/4"	11 1/8"	9"	6"
NORTHBOUND GIRDER BRIDGE 43N	127'-11 3/16"	6"	10 5/16"	14"	17"	18 7/8"	19 1/2"	18 7/8"	17"	14"	10 5/16"	6"

PROJECT No. IM 091-2(79)
ITEM No. 506.55

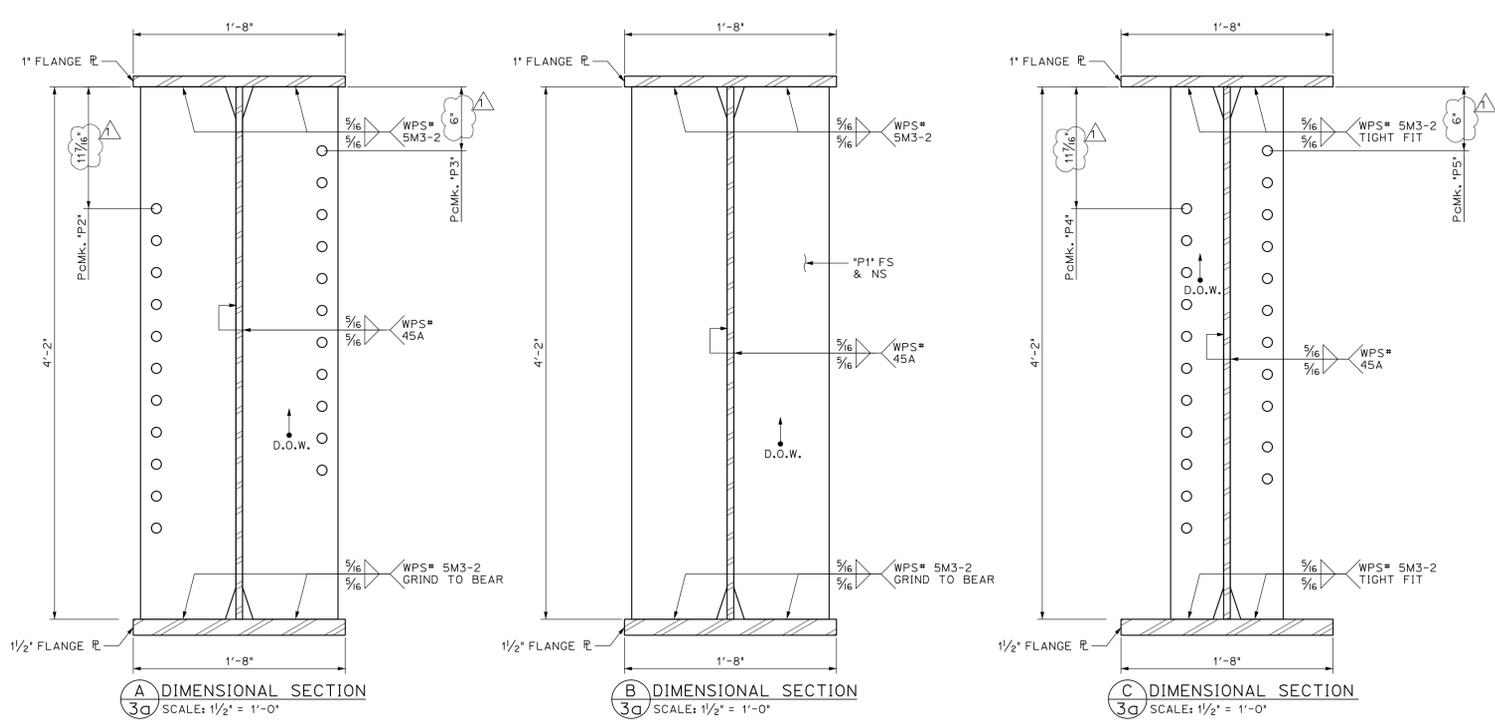
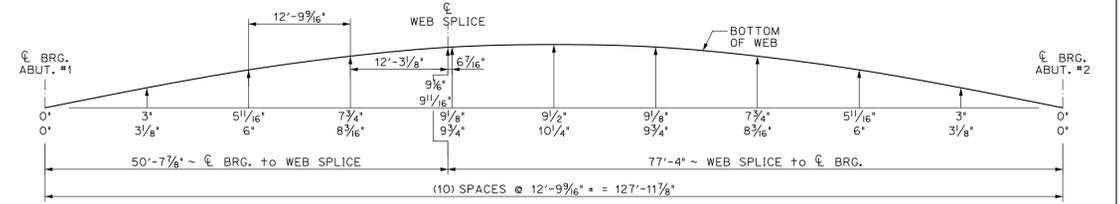
FINISH	N/A			
MATERIAL	SEE DETAIL SHEETS			
HOLES				
ELECTRODES	PER WELD PROCEDURE			
WELDS	PER WELD PROCEDURE			
SURFACE PREP	1	2/5/14	Lateral slide support	JJH
	NO	DATE	DESCRIPTION	BY

REVISIONS

	ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED P.O. BOX 120 KINGFIELD, ME. 04947 PHONE: (207) 265-2646 - FAX: (207) 265-4054	
	DRAFTER: JJH DATE: JAN. 2015 CHECKED: GNM DATE: JAN. 2015	SOUTHBOUND FRAMING PLAN HARTFORD, VT I-91 SB OVER US RTE 5 PROJECT NUMBER IM 091-2(79) PCL CIVIL CONSTRUCTORS



1 DIMENSIONAL PLANS & ELEVATIONS ~ GIRDER "G2"
 3a HORIZONTAL SCALE: 1/4" = 1'-0"
 VERTICAL SCALE EXAGGERATED 2:1



BILL OF MATERIALS							
SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	MAT'L
1	G2			BRIDGE GIRDER ASSEMBLY	133'-5 1/2"	38,225#	
		1	WP3	1/2" x 50"	53'-4 1/4"	5700#	CVN
		1	WP4	1/2" x 50"	80'-1 1/2"	8550#	CVN
		1	TF3	1" x 20"	80'-1"	5475#	CVN
		1	TF4	1" x 20"	53'-4 3/4"	3650#	CVN
		1	BF3	1 1/2" x 20"	80'-0 1/8"	8200#	CVN
		1	BF4	1 1/2" x 20"	53'-4"	5450#	CVN
		4	P1	SEE SHEET M1			
		2	P2	SEE SHEET M1			
		2	P3	SEE SHEET M1			
		5	P4	SEE SHEET M1			
		5	P5	SEE SHEET M1			

THE TWO CAMBER DIMENSIONS SHOWN REPRESENT THE FOLLOWING:
 TOP DIMENSION ~ TOTAL CAMBER IN FINISHED BEAM IN A NO-LOAD POSITION
 BTM. DIMENSION ~ TOTAL CAMBER IN BEAM @ TIME OF FABRICATION

GIRDER "G2" CAMBER

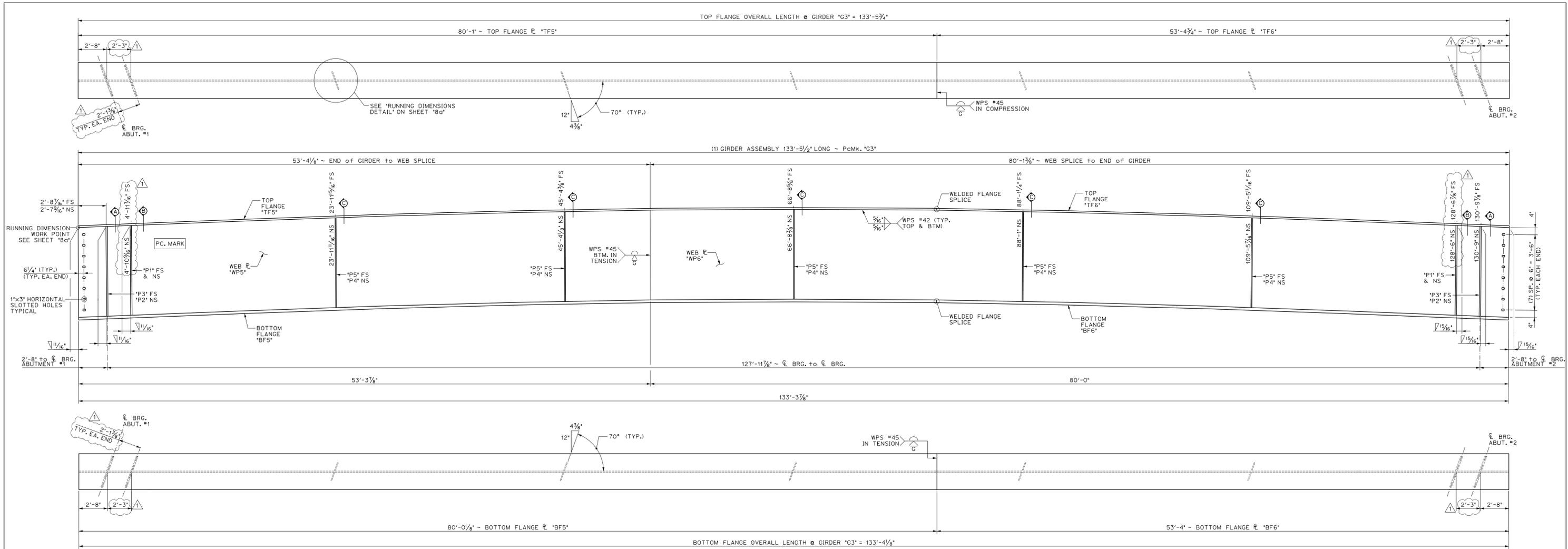
PROJECT No. IM 091-2(79)
 ITEM No. 508.55

