

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITIES							
		BRIDGE NO. 01701A	BRIDGE NO. 01701B	BRIDGE NO. 01702	BRIDGE NO. 01703	BRIDGE NO. 01704A	BRIDGE NO. 01704B	BRIDGE NO. 01705	BRIDGE NO. 01707
REMOVAL OF HMA WEARING SURFACE	S.Y.	392	392	701	616	380	510	-	-
PMA S0.5	TON	34	34	61	54	33	44	-	-
HMA S0.25	TON	23	23	41	36	22	30	-	-
EXTENDED EXISTING WEEPHOLES	EA.	-	-	-	1	-	-	-	-
ASPHALTIC PLUG EXPANSION JOINT SYSTEM	C.F.	31	31	61	55	29	37	-	-
MODIFY BRIDGE PARAPET	L.F.	214	223	278	273	122	123	-	-
CLASS "S" CONCRETE	C.Y.	-	2	-	-	-	-	-	-
CLASS "F" CONCRETE	C.Y.	-	-	-	-	1	1	-	-
FULL DEPTH PATCH (HIGH EARLY STRENGTH CONCRETE)	C.Y.	2	-	4	3	2	3	-	-
PARTIAL DEPTH PATCH	C.F.	405	405	760	650	405	540	-	-
REMOVE CONCRETE HEADERS	L.F.	44	44	131	118	42	54	-	-
DEFORMED STEEL BARS - EPOXY COATED	LB.	-	-	-	-	72	72	-	-
DRILLING HOLES AND GROUTING REINFORCING BARS	EA.	-	-	-	-	13	13	-	-
MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)	S.Y.	392	392	701	616	380	510	-	-
* TEMP. PRECAST CONCRETE BARRIER CURB (STRUCT.)	L.F.	80	80	120	120	80	80	-	-
* RELOCATED TEMP. PRECAST CONC. BARRIER CURB (STRUCT.)	L.F.	80	80	120	120	80	80	-	-
REMOVE METAL BEAM RAIL (BRIDGE)	L.F.	6	4	6	6	4	4	-	-
PROTECTIVE FENCE (6' HIGH)	L.F.	-	-	-	-	-	-	704	441
REMOVAL OF EXISTING MASONRY	C.F.	-	-	-	-	5	5	-	-
CONCRETE HAUNCH REMOVAL	L.F.	-	-	-	-	-	-	1380	936
TRENCHING AND BACKFILLING	L.F.	-	-	60	30	-	40	-	-
2" RIGID METAL CONDUIT (SURFACE)	L.F.	-	-	140	130	-	65	-	-
2" RIGID METAL CONDUIT IN TRENCH	L.F.	-	-	60	30	-	40	-	-
REMOVE CONDUIT	L.F.	-	-	140	130	-	-	-	-
STEEL JUNCTION BOX COVER	EA.	-	-	-	-	-	1	-	-
NO. 2 SINGLE CONDUCTOR	L.F.	-	-	625	500	-	340	-	-
REMOVE CABLE	L.F.	-	-	-	-	-	110	-	-
NO. 8 BARE COPPER GROUNDING CONDUCTOR	L.F.	-	-	210	180	-	115	-	-

* THESE ITEMS WILL BE USED ON ALL BRIDGES IN VARYING QUANTITIES BASED ON CONTRACTOR'S STAGING AND THEREFORE ARE UNASSIGNED.

GENERAL NOTES:

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2013, AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES [AASHTO-1996], WITH INTERIM SPECIFICATIONS UP TO AND INCLUDING 2003, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

ALLOWABLE DESIGN STRESSES:
 CLASS "F" CONCRETE: BASED ON $f_c = 4000$ PSI
 CLASS "S" CONCRETE: BASED ON $f_c = 3000$ PSI
 PARAPET MODIFICATION CONCRETE: BASED ON $f_c = 4000$ PSI
 PARTIAL DEPTH PATCH: BASED ON $f_c = 4000$ PSI
 FULL DEPTH PATCH: BASED ON $f_c = 4000$ PSI
 REINFORCEMENT (ASTM A615 GRADE 60): $F_y = 60$ KSI

LIVE LOAD: HS20-44, 24,000 LB DUAL AXLES AT 4 FEET O.C.

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE HMA S0.25 (1 INCH THICK) AND THE SECOND SHALL BE HMA S0.375 (1-1/2 INCHES THICK).

DIMENSIONS: WHEN ELEVATIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THESE STRUCTURES IS NOT ALLOWED.

CLASS "F" CONCRETE: CLASS "F" CONCRETE SHALL BE USED FOR RECONSTRUCTION OF PARAPET ENDS WHERE SPECIFICALLY EXCLUDED FROM WORK PERFORMED UNDER THE ITEM "MODIFY BRIDGE PARAPET".

PARAPET MODIFICATION CONCRETE: PARAPET MODIFICATION CONCRETE SHALL BE USED FOR ALL WORK PERFORMED UNDER THE ITEM "MODIFY BRIDGE PARAPET".

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES SHALL BE BEVELED 1 INCH x 1 INCH, UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE 2 INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

EPOXY COATED REINFORCING BARS: ALL REPLACEMENT REINFORCEMENT IN THE THE CONCRETE DECK PATCHES AND IN THE TOP MAT OF THE CONCRETE APPROACH SLAB PATCHES SHALL BE EPOXY COATED. ALL REINFORCEMENT USED IN PARAPET ENDS WHERE SPECIFICALLY EXCLUDED FROM WORK PERFORMED UNDER THE ITEM "MODIFY BRIDGE PARAPET" SHALL BE EPOXY COATED. THESE BARS SHALL BE INCLUDED IN THE PAY ITEM "DEFORMED STEEL BARS (EPOXY COATED)".

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF ITEM "CLASS 'F' CONCRETE".

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

UTILITIES: HIGHWAY ILLUMINATION SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. ALL STRUCTURE MOUNTED CONDUITS AND JUNCTION BOXES SHALL REMAIN IN SERVICE UNLESS OTHERWISE NOTED.

LIST OF DRAWINGS IN SUBSET 04 - STRUCTURES	
DRAWING NO.	TITLE
S-01	TABLE OF QUANTITIES AND GENERAL NOTES
S-02	BRIDGE GENERAL PLAN: BRIDGES 01701A & 1701B
S-03	BRIDGE GENERAL PLAN: BRIDGE 01702 & 01703
S-04	BRIDGE GENERAL PLAN: BRIDGE 01704A & 01704B
S-05	BRIDGE GENERAL PLAN: BRIDGE 01705 & 01707
S-06	CONCRETE PATCHING AND HAUNCH REMOVAL DETAILS
S-07	DECK JOINT AND MEMBRANE DETAILS
S-08	MODIFY BRIDGE PARAPET SAFETY WALK TO SAFETY SHAPE
S-09	PARAPET MODIFICATIONS AND GUIDERAIL ATTACHMENTS
S-10	PARAPET MOUNTED PROTECTIVE FENCE
S-11	TEMPORARY PRECAST CONCRETE BARRIER CURB
S-12	ELECTRICAL DETAILS

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATION AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

CONCRETE DISTRIBUTION		
ITEM	UNIT	QUANTITY
PARAPET MODIFICATIONS	C.Y.	54
DECK PATCHING (EST.)	C.Y.	132
TOTAL	C.Y.	186

NOTICE TO BRIDGE INSPECTORS

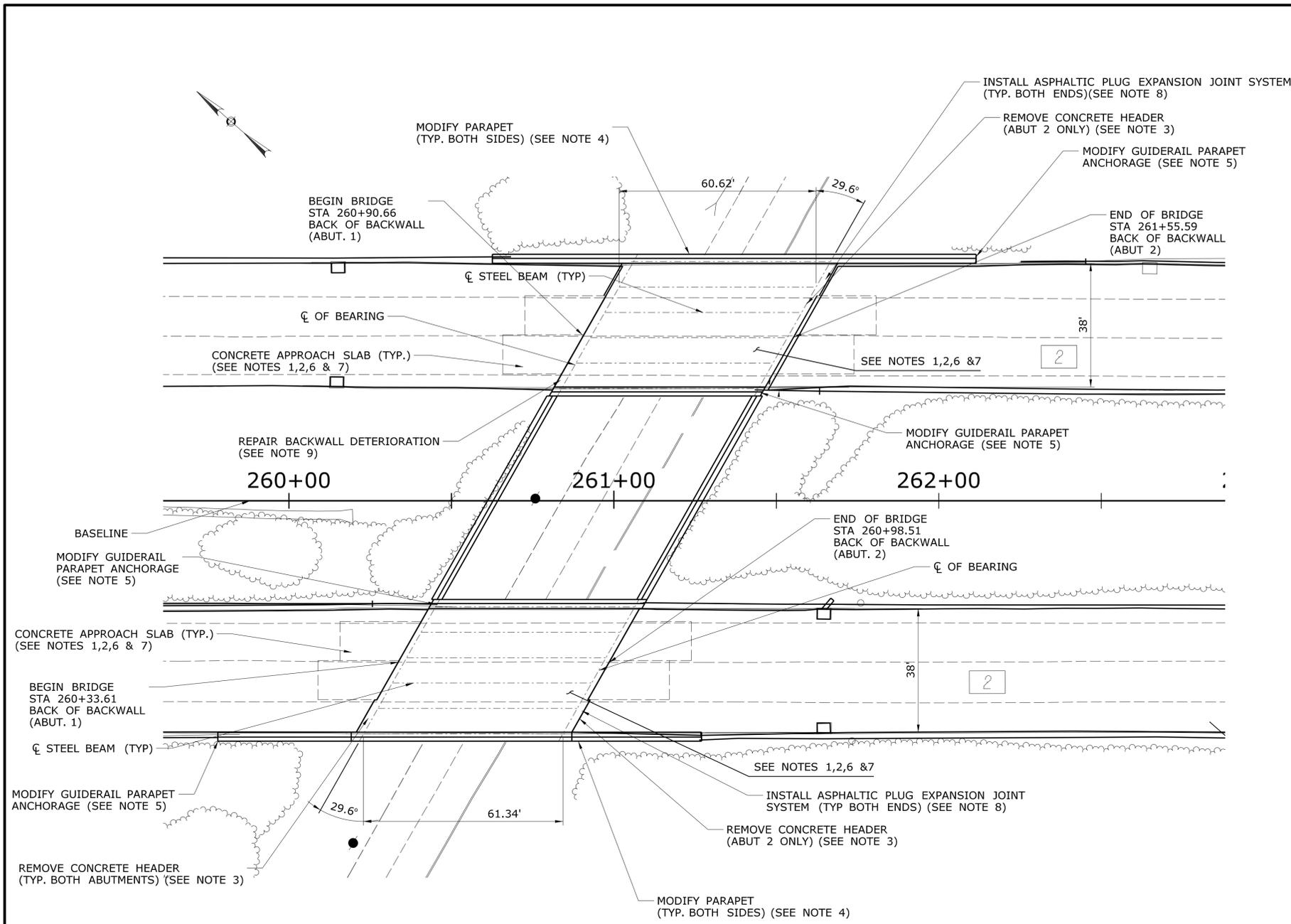
CONNDOT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING OF COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY CONNDOT'S MANAGER OF BRIDGE SAFETY AND EVALUATION.

COMPONENT OR DETAIL	DRAWING NO.
NONE	

DESIGNED BY:
CONSULTANT COMPANY NAME:

Weston & Sampson
 273 Dividend Road, Rocky Hill, CT 06067
 (860) 513-1473 (800) 5AMPSON
 www.westonandsampson.com

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REV. DATE REVISION DESCRIPTION SHEET NO.	TABLE OF QUANTITIES AND GENERAL NOTES					



PLAN VIEW
SCALE: 1" = 20'

BRIDGE NO. 01701B

ROUTE 2 W.B. OVER NEIPSIC ROAD (GLAST.)

REHABILITATION WORK:

1. REMOVE EXISTING BITUMINOUS OVERLAY AND MEMBRANE WATERPROOFING TO EXPOSE CONCRETE DECK AND APPROACH SLABS.
2. INSPECT DECK AREAS FOR DETERIORATION AND REPAIR AS NECESSARY. IT IS ANTICIPATED THAT AREAS OF DETERIORATION WILL BE FOUND THAT WILL REQUIRE PARTIAL DEPTH PATCHES. THE NEED FOR FULL DEPTH PATCHES ARE NOT EXPECTED BASED ON THE CONDITION OF THE UNDERSIDE OF THE DECK.
3. REMOVE TOP OF CONCRETE HEADERS AND JOINT SEAL.
4. REMOVE BRIDGE RAIL, REMOVE END BLOCKS, MODIFY PARAPET FACE AND EXTEND PARAPET HEIGHT (NO END BLOCKS, LEFT SIDE).
5. REMOVE EXISTING GUIDERAIL ANCHOR BOLTS AND INSTALL NEW ANCHOR BOLTS FOR SAFETY SHAPE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
6. INSTALL NEW MEMBRANE WATERPROOFING ON BRIDGE DECK AND APPROACH SLABS.
7. PLACE NEW BITUMINOUS OVERLAY, 1 1/2 INCH OF PMA S0.5 OVER 1 INCH OF HMA S0.25.
8. INSTALL NEW ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT BOTH ABUTMENTS AND SEAL PARAPET JOINT
9. REPAIR BACKWALL DETERIORATION AT ABUTMENT 1.

BRIDGE NO. 01701A

ROUTE 2 E.B. OVER NEIPSIC ROAD (GLAST.)

