

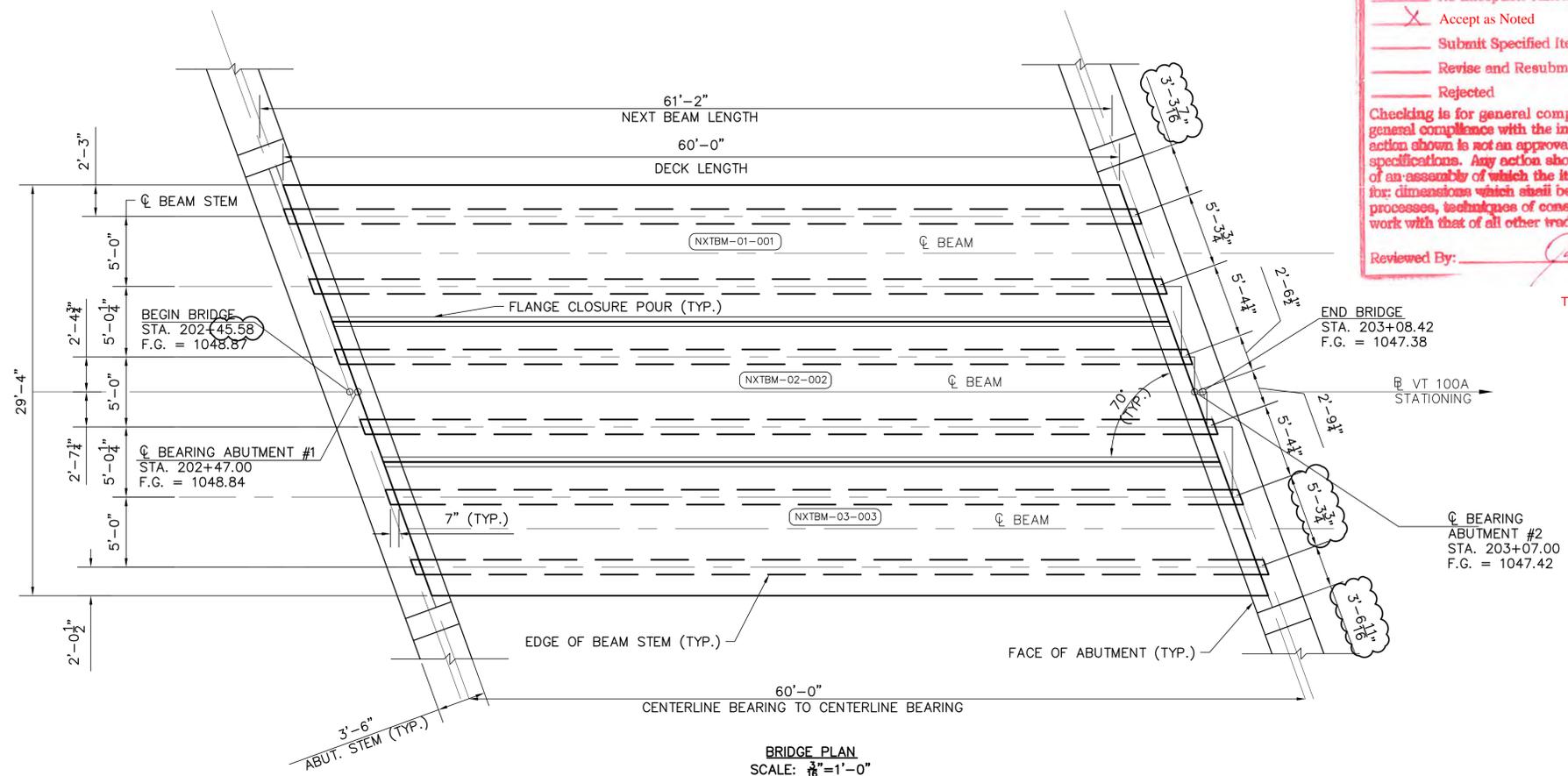
RECEIVED

ON: **July 3, 2013**

and Checked for

CONFORMANCE

BY: Rob Young DATE: 07/08/13



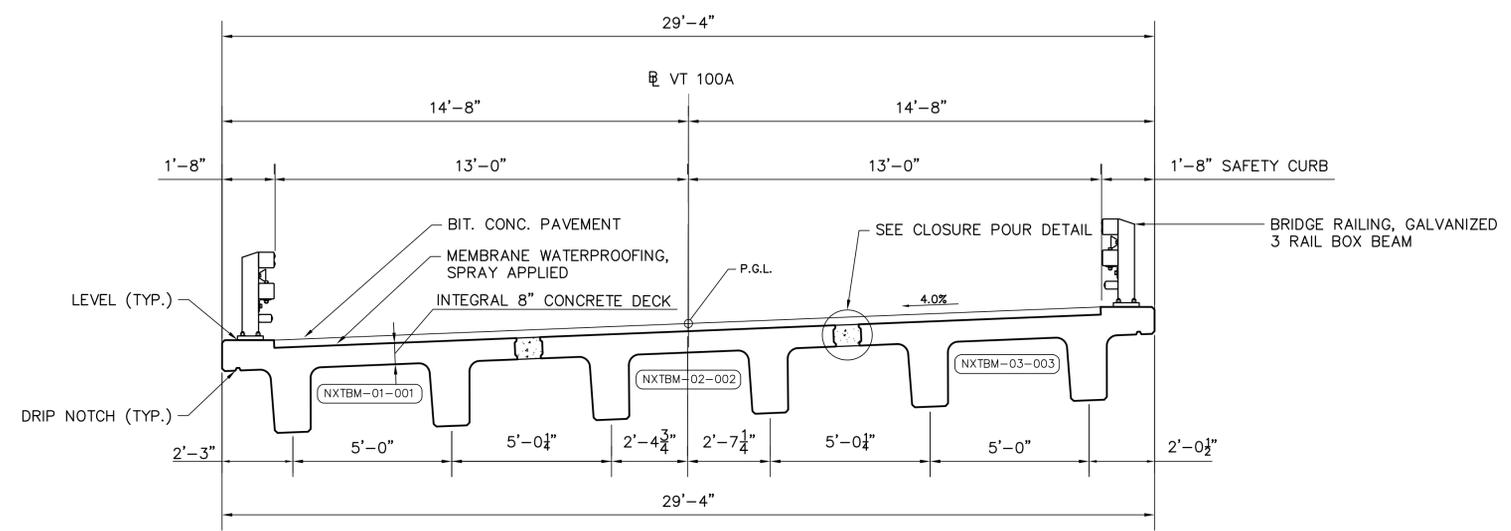
T-Y-LIN INTERNATIONAL

No Exception Taken
 Accept as Noted
 Submit Specified Item
 Revise and Resubmit as Noted
 Rejected

Checking is for general compliance with the design concept of the project and general compliance with the information given in the contract documents only. Any action shown is not an approval and is subject to the requirements of the plans and specifications. Any action shown on a specific item shall not indicate the checking of an assembly of which the item is a component. Contractor is solely responsible for: dimensions which shall be confirmed and corrected at the job site, fabrication processes, techniques of construction, safety precautions and coordination of its work with that of all other trades and the satisfactory performance of its work.

Reviewed By: *[Signature]* Date: July 8, 2013

There is no need to resubmit these fabrication drawings.



- NOTES:
- SHOP DRAWINGS WERE DEVELOPED USING THE FOLLOWING RESOURCES FOR THE CONTRACT: VT100A REPLACEMENT OF BRIDGE OVER PINNEY HOLLOW BROOK, PLYMOUTH, VT. BRIDGE NO. 47 PREPARED BY TYLIN. PROJECT NO ER BRS 0149(5)
 - IF THERE IS ADDITIONAL INFORMATION PERTINENT TO THE FABRICATION AND INSTALLATION OF THESE UNITS THAT IS NOT CONTAINED WITHIN THE RESOURCES LISTED ABOVE, IT SHALL BE BROUGHT TO THE ATTENTION OF DAILEY PRECAST LLC. AND EIV TECHNICAL SERVICES OF ALL LIABILITIES ARISING FROM ERRORS OR OMISSIONS RELATED TO THE OMITTED INFORMATION.
 - VOIDS AT LIFTER POCKETS SHALL BE FILLED WITH APPROVED NON-SHRINK GROUT ONCE BEAMS ARE IN PLACE. (NOT BY DP)
 - TOLERANCES SHALL BE IN ACCORDANCE WITH PCI TOLERANCE MANUALS (MNL-135 & MNL-116)

CONSTRUCTION SET DATE: 06/28/2013

SHEET NAME: ERECTION PLAN

REVISION NO.	REVISION DATE

Dailey PRECAST

WILLIAM E. DAILEY PRECAST, LLC
295 AIRPORT ROAD
SHAFTSBURY, VT 05262
TEL: 802.442.4418 FAX: 802.442.0738

STATE OF VERMONT
SHARLES H. SWANSON
No. 8126
Structural
LICENSED PROFESSIONAL ENGINEER

EIV TECHNICAL SERVICES

55 LEROY ROAD, WILLISTON, VT 05495
TEL: (802) 497-3653 FAX: (802) 497-3656

DATE: JUNE 2013 PROJECT # E1729
DRAWN BY: LKW/CN CHECKED BY: CHS

STATE OF VERMONT AGENCY OF TRANSPORTATION

PLYMOUTH, VERMONT
PROJECT NO: ER BRS 0149(5)