FINISH	SSPC SP10		
MATERIAL	AASHTO M270 (ASTM A709) GRADE 50W		
HOLES	15/16" Ø U.N.O.		
ELECTRODES	PER WELD PROCEDURE		
WELDS	PER WELD PROCEDURE		
SURFACE PREP	SSPC SP6	1	2/5/15
	NO	DATE	DESCRIPTION
			BY

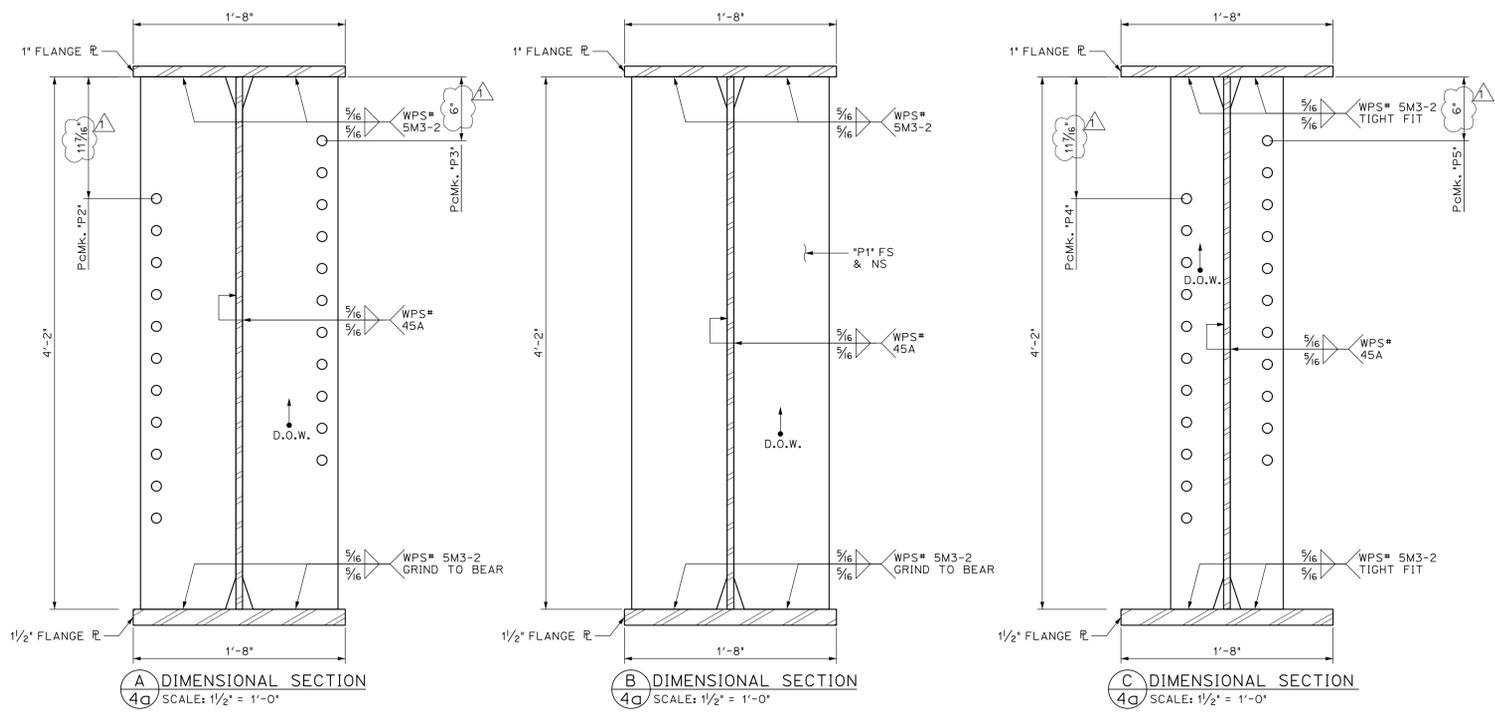
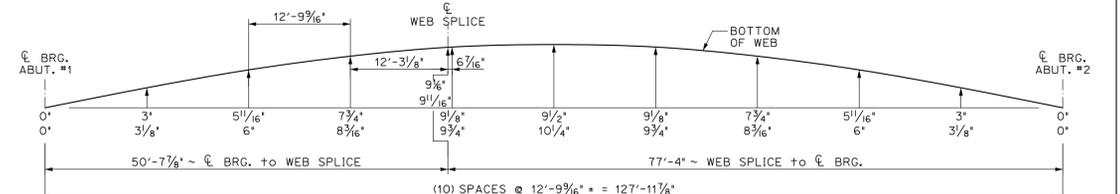
REVISIONS

DRAFTER	JUH	SOUTHBOUND GIRDER "G2" HARTFORD, VT I-91 SB OVER US RTE 5 PROJECT NUMBER IM 091-2(79) PCL CIVIL CONSTRUCTORS	PROJECT NO.	14-180
DATE	JAN. 2015		DWG. NO.	30
CHECKED	GNM			
DATE	JAN. 2015			

ARC ENTERPRISES, INC. ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED
 P.O. BOX 120 KINGFIELD, ME. 04947
 PHONE: (207) 265-2646 - FAX: (207) 265-4054



1 DIMENSIONAL PLANS & ELEVATIONS ~ GIRDER "G3"
 4a HORIZONTAL SCALE: 1/4" = 1'-0"
 VERTICAL SCALE EXAGGERATED 2:1



BILL OF MATERIALS

SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	MAT'L
1	G3			BRIDGE GIRDER ASSEMBLY	133'-5 1/2"	38,225#	
		1	WP5	1/2" x 50"	53'-4 1/4"	5700#	CVN
		1	WP6	1/2" x 50"	80'-1 1/2"	8550#	CVN
		1	TF5	1" x 20"	80'-1"	5475#	CVN
		1	TF6	1" x 20"	53'-4 3/4"	3650#	CVN
		1	BF5	1 1/2" x 20"	80'-0 1/8"	8200#	CVN
		1	BF6	1 1/2" x 20"	53'-4"	5450#	CVN
		4	P1	SEE SHEET M1			
		2	P2	SEE SHEET M1			
		2	P3	SEE SHEET M1			
		5	P4	SEE SHEET M1			
		5	P5	SEE SHEET M1			

PROJECT No. IM 091-2(79)
ITEM No. 508.55

FINISH: SSPC SP10
 MATERIAL: AASHTO M270 (ASTM A709) GRADE 50W
 HOLES: 15/16" Ø U.N.O.
 ELECTRODES: PER WELD PROCEDURE
 WELDS: PER WELD PROCEDURE
 SURFACE PREP: SSPC SP6

NO.	DATE	DESCRIPTION	BY
1	2/5/15	HOLE & PLATE LOCATION	JJH

REVISIONS

ARC
ENTERPRISES, INC.

ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED
 P.O. BOX 120 KINGFIELD, ME. 04947
 PHONE: (207) 265-2646 - FAX: (207) 265-4054

DRAFTER: JJH
 DATE: JAN. 2015
 CHECKED: GNM
 DATE: JAN. 2015

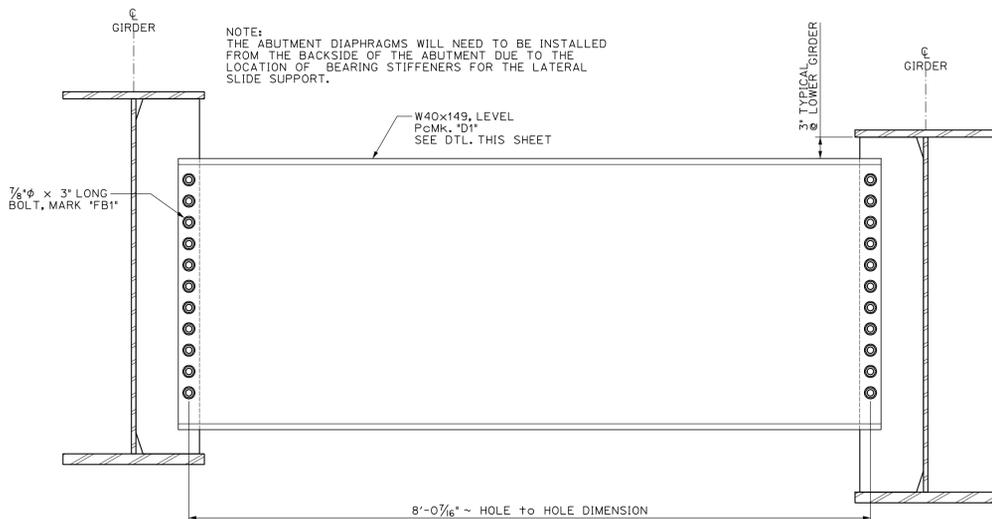
SOUTHBOUND GIRDER "G3"
 HARTFORD, VT I-91 SB OVER US RTE 5
 PROJECT NUMBER IM 091-2(79)

