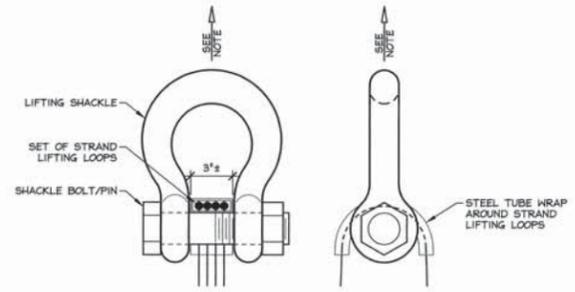
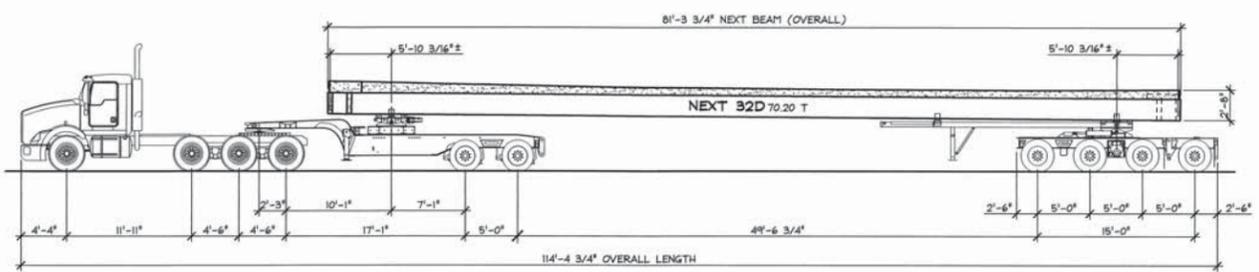


NEXT BEAM 32D HOLD-DOWN DETAIL FOR SHIPPING
3/4" = 1'-0"



LIFTING SHACKLE DETAILS
N.T.S.



SHIPPING ELEVATION
N.T.S.

NEXT BEAM GENERAL NOTES

- MIN. CONCRETE STRENGTH AT 28 DAYS SHALL BE 10,000 PSI.
- MIN. CONCRETE STRENGTH AT STRESS TRANSFER SHALL BE 8,000 PSI.
- REINFORCING STEEL SHALL BE GR-60, ASTM A-615 (AASHTO M31) LEVEL II (DUAL COATED). PROJECTING #7 BARS AT EACH END OF NEXT BEAM SHALL CONFORM TO LEVEL I EPOXY COATED FINISH.
- PRESTRESSING STRANDS SHALL CONFORM TO ASTM A-416 (AASHTO M203) AND SHALL CONSIST OF 0.60" x 270 KSI 7-WIRE LOW RELAXATION STRANDS.
- PRESTRESSING STRANDS SHALL EACH BE PULLED TO HAVE A NET TENSION OF 44.0 K AFTER ACCOUNTING FOR CHUCK SLIPPAGE. TENSION SHALL BE VERIFIED BY MEASURING STRAND ELONGATION. (SEE EXAMPLE ELONGATION CALCULATION AND TENSIONING PROCEDURE, THIS SHEET.)
- ENDS OF PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH END OF NEXT BEAM STEMS (UNLESS NOTED OTHERWISE) AND EPOXY PAINTED.
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
- THE TOP OF BEAM'S SHALL RECEIVE A SMOOTH FLOAT FINISH (UNLESS NOTED OTHERWISE).
- SHEAR KEY SURFACES SHALL RECEIVE A SAND BLAST SURFACE.
- BEAMS SHALL BE HANDLED AND ERECTED USING THE LIFTING LOOPS ONLY. RIGGING SHALL BE CONFIGURED SUCH THAT EQUAL FORCES ARE APPLIED TO EACH OF THE TWO LIFTING LOOPS AT EACH END OF THE BEAM. THE PINS OF THE SHACKLES SHALL BE PLACED THROUGH THE LIFTING LOOPS. SEE DETAIL, THIS SHEET. BEAMS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS WITHIN 2'-0" OF THE BEAM ENDS, UNLESS APPROVED BY J.P. CARRARA & SONS, INC.
- MATERIAL SPECIFICATION AND MIX DESIGN SHALL CONFORM TO VERMONT SPEC. PS10.02 AND PS10.05 RESPECTIVELY.
DESIGN MIX: J.P.C. BRIDGE MIX #430M
- QUALITY CONTROL PROCEDURES ARE IN ACCORDANCE WITH PCI REQUIREMENTS. J.P. CARRARA & SONS, INC. IS A PCI CERTIFIED PLANT.
- CURING METHOD: AS SOON AS THE TOP OF BEAM IS FINISHED, A COVER OF INSULATED POLY. THE DESIRED CURING TEMPERATURE RANGE SHALL NOT DROP BELOW 70°F. THE TEMPERATURE SHALL BE RECORDED BY AUTOMATIC SENSOR INSTRUMENTS ON GRAPH CHARTS, SPACED NOT MORE THAN 100' APART AND WILL CONTINUE UNTIL RELEASE STRENGTH IS ACHIEVED. EACH CHART SHALL BE MARKED WITH THE CASTING DATED AND LOCATION OF THE RECORDER. IF NECESSARY TO MAINTAIN CASTING BED TEMPERATURE PRIOR TO CONCRETE PLACEMENT OR TO ACCELERATE EARLY AGE STRENGTH GAIN, EXTERNAL RADIANT HEAT MAY BE EMPLOYED VIA HOT WATER DUCTS BENEATH AND WITHIN THE PERIMETER OF THE CASTING BED. MAXIMUM CURING TEMPERATURE SHALL NOT EXCEED PCI SPECIFIED LIMITS.
- OWNER SHALL PROVIDE APPROPRIATE WATERPROOFING TO GROUTED AND/OR EPOXIED SHEAR KEYS. J.P. CARRARA & SONS, INC. SHALL NOT BE HELD LIABLE FOR PROBLEMS ASSOCIATED WITH MOISTURE INFILTRATING GROUTED AND/OR EPOXIED SHEAR KEYS.
- CAMBER AT RELEASE 2". FINAL CAMBER 2 3/4".

EXAMPLE PRESTRESSING STRAND ELONGATION CALC. AND TENSIONING
(NOT TO BE USED FOR CONSTRUCTION)

SIZE & GRADE: 0.60" x 270 KSI
 AREA: 0.217 IN²
 TENSION: 44,000 LB. EACH STRAND
 GRIP-TO-GRIP: 262'-0" = 262.00'
 $E_s = 28,600,000$ PSI (ASSUMED FOR THESE CALCULATIONS; VALUE TO BE OBTAINED FOR STRAND SPOOL ACTUALLY USED)

EXAMPLE:
 $\Delta L = \frac{P \cdot L}{A \cdot E} = \frac{(44,000 - 3,000) \cdot 262.00 \cdot 12}{0.217 \cdot 28,600,000} = 19.977'$
 THEREFORE: (TOLERANCES ± 5%)
 Δ UPPER LIMIT = $1.05 \times 19.977' = 20.98' = 21'$
 Δ LOWER LIMIT = $0.95 \times 19.977' = 18.98' = 19'$

EXTRA FORCE REQUIRED TO COMPENSATE FOR 1/2" CHUCK SLIPPAGE:
 $\Delta P = \frac{0.5 \cdot 41,000}{19.977} = 1,026$ LBS.
 TOTAL TENSIONING FORCE = $44,000 + 1,026 = 45,026$ LBS.

STRAND TENSIONING PROCEDURE:

- PULL EACH STRAND INITIALLY TO 3,000+ LBS. AND MARK STRAND.
 - THEN PULL EACH STRAND TO A TOTAL TENSION OF 45,026+ LBS. AND MEASURE ELONGATION AFTER SEATING. IT MUST BE BETWEEN 19" AND 21".
- NOTE: FORCES READ ON STRESSING JACK GAUGES MUST BE MADE TO CORRESPOND TO ABOVE VALUES BASED ON CALIBRATION DATA FOR SPECIFIC JACK USED.

DRAWING INDEX

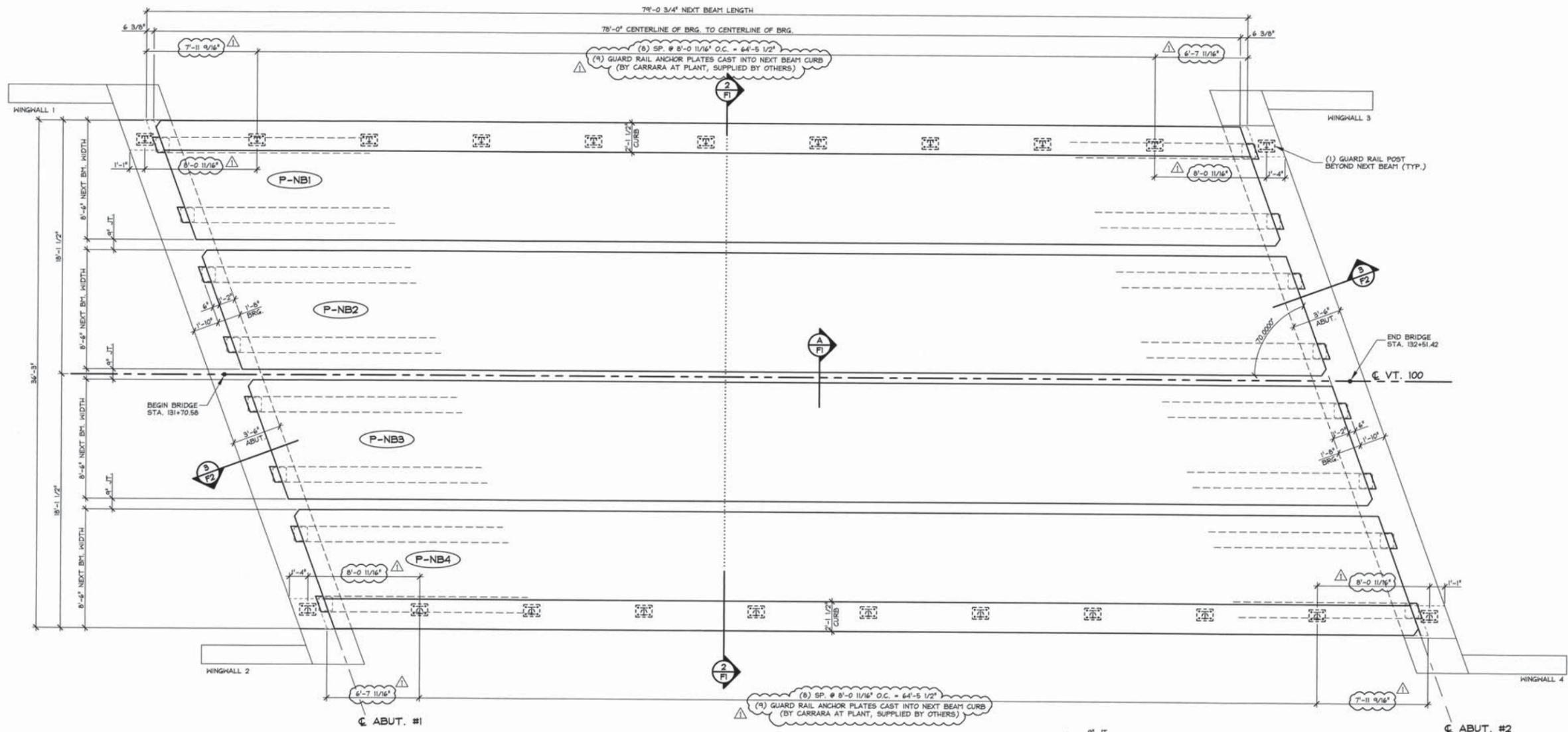
SHT. #	DRAWING TITLE	REV. #	REV. DATE
C1	COVER SHEET		
F1	SUPERSTRUCTURE PLANS		
F2	ABUTMENT SECTION		
NB1	PRESTRESSED NEXT BEAM DETAILS "P-NB1"		
NB1A	PRESTRESSED NEXT BEAM REINF. DETAILS "P-NB1"		
NB1B	PRESTRESSED NEXT BEAM FLANGE REINF. DETAILS	△	
NB1C	PRESTRESSED NEXT BEAM FLANGE REINF. DETAILS		
NB1D	PRESTRESSED NEXT BEAM FLANGE REINF. DETAILS		
NB1E	PRESTRESSED NEXT BEAM FLANGE REINF. DETAILS		
NB2	PRESTRESSED NEXT BEAM DETAILS "P-NB2"		
NB2A	PRESTRESSED NEXT BEAM REINF. DETAILS "P-NB2"		
NB3	PRESTRESSED NEXT BEAM DETAILS "P-NB3"		
NB3A	PRESTRESSED NEXT BEAM REINF. DETAILS "P-NB3"		
NB4	PRESTRESSED NEXT BEAM DETAILS "P-NB4"		
NB4A	PRESTRESSED NEXT BEAM REINF. DETAILS "P-NB4"		
M1	MATERIALS LIST		

DESIGN LIVE LOAD: HL-93

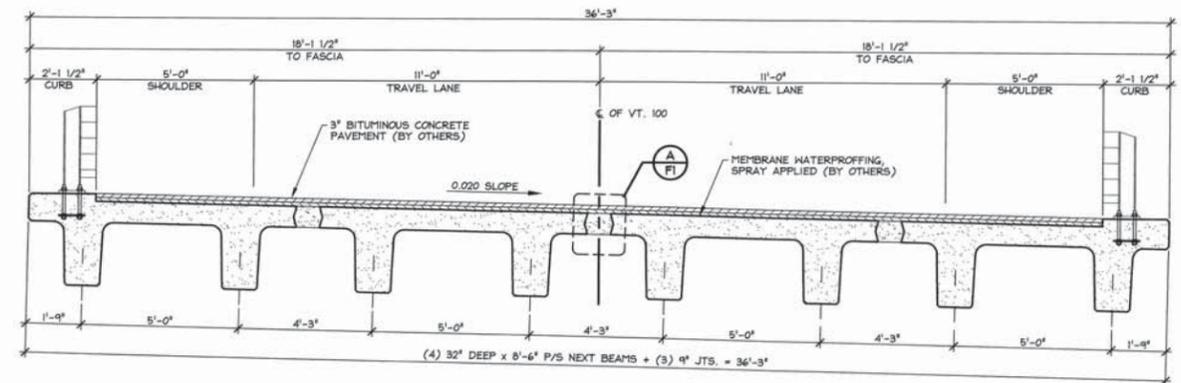
APPROVAL STAMP:

Vermont Agency of Transportation
RECEIVED
 CK'D BY JG OK'D BY JS
 May 1, 2014
 RESUBMIT YES Rejected
 BY KH DATE 5-8-2014

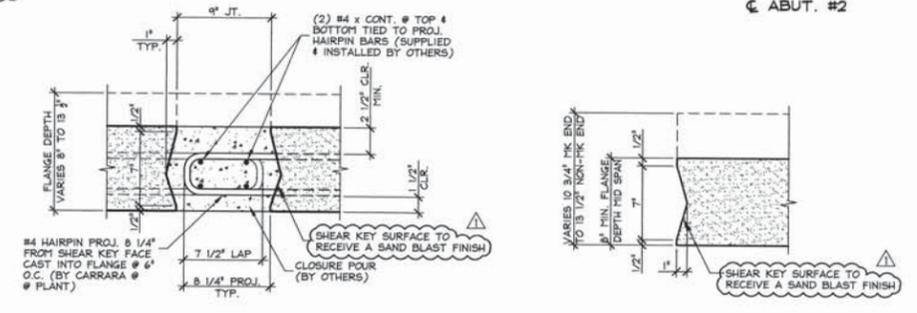
J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer <small>244 GEE ST., WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010</small>		COLD RIVER BRIDGES, LLC CONTRACTOR <small>WALPOLE, NEW HAMPSHIRE</small>	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND		DATE: FEB. 3, 2014 SCALE: NOTED	
TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL) BRIDGE NO.: 124 PROJECT NO.: ER BR 022-1 (23)		CHKD: - DFTM: T.D. JOB NO: 23416-015	
COVER SHEET		DWG. NO: C1	



1 PRESTRESSED NEXT BEAM LAYOUT
 F1 1/4" = 1'-0"



2 NEXT BEAM TRANSVERSE SECTION
 F1 3/8" = 1'-0"

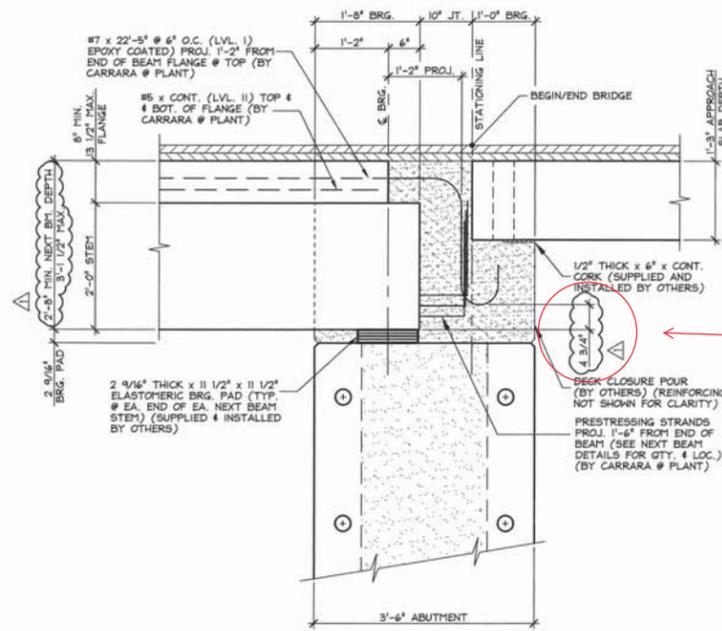


A NEXT BEAM CLOSURE POUR
 F1 1 1/2" = 1'-0"

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J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 394 CURE STR., WOODBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010		COLD RIVER BRIDGES, LLC CONTRACTOR WALPOLE, NEW HAMPSHIRE	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND		DATE: FEB. 3, 2014	SCALE: NOTED
TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL) BRIDGE NO.: 124 PROJECT NO.: ER BRF 022-1 (23)		CHKD: -	DFTM: T.D.
PRESTRESSED NEXT BEAM LAYOUT		JOB NO:	DWG. NO: F1

4-21-14 REVISED AS PER ENGINEERS COMM. T.D.

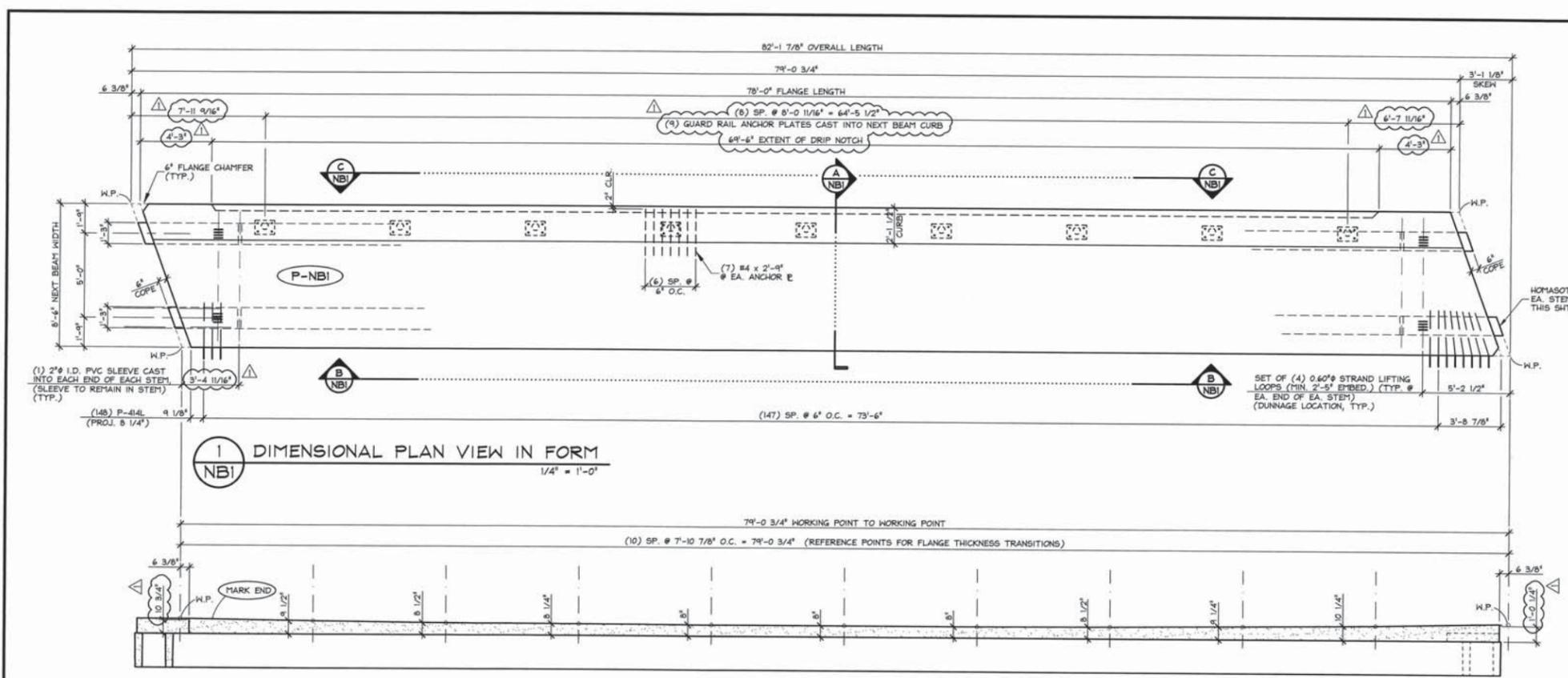


Bottom of hook should extend to bottom of beam. Bar length is correct on sheet 16. Bar projection distance is 3'-5". The dimension needs to be revised throughout the plan set.

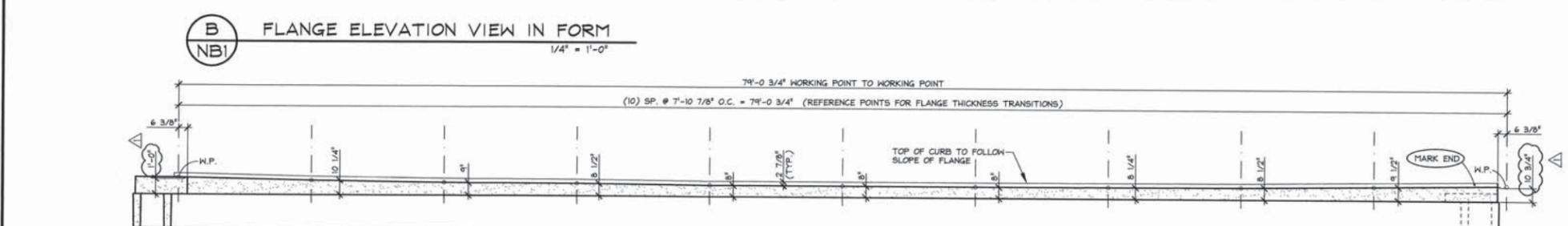
3 BEARING SECTION
F2 NEXT BEAM STEM BEARING 3/4" = 1'-0"

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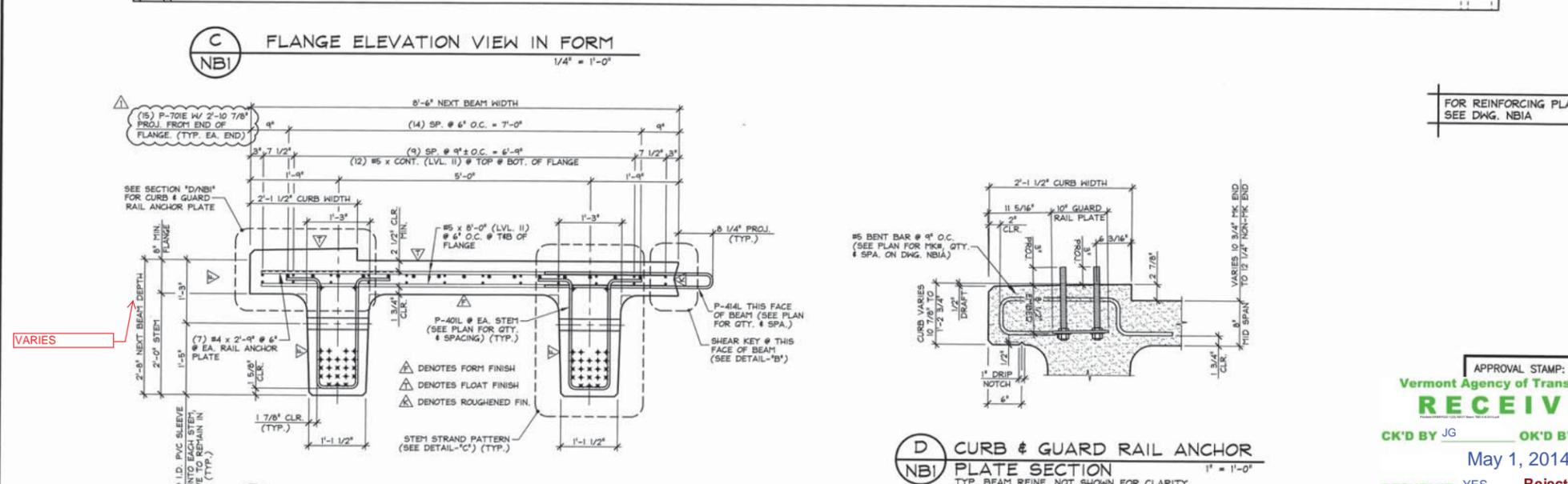
J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer <small>244 OAK ST. WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010</small>		COLD RIVER BRIDGES, LLC CONTRACTOR <small>WALPOLE, NEW HAMPSHIRE</small>	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND		DATE: FEB. 3, 2014	
TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL) BRIDGE NO.: 124 PROJECT NO.: ER BR 022-1 (23)		SCALE: NOTED	
SECTIONS & DETAILS		CHKD: - DFTM: T.D.	
		JOB NO: 23413-013	
		DWG. NO: F2	



1 DIMENSIONAL PLAN VIEW IN FORM
NBI
1/4" = 1'-0"



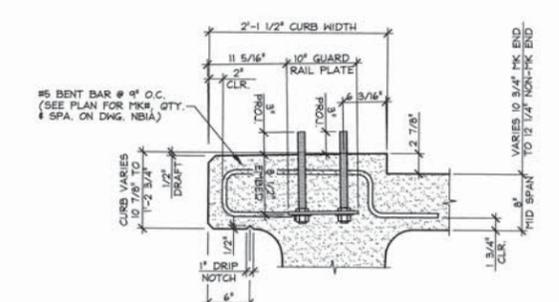
B FLANGE ELEVATION VIEW IN FORM
NBI
1/4" = 1'-0"



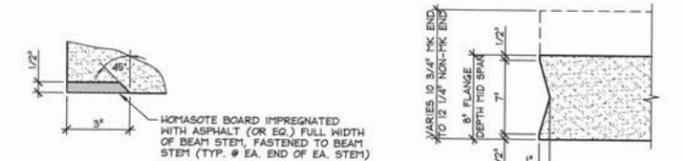
C FLANGE ELEVATION VIEW IN FORM
NBI
1/4" = 1'-0"



A DIMENSIONAL & REINFORCING SECTION
NBI
3/4" = 1'-0"