REHABILITATION WORK:

1. REMOVE EXISTING BITUMINOUS OVERLAY AND MEMBRANE WATERPROOFING TO EXPOSE CONCRETE DECK AND APPROACH SLABS.
2. INSPECT DECK AREAS FOR DETERIORATION AND REPAIR AS NECESSARY. IT IS ANTICIPATED THAT AREAS OF DETERIORATION WILL BE FOUND THAT WILL REQUIRE PARTIAL DEPTH PATCHES. FULL DEPTH PATCHES ARE EXPECTED BASED ON THE CONDITION OF THE UNDERSIDE OF THE DECK.
3. REMOVE TOP OF CONCRETE HEADERS AND JOINT SEAL.
4. REMOVE BRIDGE RAIL, REMOVE END BLOCKS, MODIFY PARAPET FACE AND EXTEND PARAPET HEIGHT (NO END BLOCKS, LEFT SIDE).
5. REMOVE EXISTING GUIDERAIL ANCHOR BOLTS AND INSTALL NEW ANCHOR BOLTS FOR SAFETY SHAPE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
6. INSTALL NEW MEMBRANE WATERPROOFING ON BRIDGE DECK AND APPROACH SLABS.
7. PLACE NEW BITUMINOUS OVERLAY, 1 1/2 INCH OF PMA S0.5 OVER 1 INCH OF HMA S0.25.
8. INSTALL NEW ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT BOTH ABUTMENTS AND SEAL PARAPET JOINT.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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DESIGNER/DRAFTER:
D.P. WURST
CHECKED BY:
A.L. NAFIS
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Plotted Date: 3/13/2013

Filename: ...SB_MSH_0053_0186_06_02_GPN_BRIDGES_01701A & 01701B.dgn

SIGNATURE/BLOCK:
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273 Divisend Road, Rocky Hill, CT 06067
(860) 513-1473 1800 SAMPSON
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PROJECT TITLE:
RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2

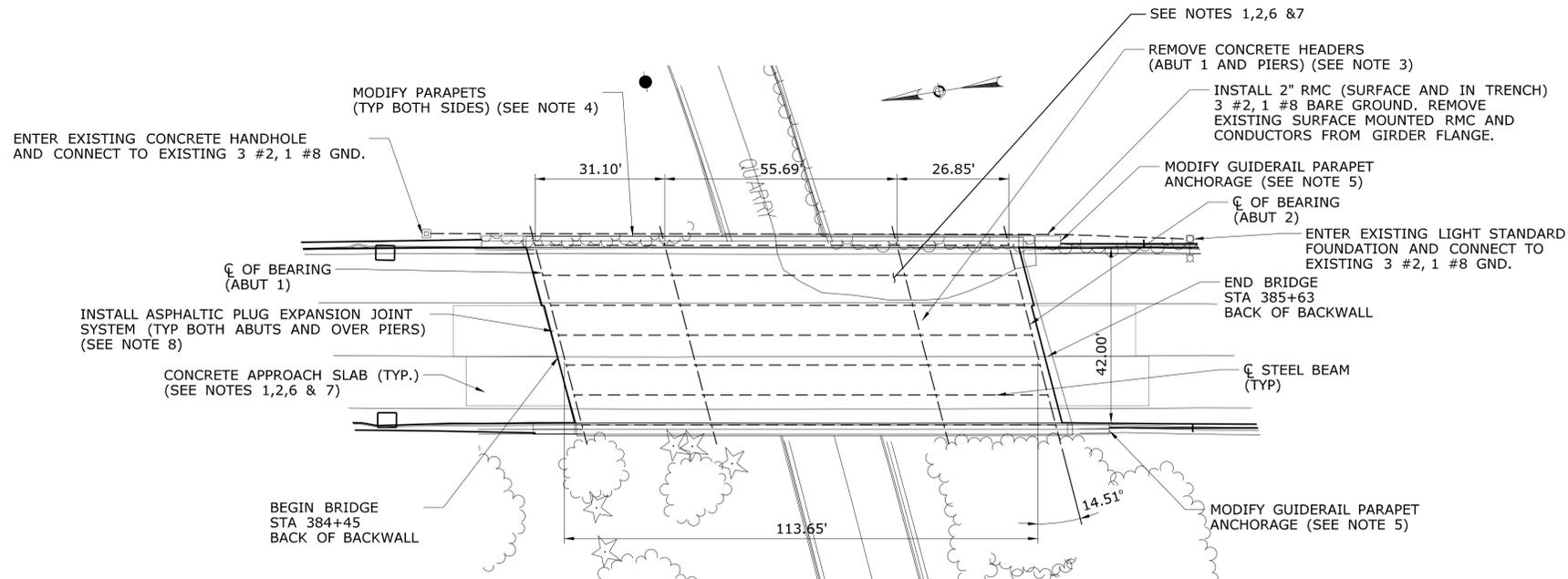
TOWN:
GLASTONBURY

DRAWING TITLE:
**BRIDGE GENERAL PLAN
BRIDGE NOS. 01701A & 01701B**

PROJECT NO.
53-186

DRAWING NO.
S-02

SHEET NO.
04.02



PLAN VIEW

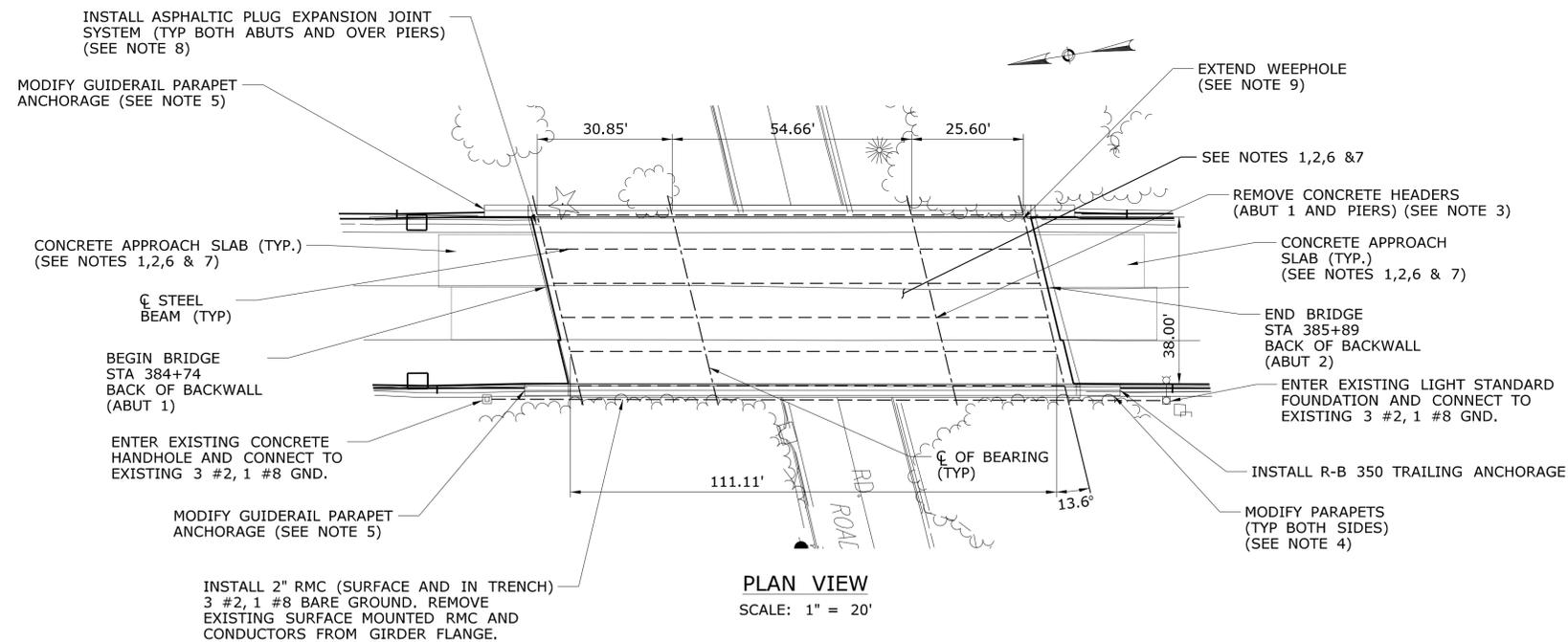
SCALE: 1" = 20'

BRIDGE NO. 01702

ROUTE 2 W.B. OVER QUARRY ROAD (GLAST.)

REHABILITATION WORK:

1. REMOVE EXISTING BITUMINOUS OVERLAY AND MEMBRANE WATERPROOFING TO EXPOSE CONCRETE DECK AND APPROACH SLABS.
2. INSPECT DECK AREAS FOR DETERIORATION AND REPAIR AS NECESSARY. IT IS ANTICIPATED THAT AREAS OF DETERIORATION WILL BE FOUND THAT WILL REQUIRE PARTIAL DEPTH PATCHES. FULL DEPTH PATCHES ARE EXPECTED BASED ON THE CONDITION OF THE UNDERSIDE OF THE DECK.
3. REMOVE TOP OF CONCRETE HEADERS AND JOINT SEAL.
4. REMOVE BRIDGE RAIL, REMOVE END BLOCKS, MODIFY PARAPET FACE AND EXTEND PARAPET HEIGHT.
5. REMOVE EXISTING GUIDERAIL ANCHOR BOLTS AND INSTALL NEW ANCHOR BOLTS FOR SAFETY SHAPE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
6. INSTALL NEW MEMBRANE WATERPROOFING ON BRIDGE DECK AND APPROACH SLABS.
7. PLACE NEW BITUMINOUS OVERLAY. 1 1/2 INCH OF PMA S0.5 OVER 1 INCH OF HMA S0.25.
8. INSTALL NEW ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT BOTH ABUTMENTS AND OVER BOTH PIERS AND SEAL PARAPET JOINT.
9. INSTALL NEW 2" RMC WITH 3 #2 AND 1 #8 BARE GROUND. SURFACE MOUNT RMC TO BACK FACE OF PARAPET AS PER THE DETAILS. CONNECT RMC TO EXISTING POLE BASE AND HANDHOLE AS INDICATED. CONNECT 3 #2 AND 1 #8 GND TO EXISTING LIGHTING CIRCUIT. REMOVE EXISTING SURFACE CONDUIT AND CONDUCTORS FROM GIRDER FLANGE.



PLAN VIEW

SCALE: 1" = 20'

BRIDGE NO. 01703

ROUTE 2 E.B. OVER QUARRY ROAD (GLAST.)

REHABILITATION WORK:

1. REMOVE EXISTING BITUMINOUS OVERLAY AND MEMBRANE WATERPROOFING TO EXPOSE CONCRETE DECK AND APPROACH SLABS.
2. INSPECT DECK AREAS FOR DETERIORATION AND REPAIR AS NECESSARY. IT IS ANTICIPATED THAT AREAS OF DETERIORATION WILL BE FOUND THAT WILL REQUIRE PARTIAL DEPTH PATCHES. FULL DEPTH PATCHES ARE EXPECTED BASED ON THE CONDITION OF THE UNDERSIDE OF THE DECK.
3. REMOVE TOP OF CONCRETE HEADERS AND JOINT SEAL.
4. REMOVE BRIDGE RAIL, REMOVE END BLOCKS, MODIFY PARAPET FACE AND EXTEND PARAPET HEIGHT.
5. REMOVE EXISTING GUIDERAIL ANCHOR BOLTS AND INSTALL NEW ANCHOR BOLTS FOR SAFETY SHAPE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
6. INSTALL NEW MEMBRANE WATERPROOFING ON BRIDGE DECK AND APPROACH SLABS.
7. PLACE NEW BITUMINOUS OVERLAY. 1 1/2 INCH OF PMA S0.5 OVER 1 INCH OF HMA S0.25.
8. INSTALL NEW ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT BOTH ABUTMENTS AND OVER BOTH PIERS AND SEAL PARAPET JOINT.
9. EXTEND EXISTING PVC WEEPHOLE PIPE TO BELOW BOTTOM FLANGE (SEE SPECIAL PROVISION).
10. INSTALL NEW 2" RMC WITH 3 #2 AND 1 #8 BARE GROUND. SURFACE MOUNT RMC TO BACK FACE OF PARAPET AS PER THE DETAILS. CONNECT RMC TO EXISTING POLE BASE AND HANDHOLE AS INDICATED. CONNECT 3 #2 AND 1 #8 GND TO EXISTING LIGHTING CIRCUIT. REMOVE EXISTING SURFACE CONDUIT AND CONDUCTORS FROM GIRDER FLANGE.