PCL CIVIL CONSTRUCTORS

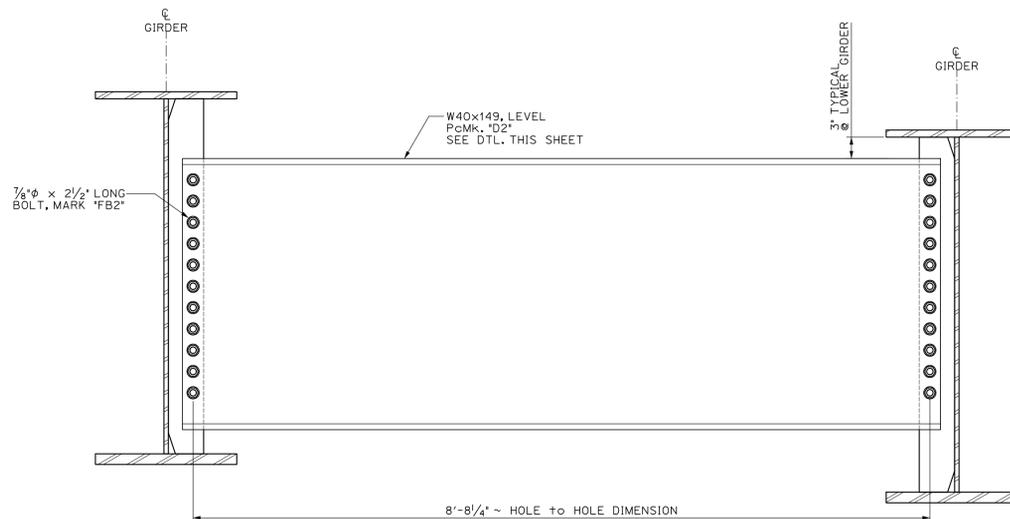
PROJECT NO. 14-180
 DWG. NO. 4a

BILL OF MATERIALS

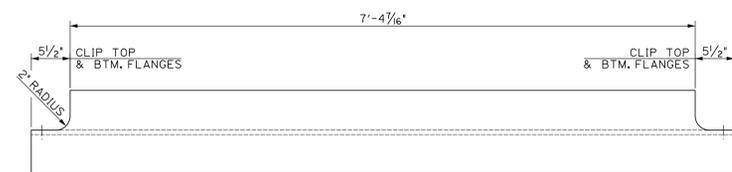
SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	WEIGHT	MATERIAL
10	D1			ABUTMENT DIAPHRAGM			
		10	--	W140x149	8'-3 ³ / ₁₆ '	1240*	EACH
25	D2			INTERMEDIATE DIAPHRAGM			
		25	--	W140x149	8'-11 ¹ / ₄ '	1340*	EACH



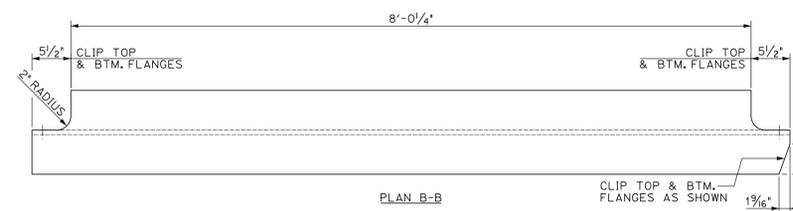
A "D1" TYPE DIAPHRAGMS
SCALE: 1" = 1'-0"
FOR USE @ ABUTMENT LOCATIONS



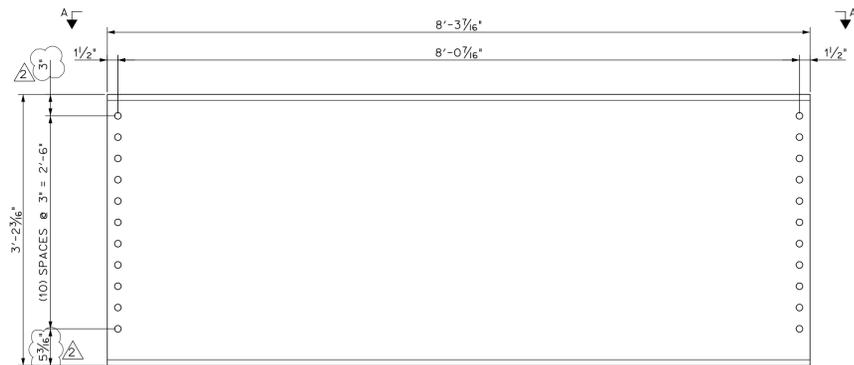
B "D2" TYPE DIAPHRAGMS
SCALE: 1" = 1'-0"
FOR USE @ INTERMEDIATE LOCATIONS



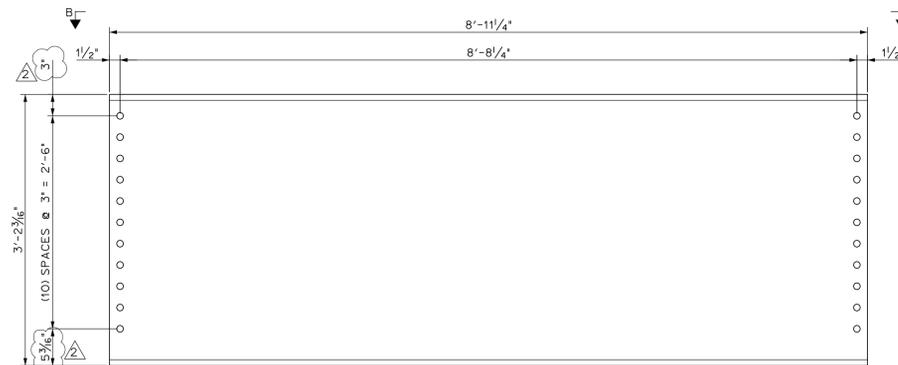
PLAN A-A



PLAN B-B



W40x149 DIAPHRAGM, Pcmk. "D1"
SCALE: 1"=1'-0"



W40x149 DIAPHRAGM, Pcmk. "D2"
SCALE: 1"=1'-0"

PROJECT No. IM 091-2(79)
ITEM No. 508.50

FINISH	SPPC SP10		
MATERIAL	AASHTO M270 (ASTM A709) GRADE 50W		
HOLES	15/16" Ø U.N.O.		
ELECTRODES	PER WELD PROCEDURE		
WELDS	PER WELD PROCEDURE		
SURFACE PREP	SPPC SP6	1	2/5/15
	NO	DATE	DESCRIPTION
			BY

REVISIONS



ADVANCED RESOURCES & CONST.
ENTERPRISES, INCORPORATED
P.O. BOX 120 KINGFIELD, ME. 04947
PHONE: (207) 265-2846 - FAX: (207) 265-4054

DRAFTER	JJH	SOUTHBOUND DIAPHRAGM DETAILS	PROJECT NO.
DATE	JAN. 2015		14-180
CHECKED	GJM	HARTFORD, VT I-91 SB OVER US RTE 5	DWG. NO.
DATE	JAN. 2015	PROJECT NUMBER IM 091-2(79)	9a
		PCL CIVIL CONSTRUCTORS	

NOTE:

THE FIRST (9) SHEETS, NUMBERED 1a-9a, DETAIL THE GIRDERS FOR THE SOUTHBOUND BRIDGE 43S.

THE FOLLOWING (9) SHEETS, NUMBERED 1-7, M1, & M2 DETAIL THE GIRDERS FOR THE NORTHBOUND BRIDGE 43N.

REFER TO SHEET #1a OF THE SOUTHBOUND DETAILS FOR THE GENERAL NOTES AND BLOCKING DIAGRAM FOR BOTH BRIDGES.