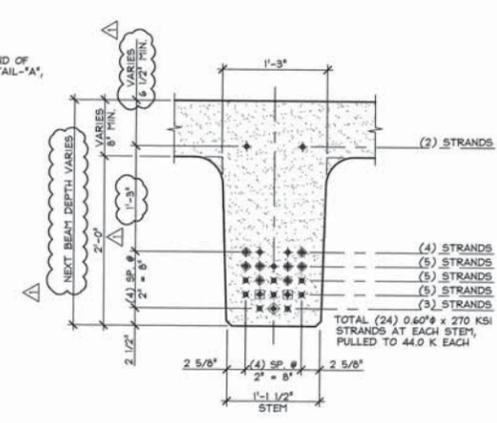


D CURB & GUARD RAIL ANCHOR PLATE SECTION
NBI
1" = 1'-0"



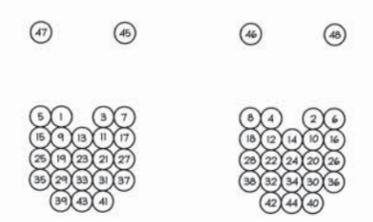
DETAIL - "A"
3" = 1'-0"

DETAIL - "B"
1 1/2" = 1'-0"



DETAIL - "C" (STEM STRAND PATTERN)
1" = 1'-0"

- PRESTRESSING NOTATIONS**
- ◆ DENOTES STRAIGHT STRANDS TO BE CUT FLUSH WITH EA. END OF EA. STEM
 - ✕ DENOTES STRAIGHT STRANDS TO PROJECT 2'-2" FROM EA. END OF EA. STEM, BEND UP 90° @ 8" FROM END OF STEM.
 - ⊕ DENOTES STRAIGHT STRANDS TO BE DEBONDED 6" FROM EA. END OF EA. STEM
 - ⊞ DENOTES STRAIGHT STRANDS TO BE DEBONDED 2'-0" FROM EA. END OF EA. STEM
 - ⊗ DENOTES STRAIGHT STRANDS TO BE DEBONDED 4'-0" FROM EA. END OF EA. STEM



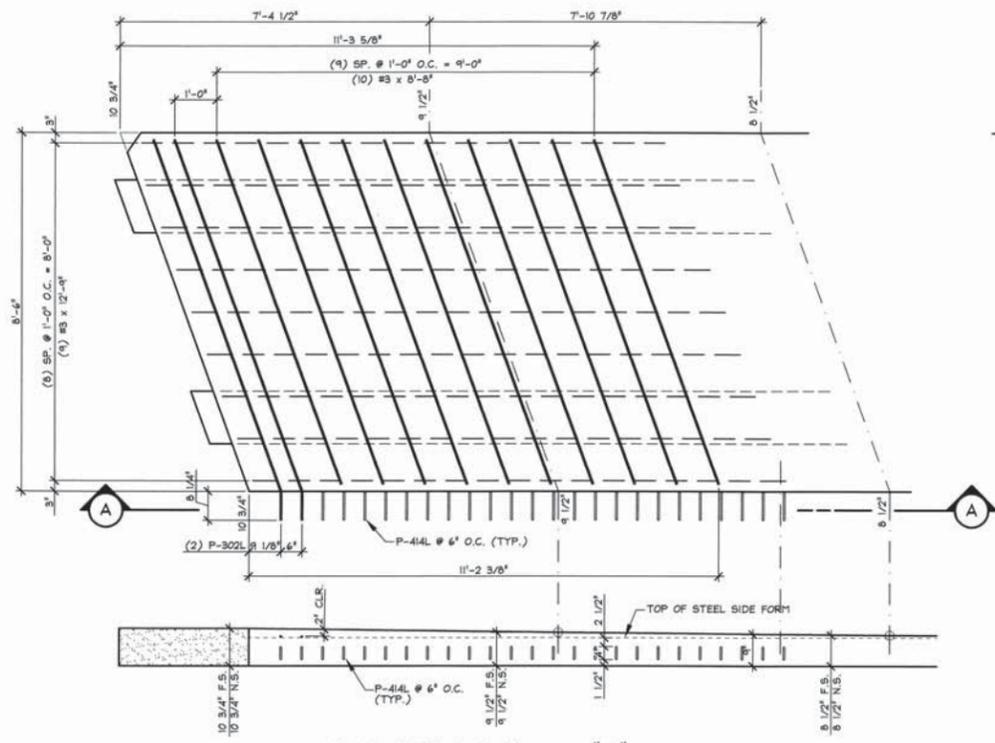
DETENSING SCHEDULE
N.T.S.

FOR REINFORCING PLAN AND ELEVATIONS SEE DWG. NBI-A

MARK: P-NBI	QTY.: 1	WT.: 70.20 T	VOL.: 34.67 cy
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	P-41L	#4 BENT BAR (LEVEL II, DUAL COATED)	(148)
2		#4 x 2'-9" (LEVEL II, DUAL COATED)	(65)
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13		GUARD RAIL ANCHOR PLATE (GALV.) (SUPPLIED BY OTHERS)	(9)
14		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4
15			

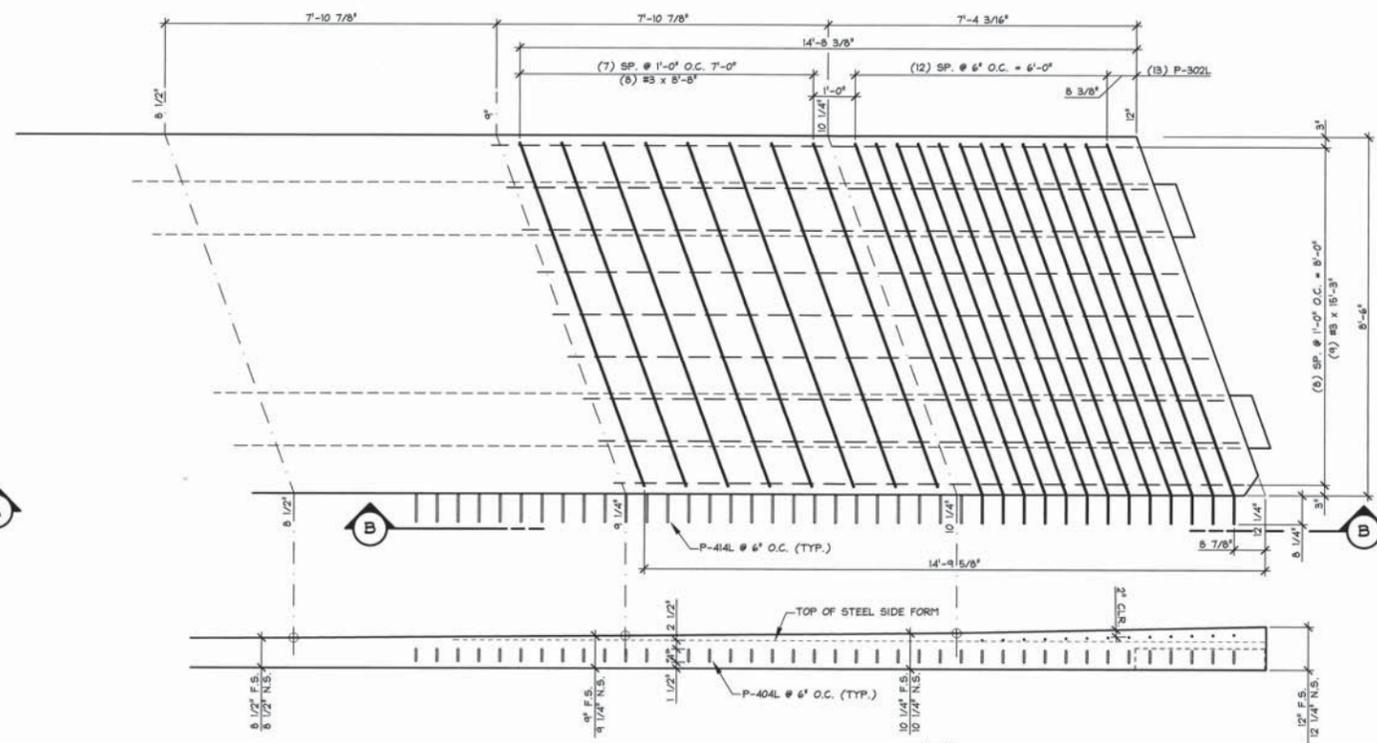
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RESUBMIT YES Rejected
BY KH DATE 5-8-2014

J.P. CARRARA & SONS INC.
Precast & Prestress Manufacturer
284 ONE ST. WOODBURY, VERMONT 05753 Phone: (802)388-6361 Fax: (802)388-9010
COLD RIVER BRIDGES, LLC
CONTRACTOR
WALPOLE, NEW HAMPSHIRE
STATE OF VERMONT AGENCY OF TRANSPORTATION
COUNTY OF RUTLAND
TOWN OF PITTSFIELD
VT ROUTE 100, (MINOR ARTERIAL)
BRIDGE NO.: 124 PROJECT NO.: ER BRP 022-1 (29)
DATE: FEB. 3, 2014
SCALE: NOTED
CHKD: - DFTM: T.D.
JOB NO: 23416-01B
PRESTRESSED NEXT BEAM DETAILS
DWG. NO: NBI



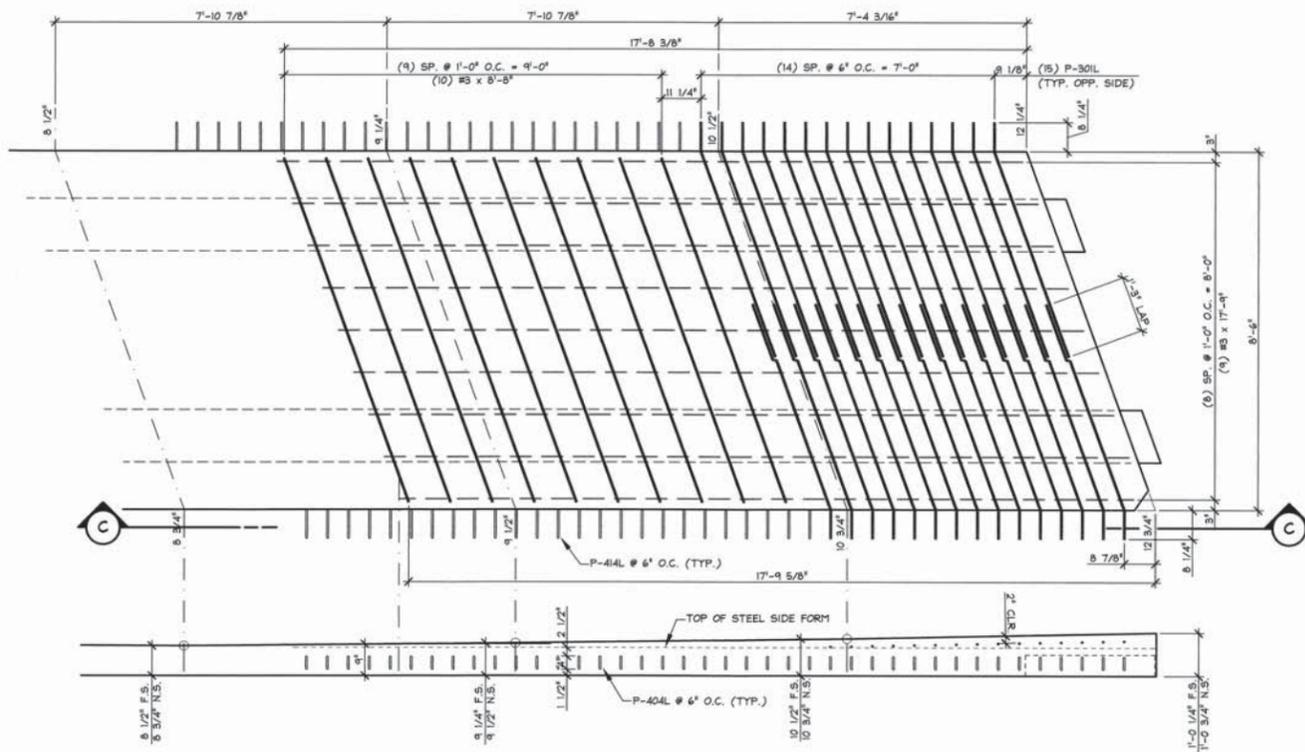
SECTION - "A"
1/2" = 1'-0"

1 THICKENED FLANGE REINFORCING PLAN VIEW IN FORM
NBIC (MARK END P-NB1) 1/2" = 1'-0"



SECTION - "B"
1/2" = 1'-0"