SHEET 1 OF 9

NOTES:

(1) NXTBM-01 REQUIRED

FINISHES

TOP: BROOM (1/8" AMP MAX.)
 SIDES: STEEL FORM
 BOTTOM: STEEL FORM
 ENDS: FORM

DIMENSION REVISED TO PROVIDE C.C. TO FIRST R9 BAR

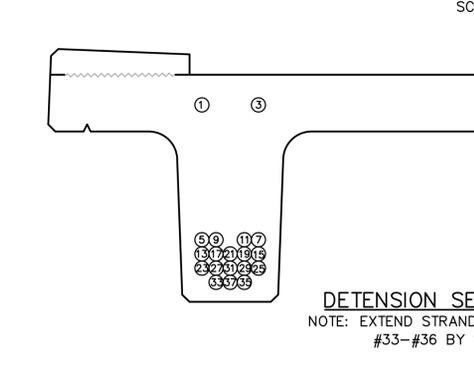
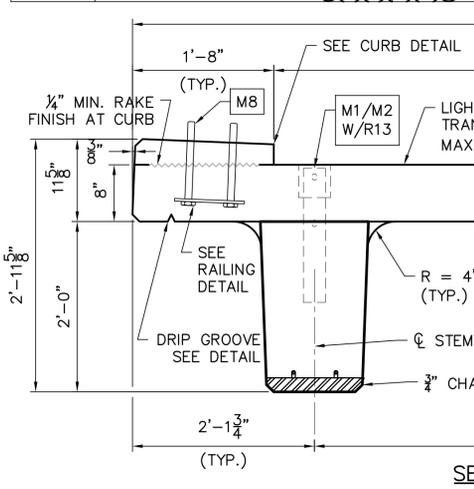
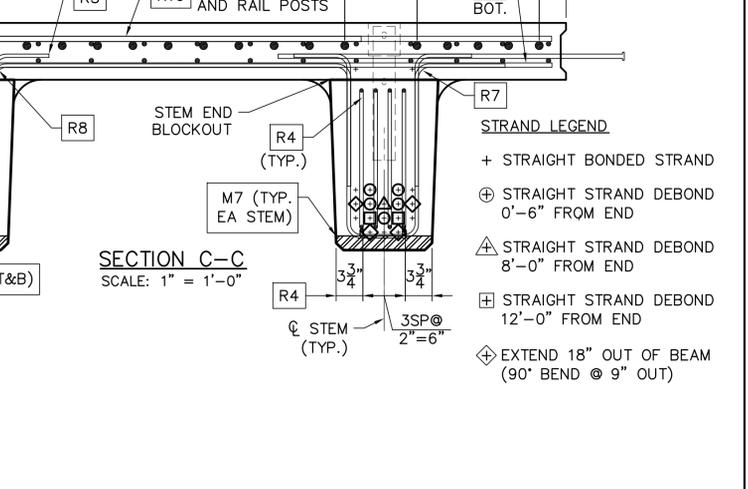
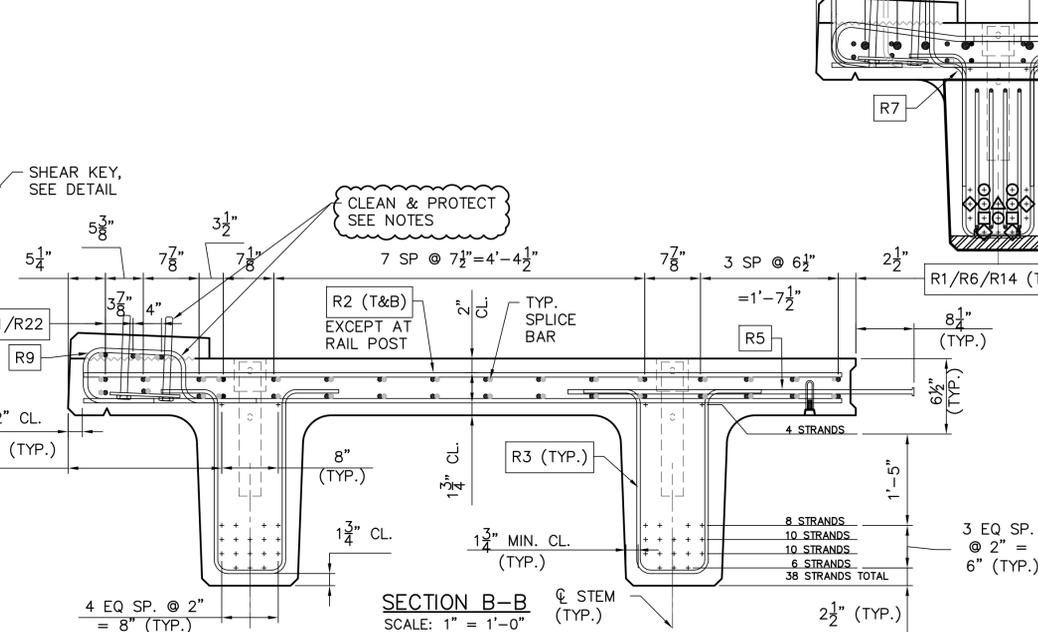
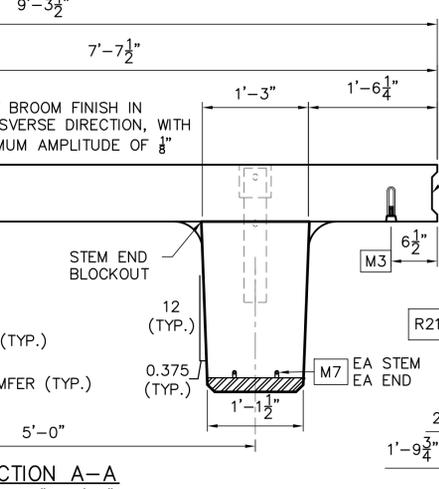
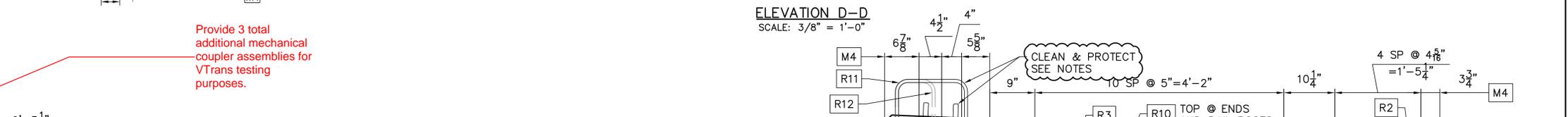
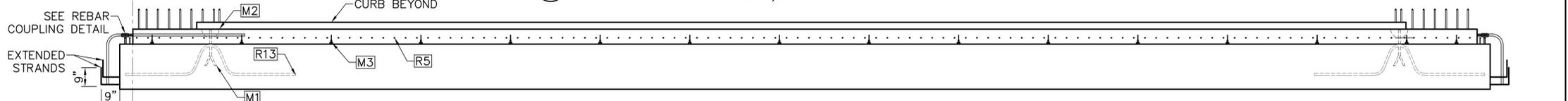
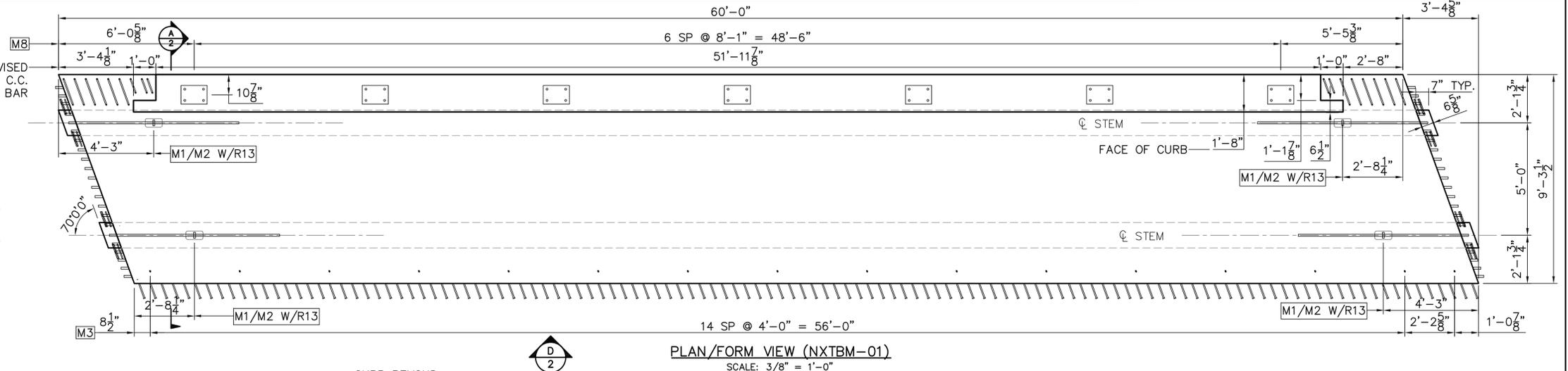
BEAMS SHALL BE HANDLED AND ERECTED USING LIFTERS ONLY. THE MINIMUM SLING ANGLE FOR SHOP PICKING SHALL BE 90° FROM THE HORIZONTAL. BEAMS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS LOCATED BELOW THE LIFTERS U.O.N.

WIPE CLEAN CURB REINF. PRIOR TO FINISHING BEAM TOP.