PROJECT No. IM 091-2(79)
ITEM No. 506.55

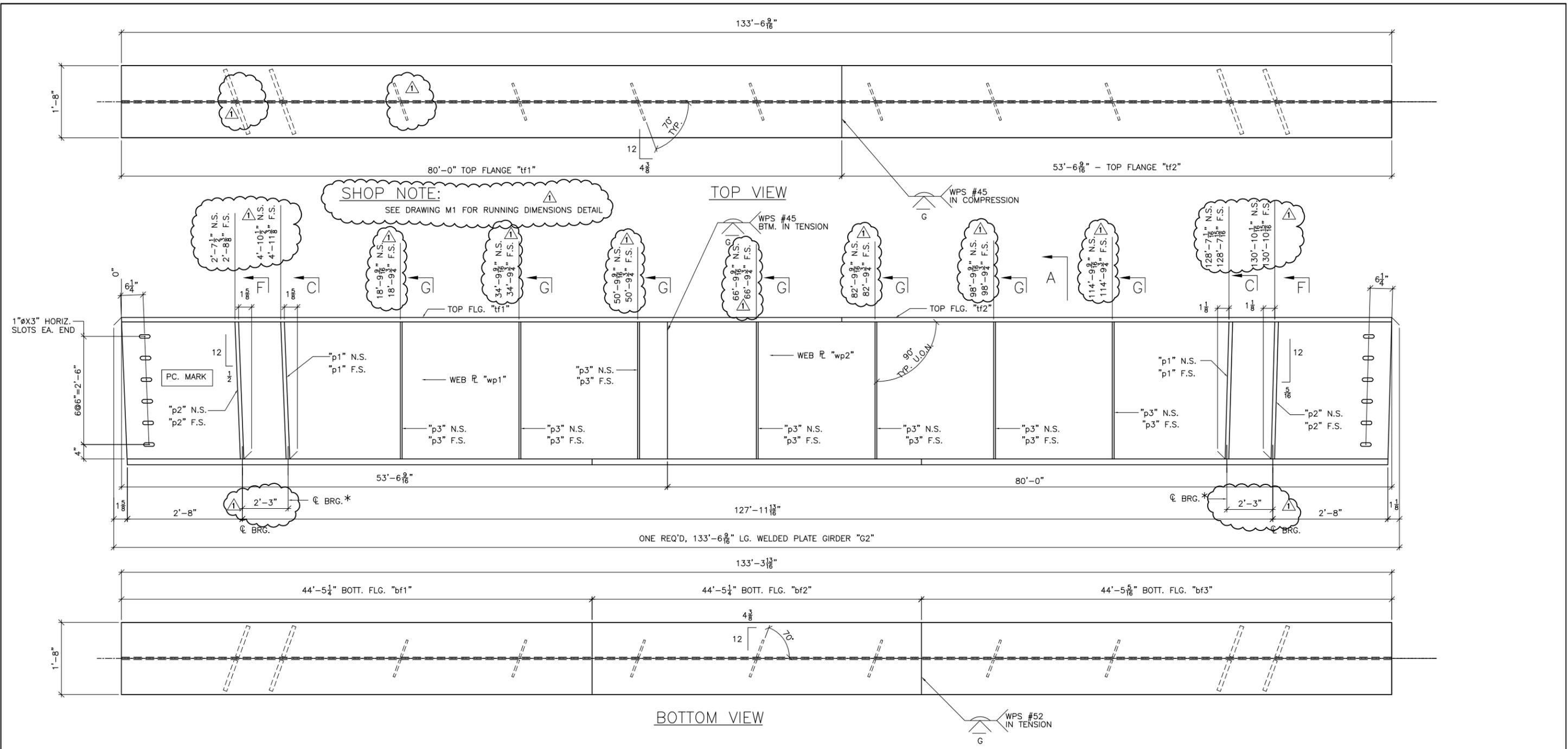
FINISH				
MATERIAL				
HOLES				
ELECTRODES				
WELDS				
SURFACE PREP				
	NO	DATE	DESCRIPTION	BY

REVISIONS



ADVANCED RESOURCES & CONST.
ENTERPRISES, INCORPORATED
P.O. BOX 120 KINGFIELD, ME. 04947
PHONE: (207) 265-2646 - FAX: (207) 265-4054

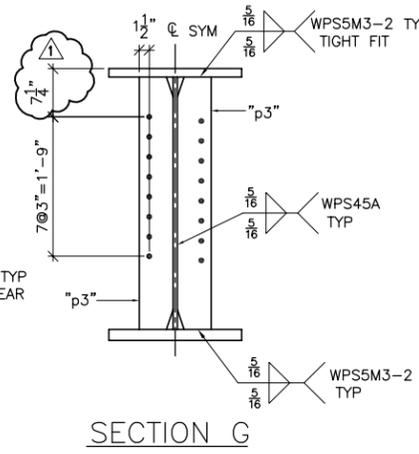
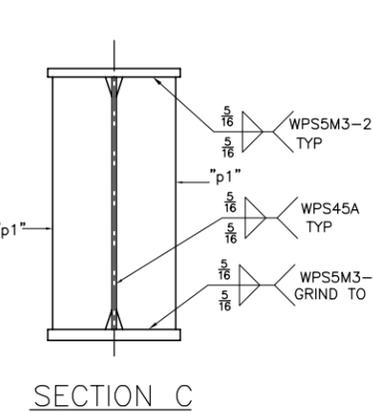
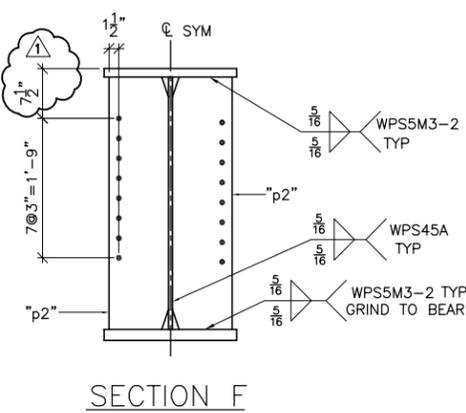
DRAFTER	JJH	N/A	PROJECT NO.	14-180
DATE	JAN. 2015	HARTFORD, VT I-91 OVER US RTE 5	DWG. NO.	n/a
CHECKED	GNM	PROJECT NUMBER IM 091-2(79)		
DATE	JAN. 2015	PCL CIVIL CONSTRUCTORS		



* STIFFENER FOR LATERAL SLIDE SUPPORT

BILL OF MATERIAL							
SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	WT.
1	G2			WELDED PLATE GIRDER			38055
		1	wp1	PL 3/8 X 38	53'-6 9/16"	CVN	4328
		1	wp2	PL 3/8 X 38	80'-0"	CVN	6466
		1	tp1	PL 1 1/2 X 20	80'-0"	CVN	6806
		1	tp2	PL 1 1/2 X 20	53'-6 9/16"	CVN	4556
		1	bp1	PL 1 1/2 X 20	44'-5 1/4"	CVN	4915
		1	bp2	PL 1 1/2 X 20	44'-5 1/4"	CVN	4915
		1	bp3	PL 1 1/2 X 20	44'-5 5/16"	CVN	4915
		4	p1	SEE SHT. M2			
		4	p2	SEE SHT. M2			
		14	p3	SEE SHT. M2			

BOTTOM FLANGE PL MATERIAL SHALL BE ASTM A709 GR. HPS 70W



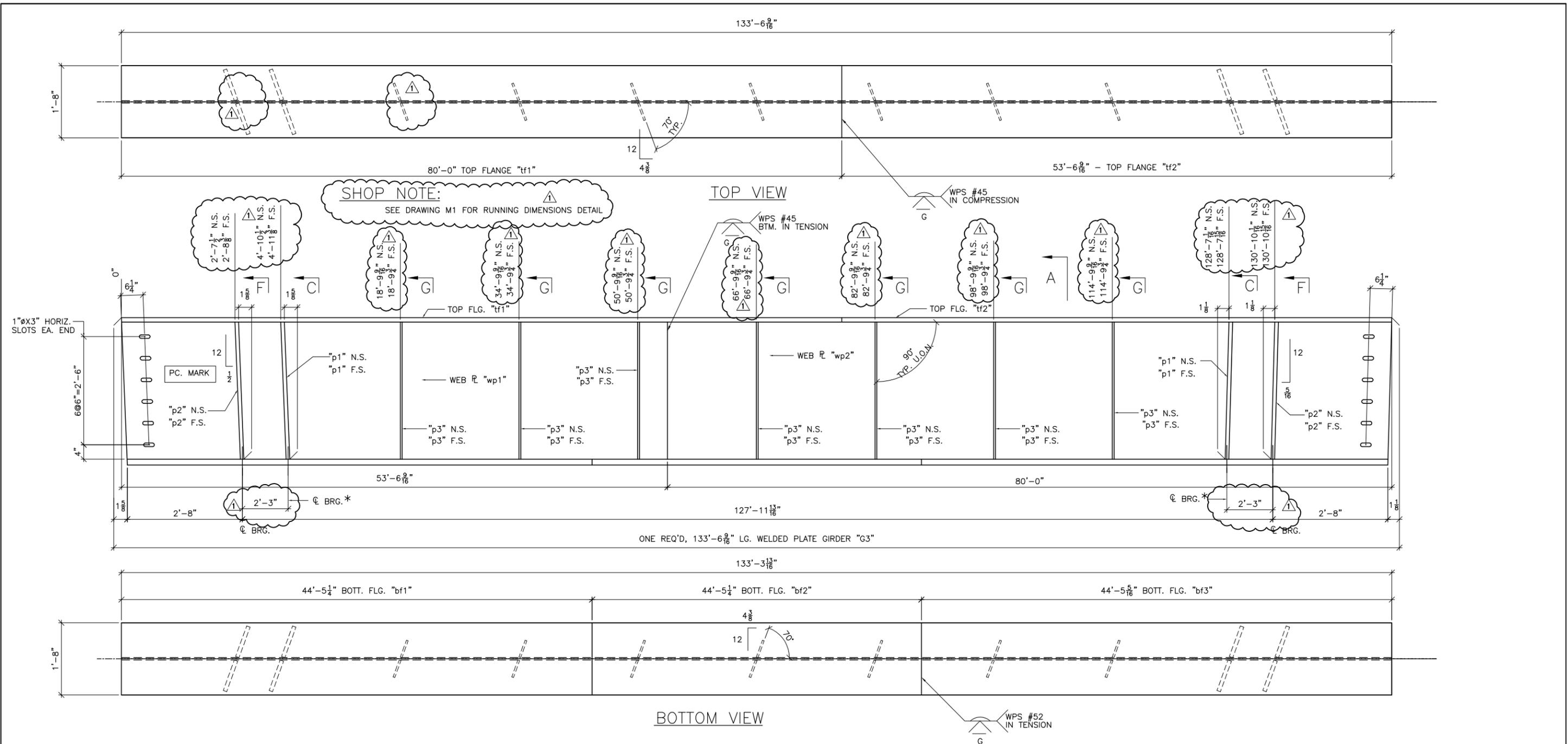
SEE SHEET M1 FOR CAMBER AND SECTIONS & DETAILS NOT SHOWN

SHOP NOTE:
ENTIRE TOP FLANGE IS IN COMPRESSION
ENTIRE BOTT FLANGE IS IN TENSION

REVISIONS			
NO	DATE	DESCRIPTION	BY
1	1/29/15	AS NOTED	JAC

FINISH	SSPC SP10		
MATERIAL	ASHTO M270 (ASTM A709) GR. 50W U.O.N.		
HOLES	15/16" U.O.N.		
ELECTRODES			
WELDS	PER WPS		
SURFACE PREP			

		ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED P.O. BOX 120 KINGFIELD, ME. 04947 PHONE: (207) 265-2646 - FAX: (207) 265-4054	
DRAFTER	JAC	STRINGER DETAILS, G2	PROJECT NO.
DATE	1/6/15	HARTFORD, VT I-91 NB OVER US RTE. 5	14-180
CHECKED	JS	PROJECT NUMBER IM 091-2(79)	DWG. NO.
DATE	1/14/15	PCL CIVIL CONSTRUCTORS	3



SHOP NOTE:
SEE DRAWING M1 FOR RUNNING DIMENSIONS DETAIL

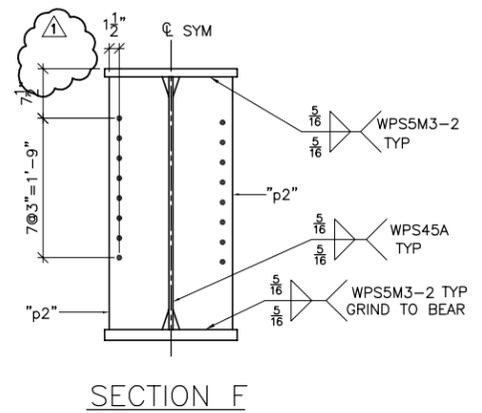
TOP VIEW

BOTTOM VIEW

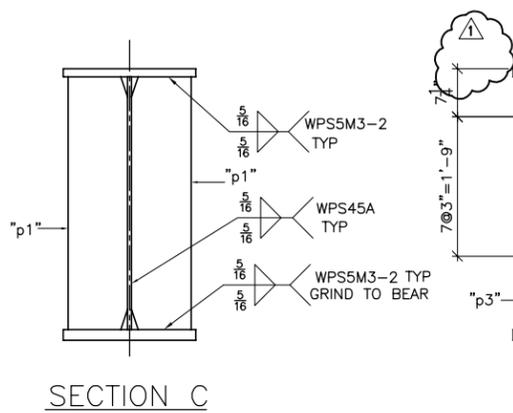
* STIFFENER FOR LATERAL SLIDE SUPPORT

BILL OF MATERIAL							
SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	WT.
1	G3			WELDED PLATE GIRDER			38055
		1	wp1	PL 3/8 X 38	53'-6 9/16"	CVN	4328
		1	wp2	PL 3/8 X 38	80'-0"	CVN	6466
		1	tp1	PL 1 1/2 X 20	80'-0"	CVN	6806
		1	tp2	PL 1 1/2 X 20	53'-6 9/16"	CVN	4556
		1	bp1	PL 1 3/8 X 20	44'-5 1/4"	CVN	4915
		1	bp2	PL 1 3/8 X 20	44'-5 1/4"	CVN	4915
		1	bp3	PL 1 3/8 X 20	44'-5 5/16"	CVN	4915
		4	p1	SEE SHT. M2			
		4	p2	SEE SHT. M2			
		14	p3	SEE SHT. M2			

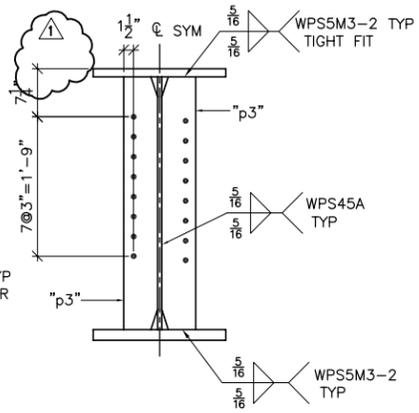
BOTTOM FLANGE PL MATERIAL SHALL BE ASTM A709 GR. HPS 70W



SECTION F



SECTION C



SECTION G

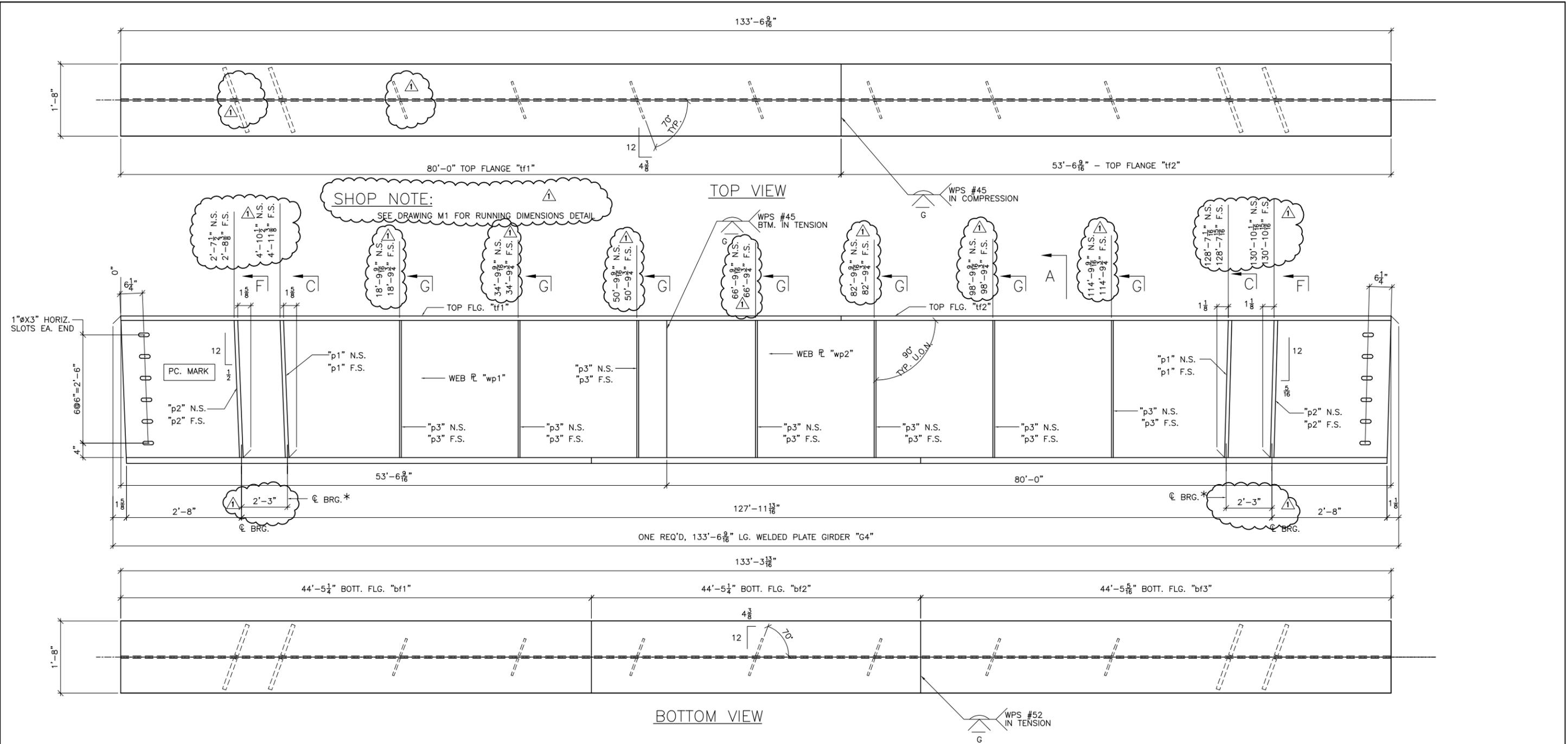
SEE SHEET M1 FOR CAMBER AND SECTIONS & DETAILS NOT SHOWN

SHOP NOTE:
ENTIRE TOP FLANGE IS IN COMPRESSION
ENTIRE BOTT FLANGE IS IN TENSION

REVISIONS			
NO	DATE	DESCRIPTION	BY
1	1/29/15	AS NOTED	JAC

FINISH	SSPC SP10		
MATERIAL	ASHTO M270 (ASTM A709) GR. 50W U.O.N.		
HOLES	15/16" U.O.N.		
ELECTRODES			
WELDS	PER WPS		
SURFACE PREP			

		ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED P.O. BOX 120 KINGFIELD, ME. 04947 PHONE: (207) 265-2646 - FAX: (207) 265-4054	
DRAFTER	JAC	STRINGER DETAILS, G3	PROJECT NO. 14-180
DATE	1/6/15	HARTFORD, VT I-91 NB OVER US RTE. 5	DWG. NO.
CHECKED	JS	PROJECT NUMBER IM 091-2(79)	
DATE	1/14/15	G.C. PCL CIVIL CONSTRUCTORS	4