ELECTRICAL NOTES:

1. LIGHTING CIRCUITRY IS 480 VOLT, 3 PHASE, 3 WIRE.
2. THE EXISTING LIGHTING CONTROL CABINET IS LOCATED ON QUARRY STREET ADJACENT TO ROUTE 2 E.B.
3. THE CONTRACTOR SHALL ABIDE BY CONNDOT LOCKOUT/TAGOUT PROCEDURES WHEN ACCESS TO THE CIRCUIT IS REQUIRED. THE CONTRACTOR SHALL CONTACT MR. PETER TYC (CONNDOT DISTRICT 1 ELECTRICAL) AT 860-566-3156 WHEN ACCESS TO THE LIGHTING CONTROL CABINET IS REQUIRED.
4. INSULATED CONDUCTORS SHALL BE 600 VOLT, TYPE XHHW, FULL LENGTH PAINT STRIPE COLOR CODED: BLACK, BLUE AND RED.
5. THE CONTRACTOR SHALL CARRY OUT THIS WORK SUCH THAT NIGHTTIME OPERATION OF THE LIGHTING SYSTEM IS MAINTAINED. THE CONTRACTOR SHALL INSTALL THE NEW CONDUIT AND CONDUCTORS WHILE KEEPING THE EXISTING CONDUIT AND CONDUCTORS IN SERVICE TO MAINTAIN THE INTEGRITY OF THE LIGHTING CIRCUIT. CIRCUIT CONNECTIONS TO THE NEW CONDUCTORS SHALL BE CARRIED OUT DURING DAYLIGHT HOURS.
6. INSTALL AN RMC EXPANSION FITTING IN THE CONDUIT AT ALL BRIDGE JOINTS SUBJECT TO EXPANSION.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 3/13/2013

DESIGNER/DRAFTER:
D.P. WURST

CHECKED BY:
A.L. NAFIS

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

File name: ...SB_MSH_0053_0186_06_03_GPN_BRIDGES_01702 & 01703.dgn

SIGNATURE/BLOCK:
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PROJECT TITLE:
RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2

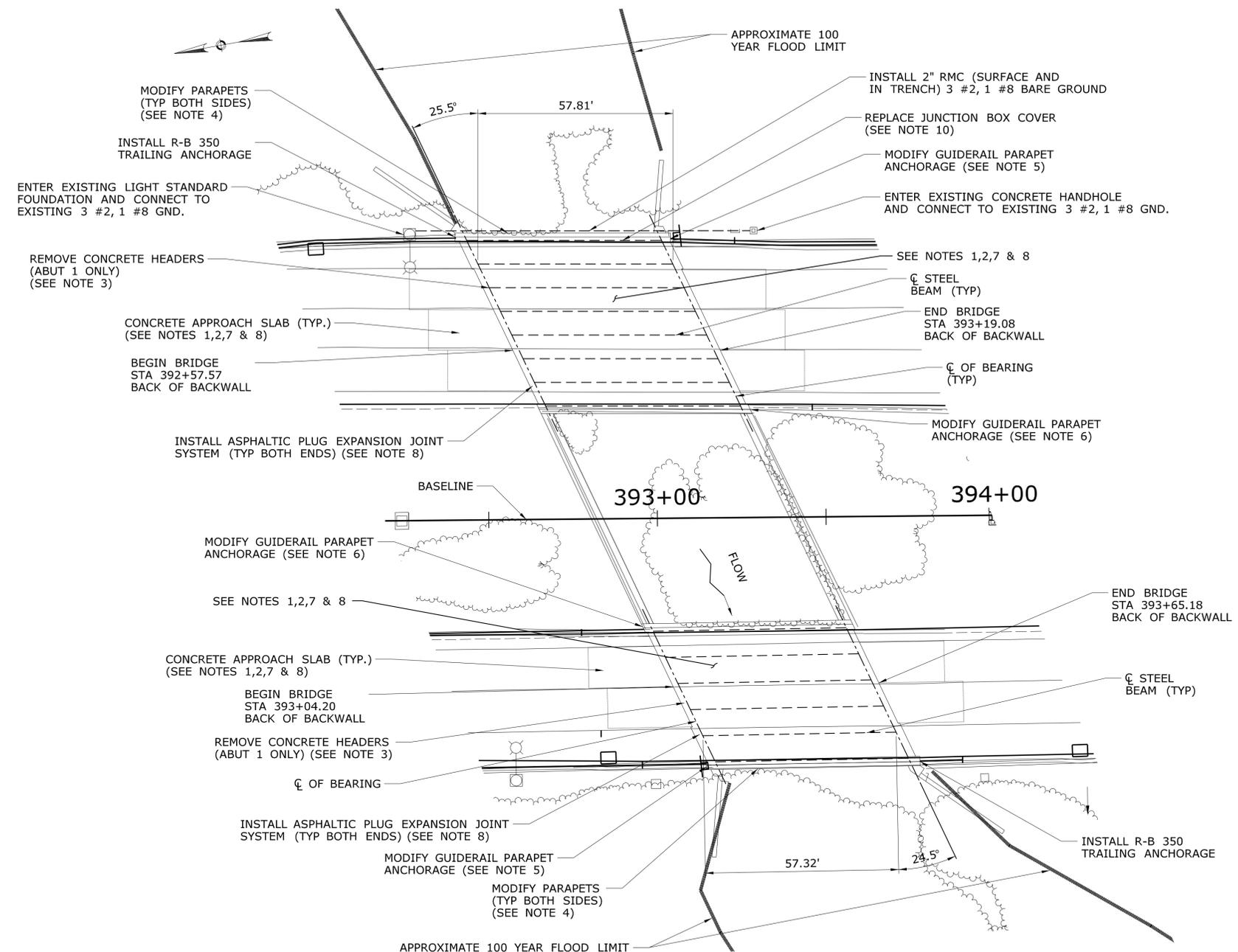
TOWN:
GLASTONBURY

DRAWING TITLE:
BRIDGE GENERAL PLAN BRIDGE NOS. 01702 & 01703

PROJECT NO.
53-186

DRAWING NO.
S-03

SHEET NO.
04.03



PLAN VIEW
SCALE: 1" = 20'



BRIDGE ELEVATIONS
SCALE: 1" = 20'

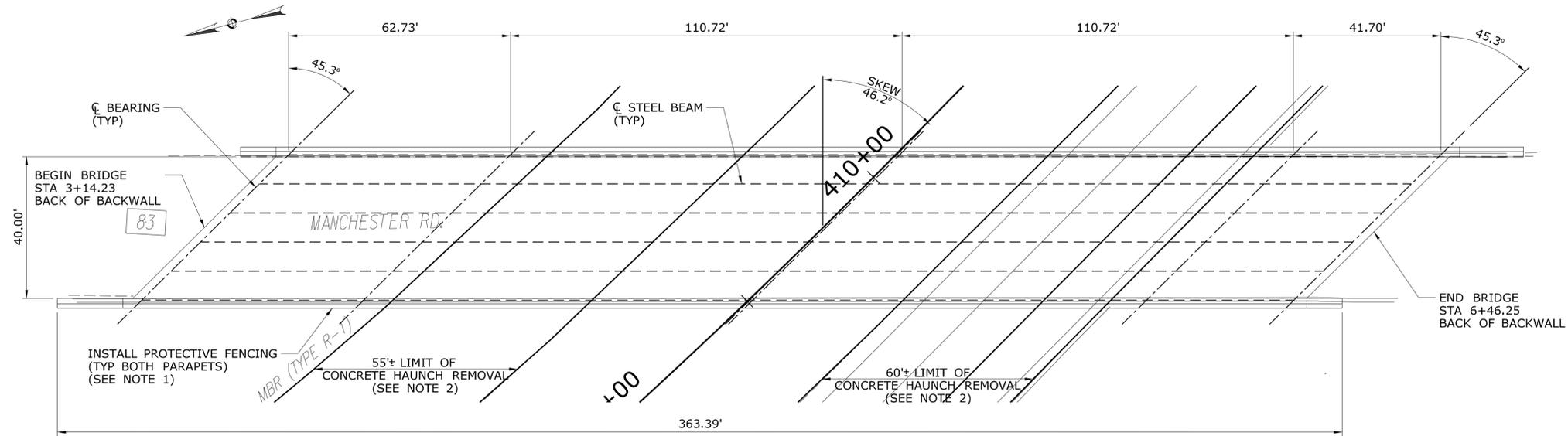
BRIDGE NO. 01704B
ROUTE 2 W.B. OVER ROARING BROOK (GLAST.)

- REHABILITATION WORK:**
1. REMOVE EXISTING BITUMINOUS OVERLAY AND MEMBRANE WATERPROOFING TO EXPOSE CONCRETE DECK AND APPROACH SLABS.
 2. INSPECT DECK AREAS FOR DETERIORATION AND REPAIR AS NECESSARY. IT IS ANTICIPATED THAT AREAS OF DETERIORATION WILL BE FOUND THAT WILL REQUIRE PARTIAL DEPTH PATCHES. THE NEED FOR FULL DEPTH PATCHES ARE NOT EXPECTED BASED ON THE CONDITION OF THE UNDERSIDE OF THE DECK.
 3. REMOVE TOP OF CONCRETE HEADERS AND JOINT SEAL.
 4. REMOVE BRIDGE RAIL, MODIFY PARAPET FACE AND EXTEND PARAPET HEIGHT (NO END BLOCKS).
 5. MODIFY ENDS OF PARAPETS TO ACCOMMODATE VERTICAL FACE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
 6. REMOVE EXISTING GUIDERAIL ANCHOR BOLTS AND INSTALL NEW ANCHOR BOLTS FOR SAFETY SHAPE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
 7. INSTALL NEW MEMBRANE WATERPROOFING ON BRIDGE DECK AND APPROACH SLABS.
 8. PLACE NEW BITUMINOUS OVERLAY. 1 1/2 INCH OF PMA S0.5 OVER 1 INCH OF HMA S0.25.
 9. INSTALL NEW ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT BOTH ABUTMENTS AND SEAL PARAPET JOINT.
 10. REPLACE DAMAGED JUNCTION BOX COVER.
 11. INSTALL NEW 2" RMC WITH 3 #2 AND 1#8 BARE GROUND. SURFACE MOUNT RMC TO BACK FACE OF PARAPET AS PER THE DETAILS. CONNECT RMC TO EXISTING POLE BASE AND HANDHOLE AS INDICATED. CONNECT 3 #2 AND 1 #8 GND TO EXISTING LIGHTING CIRCUIT. REMOVE EXISTING CONDUCTORS FROM CONDUIT IN STRUCTURE.

BRIDGE NO. 01704A
ROUTE 2 E.B. OVER ROARING BROOK (GLAST.)

- REHABILITATION WORK:**
1. REMOVE EXISTING BITUMINOUS OVERLAY AND MEMBRANE WATERPROOFING TO EXPOSE CONCRETE DECK AND APPROACH SLABS.
 2. INSPECT DECK AREAS FOR DETERIORATION AND REPAIR AS NECESSARY. IT IS ANTICIPATED THAT AREAS OF DETERIORATION WILL BE FOUND THAT WILL REQUIRE PARTIAL DEPTH PATCHES. FULL DEPTH PATCHES ARE EXPECTED BASED ON THE CONDITION OF THE UNDERSIDE OF THE DECK.
 3. REMOVE TOP OF CONCRETE HEADERS AND JOINT SEAL.
 4. REMOVE BRIDGE RAIL, MODIFY PARAPET FACE AND EXTEND PARAPET HEIGHT (NO END BLOCKS).
 5. MODIFY ENDS OF PARAPETS TO ACCOMMODATE VERTICAL FACE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
 6. REMOVE EXISTING GUIDERAIL ANCHOR BOLTS AND INSTALL NEW ANCHOR BOLTS FOR SAFETY SHAPE ATTACHMENT OF R-B 350 GUIDERAIL AT LEADING ENDS.
 7. INSTALL NEW MEMBRANE WATERPROOFING ON BRIDGE DECK AND APPROACH SLABS.
 8. PLACE NEW BITUMINOUS OVERLAY. 1 1/2 INCH OF PMA S0.5 OVER 1 INCH OF HMA S0.25.
 9. INSTALL NEW ASPHALTIC PLUG EXPANSION JOINT SYSTEM AT BOTH ABUTMENTS AND SEAL PARAPET JOINT.
 10. THERE ARE EXISTING ACTIVE LIGHTING FACILITIES (RMC, CONDUCTORS, JUNCTION BOXES) IN THE WEST SIDE BRIDGE PARAPET/WINGWALLS. THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS NOT TO CAUSE DAMAGE TO THESE FACILITIES.

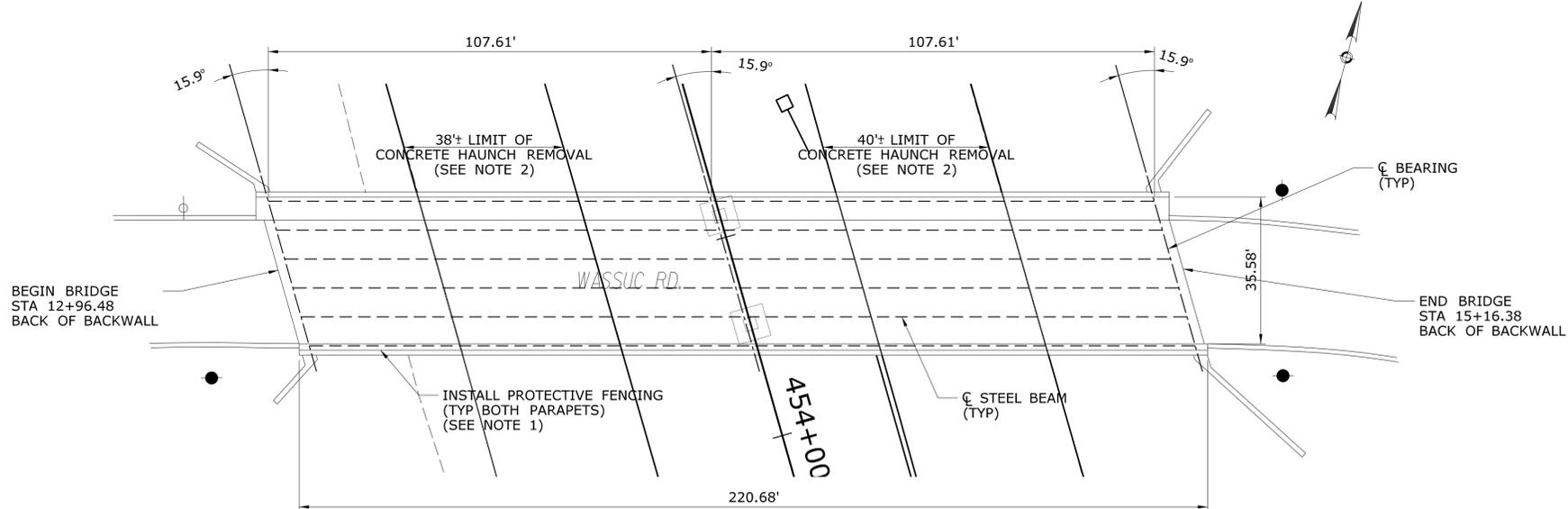
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REV. DATE REVISION DESCRIPTION SHEET NO.	Plotted Date: 3/13/2013	SCALE AS NOTED					DRAWING TITLE: BRIDGE GENERAL PLAN BRIDGE NOS. 01704A & 01704B



PLAN VIEW
SCALE: 1" = 20'

BRIDGE NO. 01705
ROUTE 83 OVER ROUTE 2 (GLAST.)