RAIL POST ANCHOR SHALL BE PROTECTED FROM CONCRETE ABOVE FINISHED CURB.

BEAM WEIGHT: 104,866 LBS

BILL OF MATERIALS				
MARK	NXTBM-01	QTY =	1	
fc'	8,000 PSI	@ 28 DAYS	fc'i =	6,000 PSI
PART MARK	DESCRIPTION	QTY	TOTAL QTY	
M1	MB RL-23 (79172) GALV.	4	4	
M2	MB RL-45 (79166)	4	4	
M3	DS F-64 FERRULE LOOP GALV.	16	16	
M4	DS D-112 #9 A=5'-4" EPOXY	40	40	
M7	P900 NXTBM END ASSEMBLY	4	4	
M8	RAIL ASSEMBLY	7	7	
	25.89 CY VT MIX ID # 53	1	1	
	0.6" 7WS LR = 2348'-4"	1	1	
INSTALL AFTER REMOVED FROM FORM				
M5	DS D-110 #9 (111520) EPOXY	40	40	
M6	DS D-102 #9 EPOXY A=8" B=2'-3"	40	40	



CONSTRUCTION SET DATE: 06/28/2013	
SHEET NAME: NXTBM-01 PLAN	
REVISION NO.	REVISION DATE

Dailey PRECAST

WILLIAM E. DAILEY PRECAST, LLC
 295 AIRPORT ROAD
 SHAFTSBURY, VT 05262
 TEL: 802.442.4418 FAX: 802.442.0738

STATE OF VERMONT
 ERIC H. SWANSON
 No. 8126
 Structural
 LICENSED PROFESSIONAL ENGINEER

EIV TECHNICAL SERVICES

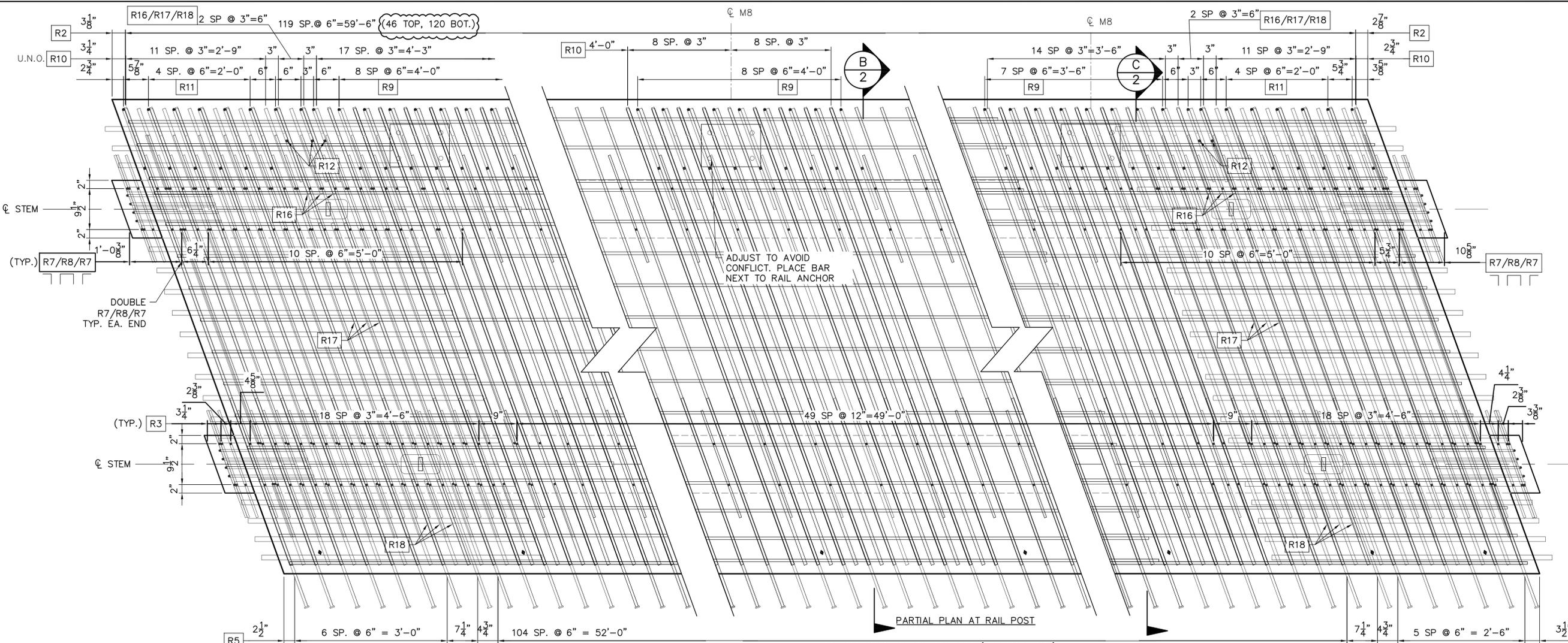
55 LEROY ROAD, WILLISTON, VT 05495
 TEL: (802) 497-3653 FAX: (802) 497-3656

DATE: JUNE 2013 PROJECT # E1729
 DRAWN BY: LKW/CN CHECKED BY: CHS

STATE OF VERMONT AGENCY OF TRANSPORTATION

PLYMOUTH, VERMONT
 PROJECT NO: ER BRS 0149(5)

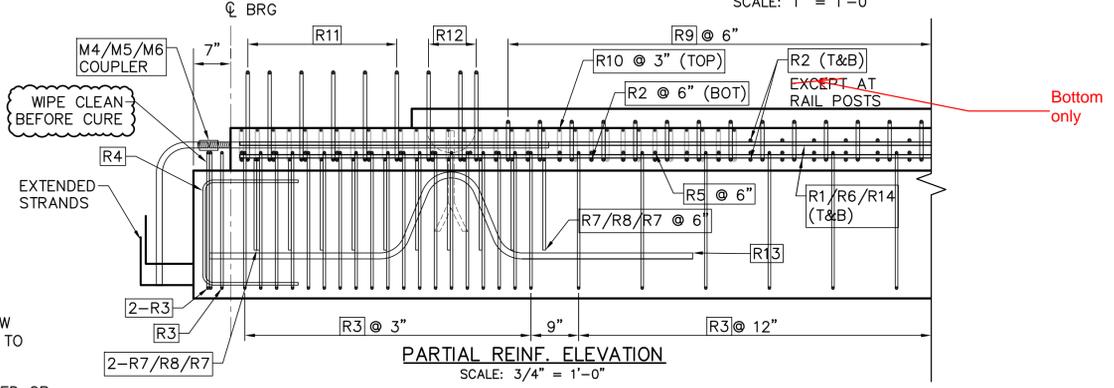
SHEET 2 OF 9



REINFORCEMENT PLAN (NXTBM-01)
SCALE: 1" = 1'-0"

REINFORCEMENT CHART					
DESCRIPTION					
BAR MARK	BAR SIZE	COATING	BENT/STRAIGHT	LENGTH	QTY
R1	5	E	STRAIGHT	20'-0.00"	32
R2	5	E	STRAIGHT	9'-6.38"	166
R3	4	E	BENT	6'-6.63"	188
R4	4	E	BENT	4'-7.50"	16
R5	5	E	HEADED	4'-4.375"	120
R6	5	E	STRAIGHT	35'-2.00"	32
R7	4	E	BENT	2'-6.38"	52
R8	4	E	BENT	7'-4.50"	26
R9	5	E	BENT	3'-10.25"	62
R10	6	E	BENT	9'-11.75"	142
R11	5	E	BENT	5'-4.63"	12
R12	5	E	BENT	4'-11.63"	5
R13	9	E	BENT	9'-0.00"	4
R14	5	E	STRAIGHT	10'-0.00"	32
R16	6	E	BENT	2'-7.38"	6
R17	6	E	STRAIGHT	4'-8.25"	6
R18	6	E	STRAIGHT	1'-9.25"	6
R21	5	E	STRAIGHT	40'-0.00"	3
R22	5	E	STRAIGHT	15'-0.00"	3

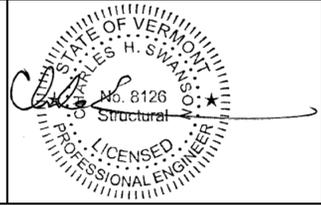
NOTES:
 STRANDS SHALL BE 270 KSI 0.6" Ø LOW RELAXATION STRAIGHT STRAND PULLED TO 44 KIPS.
 EACH STRAND SHALL BE FINALLY BURNED OR CUT OFF AT A DEPTH OF 1/2" INTO THE END OF THE BEAM AND THE RECESSED AREA AROUND THE STRAND SHALL BE FILLED WITH NON-SHRINK GROUT, EXCEPT AS NOTED.
 STAGGER SPLICES OF R1\R6\R14 OR R21\R22 BARS BY 5'-0" MIN.
 MIN LAP LENGTH OF R1\R6\R14 OR R21\R22 BARS IS 2'-9" MIN.