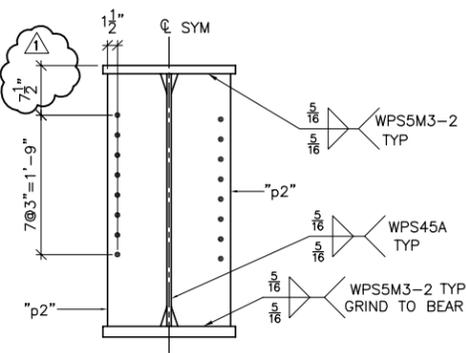
SHOP NOTE:
SEE DRAWING M1 FOR RUNNING DIMENSIONS DETAIL

SHOP NOTE:
ENTIRE TOP FLANGE IS IN COMPRESSION
ENTIRE BOTTOM FLANGE IS IN TENSION

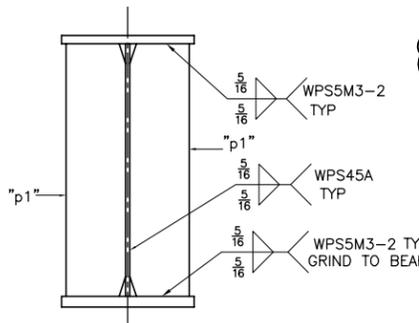
* STIFFENER FOR LATERAL SLIDE SUPPORT

BILL OF MATERIAL							
SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	WT.
1	G4			WELDED PLATE GIRDER			38055
		1	wp1	PL 3/8 X 38	53'-6 9/16"	CVN	4328
		1	wp2	PL 3/8 X 38	80'-0"	CVN	6466
		1	tp1	PL 1 1/2 X 20	80'-0"	CVN	6806
		1	tp2	PL 1 1/2 X 20	53'-6 9/16"	CVN	4556
		1	bp1	PL 1 1/2 X 20	44'-5 1/4"	CVN	4915
		1	bp2	PL 1 1/2 X 20	44'-5 1/4"	CVN	4915
		1	bp3	PL 1 1/2 X 20	44'-5 5/16"	CVN	4915
		4	p1	SEE SHT. M2			
		4	p2	SEE SHT. M2			
		14	p3	SEE SHT. M2			

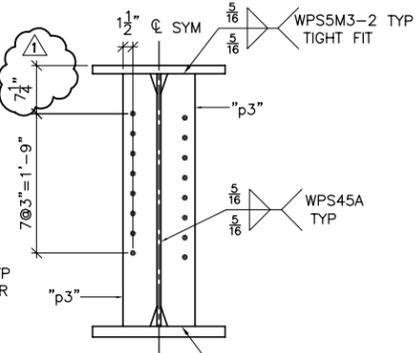
BOTTOM FLANGE PL MATERIAL SHALL BE ASTM A709 GR. HPS 70W



SECTION F



SECTION C



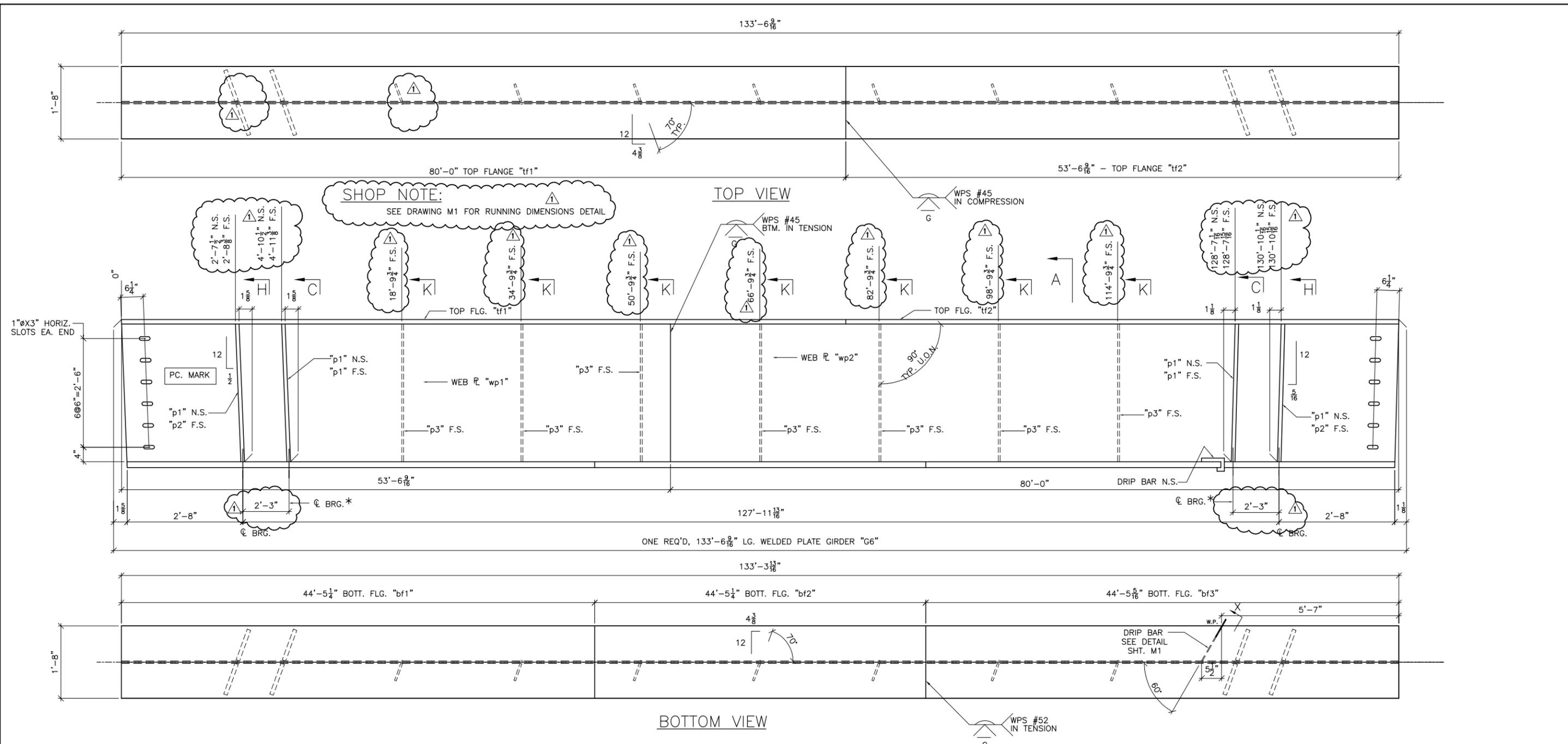
SECTION G

SEE SHEET M1 FOR CAMBER AND SECTIONS & DETAILS NOT SHOWN

FINISH	SSPC SP10	DATE	NO	DATE	DESCRIPTION	JAC	BY
MATERIAL	ASHTO M270 (ASTM A709) GR. 50W U.O.N.						
HOLES	15/16" U.O.N.						
ELECTRODES							
WELDS	PER WPS						
SURFACE PREP							

ARC ENTERPRISES, INC.
ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED
 P.O. BOX 120 KINGFIELD, ME. 04947
 PHONE: (207) 265-2646 - FAX: (207) 265-4054

DRAFTER	JAC	STRINGER DETAILS, G4	PROJECT NO.	14-180
DATE	1/6/15	HARTFORD, VT I-91 NB OVER US RTE. 5	DWG. NO.	5
CHECKED	JS	PROJECT NUMBER IM 091-2(79)		
DATE	1/14/15	G.C. PCL CIVIL CONSTRUCTORS		



SHOP NOTE:
SEE DRAWING M1 FOR RUNNING DIMENSIONS DETAIL

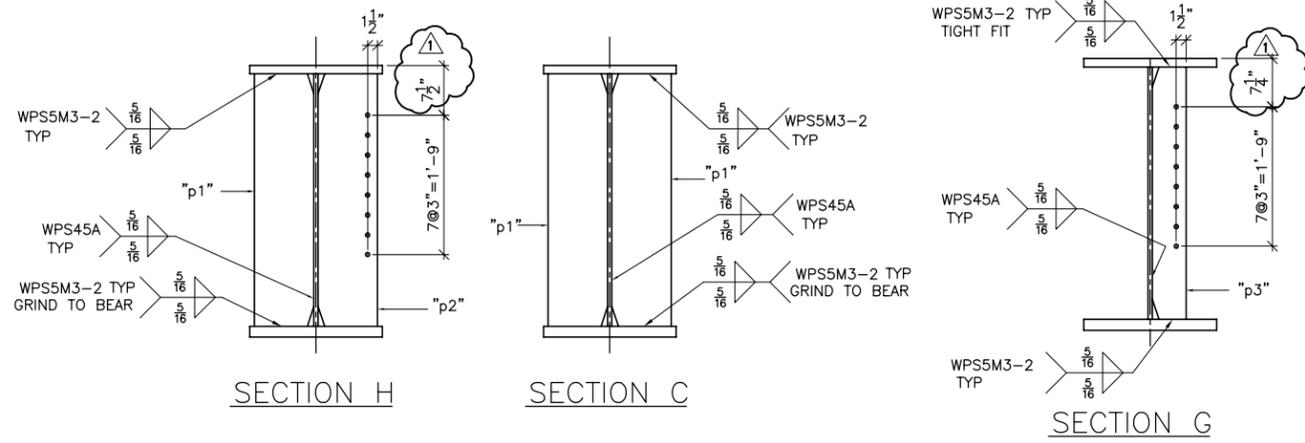
TOP VIEW

BOTTOM VIEW

* STIFFENER FOR LATERAL SLIDE SUPPORT

BILL OF MATERIAL							
SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	WT.
1	G6			WELDED PLATE GIRDER			37866
		1	wp1	PL 3/8 X 38	53'-6 9/16"	CVN	4328
		1	wp2	PL 3/8 X 38	80'-0"	CVN	6466
		1	tp1	PL 1 1/2 X 20	80'-0"	CVN	6806
		1	tp2	PL 1 1/2 X 20	53'-6 9/16"	CVN	4556
		1	bp1	PL 1 1/8 X 20	44'-5 1/4"	CVN	4915
		1	bp2	PL 1 1/8 X 20	44'-5 1/4"	CVN	4915
		1	bp3	PL 1 1/8 X 20	44'-5 5/8"	CVN	4915
		6	p1	SEE SHT. M2			
		2	p2	SEE SHT. M2			
		7	p3	SEE SHT. M2			