- REHABILITATION WORK:**
1. INSTALL PROTECTIVE FENCING ON BOTH PARAPETS FROM END TO END.
 2. REMOVE WIDE PORTION OF CONCRETE HAUNCHES ALONG EACH BEAM ABOVE LANES AND SHOULDERS ONLY.

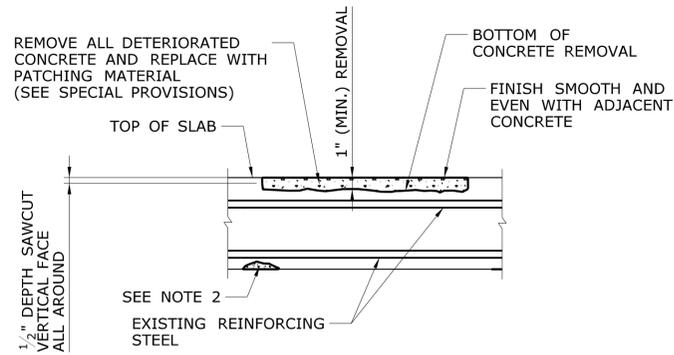


PLAN VIEW
SCALE: 1" = 20'

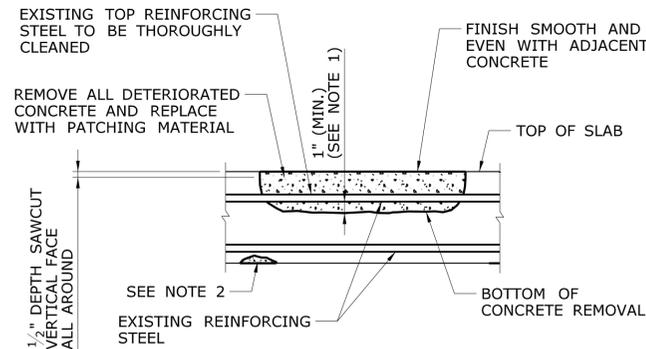
BRIDGE NO. 01707
WASSUC ROAD OVER ROUTE 2 (GLAST.)

- REHABILITATION WORK:**
1. INSTALL PROTECTIVE FENCING ON BOTH PARAPETS FROM END TO END.
 2. REMOVE WIDE PORTION OF CONCRETE HAUNCHES ALONG EACH BEAM ABOVE LANES AND SHOULDERS ONLY.

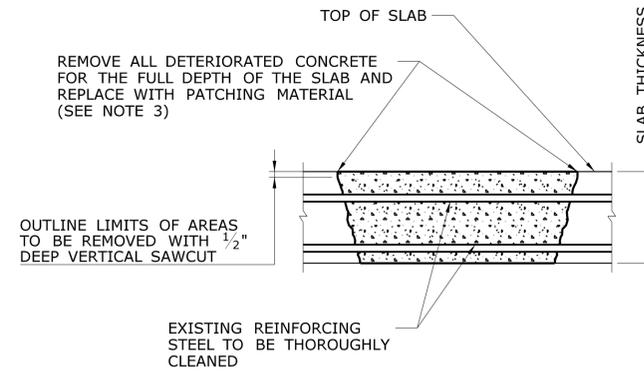
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: D.P. WURST CHECKED BY: A.L. NAFIS	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>	SIGNATURE/BLOCK: 273 Dividend Road, Rocky Hill, CT 06067 (860) 513-1473 1800 SAMPSON www.westonandsampson.com	PROJECT TITLE: RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2	TOWN: GLASTONBURY	PROJECT NO. 53-186
REV. DATE REVISION DESCRIPTION SHEET NO.	Plotted Date: 3/13/2013	SCALE AS NOTED					DRAWING TITLE: BRIDGE GENERAL PLAN BRIDGE NOS. 01705 & 01707



PATCH ABOVE TOP REINFORCING STEEL



PATCH BELOW TOP REINFORCING STEEL



FULL DEPTH PATCH DETAIL

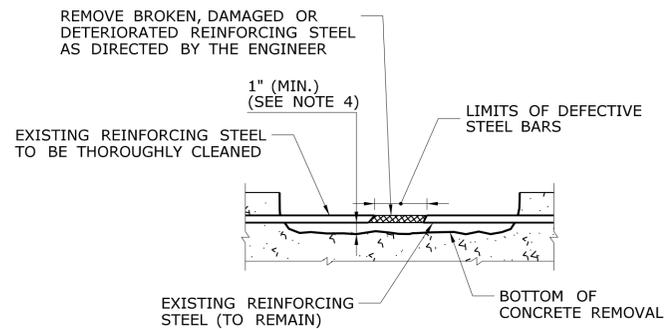
CONCRETE PATCHING NOTES:

1. IF AFTER CONCRETE REMOVAL THE REINFORCING STEEL HAS AT LEAST ONE HALF OF ITS SURFACE AREA EXPOSED, THE CONCRETE SHALL BE FURTHER REMOVED TO A DEPTH OF 1" BELOW THE STEEL. IN AREAS WHERE REINFORCING STEEL IS ONLY PARTIALLY EXPOSED AFTER REMOVAL OF DETERIORATED CONCRETE, THE REINFORCEMENT SHALL BE COATED WITH EPOXY BONDING COMPOUND (SEE SPECIAL PROVISIONS) BEFORE PLACING "PARTIAL DEPTH PATCH" MATERIAL.
2. EXPOSED REINFORCING STEEL IN POP-OUTS CAUSED BY REMOVAL OF DETERIORATED CONCRETE SHALL BE PROTECTED WITH EPOXY COATING.
3. IF REMOVAL OF DETERIORATED CONCRETE FOR "PARTIAL DEPTH PATCH" EXCEEDS TWO-THIRDS OF THE TOTAL THICKNESS OF THE SLAB, REMOVE THE REMAINDER OF THE CONCRETE TO THE BOTTOM OF THE SLAB AND PERFORM "FULL DEPTH PATCH (HIGH EARLY STRENGTH)". FINAL PAYMENT SHALL BE MADE AS "FULL DEPTH PATCH (HIGH EARLY STRENGTH)" ONLY, (SEE SPECIAL PROVISIONS).
4. ADDITIONAL CONCRETE REMOVAL REQUIRED FOR THE REPAIR OF THE REINFORCING STEEL SHALL BE PAID FOR UNDER ITEM "FULL DEPTH PATCH (HIGH EARLY STRENGTH)" OR "PARTIAL DEPTH PATCH", WHICH EVER CONDITION APPLIES.
5. REPAIR VOIDS IN VERTICAL CONCRETE SURFACES WITH "CLASS "S" CONCRETE" IF THE FACE AREA IS GREATER THAN 4 SQUARE FEET AND THE DEPTH OF THE VOID IS 1 INCH OR DEEPER.

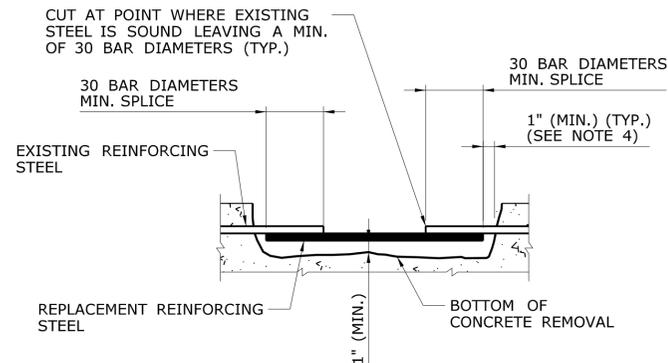
PARTIAL DEPTH PATCH DETAILS

SCALE: 1 1/2" = 1'-0"

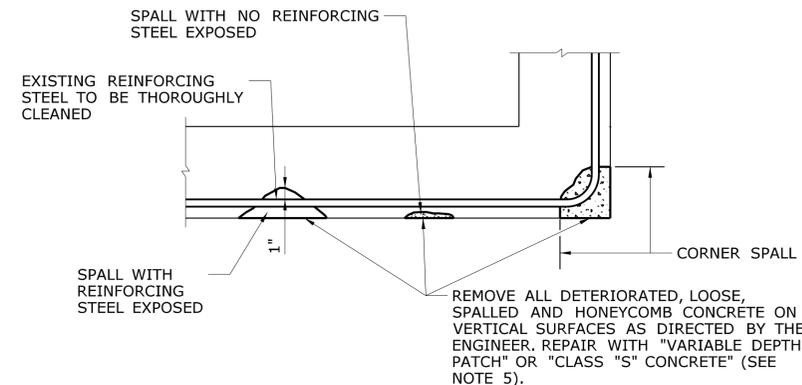
SCALE: 1 1/2" = 1'-0"



REMOVAL OF EXISTING DEFECTIVE REINFORCING STEEL



REPAIR OF DEFECTIVE REINFORCING STEEL

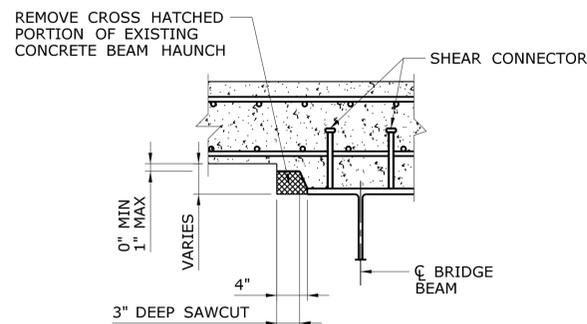


CONCRETE PATCHING FOR VERTICAL SURFACES

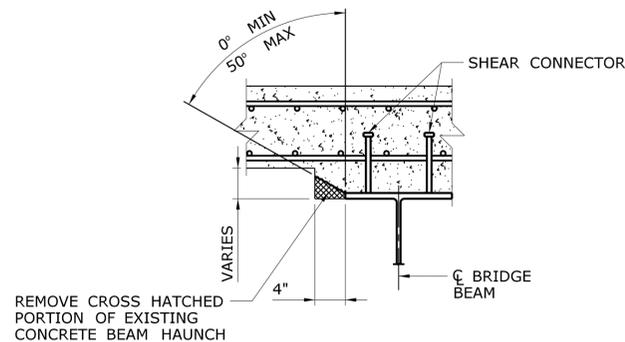
SCALE: 1 1/2" = 1'-0"

DEFECTIVE REINFORCING STEEL REPAIR DETAILS

SCALE: 1 1/2" = 1'-0"

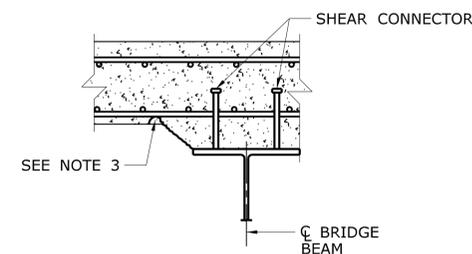


TYPICAL REMOVAL METHOD



EXISTING CONDITION

***DETAILS FOR INACCESSIBLE LOCATIONS (ONLY)**



FINAL CONDITION

CONCRETE HAUNCH REMOVAL NOTES:

1. THE REMOVAL OF THE PORTION OF THE CONCRETE HAUNCH SHOWN SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, PER LINEAR FOOT FOR "CONCRETE HAUNCH REMOVAL".
- * 2. THIS METHOD TO BE USED ONLY IN THOSE AREAS HAVING INSUFFICIENT CLEARANCE FOR SAW-CUTTING EQUIPMENT. AREAS MAY INCLUDE LOCATIONS ABOVE DIAPHRAGMS OR OTHER LOCATIONS DIRECTED BY THE ENGINEER.
3. IF OVER-REMOVAL RESULTS, APPLY TWO COATS OF EPOXY RESIN TO DECK REINFORCING STEEL EXPOSED DURING HAUNCH REMOVAL. ALL REASONABLE PRECAUTIONS SHALL BE TAKEN TO AVOID THIS CONDITION.
4. TYPICALLY, WIDE HAUNCHES SHALL BE REMOVED ALONG BOTH EDGES OF INTERIOR BEAM FLANGES. ONLY THE WIDENED HAUNCH ON THE INSIDE OF FASCIA BEAMS SHALL BE REMOVED, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

CONCRETE HAUNCH REMOVAL DETAILS

SCALE: 1" = 1'-0"

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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DESIGNER/DRAFTER:
D.P. WURST