PARTIAL REINF. ELEVATION
SCALE: 3/4" = 1'-0"

CONSTRUCTION SET DATE: 06/28/2013	
SHEET NAME: NXTBM-01 REINFORCEMENT PLAN	
REVISION NO.	REVISION DATE

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 WILLIAM E. DAILEY PRECAST, LLC
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EIV TECHNICAL SERVICES
 53 LEROY ROAD, WILLISTON, VT 05495
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STATE OF VERMONT AGENCY OF TRANSPORTATION
 PLYMOUTH, VERMONT
 PROJECT NO: ER BRS 0149(5)
SHEET 3 OF 9

DATE: JUNE 2013 PROJECT # E1729
 DRAWN BY: LKW/CN CHECKED BY: CHS

NOTES:

(1) NXTBM-02 REQUIRED

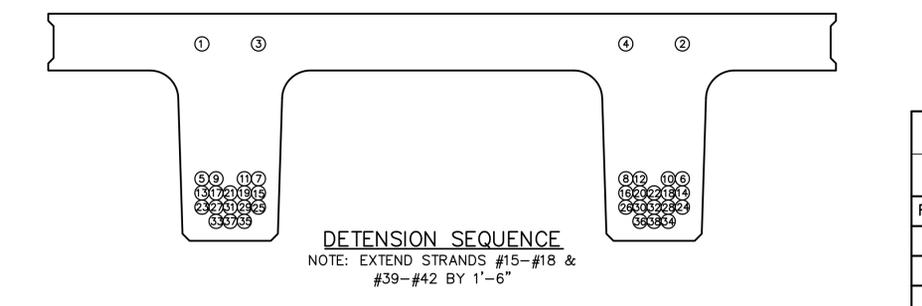
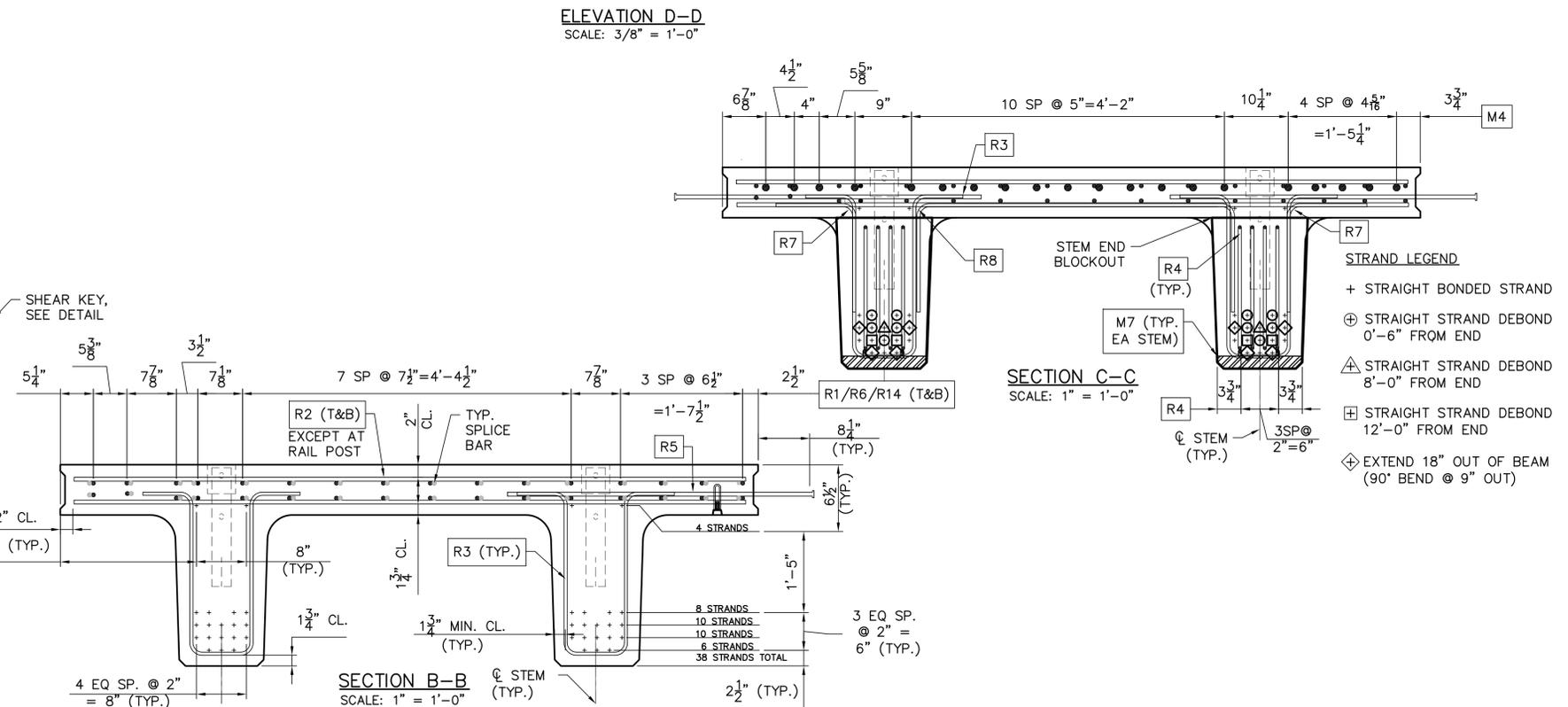
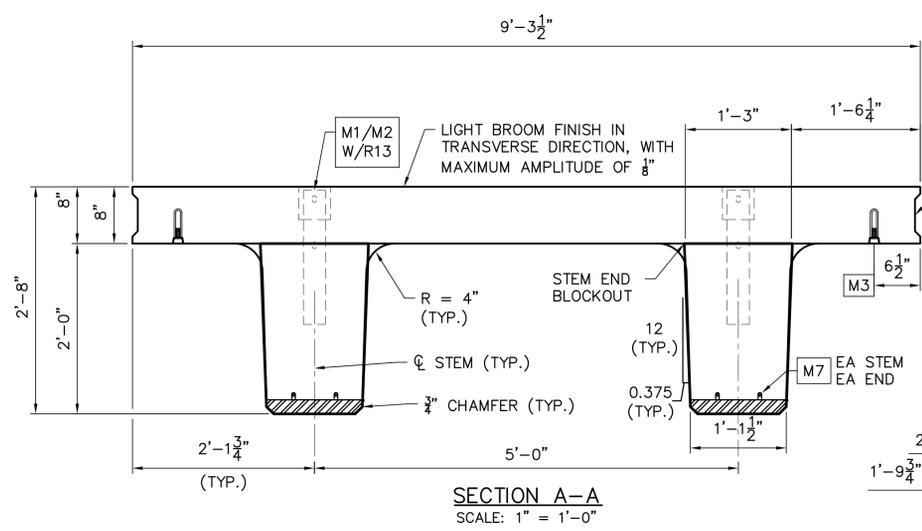
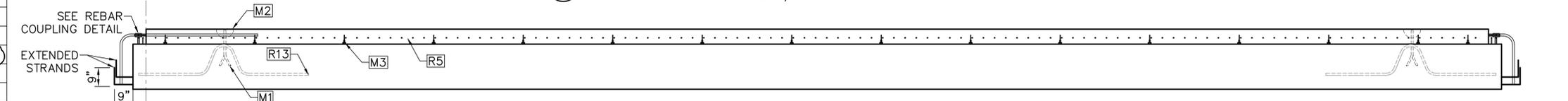
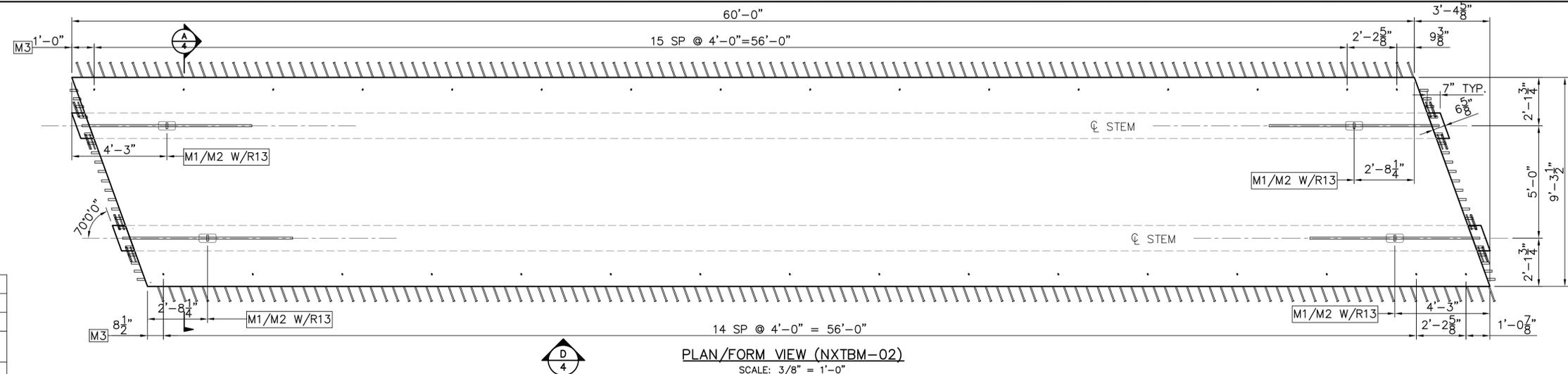
FINISHES

TOP: BROOM (1/8" AMP MAX.)
 SIDES: STEEL FORM
 BOTTOM: STEEL FORM
 ENDS: FORM

BEAMS SHALL BE HANDLED AND ERECTED USING LIFTERS ONLY. THE MINIMUM SLING ANGLE FOR SHOP PICKING SHALL BE 90° FROM THE HORIZONTAL. BEAMS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS LOCATED BELOW THE LIFTERS U.O.N.