2 THICKENED FLANGE REINFORCING PLAN VIEW IN FORM
NBIC (NON-MARK END P-NB1) 1/2" = 1'-0"



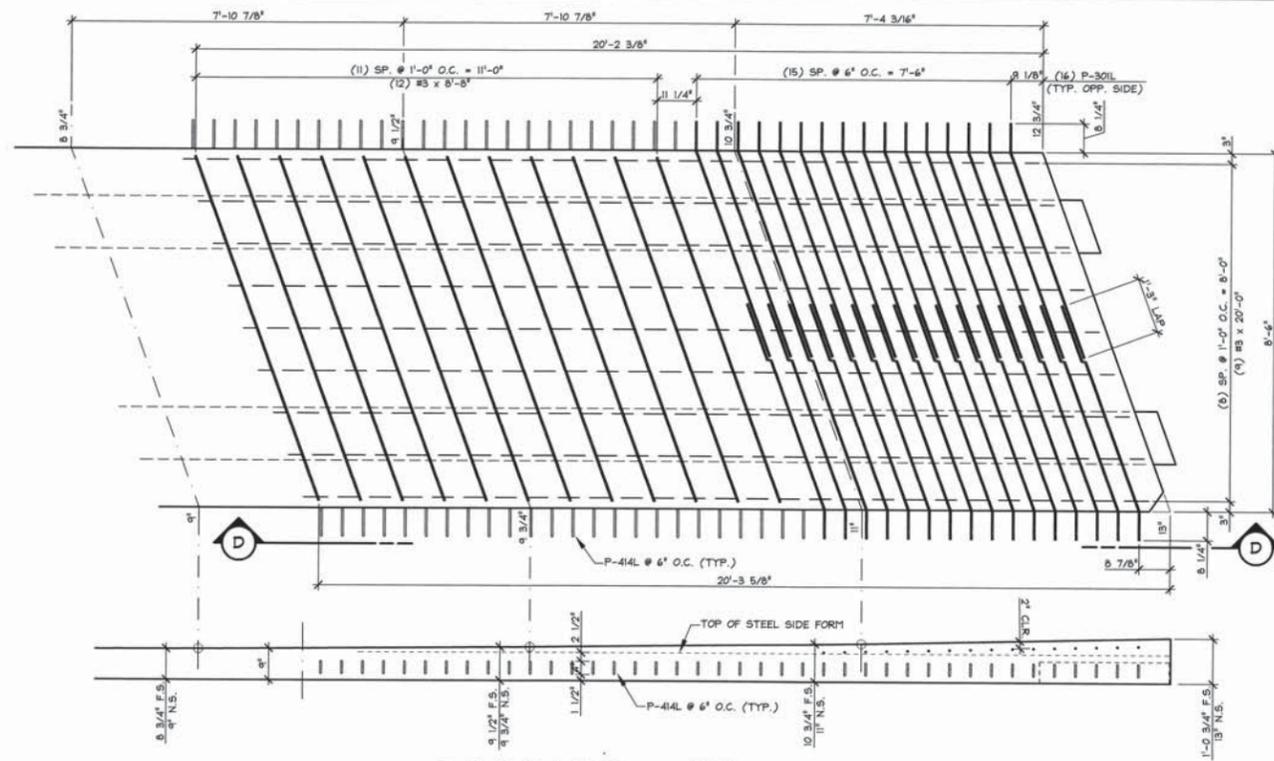
SECTION - "C"
1/2" = 1'-0"

3 THICKENED FLANGE REINFORCING PLAN VIEW IN FORM
NBIC (NON-MARK END P-NB2) 1/2" = 1'-0"

APPROVAL STAMP:

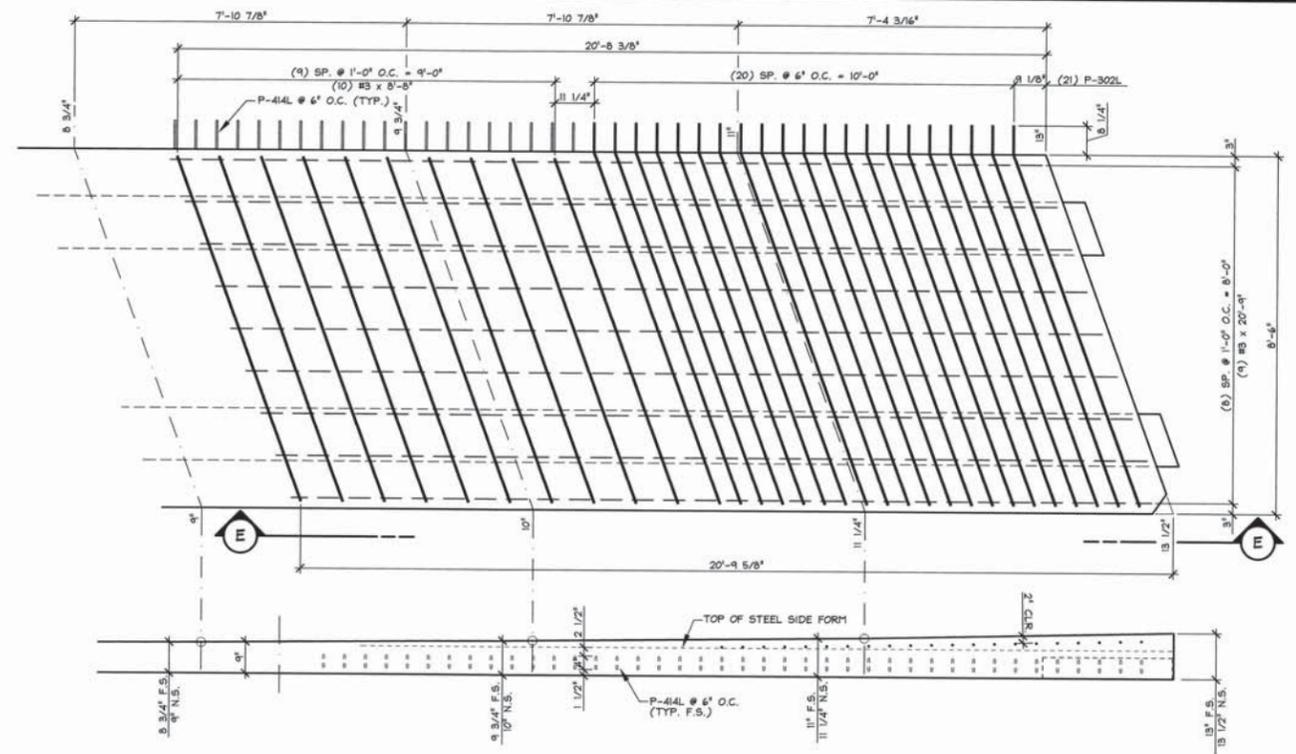
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J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 244 ONE STR. WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010		COLD RIVER BRIDGES, LLC CONTRACTOR WALPOLE, NEW HAMPSHIRE	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND		DATE: FEB. 3, 2014	
TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL)		SCALE: NOTED	
BRIDGE NO.: 124	PROJECT NO.: ER BR 022-1 (23)	CHKD: -	DFTM: T.D.
FLANGE REINFORCEMENT DETAILS		JOB NO: 23416-013	DWG. NO: NBIC



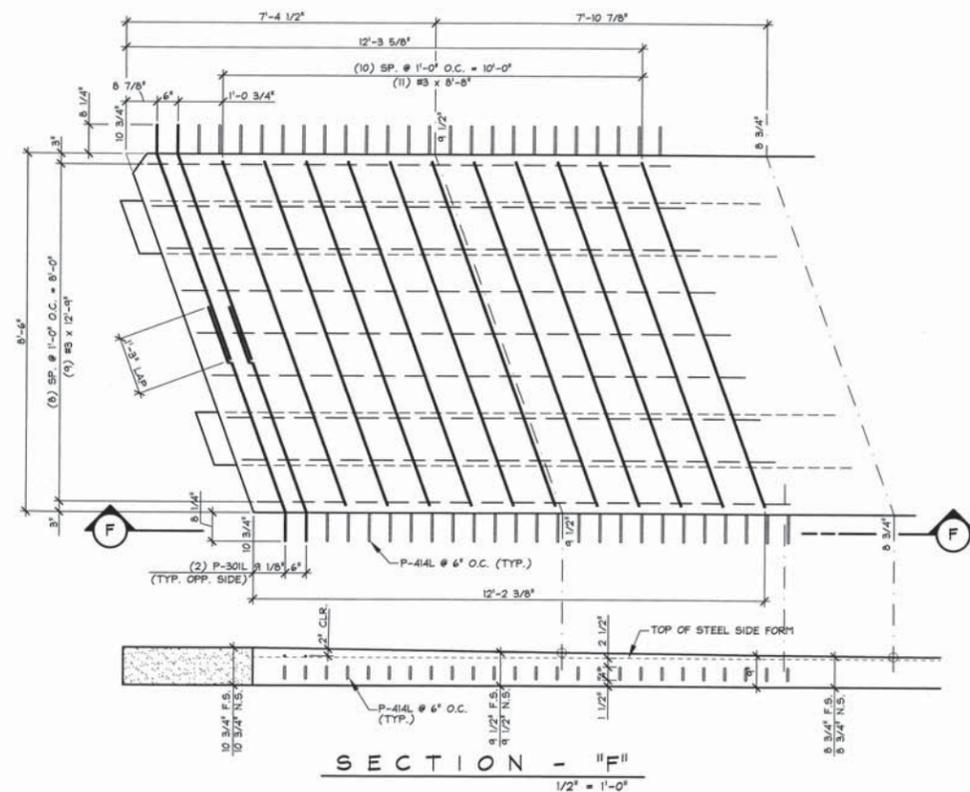
SECTION - "D"
1/2" = 1'-0"

4 THICKENED FLANGE REINFORCING PLAN VIEW IN FORM
NBID (NON-MARK END P-NB3) 1/2" = 1'-0"



SECTION - "E"
1/2" = 1'-0"

5 THICKENED FLANGE REINFORCING PLAN VIEW IN FORM
NBID (NON-MARK END P-NB4) 1/2" = 1'-0"

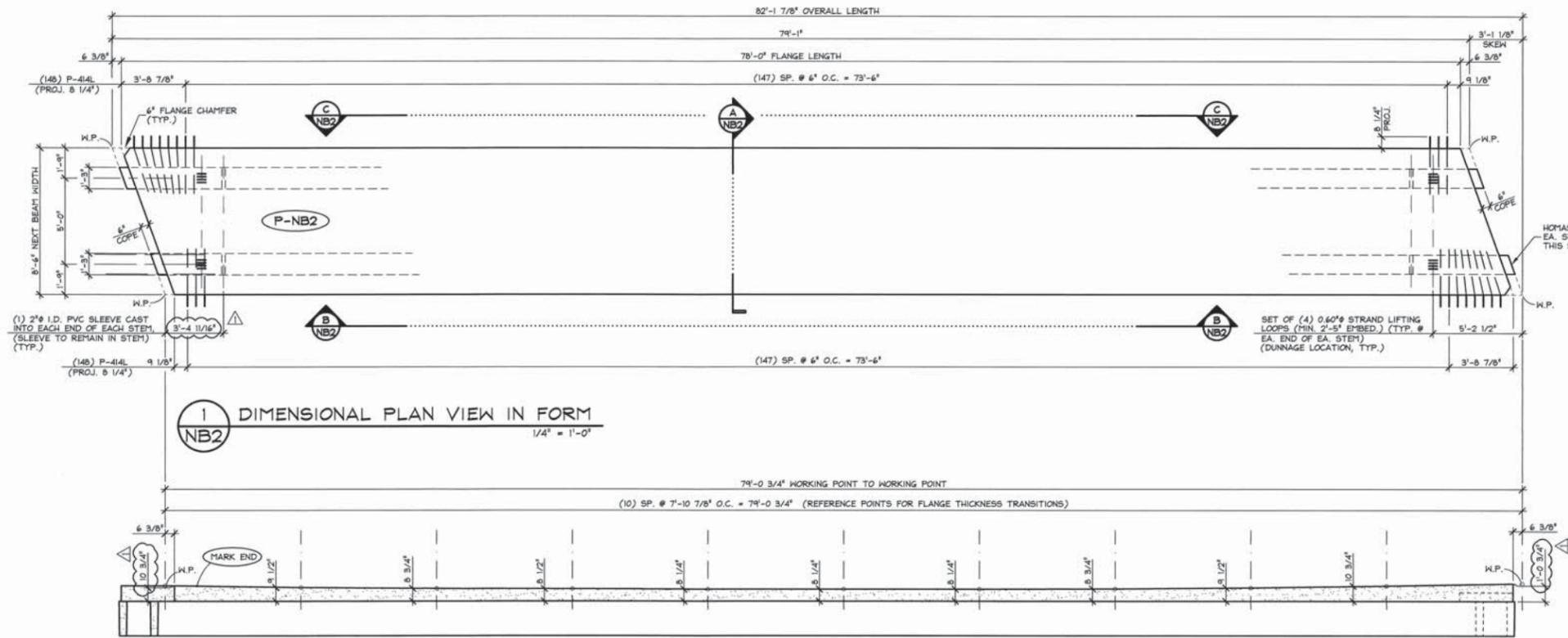


SECTION - "F"
1/2" = 1'-0"

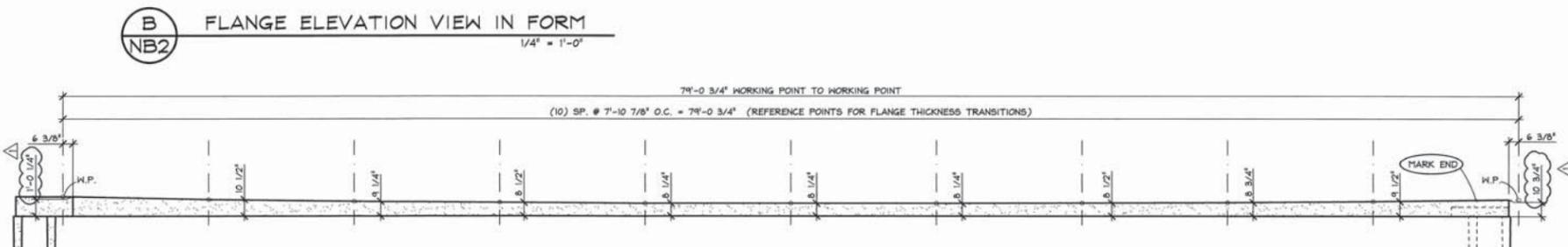
6 THICKENED FLANGE REINFORCING PLAN VIEW IN FORM
NBID (MARK END P-NB2, P-NB3) 1/2" = 1'-0"

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J.P. CARRARA & SONS INC. Precast & Prestress Manufacturer 244 GALE ST., WOODBURY, VERMONT 05753 Phone: (802) 388-6361 Fax: (802) 388-9010		COLD RIVER BRIDGES, LLC CONTRACTOR WALPOLE, NEW HAMPSHIRE	
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND		DATE: FEB. 3, 2014	SCALE: NOTED
TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL) BRIDGE NO.: 124 PROJECT NO.: ER BRF 022-1 (23)		CHKD: -	DFTM: T.D.
FLANGE REINFORCEMENT DETAILS		JOB NO: 23416-013	DWG. NO: NBID