CHECKED BY:
A.L. NAFIS

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Plotted Date: 3/13/2013

Filename: ...SB_MSH_0053_0186_06_06_PATCHING_DETAILS.dgn

SIGNATURE/BLOCK:
Weston & Sampson

273 Divisend Road, Rocky Hill, CT 06067
(860) 513-1473 1800 SAMPSON
www.westonandsampson.com

STATE OF CONNECTICUT
REGISTERED PROFESSIONAL ENGINEER

PROJECT TITLE:
RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2

TOWN:
GLASTONBURY

PROJECT NO.
53-186

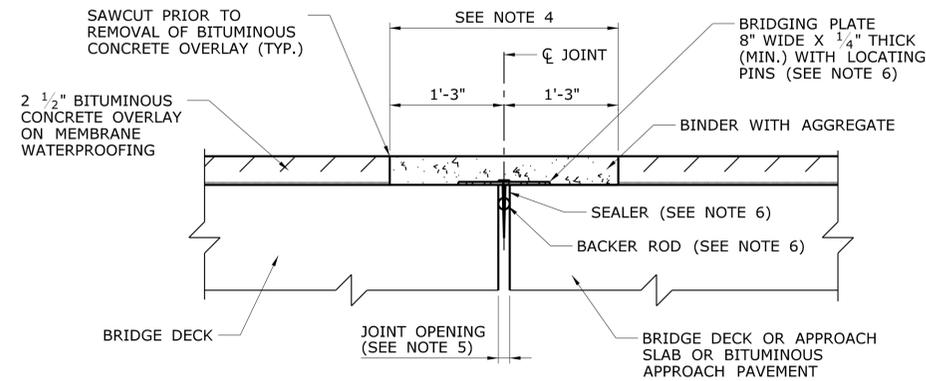
DRAWING NO.
S-06

DRAWING TITLE:
CONCRETE PATCHING AND HAUNCH REMOVAL DETAILS

SHEET NO.
04.06

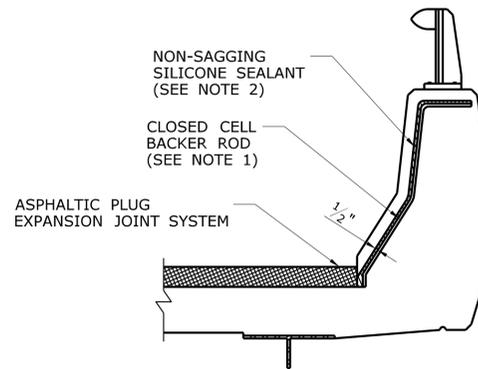
ASPHALTIC PLUG EXPANSION JOINT SYSTEM NOTES:

1. THE CLOSED CELL BACKER ROD SHALL BE PLACED A MINIMUM OF 2" FROM THE OUTSIDE FACE OF PARAPETS AND MEDIAN BARRIERS.
2. THE NON-SAGGING SILICONE SEALANT SHALL BE PLACED ON THE BACKER ROD 1/2" THICK. AT THE GUTTER, THE SILICONE SEALANT SHALL BE PLACED FLUSH WITH THE OUTSIDE FACE OF CONCRETE.
3. PRIOR TO INSTALLING THE SILICONE SEALANT, CLEAN JOINT SIDES BY SANDBLASTING. DUST SHALL BE REMOVED BY A METHOD APPROVED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM". (SEE SPECIAL PROVISION)
4. REMOVE NEW BITUMINOUS CONCRETE OVERLAY AND MEMBRANE WATERPROOFING. REPLACE WITH ASPHALTIC PLUG EXPANSION JOINT SYSTEM. TO BE PAID FOR UNDER "ASPHALTIC PLUG EXPANSION JOINT SYSTEM". (SEE SPECIAL PROVISION)
5. EXISTING JOINT OPENINGS VARY FROM APPROXIMATELY 1/2" TO 1 1/2" DEPENDING ON BRIDGE SPANS, LENGTHS AND TEMPERATURES. THERE IS NO JOINT OPENING AT LOCATIONS WHERE THE BRIDGE DECK SITS ON TOP OF THE BACKWALL AND APPROACH SLABS ARE NOT PRESENT.
6. AT ENDS OF DECKS WHERE THE APPROACH PAVEMENT IS BITUMINOUS, ELIMINATE THE BRIDGING PLATE, LOCATING PIN, SEALER AND BACKER ROD.



TYPICAL SECTION

SCALE: 1 1/2" = 1'-0"



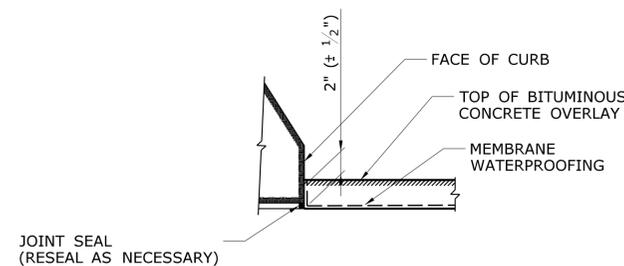
TREATMENT AT PARAPET

SCALE: 3/4" = 1'-0"

ASPHALTIC PLUG EXPANSION JOINT SYSTEM

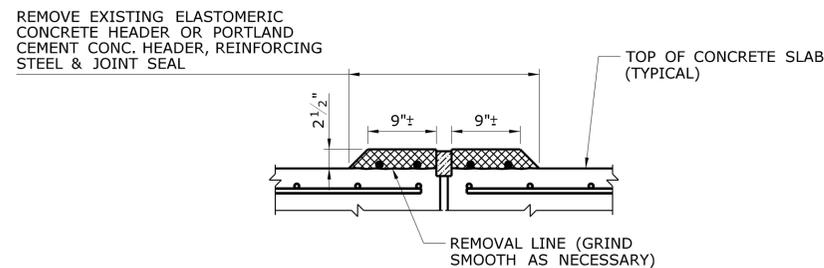
ASPHALTIC PLUG EXPANSION JOINT SYSTEM		
BRIDGE NO.	LOCATION	MAXIMUM MOVEMENT BASED ON 120° F
01701A	ABUTMENT 2	0.57 INCHES
01701B	ABUTMENT 2	0.57 INCHES
01702	ABUTMENT 1	0.28 INCHES
	PIER 1	0.50 INCHES
	PIER 2	0.24 INCHES
01703	ABUTMENT 1	0.28 INCHES
	PIER 2	0.23 INCHES
01704A	ABUTMENT 1	0.53 INCHES
01704B	ABUTMENT 1	0.53 INCHES

NOTE: THE TEMPERATURE RANGE OF 120° F IS BASED ON A MEAN LOW TEMPERATURE OF -10° F AND A MEAN HIGH TEMPERATURE OF +110° F.



MEMBRANE TREATMENT AT GUTTER

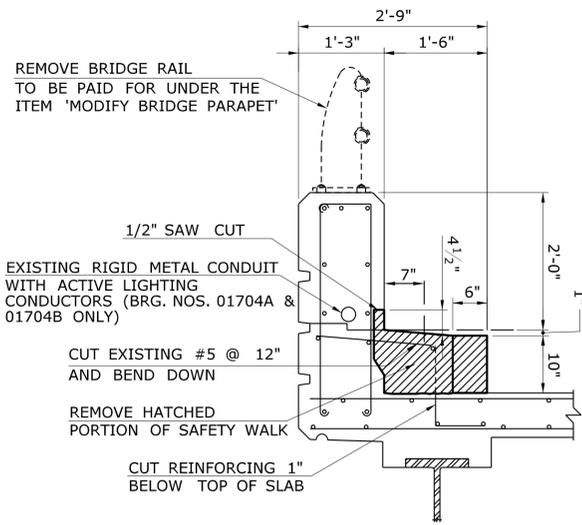
SCALE: 1 1/2" = 1'-0"



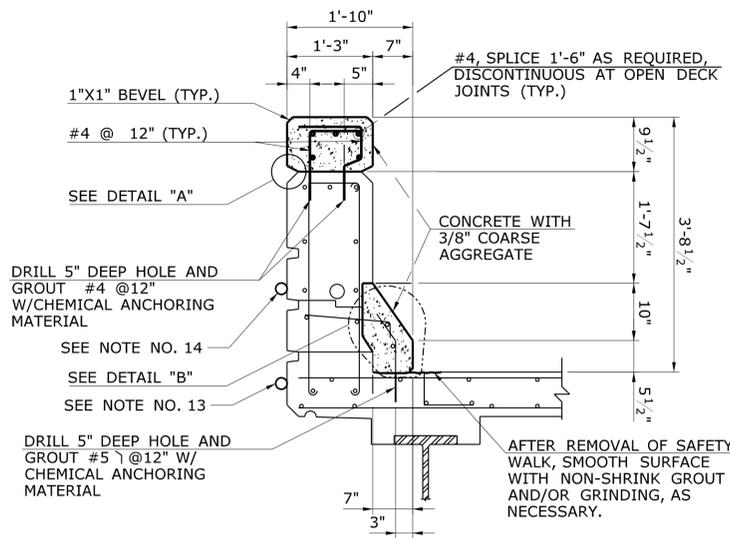
HEADER REMOVAL DETAIL

SCALE: 1" = 1'-0"

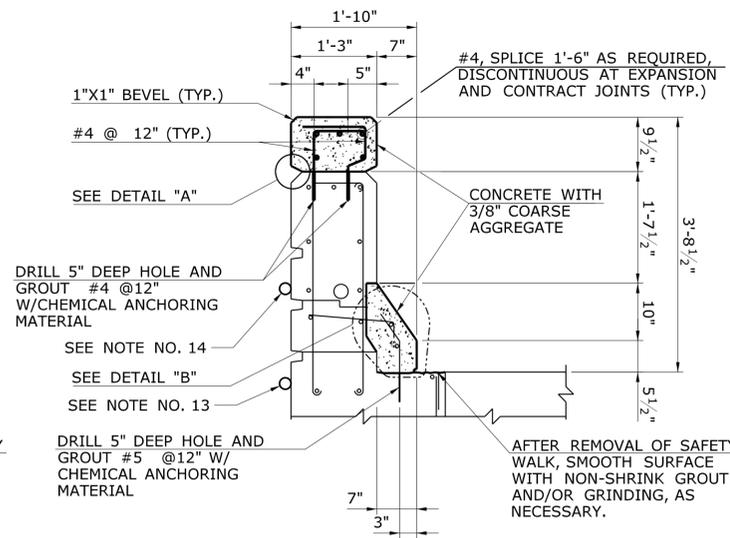
<table border="1"> <tr> <td>REV.</td> <td>DATE</td> <td>REVISION DESCRIPTION</td> <td>SHEET NO.</td> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>	REV.	DATE	REVISION DESCRIPTION	SHEET NO.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<p>THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.</p> <p>Plotted Date: 3/13/2013</p>	<p>DESIGNER/DRAFTER: D.P. WURST</p> <p>CHECKED BY: A.L. NAFIS</p> <p>SCALE AS NOTED</p>	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p>Filename: ...SB_MSH_0053_0186_06_07_DECK_JOINT_DETAILS.dgn</p>	<p>SIGNATURE/BLOCK:</p> <p>Weston & Sampson 273 Dividend Road, Rocky Hill, CT 06067 (860) 513-1473 1800 SAMPSON www.westonandsampson.com</p>	<p>PROJECT TITLE:</p> <p>RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2</p>	<p>TOWN:</p> <p>GLASTONBURY</p>	<p>PROJECT NO.</p> <p>53-186</p> <p>DRAWING NO.</p> <p>S-07</p> <p>SHEET NO.</p> <p>04.07</p>
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REMOVAL OF EXISTING MATERIAL



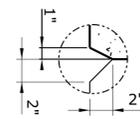
MODIFIED SECTION



MODIFIED WINGWALL PARAPET (ALL BRIDGES)

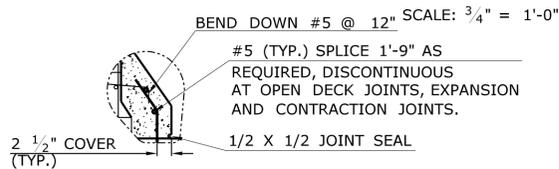
MODIFICATION OF DECK PARAPET (ALL BRIDGES)

SCALE: 3/4" = 1'-0"



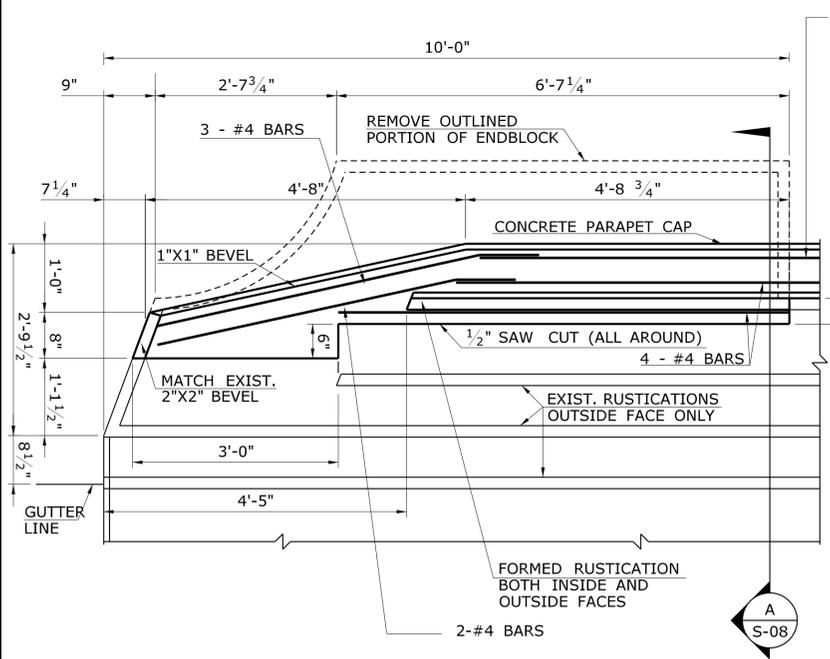
DETAIL "A"

SCALE: 1 1/2" = 1'-0"

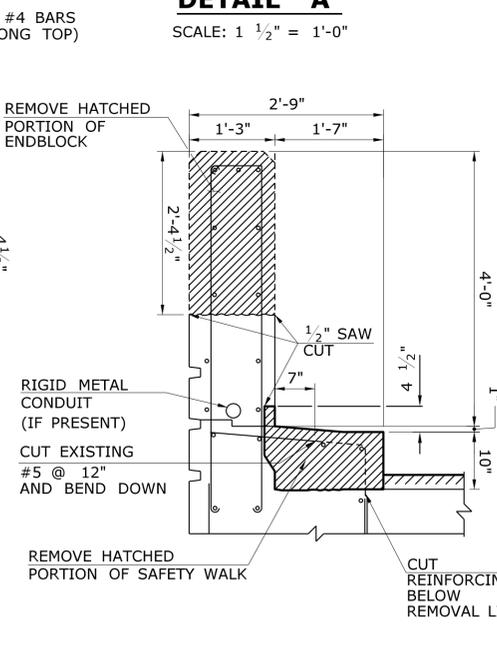


DETAIL "B"