BOTTOM FLANGE PL MATERIAL SHALL BE ASTM A709 GR. HPS 70W



SECTION H

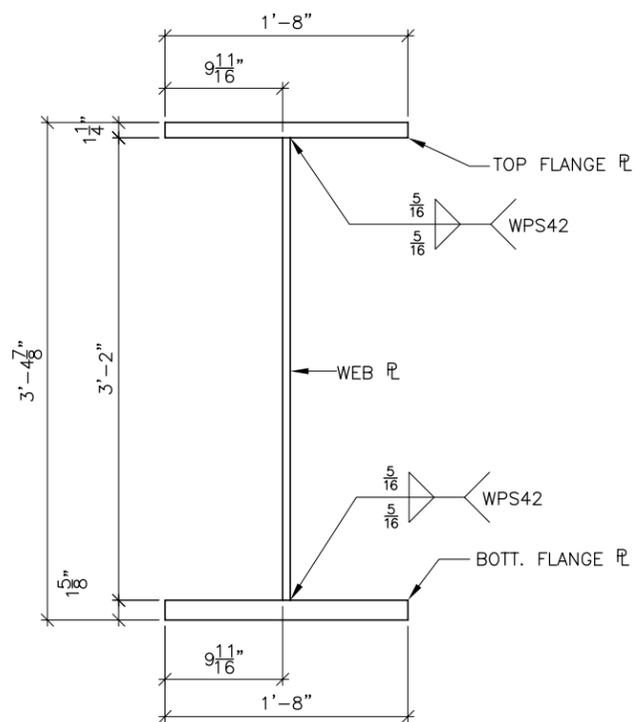
SECTION C

SECTION G

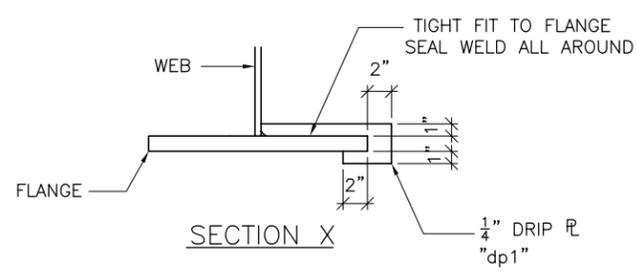
SEE SHEET M1 FOR CAMBER AND SECTIONS & DETAILS NOT SHOWN

SHOP NOTE:
ENTIRE TOP FLANGE IS IN COMPRESSION
ENTIRE BOTT FLANGE IS IN TENSION

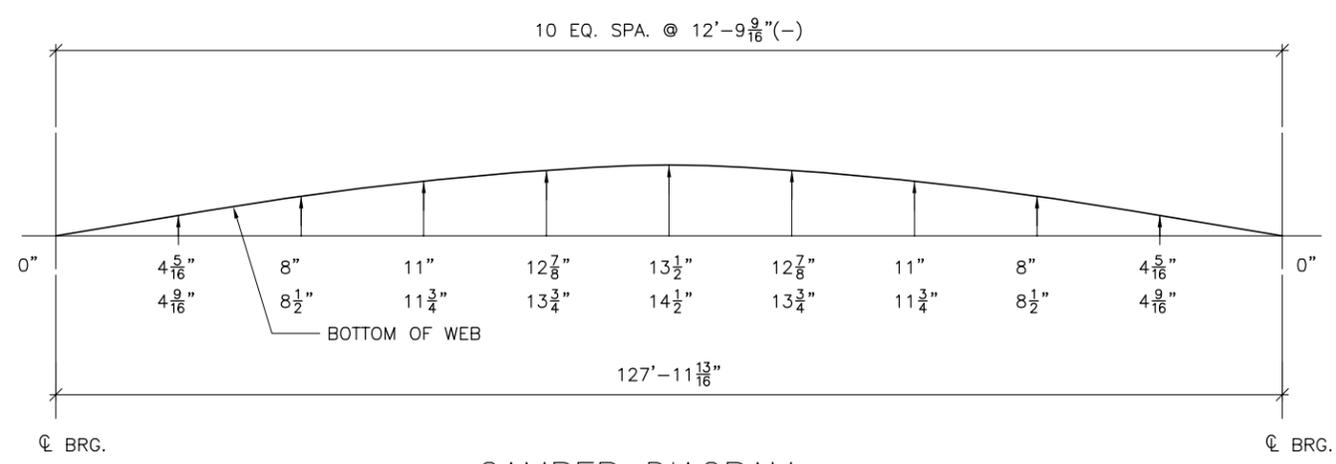
FINISH	SSPC SP10			
MATERIAL	AKSHTO M270 (ASTM A709) GR. 50W U.O.N.			
HOLES	15/16" U.O.N.			
ELECTRODES				
WELDS	PER WPS			
SURFACE PREP		1/29/15	AS NOTED	JAC
		NO	DATE	DESCRIPTION
				BY
REVISIONS				
ARC ENTERPRISES, INC.		ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED P.O. BOX 120 KINGFIELD, ME. 04947 PHONE: (207) 265-2646 - FAX: (207) 265-4054		
DRAFTER	JAC	STRINGER DETAILS, G6		PROJECT NO.
DATE	1/6/15	HARTFORD, VT I-91 NB OVER US RTE. 5		14-180
CHECKED	JS	PROJECT NUMBER IM 091-2(79)		DWG. NO.
DATE	1/14/15	P.C. CIVIL CONSTRUCTORS		7



SECTION A
(GIRDER ASS'Y)

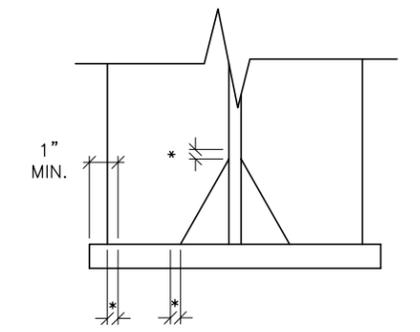


SECTION X



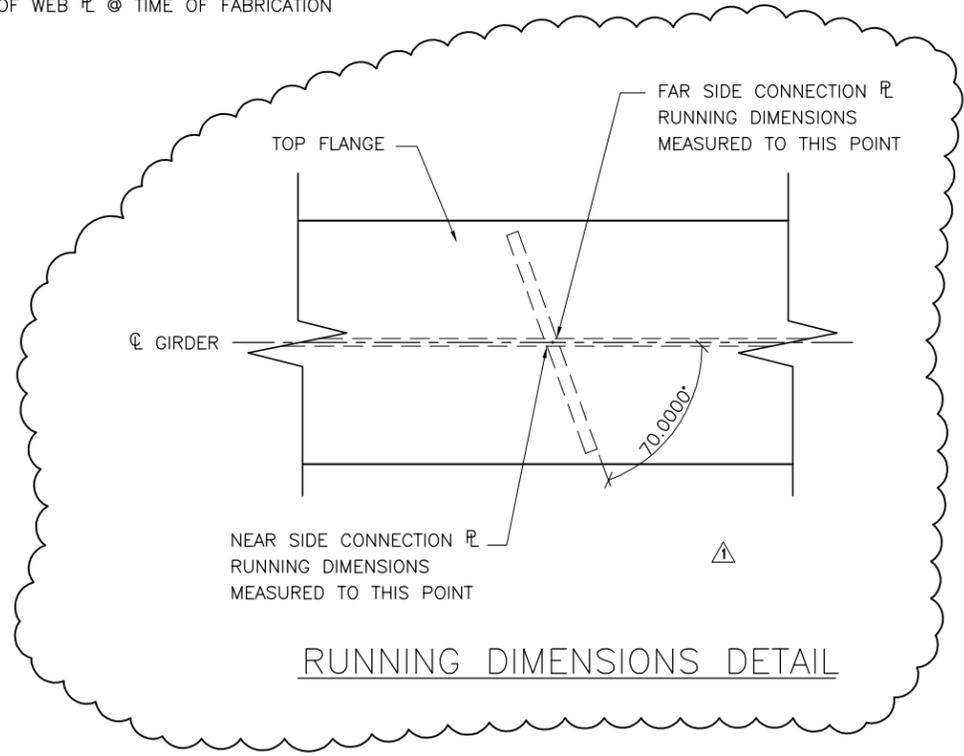
CAMBER DIAGRAM

THE TWO CAMBER DIMENSIONS SHOWN REPRESENT THE FOLLOWING:
 TOP DIMENSION - TOTAL CAMBER IN FINISHED BEAM IN A NO-LOAD POSITION
 BTM. DIMENSION - TOTAL CAMBER OF WEB @ TIME OF FABRICATION



WELD TERMINATION DETAIL

* NO WELD FOR 3/8" MIN. 7/8" MAX.