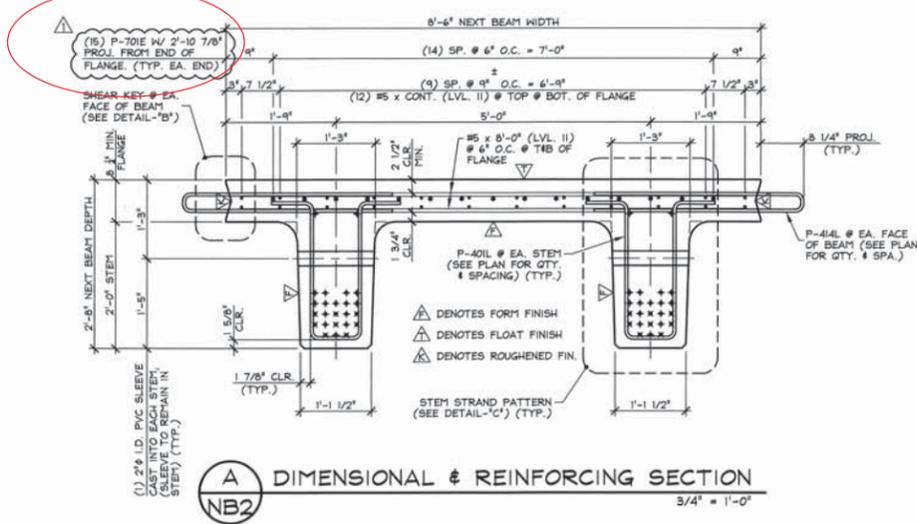
1 DIMENSIONAL PLAN VIEW IN FORM
NB2
1/4" = 1'-0"



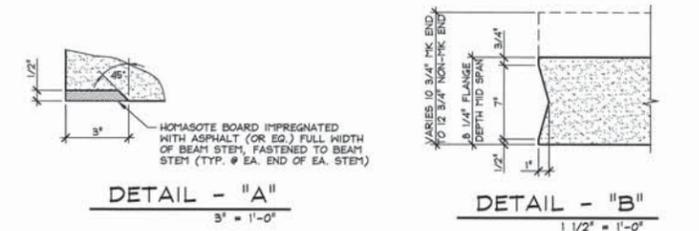
B FLANGE ELEVATION VIEW IN FORM
NB2
1/4" = 1'-0"



C FLANGE ELEVATION VIEW IN FORM
NB2
1/4" = 1'-0"

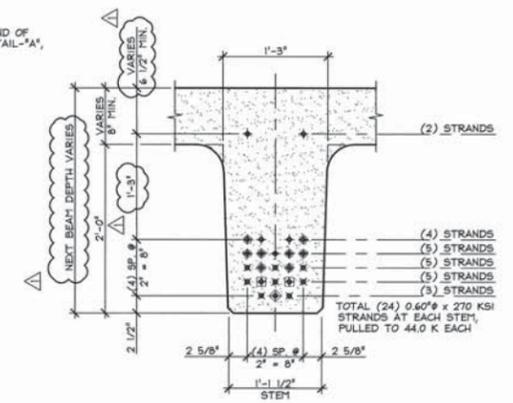


A DIMENSIONAL & REINFORCING SECTION
NB2
3/4" = 1'-0"



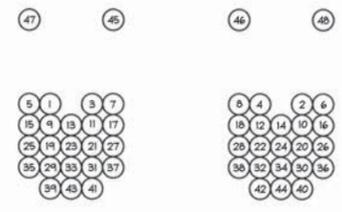
DETAIL - "A"
3" = 1'-0"

DETAIL - "B"
1 1/2" = 1'-0"



DETAIL - "C" (STEM STRAND PATTERN)
1" = 1'-0"

- PRESTRESSING NOTATIONS**
- ◆ DENOTES STRAIGHT STRANDS TO BE CUT FLUSH WITH EA. END OF EA. STEM
 - ✱ DENOTES STRAIGHT STRANDS TO PROJECT 2'-2" FROM EA. END OF EA. STEM, BEND 90° UP @ 0' FROM END OF STEM.
 - ⊕ DENOTES STRAIGHT STRANDS TO BE DEBONDED 4" FROM EA. END OF EA. STEM
 - ⊞ DENOTES STRAIGHT STRANDS TO BE DEBONDED 2'-0" FROM EA. END OF EA. STEM
 - ⊞ DENOTES STRAIGHT STRANDS TO BE DEBONDED 4'-0" FROM EA. END OF EA. STEM



DETENSIONING SCHEDULE
N.T.S.

MARK: P-NB2	QTY.: 1	WT.: 66.9 T	VOL.: 33.04 cy
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	P-414L	#4 BENT BAR (LEVEL II, DUAL COATED)	26
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4
15			

FOR REINFORCING PLAN AND ELEVATIONS
SEE DWG. NB2A

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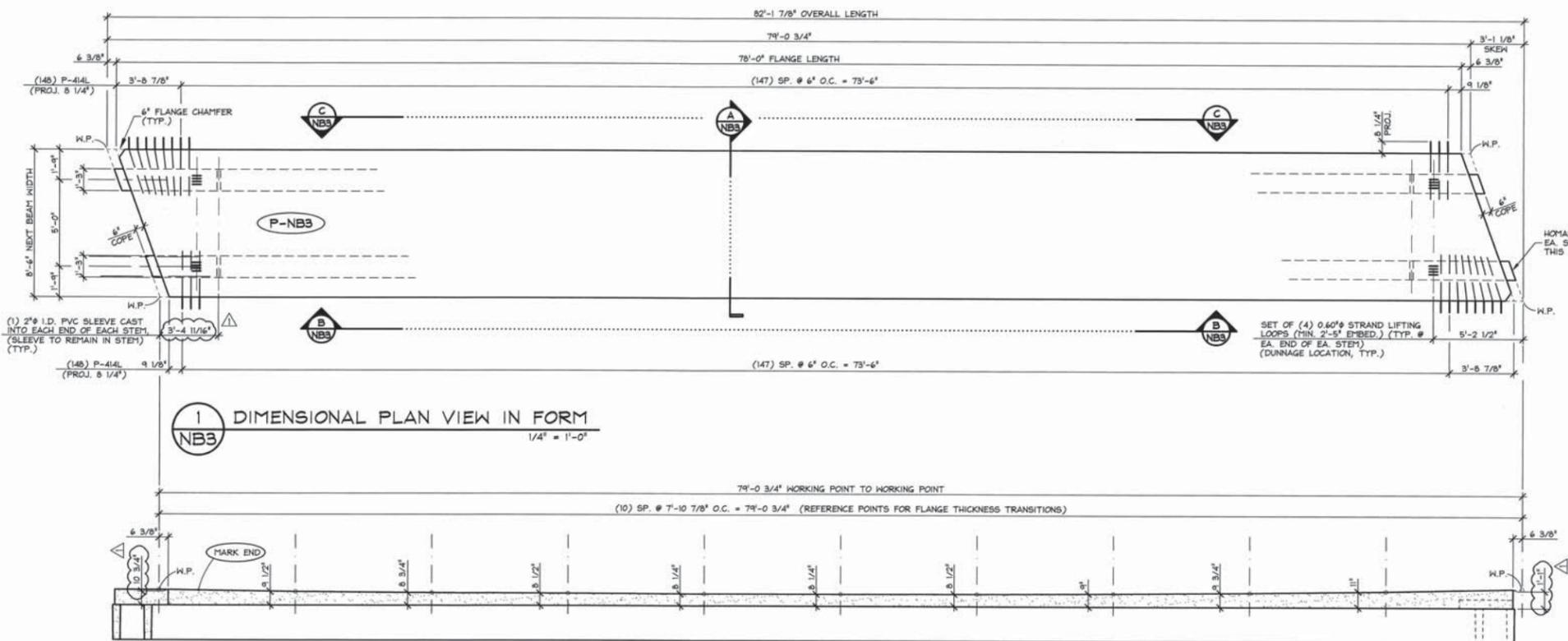
COLD RIVER BRIDGES, LLC
 CONTRACTOR
 WALPOLE, NEW HAMPSHIRE

STATE OF VERMONT AGENCY OF TRANSPORTATION
 COUNTY OF RUTLAND

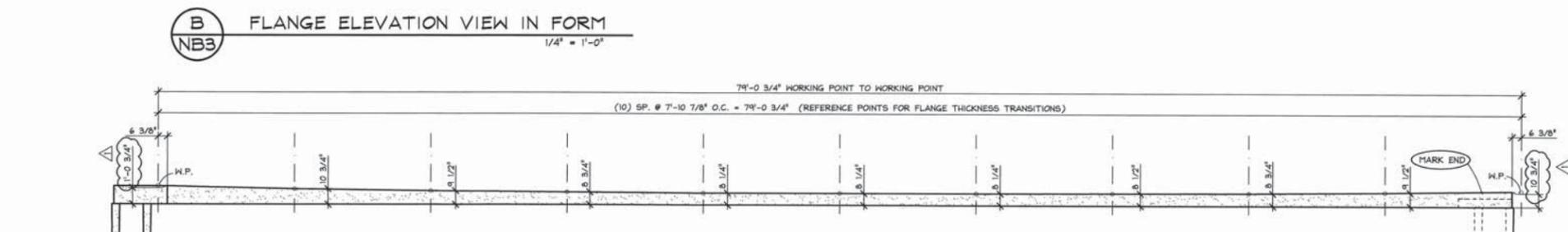
TOWN OF PITTSFIELD
 VT ROUTE 100, (MINOR ARTERIAL)
 BRIDGE NO.: 124 PROJECT NO.: ER BR F 022-1 (23)

DATE: FEB. 3, 2014
 SCALE: NOTED
 CHKD: - DFTM: T.D.
 JOB NO: 23416-013

PRESTRESSED NEXT BEAM DETAILS
 DWG. NO: NB2



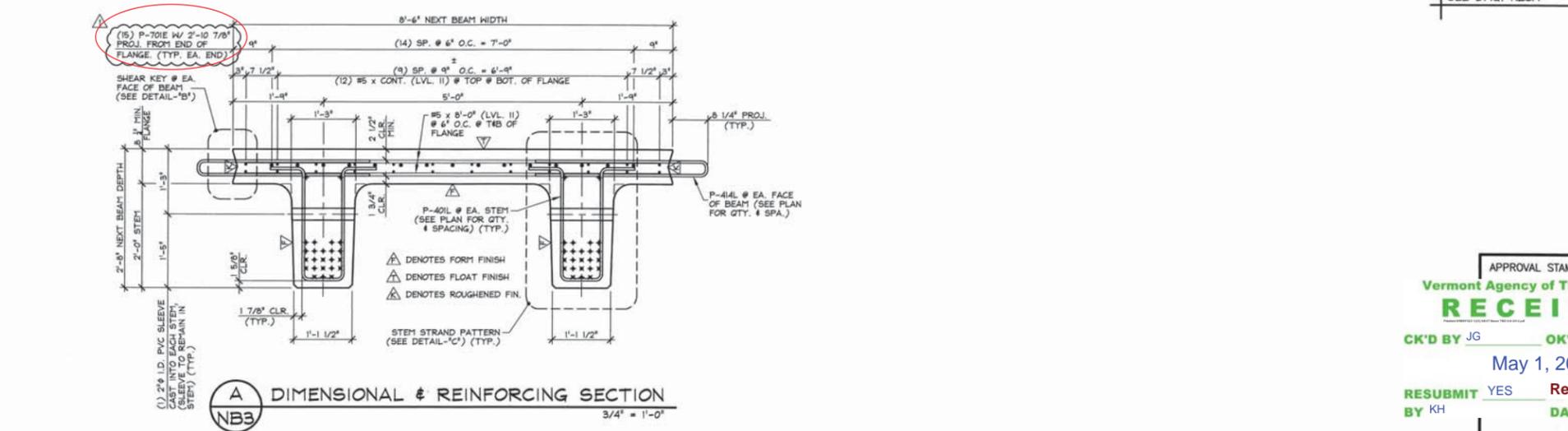
1 DIMENSIONAL PLAN VIEW IN FORM
NB3 1/4" = 1'-0"



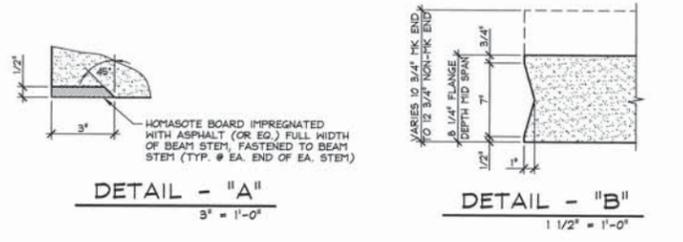
B FLANGE ELEVATION VIEW IN FORM
NB3 1/4" = 1'-0"



C FLANGE ELEVATION VIEW IN FORM
NB3 1/4" = 1'-0"

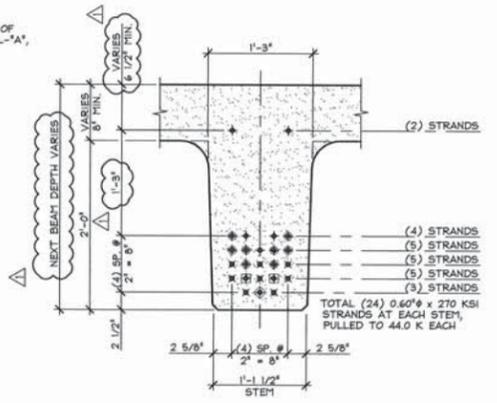


A DIMENSIONAL & REINFORCING SECTION
NB3 3/4" = 1'-0"



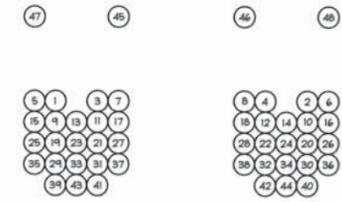
DETAIL - "A"
3" = 1'-0"

DETAIL - "B"
1 1/2" = 1'-0"



DETAIL - "C" (STEM STRAND PATTERN)
1" = 1'-0"

- PRESTRESSING NOTATIONS**
- ◆ DENOTES STRAIGHT STRANDS TO BE CUT FLUSH WITH EA. END OF EA. STEM
 - ✱ DENOTES STRAIGHT STRANDS TO PROJECT 2'-2" FROM EA. END OF EA. STEM. BEND 90° UP # 8' FROM END OF STEM.
 - ⊕ DENOTES STRAIGHT STRANDS TO BE DEBONDED 6' FROM EA. END OF EA. STEM
 - ⊕ DENOTES STRAIGHT STRANDS TO BE DEBONDED 2'-0" FROM EA. END OF EA. STEM
 - ⊕ DENOTES STRAIGHT STRANDS TO BE DEBONDED 4'-0" FROM EA. END OF EA. STEM



DETENSIONING SCHEDULE
N.T.S.