SCALE: 3/4" = 1'-0"

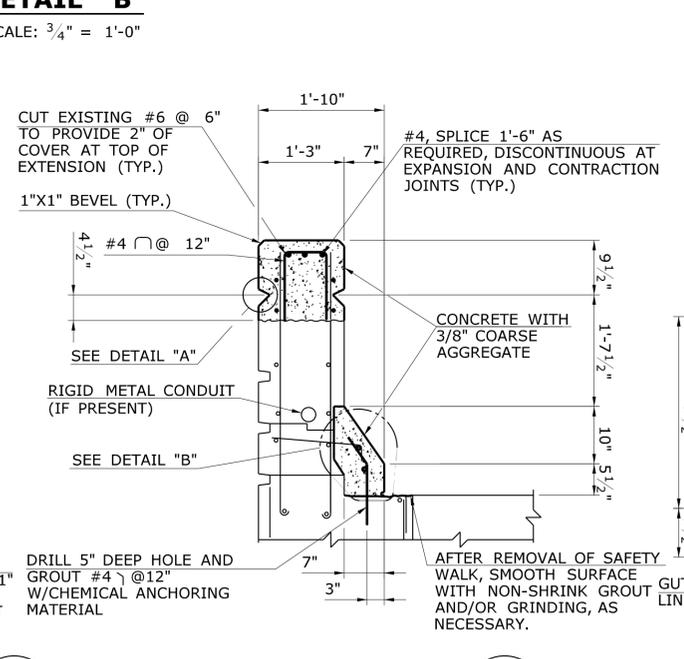


ELEVATION OUTSIDE FACE OF PARAPET AT ENDBLOCK LEADING ENDS



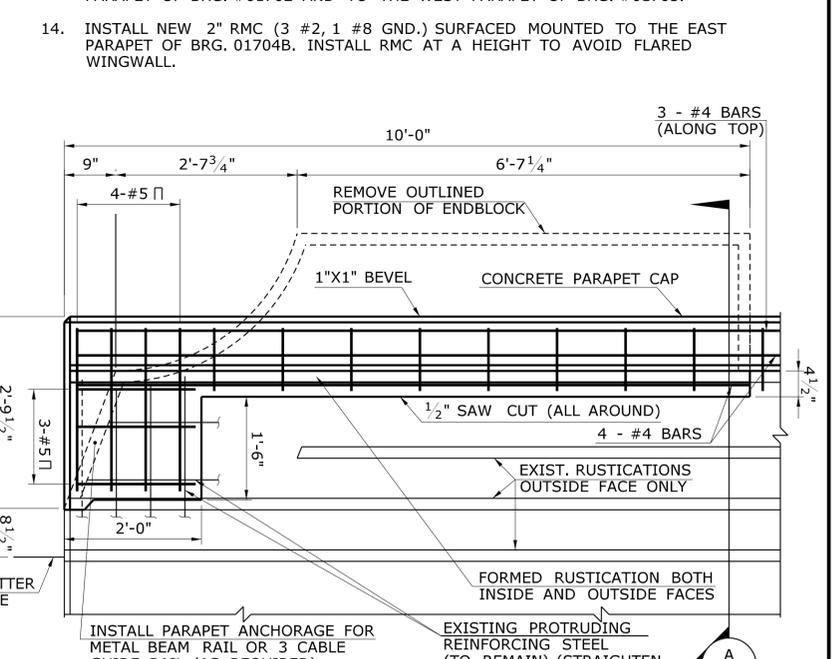
REMOVAL OF EXISTING MASONRY

A S-08



MODIFIED ENDBLOCK

A S-08



ELEVATION OF OUTSIDE FACE OF PARAPET AT ENDBLOCK TRAILING ENDS

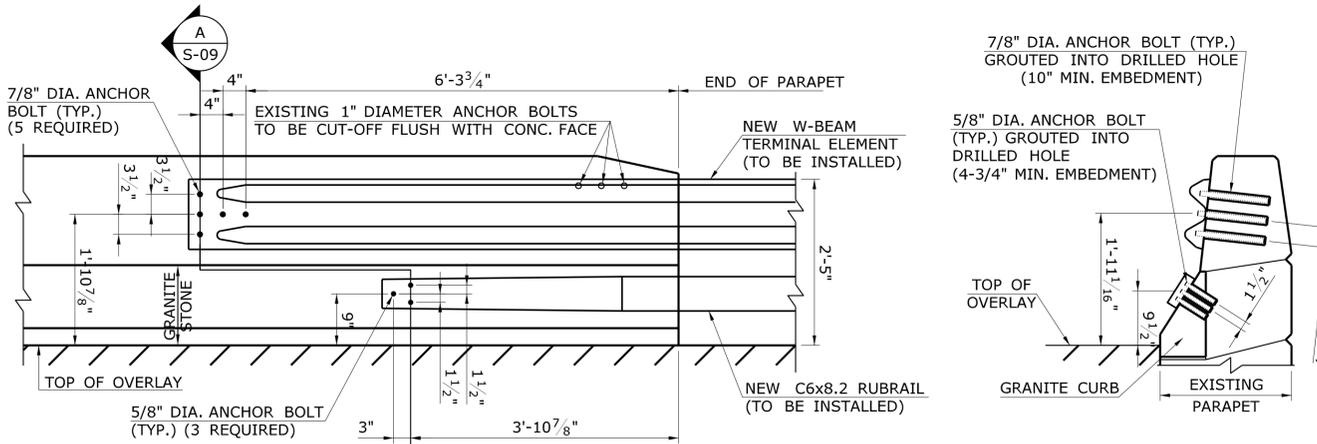
MODIFICATIONS TO PARAPET AT EXISTING ENDBLOCKS BRIDGE NOS. 01701A, 01701B, 01702, AND 01703

SCALE: 1 1/2" = 1'-0"

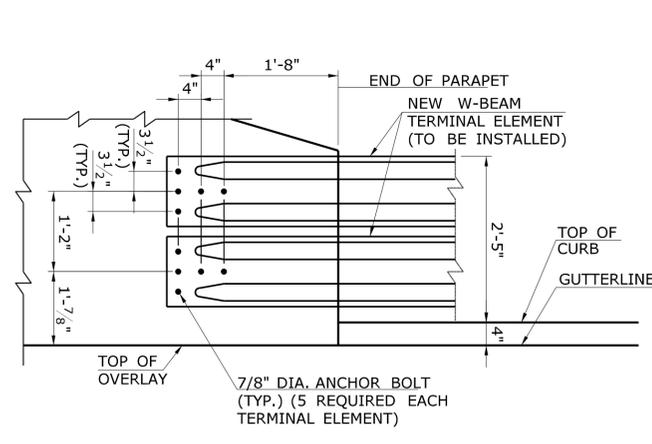
NOTES:

1. THE CONCRETE FOR THE PARAPET MODIFICATIONS SHALL BE A PORTLAND CEMENT CONCRETE WITH A MAXIMUM SIZE COARSE AGGREGATE OF 3/8" AND f'c=4000psi, AND SHALL BE DESIGNED BY THE CONTRACTOR.
2. THE REINFORCEMENT SHALL BE UNCOATED AND CONFORM TO ASTM A615, GRADE 60.
3. JOINTS SHALL BE FORMED IN THE SLOPED CURB AND THE PARAPET CAP AT THE JOINTS BETWEEN THE BRIDGE DECK AND WINGWALL PARAPETS, AND AT THE EXPANSION AND CONTRACTION JOINTS IN THE WINGWALLS. THE JOINT WIDTH SHALL MATCH THAT OF THE EXISTING ADJACENT JOINT. NO REINFORCEMENT SHALL PASS THROUGH EXPANSION OR CONTRACTION JOINTS.
4. THE REMOVAL OF THE CONCRETE SAFETY CURB, REMOVAL AND SALVAGE OF THE GRANITE CURB (IF PRESENT AND SPECIFIED FOR SALVAGE), BRIDGE RAIL AND TOP PORTION OF ENDBLOCK, DRILLING AND GROUTING DOWELS, FURNISHING AND PLACING REINFORCEMENT, AND PLACING AND FINISHING CONCRETE SHALL BE PAID FOR UNDER THE ITEM "MODIFY BRIDGE PARAPET."
5. DIAMETER OF DRILLED HOLES SHALL BE PER THE CHEMICAL ANCHOR MANUFACTURER'S INSTRUCTIONS.
6. THE WEIGHT OF PNEUMATIC HAMMERS USED TO REMOVE CONCRETE SHALL NOT EXCEED 30 POUNDS.
7. EXISTING TRAILING END GUIDERAIL ANCHORAGES MAY BE RESET IN PARAPET END AND REUSED IF IN GOOD CONDITION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.
8. DETAILS ON THIS SHEET PERTAIN TO ALL BRIDGES WHERE "MODIFY BRIDGE PARAPET" IS INDICATED ON THE GENERAL PLAN SHEET.
9. SEE DRAWING NO. S-09 FOR GUIDERAIL ANCHORAGE DETAILS AND FOR DETAILS OF BRIDGES WITHOUT EXISTING ENDBLOCKS.
10. REMOVAL OF EXISTING METAL BEAM RAIL MOUNTED TO THE PARAPET FACE WITH "I" BEAM SPACERS SHALL BE PAID FOR UNDER THE ITEM "REMOVE METAL BEAM RAIL (BRIDGE)". WHERE AN EXISTING LEADING END TERMINAL TREATMENT CONSISTS OF A SINGLE "I" BEAM SPACER, THE MEASUREMENT FOR PAYMENT SHALL BE FROM THE LEADING END OF THE PARAPET TO THE C.L. OF THE SPACER.
11. INTERRUPT SLOPED FACE OF NEW SLOPED CURB PORTION AT EXISTING 18" X 18" JUNCTION BOXES AND BEVEL EDGES 1:1. DOWELS FROM NEW CONCRETE CAP SHALL NOT PENETRATE THE TOP OF THE EXISTING JUNCTION BOX.
12. FOR BRIDGE 01704A, DRILLING AND SAWCUTTING OF THE EXISTING PARAPET/WINGWALL SHALL BE CARRIED OUT IN SUCH A MANNER AS TO NOT DAMAGE THE EXISTING RMC (AND CONDUCTORS). ANY DAMAGE TO THE EXISTING ELECTRICAL SYSTEM CAUSED BY THE CONTRACTOR'S WORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
13. INSTALL NEW 2" RMC (3 #2, 1 #8 GND.) SURFACE MOUNTED TO THE EAST PARAPET OF BRG. #01702 AND TO THE WEST PARAPET OF BRG. #01703.
14. INSTALL NEW 2" RMC (3 #2, 1 #8 GND.) SURFACED MOUNTED TO THE EAST PARAPET OF BRG. 01704B. INSTALL RMC AT A HEIGHT TO AVOID FLARED WINGWALL.

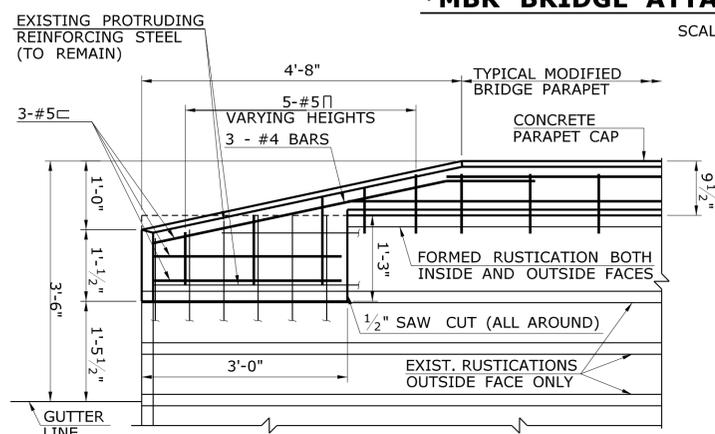
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	CHECKED BY: A.L. NAFIS				SCALE AS NOTED	DRAWING TITLE: MODIFY BRIDGE PARAPET SAFETY WALK TO SAFETY SHAPE
REV. DATE REVISION DESCRIPTION SHEET NO.	Plotted Date: 3/13/2013	Filename: ...SB_MSH_0053_0186_06_08_PARPET_MOD_DETAILS.dgn				



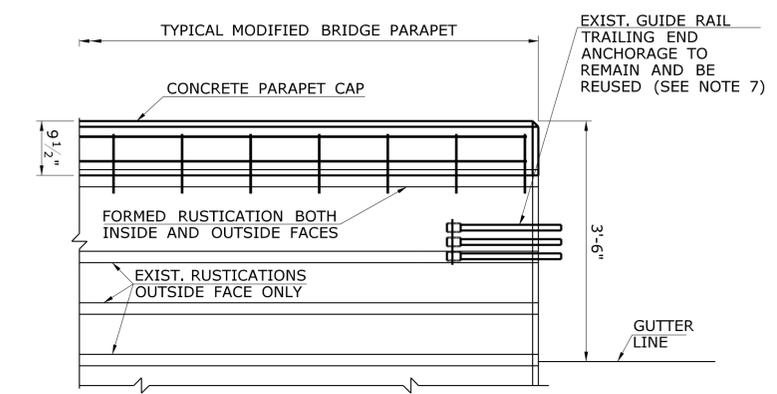
INSIDE FACE ELEVATION
*** MBR BRIDGE ATTACHMENT - SAFETY SHAPE**
 SCALE: 3/4" = 1'-0"
SECTION A S-09