BEAM WEIGHT: 100,645 LBS

BILL OF MATERIALS				
MARK	NXTBM-02	QTY =	1	
fc'	8,000 PSI	@ 28 DAYS	fc'	6,000 PSI
PART MARK	DESCRIPTION	QTY	TOTAL QTY	
M1	MB RL-23 (79172) GALV.	4	4	
M2	MB RL-45 (79166)	4	4	
M3	DS F-64 FERRULE LOOP GALV.	32	32	
M4	DS D-112 #9 A=5'-4" EPOXY	40	40	
M7	P900 NXTBM END ASSEMBLY	4	4	
	24.85 CY VT MIX ID # 53	1	1	
	0.6" 7WS LR = 2348'-4"	1	1	
INSTALL AFTER REMOVED FROM FORM				
M5	DS D-110 #9 (111520) EPOXY	40	40	
M6	DS D-102 #9 EPOXY A=8" B=2'-3"	40	40	



CONSTRUCTION SET DATE: 06/28/2013	
SHEET NAME: NXTBM-02 PLAN	
REVISION NO.	REVISION DATE

Dailey PRECAST

WILLIAM E. DAILEY PRECAST, LLC
 295 AIRPORT ROAD
 SHAFTSBURY, VT 05262
 TEL: 802.442.4418 FAX: 802.442.0738

STATE OF VERMONT
 ERIC H. SWANSON
 No. 8126
 Structural
 LICENSED PROFESSIONAL ENGINEER

EIV TECHNICAL SERVICES

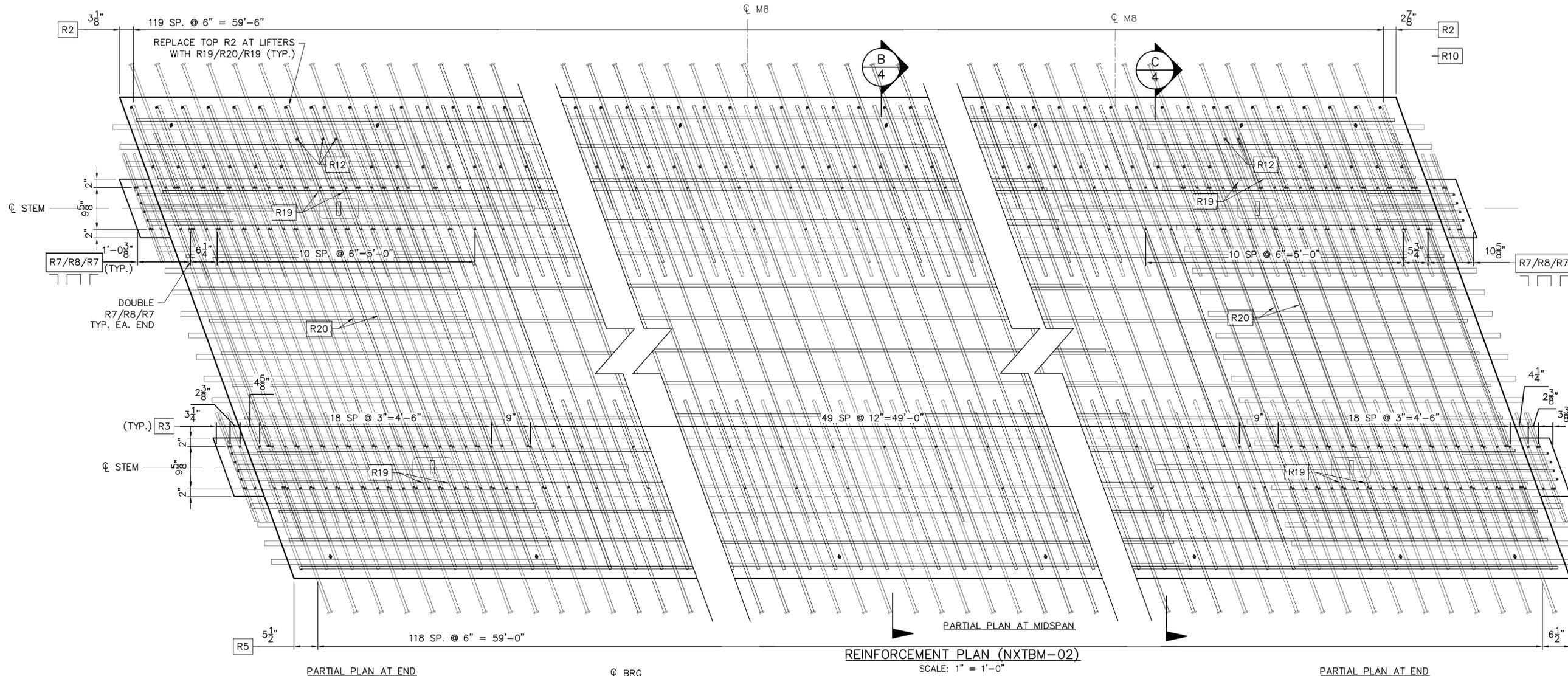
55 LEROY ROAD, WILLISTON, VT 05495
 TEL: (802) 497-3653 FAX: (802) 497-3656

DATE: JUNE 2013 PROJECT # E1729
 DRAWN BY: LKW/CN CHECKED BY: CHS

STATE OF VERMONT AGENCY OF TRANSPORTATION

PLYMOUTH, VERMONT
 PROJECT NO: ER BRS 0149(5)

SHEET 4 OF 9

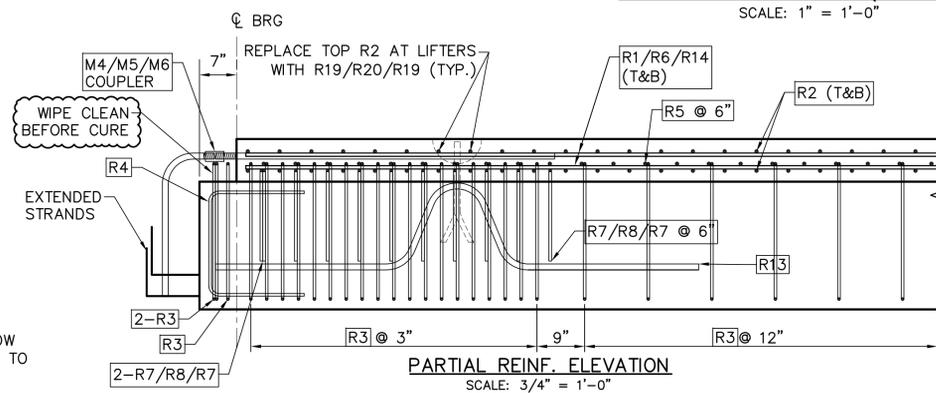


PARTIAL PLAN AT END

REINFORCEMENT PLAN (NXTBM-02)

SCALE: 1" = 1'-0"

PARTIAL PLAN AT END

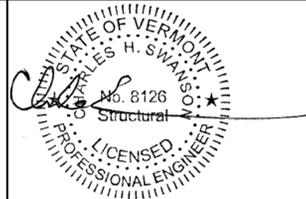


REINFORCEMENT CHART					
DESCRIPTION					
BAR MARK	BAR SIZE	COATING	BENT/STRAIGHT	LENGTH	QTY
R1	5	E	STRAIGHT	20'-0.00"	32
R2	5	E	STRAIGHT	9'-6.38"	240
R3	4	E	BENT	6'-6.63"	188
R4	4	E	BENT	4'-7.50"	16
R5	5	E	HEADED	4'-4.375"	238
R6	5	E	STRAIGHT	35'-2.00"	32
R7	4	E	BENT	2'-6.38"	52
R8	4	E	BENT	7'-4.50"	26
R13	9	E	BENT	9'-0.00"	4
R14	5	E	STRAIGHT	10'-0.00"	32
R19	5	E	STRAIGHT	1'-9.25"	6
R20	5	E	STRAIGHT	4'-8.25"	6

NOTES:
 STRANDS SHALL BE (270 KSI) 0.6" Ø LOW RELAXATION STRAIGHT STRAND PULLED TO 44 KIPS.
 EACH STRAND SHALL BE FINALLY BURNED OR CUT OFF AT A DEPTH OF 3/8" INTO THE END OF THE BEAM AND THE RECESSED AREA AROUND THE STRAND SHALL BE FILLED WITH NON-SHRINK GROUT, EXCEPT AS NOTED.
 STAGGER SPLICES OF R1\R6\R14 OR R21\R22 BARS BY 5'-0" MIN.
 MIN LAP LENGTH OF R1\R6\R14 OR R21\R22 BARS IS 2'-9" MIN.