FOR REINFORCING PLAN AND ELEVATIONS
SEE DWG. NB3A

MARK: P-NB3	QTY.: 1	WT.: 69.9 T	VOL.: 33.04 cy
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	P-414L	#4 BENT BAR (LEVEL II, DUAL COATED)	2%
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4
15			

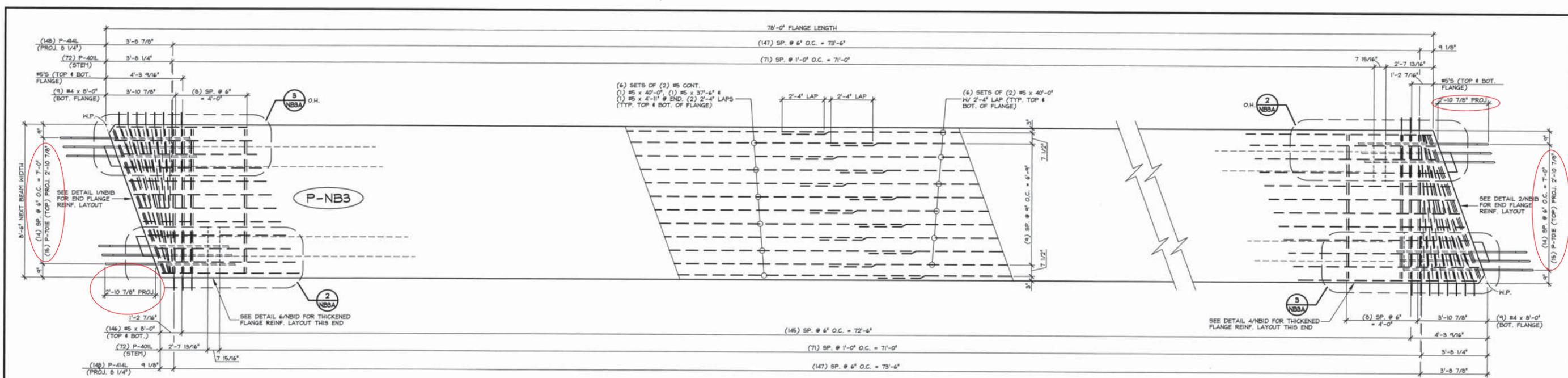
APPROVAL STAMP:
Vermont Agency of Transportation
RECEIVED
 CK'D BY JG OK'D BY JS
 May 1, 2014
 RESUBMIT YES Rejected
 BY KH DATE 5-8-2014

J.P. CARRARA & SONS INC. COLD RIVER BRIDGES, LLC
 Precast & Prestress Manufacturer CONTRACTOR
 2044 ONE STR. WETHERLY, VERMONT 05753 Phone:(802)388-6261 Fax:(802)388-9010 WALPOLE, NEW HAMPSHIRE

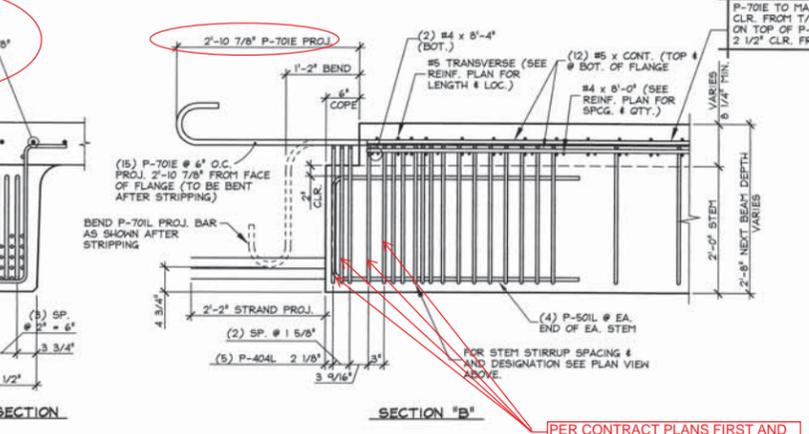
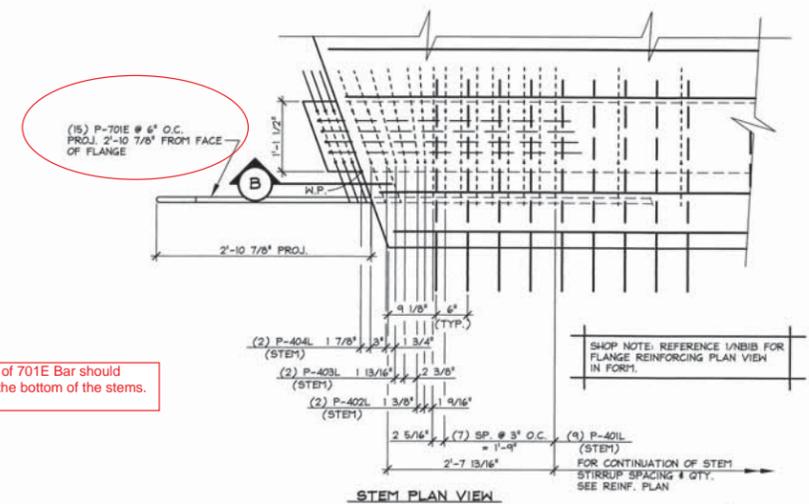
STATE OF VERMONT AGENCY OF TRANSPORTATION DATE: FEB. 3, 2014
 COUNTY OF RUTLAND SCALE: NOTED

TOWN OF PITTSFIELD CHKD: - DFTM: T.D.
 VT ROUTE 100, (MINOR ARTERIAL)
 BRIDGE NO.: 124 PROJECT NO.: ER BRP 022-1 (23) JOB NO: 23416-013

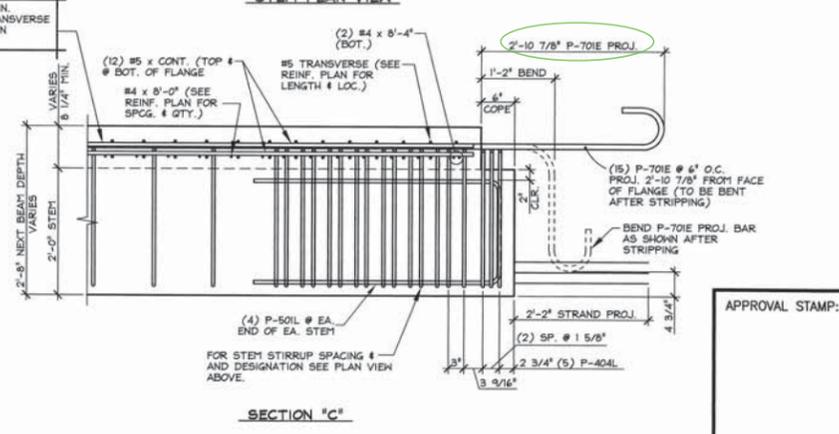
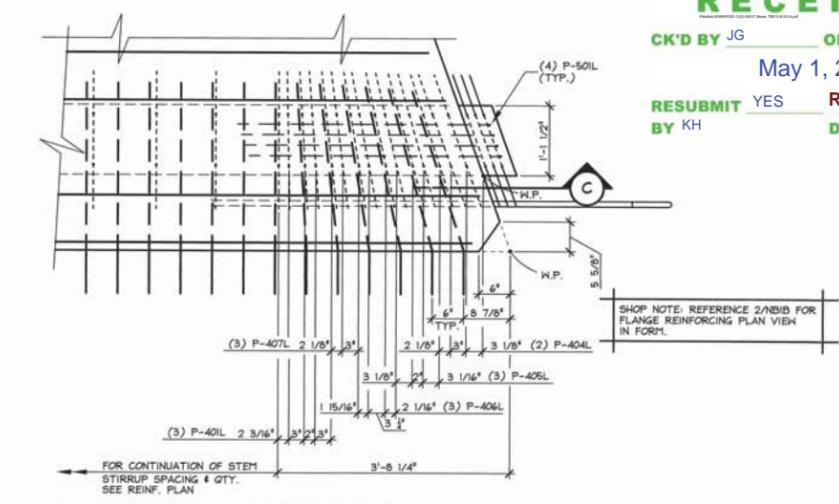
PRESTRESSED NEXT BEAM DETAILS DWG. NO: NB3



1 REINFORCING PLAN VIEW IN FORM
NB3A 3/8" = 1'-0"



2 END BLOCK STEM REINFORCING DETAILS
NB3A 3/4" = 1'-0"



3 END BLOCK STEM REINFORCING DETAILS
NB3A 3/4" = 1'-0"

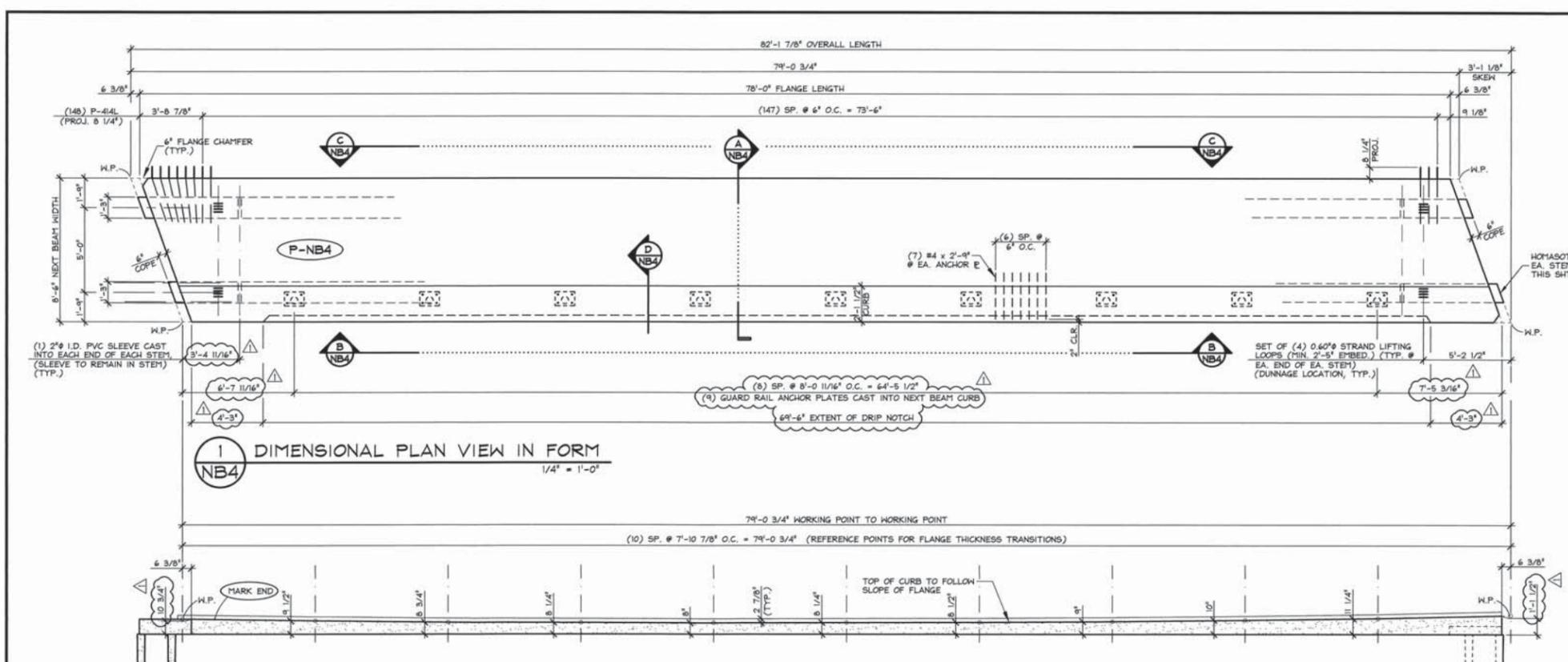
Vermont Agency of Transportation
RECEIVED
CK'D BY JG OK'D BY JS
May 1, 2014
RESUBMIT YES Rejected
BY KH DATE 5-8-2014

MARK: P-NB3 QTY.: 1 WT.: T VOL.: cy			
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	P-301L	#3 BENT BAR (LEVEL II, DUAL COATED) (THICKENED FLANGE)	36
2	P-401L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	168
3	P-402L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	4
4	P-403L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	4
5	P-404L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	20
6	P-405L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	6
7	P-406L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	6
8	P-407L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	6
9	P-408L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	2
10	P-409L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	2
11	P-410L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	2
12	P-411L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	2
13	P-412L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	2
14	P-413L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	2
15	P-414L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	246
16			
17	P-501L	#5 BENT BAR (LEVEL II, DUAL COATED) (STEM)	16
18			
19	P-701E	#7 BENT BAR (LEVEL I, EPOXY COATED) (FLANGE)	30
20			
21		#3 x 8'-8" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	23
22		#3 x 12'-9" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	9
23		#3 x 20'-0" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	9
24			
25		#4 x 8'-4" (LEVEL II, DUAL COATED) (FLANGE)	4
26		#4 x 8'-1" (LEVEL II, DUAL COATED) (FLANGE)	2
27		#4 x 4'-1" (LEVEL II, DUAL COATED) (FLANGE)	10
28		#4 x 8'-0" (LEVEL II, DUAL COATED) (FLANGE)	18
29		#5 x 8'-4" (LEVEL II, DUAL COATED) (FLANGE)	4
30		#5 x 8'-3" (LEVEL II, DUAL COATED) (FLANGE)	4
31		#5 x 8'-1" (LEVEL II, DUAL COATED) (FLANGE)	4
32		#5 x 8'-0" (LEVEL II, DUAL COATED) (FLANGE)	246
33		#5 x 6'-2" (LEVEL II, DUAL COATED) (FLANGE)	16
34			
35		#5 x 37'-6" (LEVEL II, DUAL COATED) (FLANGE)	12
36		#5 x 40'-0" (LEVEL II, DUAL COATED) (FLANGE)	36
37		#5 x 4'-11" (LEVEL II, DUAL COATED) (FLANGE)	12