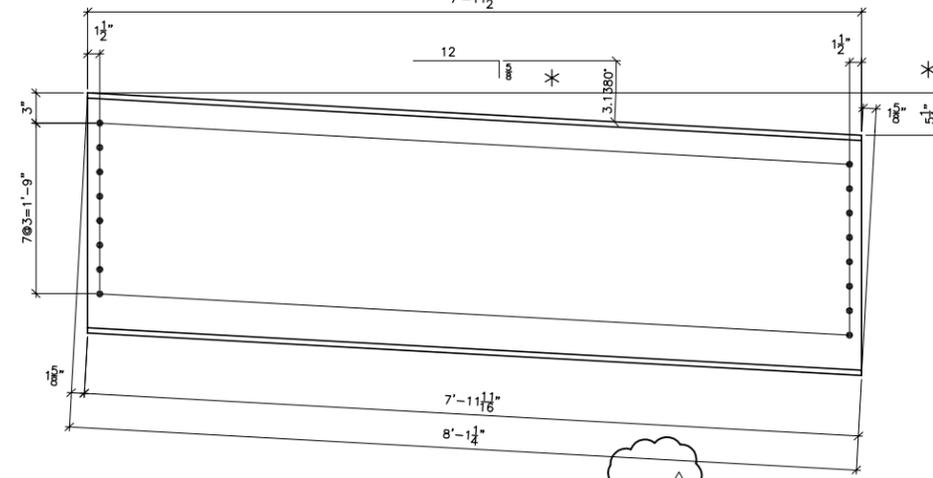
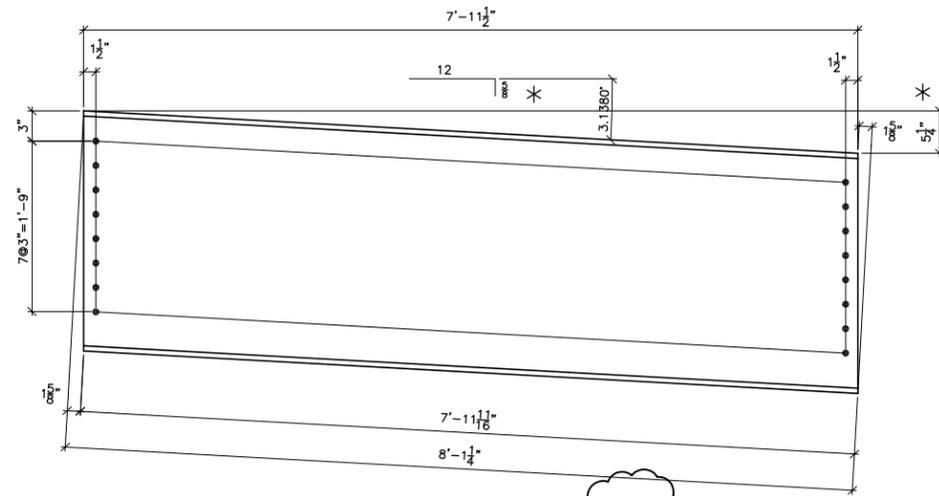
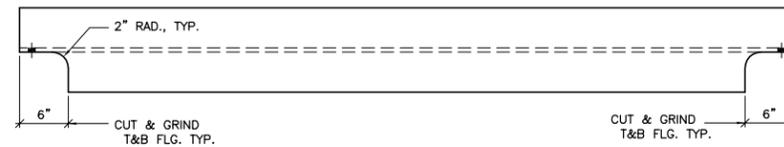
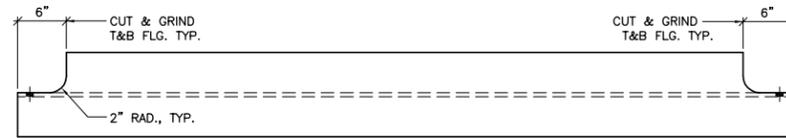


RUNNING DIMENSIONS DETAIL

FINISH				
MATERIAL	ASTM A709 GRADE 50W U.O.N.			
HOLES	15/16" U.O.N.			
ELECTRODES				
WELDS	PER WPS			
SURFACE PREP		1/29/15	AS NOTED	JAC
	NO	DATE	DESCRIPTION	BY
REVISIONS				
		ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED P.O. BOX 120 KINGFIELD, ME. 04947 PHONE: (207) 265-2646 - FAX: (207) 265-4054		
DRAFTER	JAC	MISC. DETAILS		PROJECT NO.
DATE	1/09/15	HARTFORD, VT I-95 NB OVER US RTE. 5		14-180
CHECKED	JS	PROJECT NUMBER IM 091-2(79)		DWG. NO.
DATE	1/14/15	CUSTOMER: PCL CIVIL CONSTRUCTORS		M1

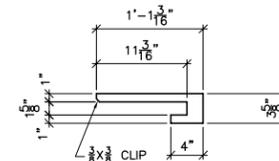
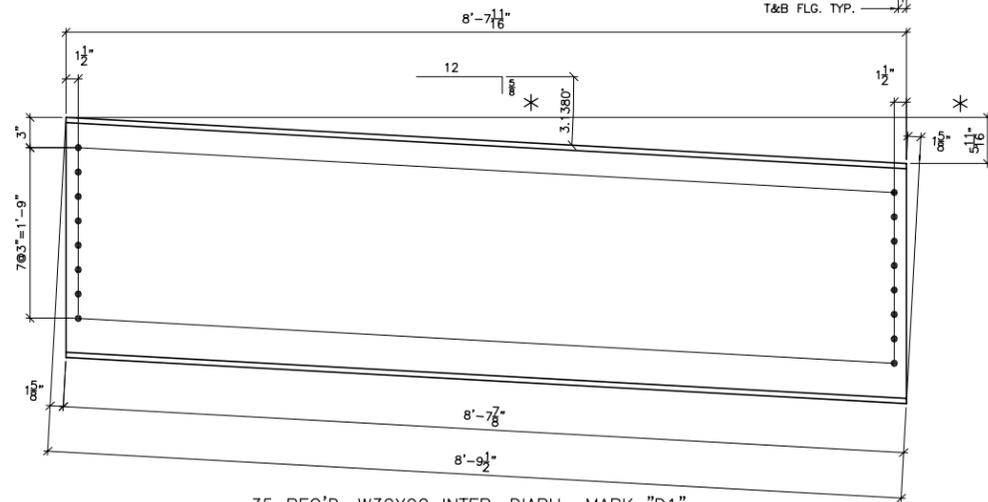
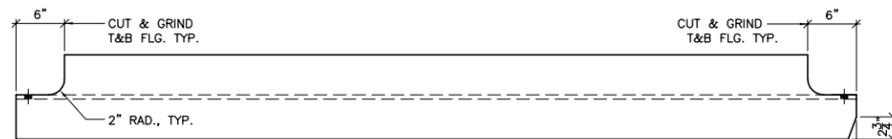
BILL OF MATERIAL

SHIP	SHIP MARK	NO. PCS.	PIECE MARK	DESCRIPTION	LENGTH	REMARKS	WT.
		28	p1	PL 1X9 $\frac{3}{8}$	3'-2"		2716
		20	p2	PL 1X9 $\frac{3}{8}$	3'-2"		1940
		70	p3	PL $\frac{1}{2}$ X5 $\frac{1}{8}$	3'-2"		1890
		2	dp1	PL $\frac{1}{4}$ X3 $\frac{3}{8}$	1'-1 $\frac{3}{8}$ "		3
		D1	35	W30X90	8'-9 $\frac{1}{2}$ "		26775
		D2	5	W30X90	8'-1 $\frac{1}{2}$ "		3510
		D3	5	W30X90	8'-1 $\frac{1}{2}$ "		3510



5 REQ'D. W30X90 END DIAPH., MARK "D2" \triangle

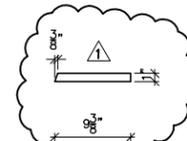
5 REQ'D. W30X90 END DIAPH., MARK "D3" \triangle



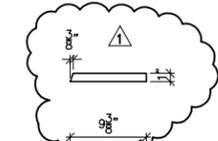
2 REQ'D. 1/4" DRIP PL. MARK "dp1"

35 REQ'D. W30X90 INTER. DIAPH., MARK "D1"

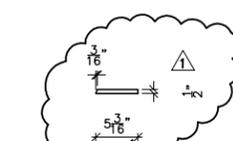
*** NOTE:** \triangle
DIAPHRAGM SLOPE IS CALCULATED BY USING CONNECTION HOLE LOCATIONS IN CONNECTION PLATE



28 REQ'D. 1" STIFF. PL. MARK "p1"



20 REQ'D. 1" STIFF./CONN. PL. MARK "p2"



70 REQ'D. 1/2" CONN. PL. MARK "p3"

FINISH \triangle SSPC SP10			
MATERIAL ASTM A709 GRADE 50W U.O.N.			
HOLES 15/16" U.O.N.			
ELECTRODES			
WELDS PER WPS			
SURFACE PREP		\triangle 1/29/15	AS NOTED
	NO	DATE	DESCRIPTION
REVISIONS			
ARC ENTERPRISES, INC.		ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED P.O. BOX 120 KINGFIELD, ME. 04947 PHONE: (207) 265-2646 - FAX: (207) 265-4054	
DRAFTER JAC	MISC. DETAILS	PROJECT NO. 14-180	
DATE 1/09/15	HARTFORD, VT I-95 NB OVER US RTE. 5	DWG. NO. M2	
CHECKED JS	PROJECT NUMBER IM 091-2(79)		
DATE 1/14/15	CUSTOMER: PCL CIVIL CONSTRUCTORS		