CONSTRUCTION SET DATE: 06/28/2013	
SHEET NAME: NXTBM-02 REINFORCEMENT PLAN	
REVISION NO.	REVISION DATE

Dailey PRECAST
 WILLIAM E. DAILEY PRECAST, LLC
 295 AIRPORT ROAD
 SHAFTSBURY, VT 05262
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EIV TECHNICAL SERVICES
 55 LEROY ROAD, WILLISTON, VT 05495
 TEL: (802) 497-3653 FAX: (802) 497-3656
 DATE: JUNE 2013 PROJECT # E1729
 DRAWN BY: LKW/CN CHECKED BY: CHS

STATE OF VERMONT AGENCY OF TRANSPORTATION
 PLYMOUTH, VERMONT
 PROJECT NO: ER BR5 0149(5)
SHEET 5 OF 9

NOTES:

(1) NXTBM-03 REQUIRED

FINISHES

TOP: BROOM (1/8" AMP MAX.)
 SIDES: STEEL FORM
 BOTTOM: STEEL FORM
 ENDS: FORM

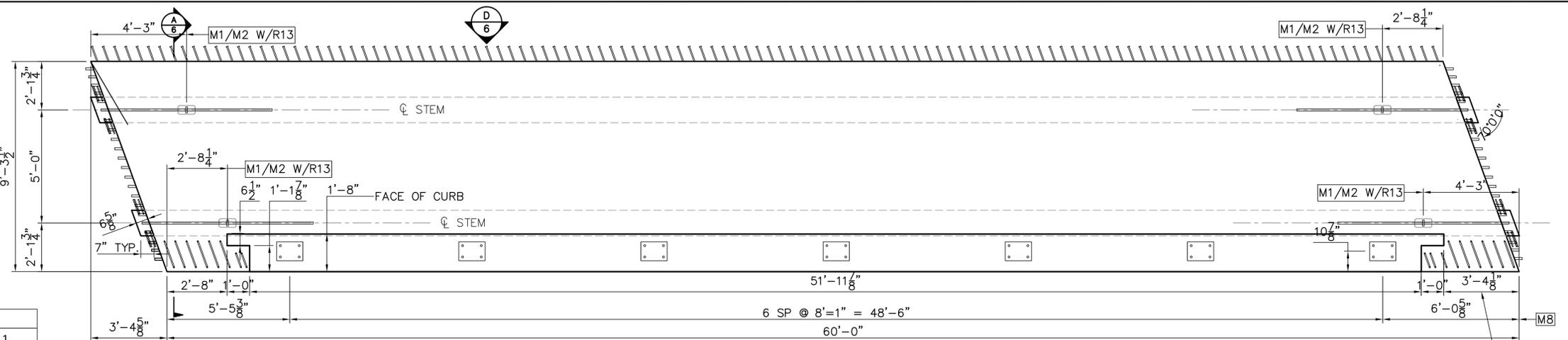
BEAMS SHALL BE HANDLED AND ERECTED USING LIFTERS ONLY. THE MINIMUM SLING ANGLE FOR SHOP PICKING SHALL BE 90° FROM THE HORIZONTAL. BEAMS SHALL BE STORED AND TRANSPORTED WITH TIMBER SUPPORTS LOCATED BELOW THE LIFTERS U.O.N.

WIPE CLEAN CURB REINF. PRIOR TO FINISHING BEAM TOP.

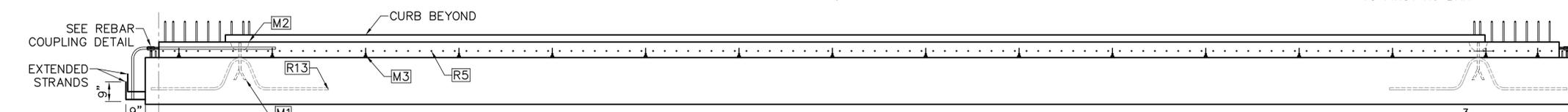
RAIL POST ANCHOR SHALL BE PROTECTED FROM CONCRETE ABOVE FINISHED CURB.

BEAM WEIGHT: 104,866 LBS

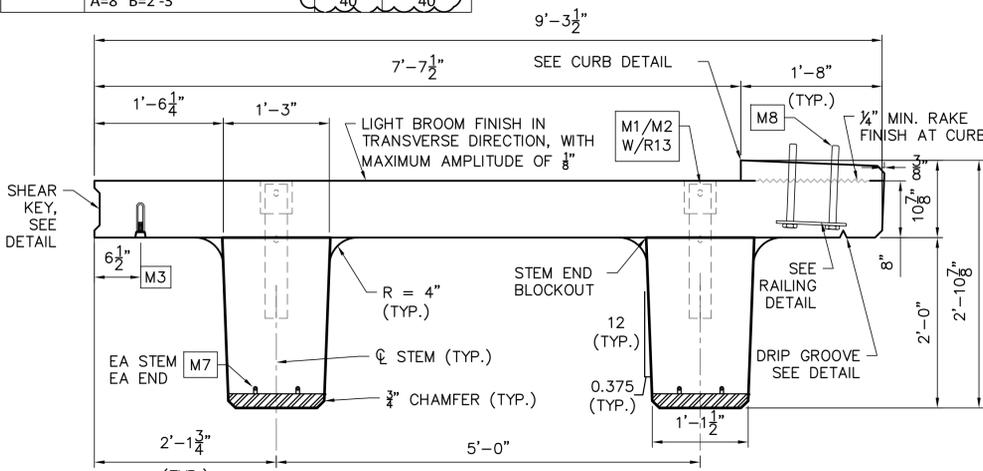
BILL OF MATERIALS			
MARK	NXTBM-03	QTY =	1
fc'	8,000 PSI	@ 28 DAYS	fc' = 6,000 PSI
PART MARK	DESCRIPTION	QTY	TOTAL QTY
M1	MB RL-23 (79172) GALV.	4	4
M2	MB RL-45 (79166)	4	4
M3	DS F-64 FERRULE LOOP GALV.	16	16
M4	DS D-112 #9 A=5'-4" EPOXY	40	40
M7	P900 NXTBM END ASSEMBLY	4	4
M8	RAIL ASSEMBLY	7	7
	25.89 CY VT MIX ID # 53	1	1
	0.6" 7WS LR = 2348'-4"	1	1
INSTALL AFTER REMOVED FROM FORM			
M5	DS D-110 #9 (111520) EPOXY	40	40
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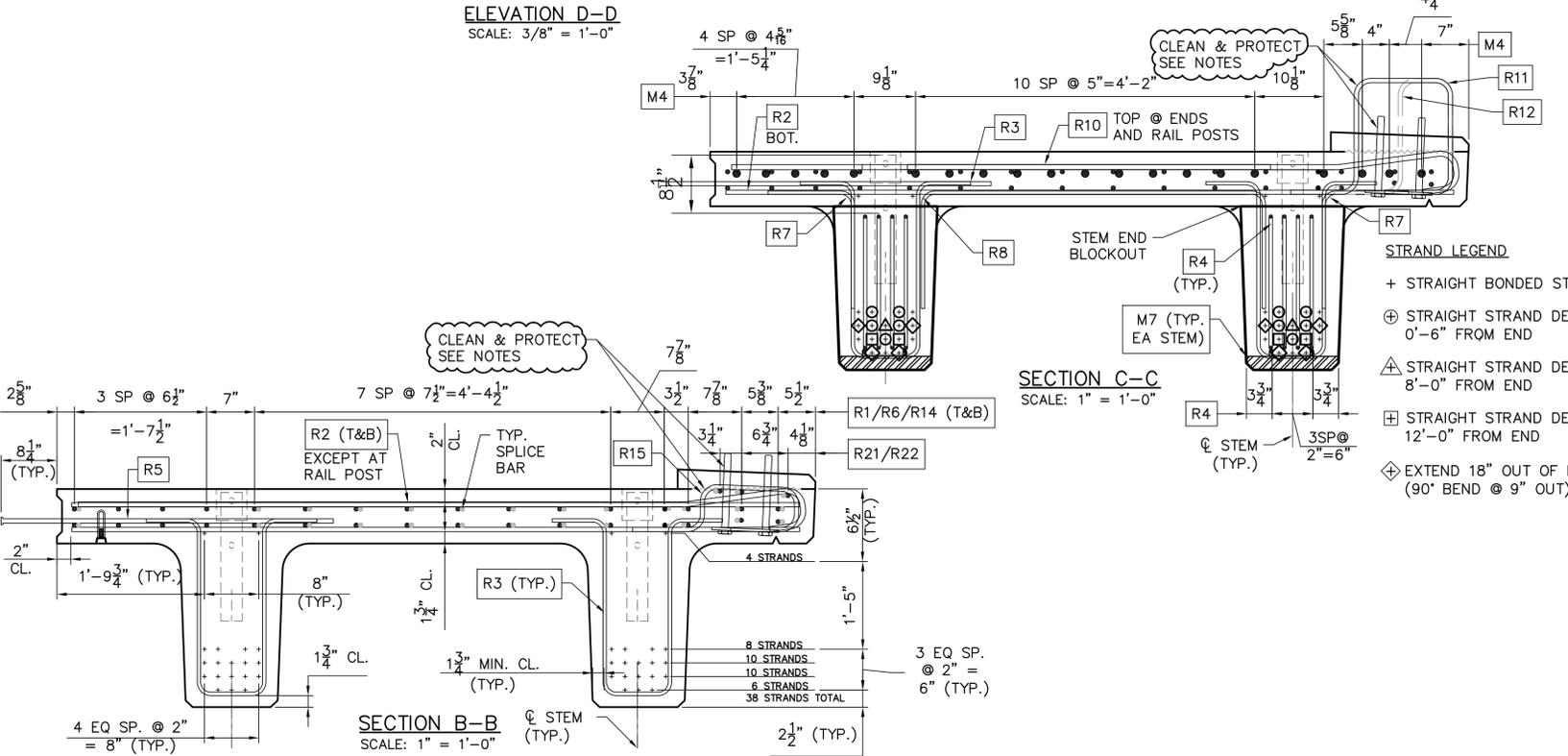
PLAN/FORM VIEW (NXTBM-03)
 SCALE: 3/8" = 1'-0"