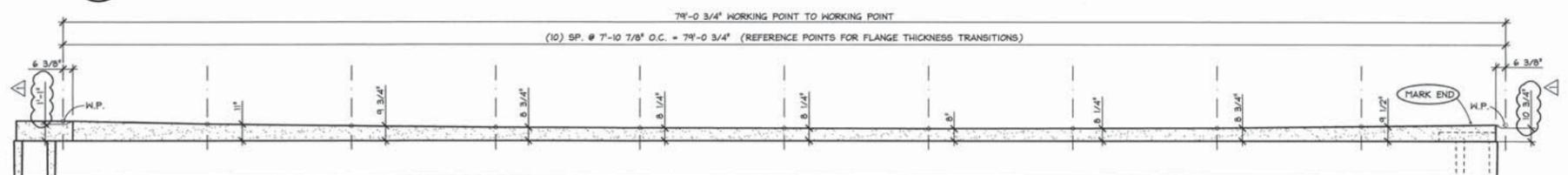
APPROVAL STAMP:

J.P. CARRARA & SONS INC. COLD RIVER BRIDGES, LLC
Precast & Prestress Manufacturer CONTRACTOR
284 ONE ST. WASHINGTON, VERMONT 0553 Phone: (802)388-6361 Fax: (802)388-9010 WALPOLE, NEW HAMPSHIRE

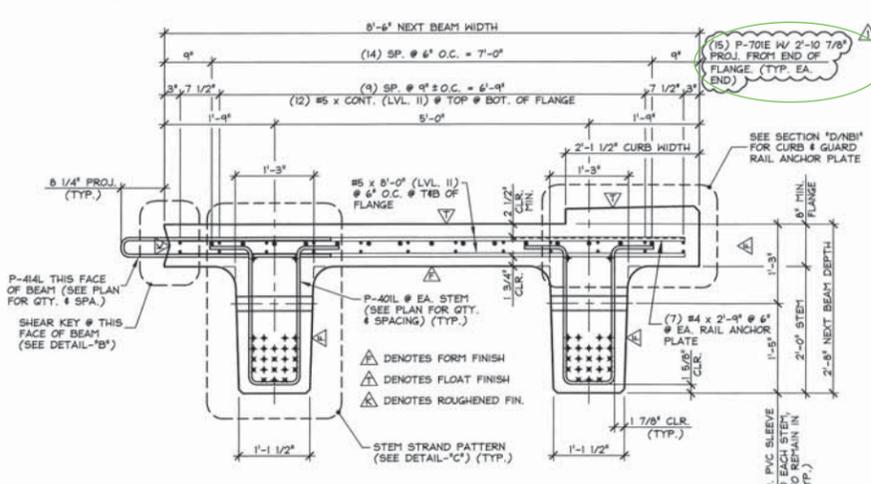
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND DATE: FEB. 3, 2014
SCALE: NOTED
TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL) CHKD: - DFTM: T.D.
BRIDGE NO. 124 PROJECT NO. ER BRF 022-1 (23) JOB NO: 23416-013
PRESTRESSED NEXT BEAM DETAILS DWG. NO: NB3A



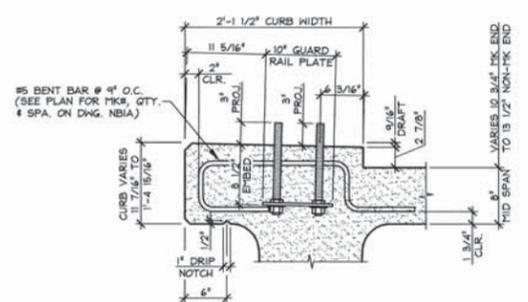
B FLANGE ELEVATION VIEW IN FORM NB4
1/4" = 1'-0"



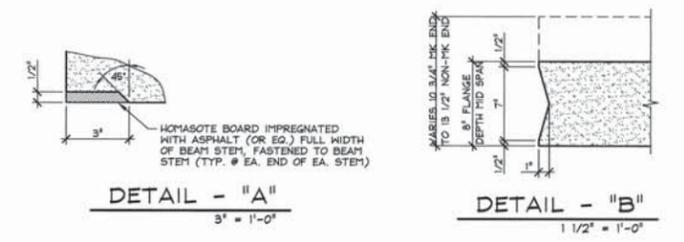
C FLANGE ELEVATION VIEW IN FORM NB4
1/4" = 1'-0"



A DIMENSIONAL & REINFORCING SECTION NB4
3/4" = 1'-0"

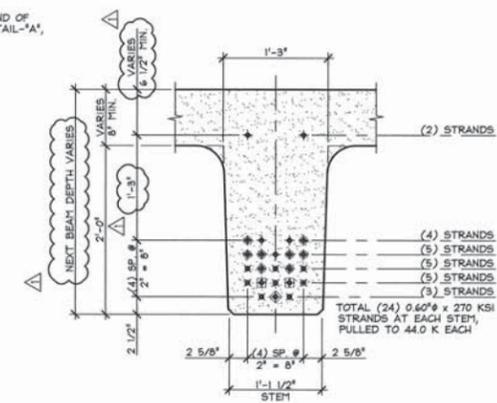


D CURB & GUARD RAIL ANCHOR PLATE SECTION NB4
1" = 1'-0"



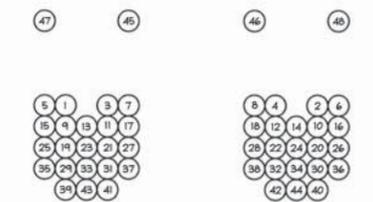
DETAIL - "A"
3' x 1'-0"

DETAIL - "B"
1 1/2' x 1'-0"



DETAIL - "C" (STEM STRAND PATTERN)
1" = 1'-0"

- PRESTRESSING NOTATIONS**
- ◆ DENOTES STRAIGHT STRANDS TO BE CUT FLUSH WITH EA. END OF EA. STEM
 - ✖ DENOTES STRAIGHT STRANDS TO PROJECT 2'-2" FROM EA. END OF EA. STEM. BEND 90° UP @ 8" FROM END OF STEM.
 - ⊕ DENOTES STRAIGHT STRANDS TO BE DEBONDED 6" FROM EA. END OF EA. STEM
 - ⊞ DENOTES STRAIGHT STRANDS TO BE DEBONDED 2'-0" FROM EA. END OF EA. STEM
 - ⊞ DENOTES STRAIGHT STRANDS TO BE DEBONDED 4'-0" FROM EA. END OF EA. STEM



DETENSIONING SCHEDULE
N.T.S.

FOR REINFORCING PLAN AND ELEVATIONS SEE DWG. NB4A

MARK: P-NB4	QTY.: 1	WT.: 70.20 T	VOL.: 34.67 cy
MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	P-414L	#4 BENT BAR (LEVEL II, DUAL COATED)	148
2		#4 x 2'-9" (LEVEL II, DUAL COATED)	63
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13		GUARD RAIL ANCHOR PLATE (GALV.) (SUPPLIED BY OTHERS)	9
14		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	4
15			

APPROVAL STAMP:
Vermont Agency of Transportation
RECEIVED
 CK'D BY JG OK'D BY JS
 May 1, 2014
 RESUBMIT YES Rejected
 BY KH DATE 5-8-2014

J.P. CARRARA & SONS INC.
 Precast & Prestress Manufacturer
 264 OAK ST., WOODBURY, VERMONT 05733 Phone:(802)388-6361 Fax:(802)388-9010

COLD RIVER BRIDGES, LLC
 CONTRACTOR
 WALPOLE, NEW HAMPSHIRE

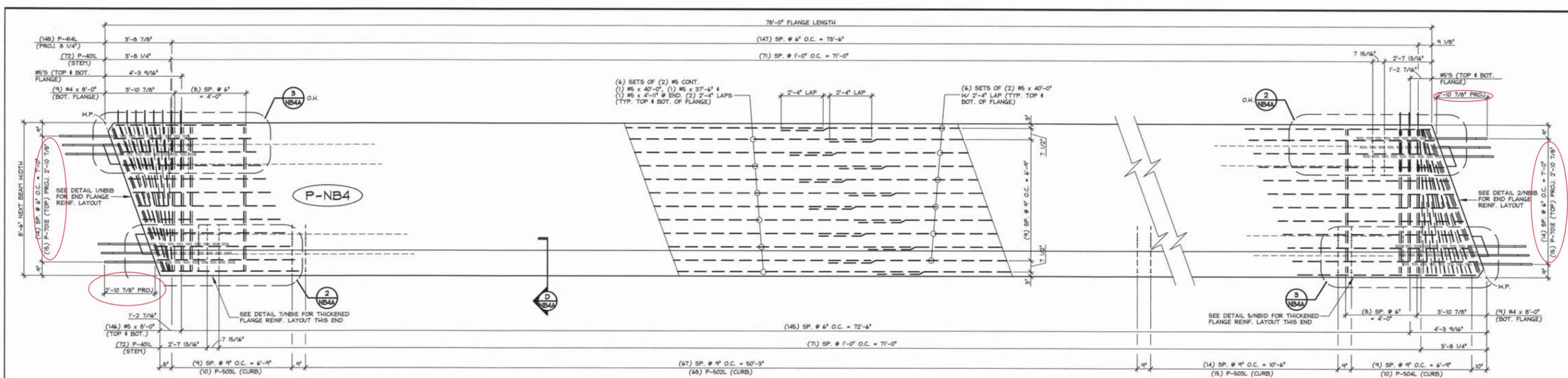
STATE OF VERMONT AGENCY OF TRANSPORTATION
 COUNTY OF RUTLAND

TOWN OF PITTSFIELD
 VT ROUTE 100, (MINOR ARTERIAL)

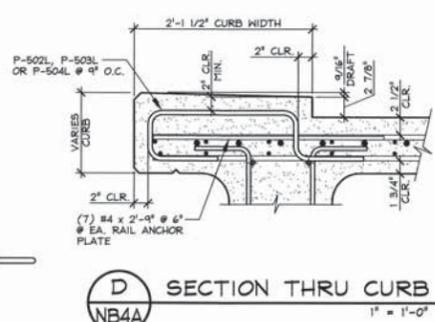
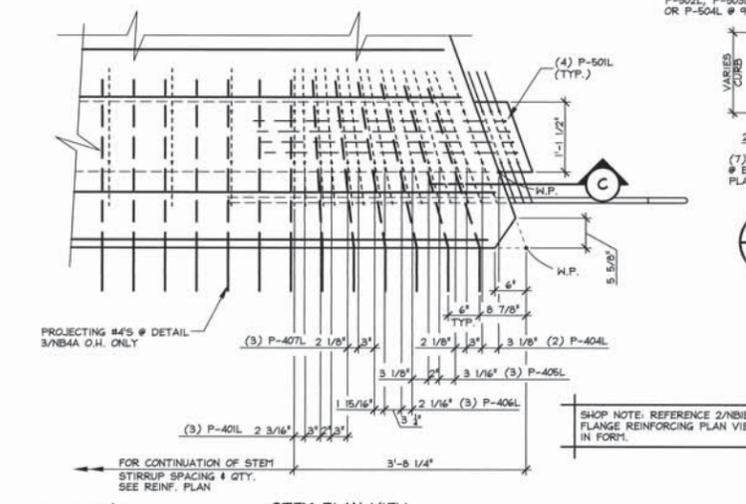
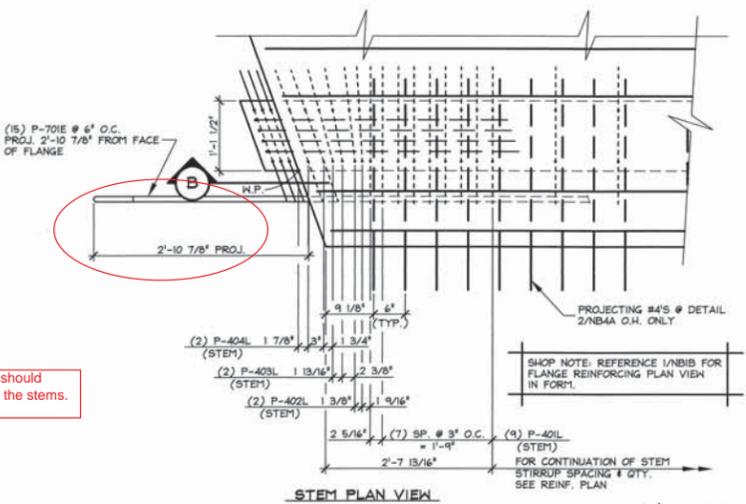
BRIDGE NO.: 124 PROJECT NO.: ER BR F 022-1 (23)