MBR BRIDGE ATTACHMENT - VERTICAL FACE
 SCALE: 3/4" = 1'-0"

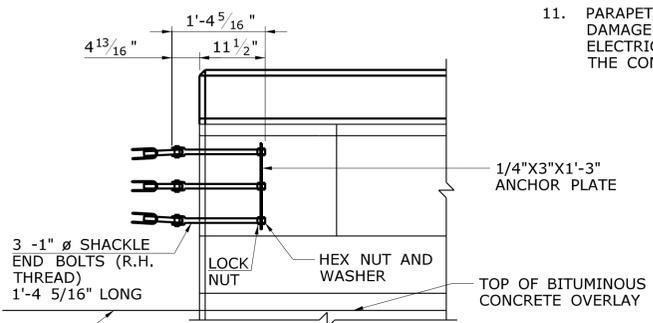


LEADING ENDS FOR SAFETY SHAPE ATTACHMENTS

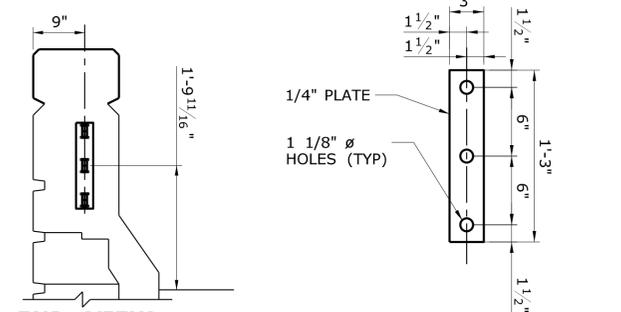


TRAILING ENDS

RECONSTRUCTION OF PARAPET ENDS WITHOUT EXISTING ENDBLOCKS
BRIDGE NOS. 01701A, 01701B, 01704A, AND 01704B

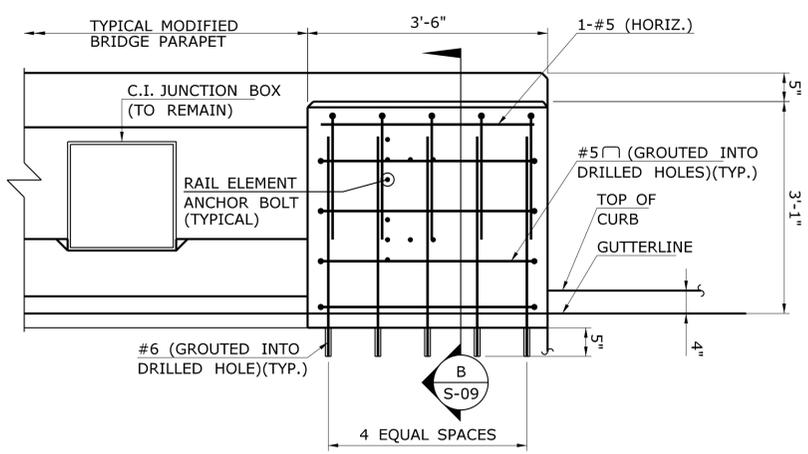


ELEVATION
 SCALE: 3/4" = 1'-0"

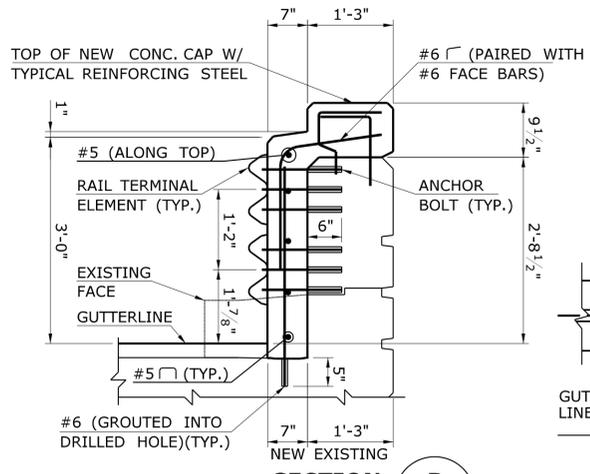


END VIEW
 SCALE: 3/4" = 1'-0"
ANCHORAGE PLATE
 SCALE: 1 1/2" = 1'-0"
THREE CABLE GUIDE RAILING ANCHORAGE
 (SEE NOTE 9)

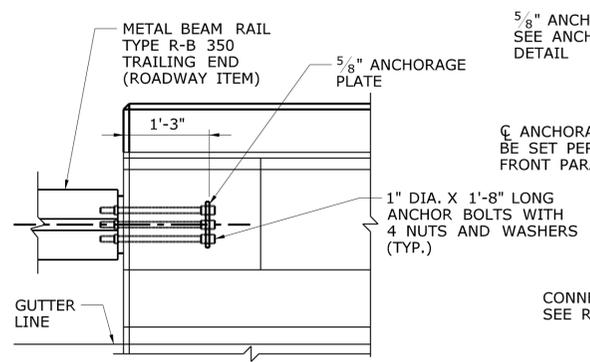
- THREE CABLE GUIDE RAIL NOTES:
1. THE SHACKLE END BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A688 CLASS E OR AISI 1035 FORGED STEEL, GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A153.
 2. THE STANDARD HEX NUTS, ANCHOR PLATES AND LOCK NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36.
 3. LONGITUDINAL REINFORCEMENT IN PARAPET TO CLEAR ANCHOR PLATE.



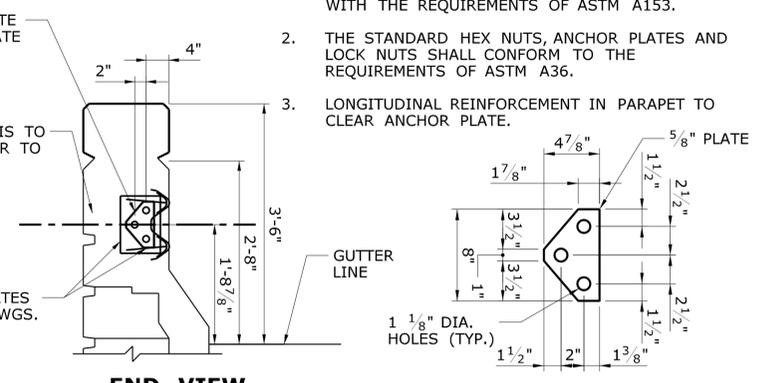
INSIDE FACE ELEVATION



SECTION B S-09



INSIDE FACE ELEVATION
 SCALE: 3/4" = 1'-0"



END VIEW
 SCALE: 3/4" = 1'-0"

R-B 350 TRAILING ANCHORAGE
 (SEE NOTE 9)

PARAPET LEADING END MODIFICATION FOR MBR BRIDGE ATTACHMENT - VERTICAL FACE
BRIDGE NOS. 01704A AND 01704B

(SEE NOTE 10)
 SCALE: 3/4" = 1'-0"

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DESIGNER/DRAFTER:
D.P. WURST
 CHECKED BY:
A.L. NAFIS

STATE OF CONNECTICUT
 DEPARTMENT OF TRANSPORTATION

SCALE AS NOTED

Plotted Date: 3/13/2013

SIGNATURE/
 BLOCK:

Weston & Sampson
 273 Dividend Road, Rocky Hill, CT 06067
 (860) 513-1473 1800 SAMPSON
 www.westonandsampson.com

STATE OF CONNECTICUT
 REGISTERED PROFESSIONAL ENGINEER

PROJECT TITLE:
RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2

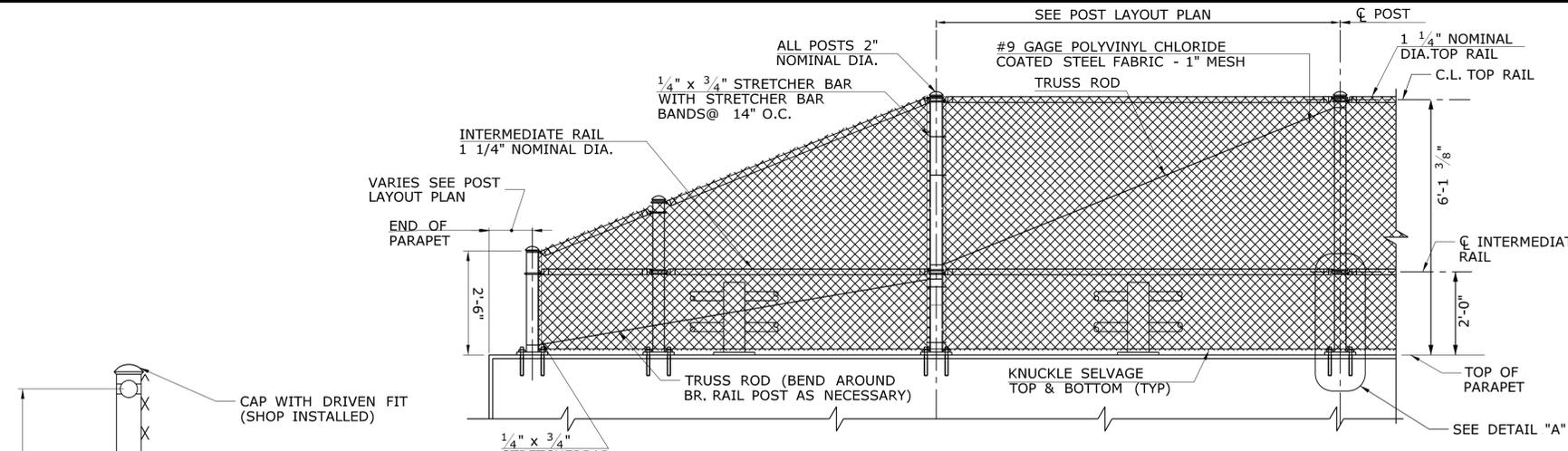
TOWN:
GLASTONBURY

PROJECT NO.
53-186

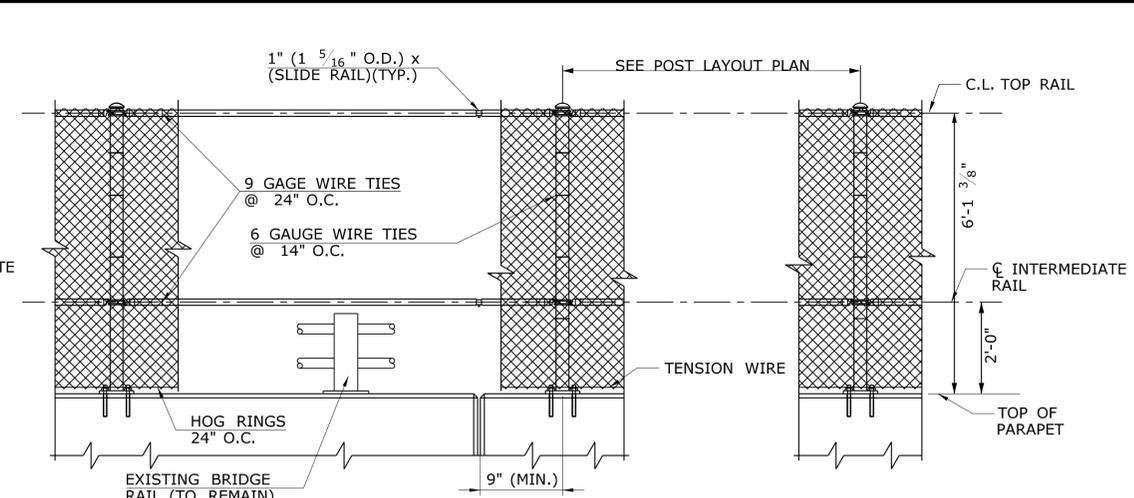
DRAWING NO.
S-09

DRAWING TITLE:
PARAPET MODIFICATIONS AND GUIDERAIL ATTACHMENTS

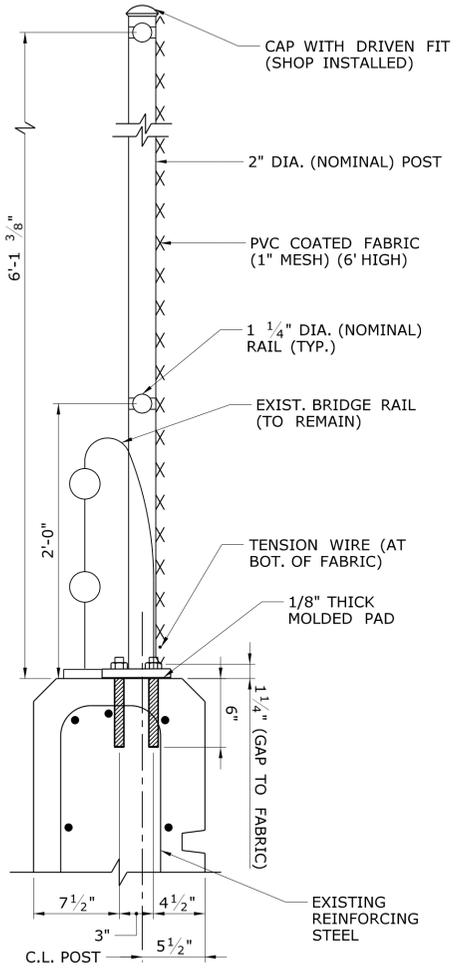
SHEET NO.
04.09



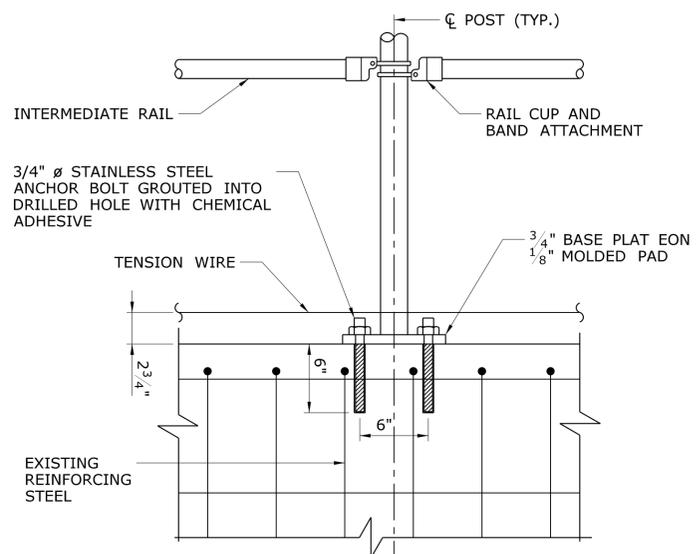
ELEVATION AT END OF PARAPET
SCALE: 1/2" = 1'-0"