ELEVATION D-D
 SCALE: 3/8" = 1'-0"

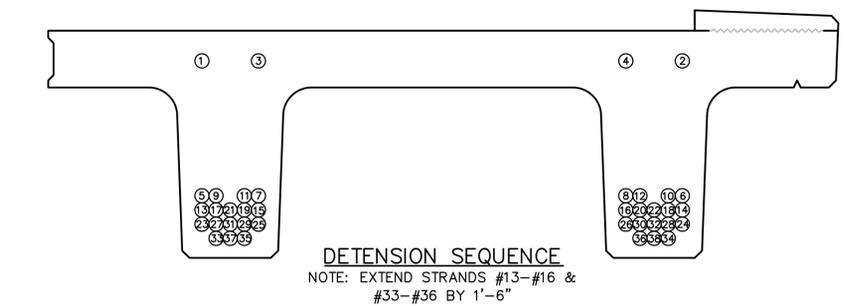


SECTION A-A
 SCALE: 1" = 1'-0"



SECTION B-B
 SCALE: 1" = 1'-0"

- STRAND LEGEND**
- + STRAIGHT BONDED STRAND
 - ⊕ STRAIGHT STRAND DEBOND 0'-6" FROM END
 - △ STRAIGHT STRAND DEBOND 8'-0" FROM END
 - ⊞ STRAIGHT STRAND DEBOND 12'-0" FROM END
 - ⊕ EXTEND 18" OUT OF BEAM (90° BEND @ 9" OUT)



DETENSION SEQUENCE
 NOTE: EXTEND STRANDS #13-#16 & #33-#36 BY 1'-6"

CONSTRUCTION SET DATE: 06/28/2013	
SHEET NAME: NXTBM-03 PLAN	
REVISION NO.	REVISION DATE

Dailey PRECAST

WILLIAM E. DAILEY PRECAST, LLC
 295 AIRPORT ROAD
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STATE OF VERMONT
 CHARLES H. SWANSON
 No. 8126
 Structural
 LICENSED PROFESSIONAL ENGINEER

EIV TECHNICAL SERVICES

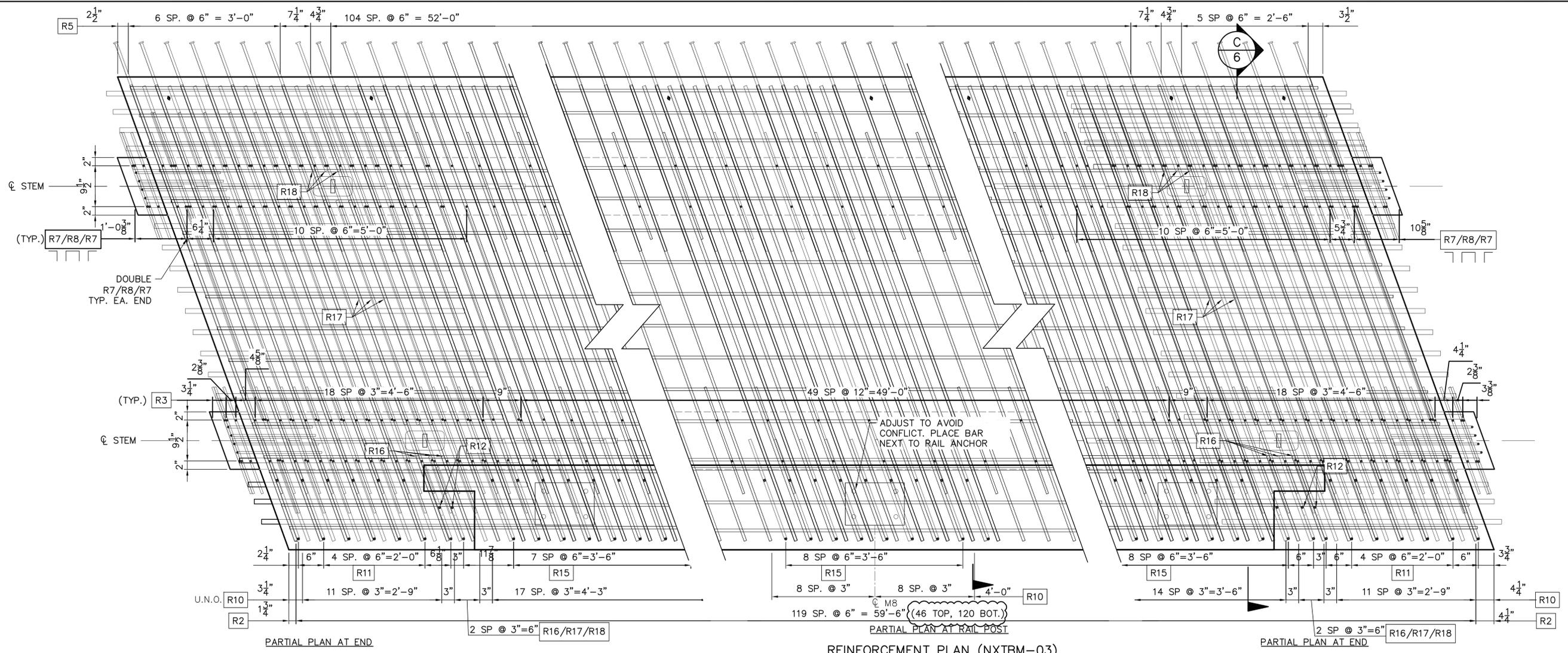
55 LEROY ROAD, WILLISTON, VT 05495
 TEL: (802) 497-3653 FAX: (802) 497-3656

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 DRAWN BY: LKW/CN CHECKED BY: CHS

STATE OF VERMONT AGENCY OF TRANSPORTATION

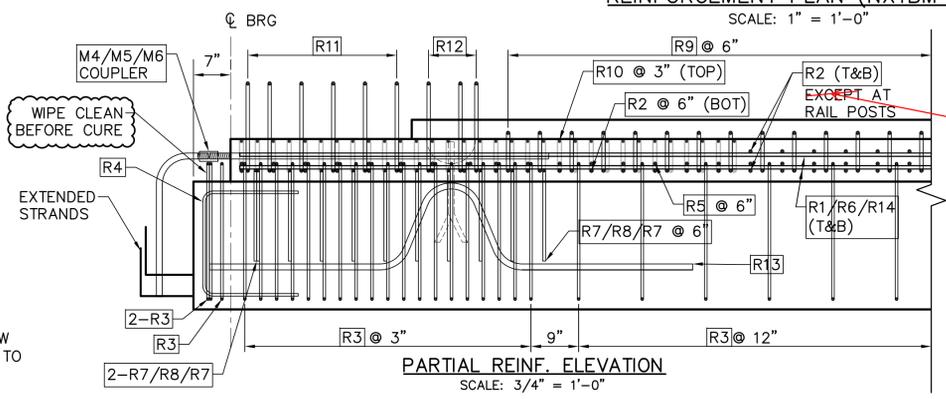
PLYMOUTH, VERMONT
 PROJECT NO: ER BRS 0149(5)

SHEET 6 OF 9



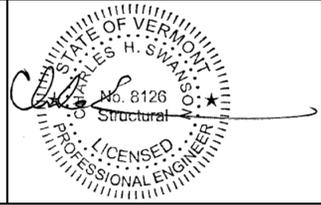
REINFORCEMENT CHART					
DESCRIPTION					
BAR MARK	BAR SIZE	COATING	BENT/STRAIGHT	LENGTH	QTY
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R6	5	E	STRAIGHT	35'-2.00"	32
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R12	5	E	BENT	4'-6.00"	5
R13	9	E	BENT	9'-0.00"	4
R14	5	E	STRAIGHT	10'-0.00"	32
R15	5	E	BENT	4'-2.88"	62
R16	6	E	BENT	2'-5.70"	6
R17	6	E	STRAIGHT	4'-8.25"	6
R18	6	E	STRAIGHT	1'-9.25"	6
R21	5	E	STRAIGHT	40'-0.00"	3
R22	5	E	STRAIGHT	15'-0.00"	3

NOTES:
 STRANDS SHALL BE (270 KSI) 0.6" Ø LOW RELAXATION STRAIGHT STRAND PULLED TO 44 KIPS.
 EACH STRAND SHALL BE FINALLY BURNED OR CUT OFF AT A DEPTH OF 1/2" INTO THE END OF THE BEAM AND THE RECESSED AREA AROUND THE STRAND SHALL BE FILLED WITH NON-SHRINK GROUT, EXCEPT AS NOTED.
 STAGGER SPLICES OF R1\R6\R14 OR R21\R22 BARS BY 5'-0" MIN.
 MIN LAP LENGTH OF R1\R6\R14 OR R21\R22 BARS IS 2'-9" MIN.