DATE: FEB. 3, 2014
 SCALE: NOTED
 CHKD: - DFTM: T.D.
 JOB NO: 23416-015

PRESTRESSED NEXT BEAM DETAILS DWG. NO: NB4



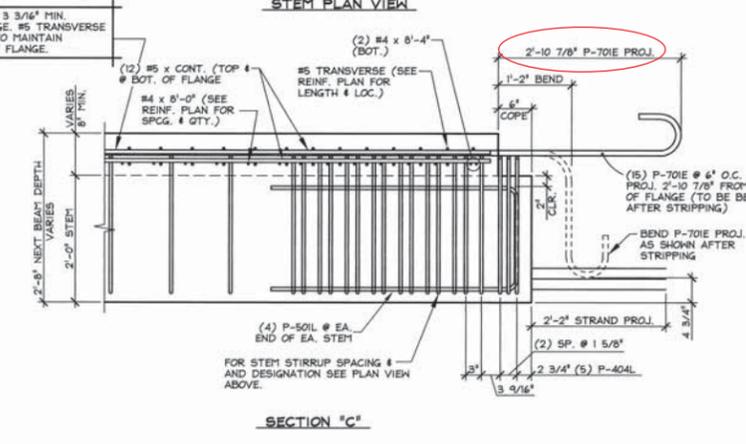
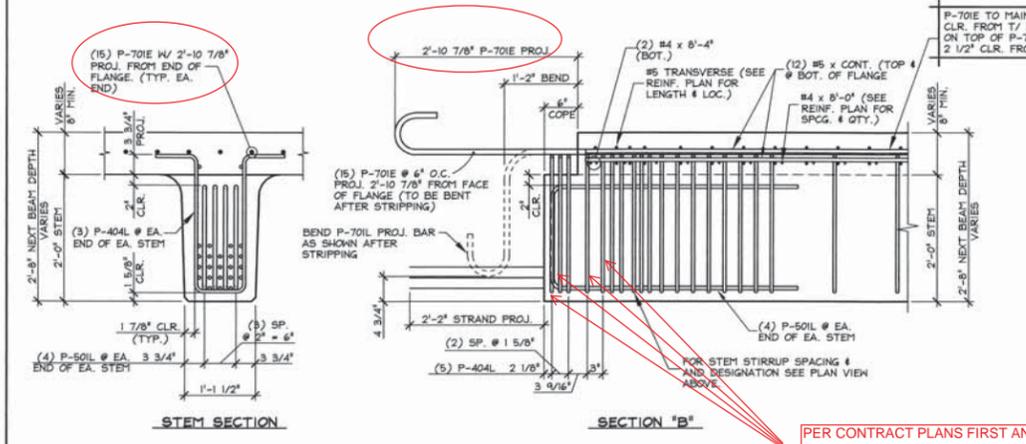
1 REINFORCING PLAN VIEW IN FORM
 NB4A 3/8" = 1'-0"



MARK: P-NB4 QTY.: 1 WT.: T VOL.: cy

MATERIAL LIST / NEXT BEAM			
ITEM	MARK	DESCRIPTION	QTY.
1	P-302L	#3 BENT BAR (LEVEL II, DUAL COATED) (THICKENED FLANGE)	23
2	P-401L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	168
3	P-402L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	4
4	P-403L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	4
5	P-404L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	20
6	P-405L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	6
7	P-406L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	6
8	P-407L	#4 BENT BAR (LEVEL II, DUAL COATED) (STEP)	6
9	P-408L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	1
10	P-409L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	1
11	P-410L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	1
12	P-411L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	1
13	P-412L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	1
14	P-413L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	1
15	P-414L	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	148
16	P-501L	#5 BENT BAR (LEVEL II, DUAL COATED) (STEP)	16
17	P-502L	#5 BENT BAR (LEVEL II, DUAL COATED) (CURB)	68
18	P-503L	#5 BENT BAR (LEVEL II, DUAL COATED) (CURB)	25
19	P-504L	#5 BENT BAR (LEVEL II, DUAL COATED) (CURB)	10
20	P-701E	#7 BENT BAR (LEVEL I, EPOXY COATED) (FLANGE)	30
21		#3 x 8'-8" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	21
22		#3 x 12'-9" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	9
23		#3 x 20'-9" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	9
24			
25		#4 x 8'-4" (LEVEL II, DUAL COATED) (FLANGE)	4
26		#4 x 8'-1" (LEVEL II, DUAL COATED) (FLANGE)	2
27		#4 x 4'-1" (LEVEL II, DUAL COATED) (FLANGE)	10
28		#4 x 8'-0" (LEVEL II, DUAL COATED) (FLANGE)	15
29		#5 x 8'-4" (LEVEL II, DUAL COATED) (FLANGE)	4
30		#5 x 8'-3" (LEVEL II, DUAL COATED) (FLANGE)	4
31		#5 x 8'-1" (LEVEL II, DUAL COATED) (FLANGE)	4
32		#5 x 8'-0" (LEVEL II, DUAL COATED) (FLANGE)	2%
33		#5 x 6'-2" (LEVEL II, DUAL COATED) (FLANGE)	16
34			
35		#5 x 37'-6" (LEVEL II, DUAL COATED) (FLANGE)	12
36		#5 x 40'-0" (LEVEL II, DUAL COATED) (FLANGE)	36
37		#5 x 4'-11" (LEVEL II, DUAL COATED) (FLANGE)	12

Vermont Agency of Transportation
RECEIVED
 CK'D BY JG OK'D BY JS
 May 1, 2014
 RESUBMIT YES Rejected
 BY KH DATE 5-8-2014



2 END BLOCK STEM REINFORCING DETAILS
 NB4A 3/4" = 1'-0"

3 END BLOCK STEM REINFORCING DETAILS
 NB4A 3/4" = 1'-0"

PER CONTRACT PLANS FIRST AND THIRD PAIRS WILL BE BUNDLED (TYP)

APPROVAL STAMP:

J.P. CARRARA & SONS INC. COLD RIVER BRIDGES, LLC
 Precast & Prestress Manufacturer CONTRACTOR
 284 ODE SR. WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-1010 WALPOLE, NEW HAMPSHIRE

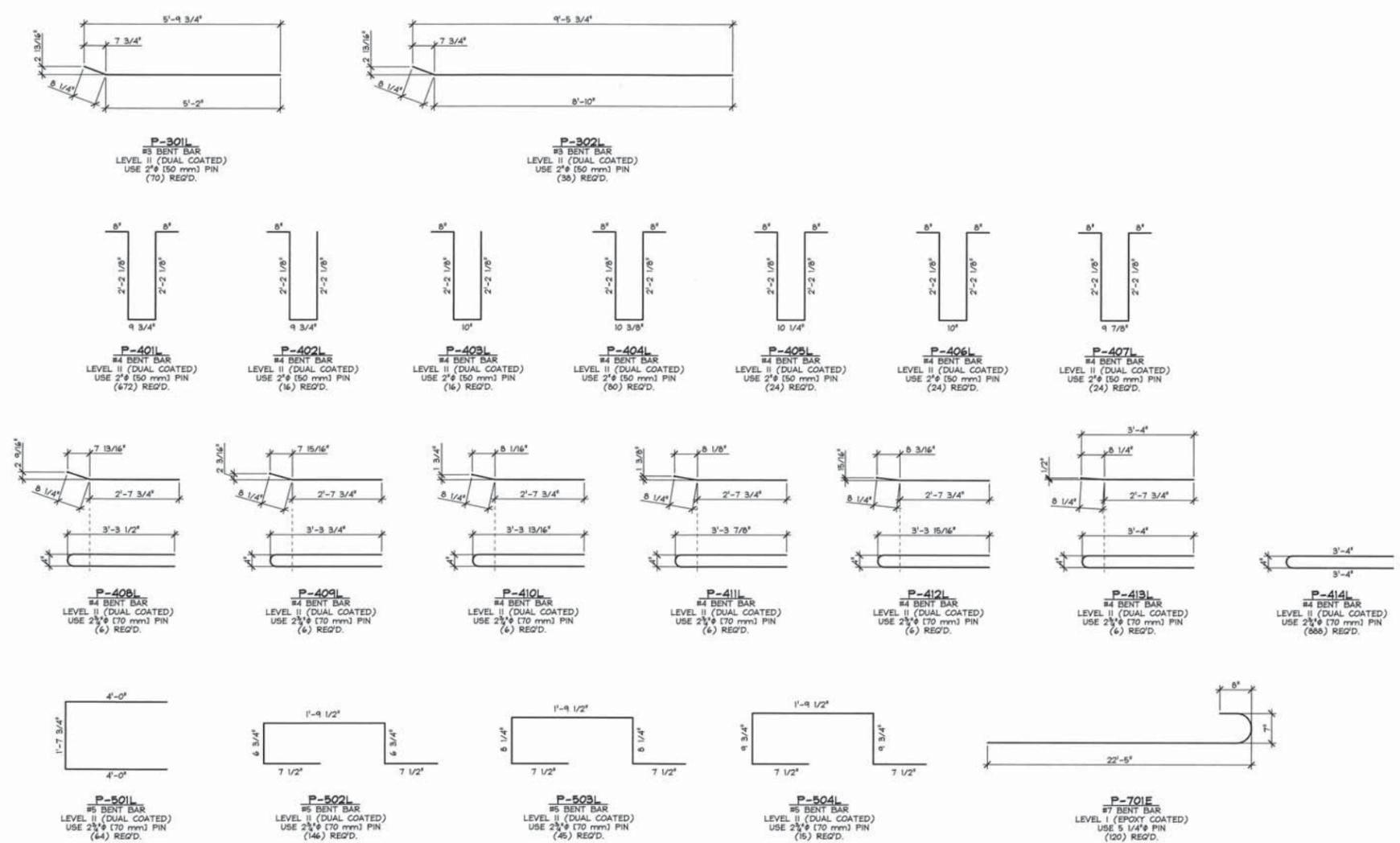
STATE OF VERMONT AGENCY OF TRANSPORTATION COUNTY OF RUTLAND DATE: FEB. 9, 2014
 SCALE: NOTED

TOWN OF PITTSFIELD VT ROUTE 100, (MINOR ARTERIAL) CHKD: - DFTM: T.D.
 BRIDGE NO.: 124 PROJECT NO.: ER BRF 022-1 (29) JOB NO: 23416-013

PRESTRESSED NEXT BEAM DETAILS DWG. NO: NB4A

MISCELLANEOUS MATERIALS

ITEM	MARK	QTY.	DESCRIPTION	REMARKS
1				
2				
3				
4	18		GUARD RAIL ANCHOR PLATE (GALV.)	SUPPLIED BY OTHERS
5	16		SET OF (4) 0.60" x 270 KSI STRAND LIFTING LOOPS	
6				
7				
8	P-301L	70	#3 BENT BAR (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
9	P-302L	38	#3 BENT BAR (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
10				
11	P-401L	672	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
12	P-402L	16	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
13	P-403L	16	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
14	P-404L	80	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
15	P-405L	24	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
16	P-406L	24	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
17	P-407L	24	#4 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
18	P-408L	6	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
19	P-409L	6	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
20	P-410L	6	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
21	P-411L	6	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
22	P-412L	6	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
23	P-413L	6	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
24	P-414L	888	#4 BENT BAR (LEVEL II, DUAL COATED) (FLANGE)	
25				
26	P-501L	64	#5 BENT BAR (LEVEL II, DUAL COATED) (STEM)	
27	P-502L	146	#5 BENT BAR (LEVEL II, DUAL COATED) (CURB)	
28	P-503L	45	#5 BENT BAR (LEVEL II, DUAL COATED) (CURB)	
29	P-504L	15	#5 BENT BAR (LEVEL II, DUAL COATED) (CURB)	
30				
31	P-701E	120	#7 BENT BAR (LEVEL I, EPOXY COATED) (FLANGE)	
32				
33				
34		83	#3 x 8'-8" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
35		36	#3 x 12'-9" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
36		9	#3 x 17'-9" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
37		9	#3 x 15'-3" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
38		9	#3 x 20'-0" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
39		9	#3 x 20'-9" (LEVEL II, DUAL COATED) (THICKENED FLANGE)	
40				
41		126	#4 x 2'-9" (LEVEL II, DUAL COATED) (FLANGE)	
42		16	#4 x 8'-4" (LEVEL II, DUAL COATED) (FLANGE)	
43		5	#4 x 8'-1" (LEVEL II, DUAL COATED) (FLANGE)	
44		40	#4 x 4'-1" (LEVEL II, DUAL COATED) (FLANGE)	
45		72	#4 x 8'-0" (LEVEL II, DUAL COATED) (FLANGE)	
46		16	#5 x 8'-4" (LEVEL II, DUAL COATED) (FLANGE)	
47		16	#5 x 8'-3" (LEVEL II, DUAL COATED) (FLANGE)	
48		16	#5 x 8'-1" (LEVEL II, DUAL COATED) (FLANGE)	
49		1184	#5 x 8'-0" (LEVEL II, DUAL COATED) (FLANGE)	
50		64	#5 x 6'-2" (LEVEL II, DUAL COATED) (FLANGE)	
51				
52		45	#5 x 37'-4" (LEVEL II, DUAL COATED) (FLANGE)	
53		144	#5 x 40'-0" (LEVEL II, DUAL COATED) (FLANGE)	
54		45	#5 x 4'-11" (LEVEL II, DUAL COATED) (FLANGE)	
55				



APPROVAL STAMP:
Vermont Agency of Transportation
RECEIVED
 CK'D BY JG OK'D BY JS
 May 1, 2014
 RESUBMIT YES Rejected
 BY KH DATE 5-8-2014

J.P. CARRARA & SONS INC.
 Precast & Prestress Manufacturer
 2944 ONE SIX, WOODBURY, VERMONT 05753 Phone:(802)388-6361 Fax:(802)388-9010
 COLD RIVER BRIDGES, LLC
 CONTRACTOR
 WALPOLE, NEW HAMPSHIRE
 STATE OF VERMONT AGENCY OF TRANSPORTATION
 COUNTY OF RUTLAND
 TOWN OF PITTSFIELD
 VT ROUTE 100, (MINOR ARTERIAL)
 BRIDGE NO.: 124 PROJECT NO.: ER BRF 022-1 (23)
 DATE: FEB. 3, 2014
 SCALE: NOTED
 CHKD: - DFTM: T.D.
 JOB NO:
 DWG. NO: M1