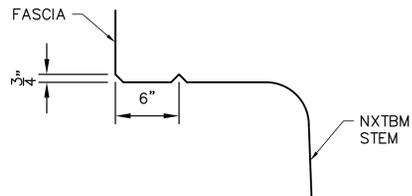
CONSTRUCTION SET DATE: 06/28/2013	
SHEET NAME: NXTBM-03 REINFORCEMENT PLAN	
REVISION NO.	REVISION DATE

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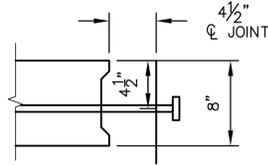


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STATE OF VERMONT AGENCY OF TRANSPORTATION
 PLYMOUTH, VERMONT
 PROJECT NO: ER BRS 0149(5)
SHEET 7 OF 9



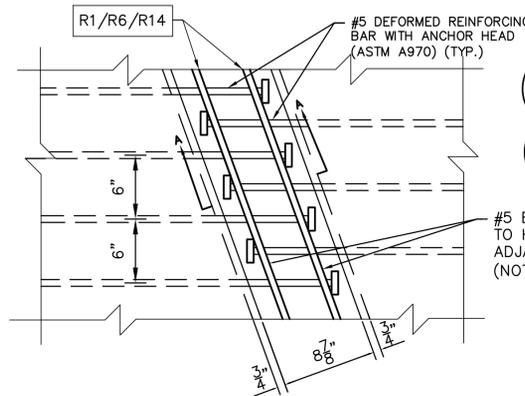
DRIP GROOVE DETAIL
SCALE: 1/2" = 1'-0"



SHEAR KEY DETAIL (NXTBM)
SCALE: 1/2" = 1'-0"

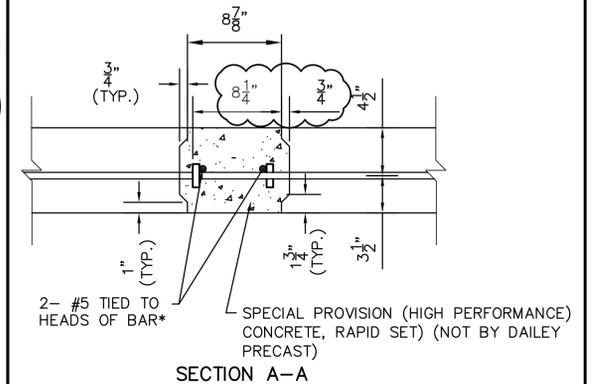
SHEAR KEY NOTES:

- FLANGE EDGES AND BEAM STEMS IN CONTACT WITH HPC RAPID SET CONCRETE SHALL BE SANDBLASTED PRIOR TO DELIVERY AND POWER WASHED WITH WATER PRIOR TO ERECTION OF THE BEAMS.

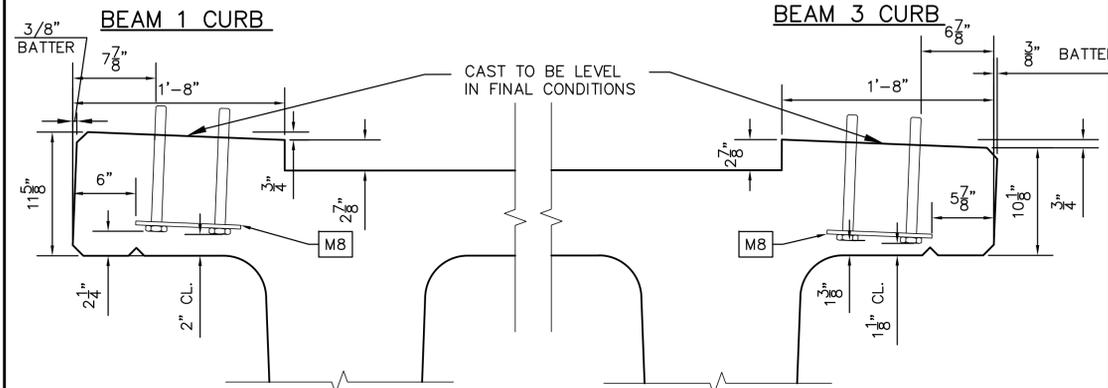


FLANGE CLOSURE POUR DETAILS
SCALE: 1 1/2" = 1'-0"

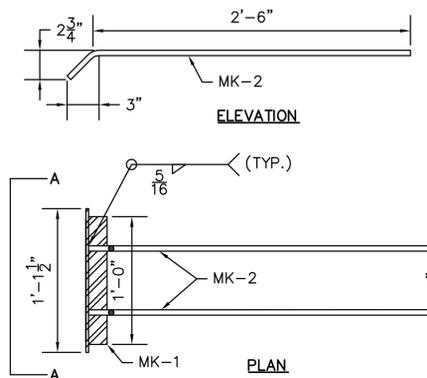
REINFORCEMENT CHART					
DESCRIPTION					
BAR MARK	BAR SIZE	COATING	BENT/STRAIGHT	LENGTH	QTY
R6	5	E	STRAIGHT	35'-2.00"	4
R23	5	E	BENT	22'-0.00"	4
R24	5	E	BENT	12'-0.00"	4



FLANGE CLOSURE POUR SECTION
SCALE: 1 1/2" = 1'-0"



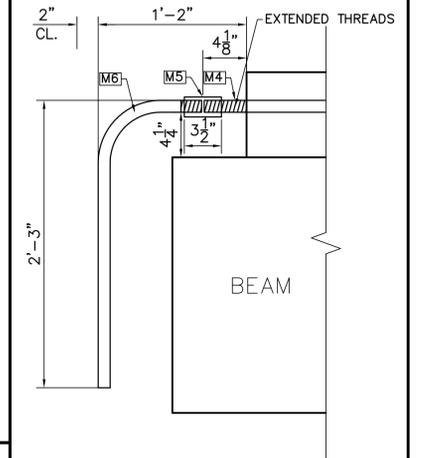
NXTBM CURB DETAIL
SCALE: 1 1/2" = 1'-0"



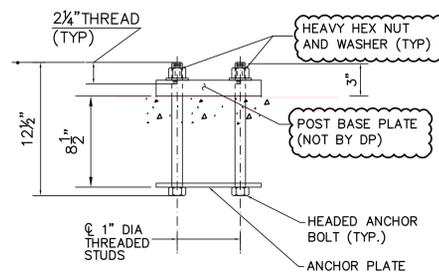
REINFORCEMENT ASSEMBLY DETAILS
P900 (PART S6)
SCALE: 1/2" = 1'-0"

S6-REINFORCEMENT ASSEMBLY BILL OF MATERIALS				
MK	DESCRIPTION	SPEC/FINISH	QTY. PER BEAM	QTY. TOTAL
1	L2X2X1/2	GALV.	4	12
2	#4 X 2'-9" REBAR	GALV.	8	24

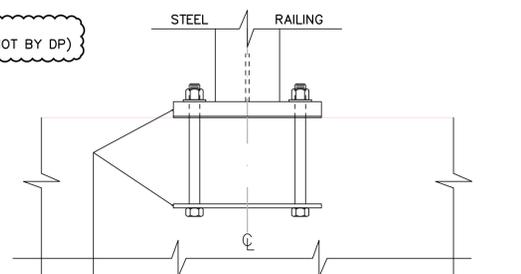
NOTE:
PLACE ANGLE (P900) CENTERED IN BEAM STEM FLUSH WITH BEAM FACE OF FORM. ADDITIONAL REINFORCEMENT PROVIDED TO AID IN THE PREVENTION OF BEAM END CRACKING.



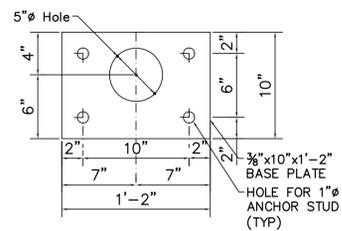
REBAR COUPLING DETAIL
SCALE: 1 1/2" = 1'-0"



RAILING POST ANCHORAGE



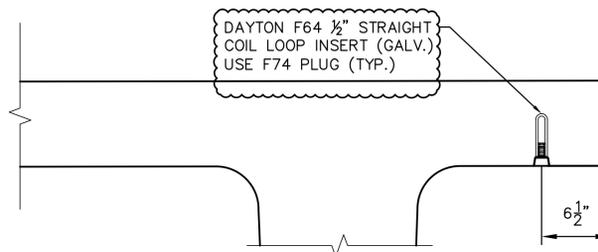
SEE BASE PLATE & ANCHOR PLATE DETAILS
RAILING ANCHOR ELEVATION



ANCHOR PLATE DETAIL

RAIL POST ANCHOR ASSEMBLY
SCALE: 1 1/2" = 1'-0"

NOTE:
AFTER TEMPORARY INSERT USE IS COMPLETE, PATCH OVER INSERT WITH NON-SHRINK CONCRETE PATCH MATERIAL. COLOR TO MATCH SURROUNDING CONCRETE. (NOT BY DAILEY PRECAST)



COIL LOOP DETAIL NXTBM
(APP. SLAB SIM.)
SCALE: 1 1/2" = 1'-0"

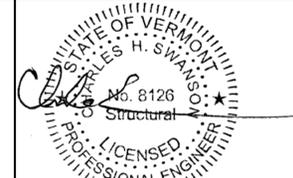
CONSTRUCTION SET DATE: 06/28/2013

SHEET NAME: DETAILS

REVISION NO. REVISION DATE

Dailey
PRECAST

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295 AIRPORT ROAD
SHAFTSBURY, VT 05262
TEL: 802.442.4418 FAX: 802.442.0738



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DATE: JUNE 2013 PROJECT # E1729
DRAWN BY: LKW/CN CHECKED BY: CHS

STATE OF VERMONT AGENCY OF TRANSPORTATION

PLYMOUTH, VERMONT
PROJECT NO: ER BRS 0149(5)

SHEET 8 OF 9