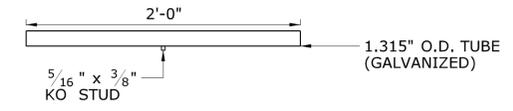
ELEVATION AT EXPANSION JOINT
SCALE: 1/2" = 1'-0"



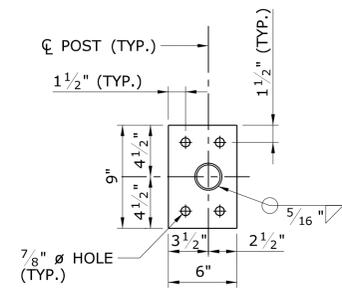
TYPICAL SECTION
SCALE: 1 1/2" = 1'-0"



DETAIL "A"
SCALE: 1 1/2" = 1'-0"



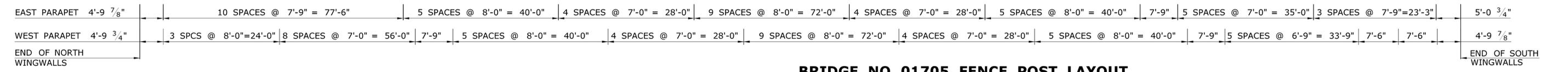
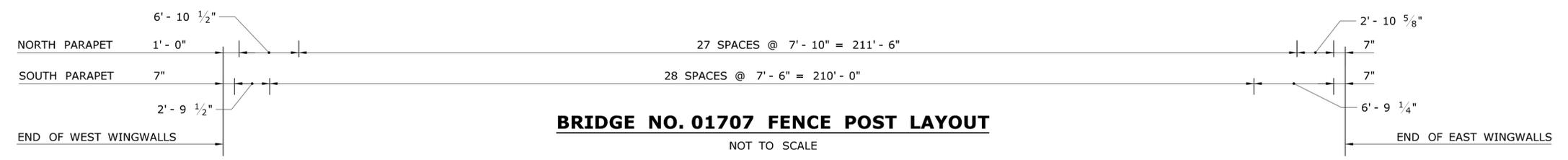
SLIDE RAIL
SCALE: 1 1/2" = 1'-0"



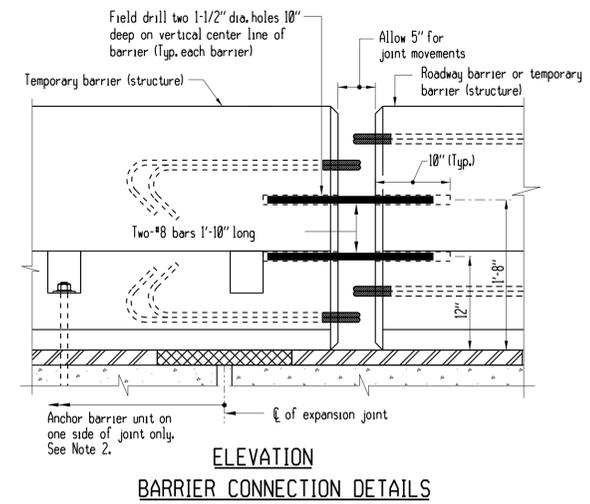
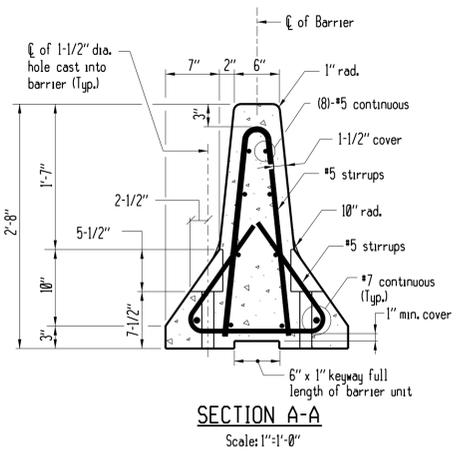
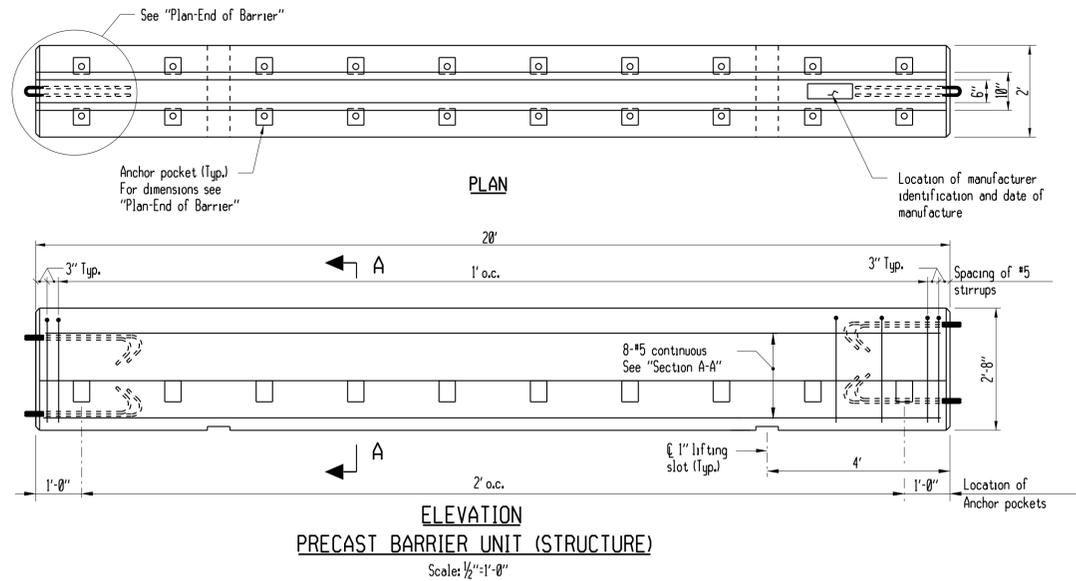
BASE PLATE
SCALE: 1 1/2" = 1'-0"

NOTES:

1. SINCE THE FINISHED PROTECTIVE FENCE MUST MEET ALL REQUIREMENTS OF FIT, ALIGNMENT, GRADE AND VERTICALITY OF THE POST TO THE FULL SATISFACTION OF THE ENGINEER, IT IS SUGGESTED THAT COMPLETE FIELD MEASUREMENTS BE MADE BEFORE ANY SHOP FABRICATION IS PERFORMED.
2. ALL FENCE MATERIALS SHALL CONFORM TO THE GENERAL SPECIFICATIONS. ANCHOR BOLTS SHALL BE STAINLESS STEEL.
3. ALL FENCE POSTS SHALL BE SET PLUMB.
4. LOCATE SLIDE RAILS AT ALL EXISTING BRIDGE EXPANSION JOINTS.



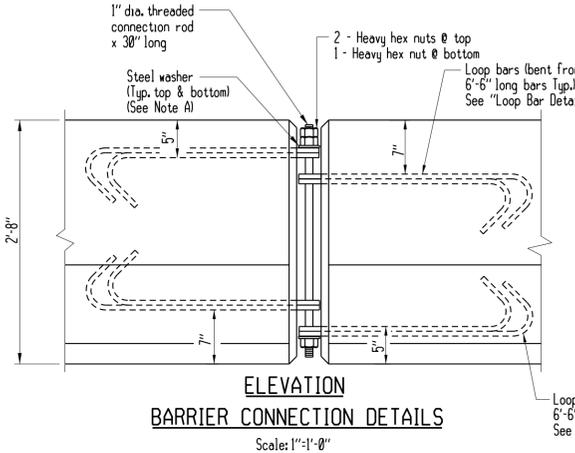
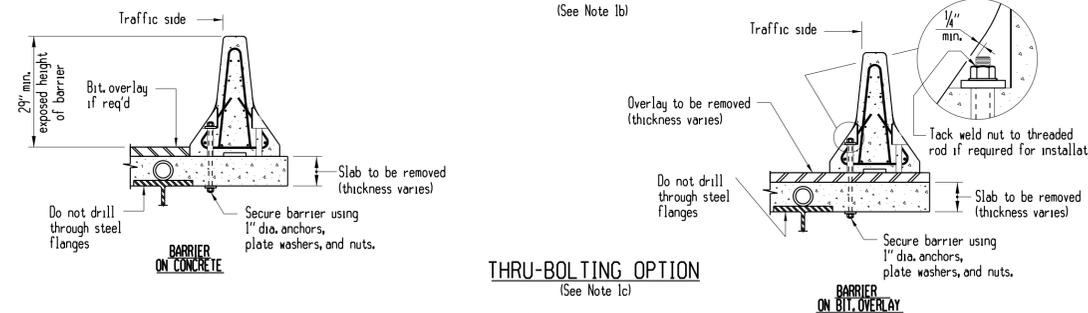
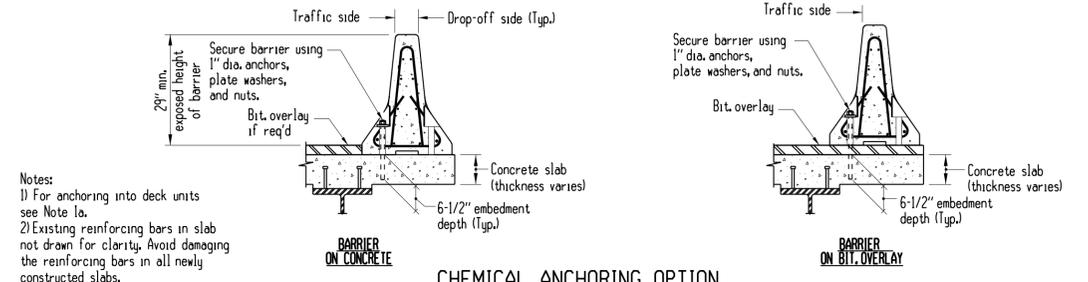
DESIGNER/DRAFTER: D.P. WURST	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>	<p>Weston & Sampson 273 Divisend Road, Rocky Hill, CT 06067 (860) 513-1473 (800) 5AMPSOHN www.westonandsampson.com</p>	PROJECT TITLE: RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2	TOWN: GLASTONBURY	PROJECT NO. 53-186
CHECKED BY: A.L. NAFIS					DRAWING NO. S-10
SCALE AS NOTED	Plotted Date: 3/13/2013	Filename: ...SB_MSH_0053_0186_06_10_FENCE_DETAILS.dgn			SHEET NO. 04.10
REV. DATE REVISION DESCRIPTION SHEET NO.					



NOTES

- The temporary barrier shown on this sheet shall be anchored onto bridge decks (see "Temporary Anchorage System") when it is used to protect a vertical drop-off. The temporary anchorage system shall conform to the following:
 - Prestressed Deck Units: Threaded inserts shall be used for securing temporary barrier (structure) to prestressed deck units. The threaded inserts shall be cast into the deck units during fabrication and shall be located as required to accommodate the stage construction. See special provisions for additional information.
 - Chemical Anchoring: This consists of drilling holes in existing concrete, placing threaded anchors in the holes, and securing the anchors with a pre-approved chemical anchor material which conforms to M83.01-15 of the Standard Specifications. Hole diameter shall be determined by the manufacturer of the chemical anchoring material.
 - Through-Bolting: This consists of drilling through deck slabs and securing removable anchors on the underside with plate washers and nuts. Through-bolting is not permitted on new construction or prestressed concrete. Maximum hole size in slab = 1-1/2".
- Number of Anchors: On the traffic side of a typical barrier, anchors shall be installed in all pockets. At barrier units which straddle bridge expansion joints the anchor and connection details shall conform to Table "A".
- The work done on this sheet, with the exception of the delineators, shall be paid for under the item "Temporary Precast Concrete Barrier Curb (Structure)".

Case	Span Length Contributing to Movement at the Expansion Joint.	Method of End Connection to Abutting Barrier Unit. (Where movement will occur)	Anchor Requirements for the Barrier Unit which Straddles the Bridge Joint
I.	Up to 100'	Use 1" connection rod but do not over tighten the nuts and allow room for expansion around the rod and loops.	On one side of the joint only, install as many anchors as possible on the traffic side of the barrier. On the other side of the joint do not install anchors.
II.	100' to 400'	Field drill holes in ends of both units and connect with 2-#8 bars. For details see "Barrier Connection Details".	On one side of the joint only, install a total of 10 anchors. Fill the pockets on the traffic side before filling the pockets on the drop-off side. If this cannot be achieved see III below.
III.	Over 400' and barrier layouts which do not satisfy II.	To be designed by Contractor and reviewed by Engineer. Cost of designing and furnishing special barrier units or attachments paid for under "TPCBC (Structure)".	To be designed by Contractor and reviewed by Engineer. Cost of designing and furnishing special barrier units or attachments paid for under "TPCBC (Structure)".

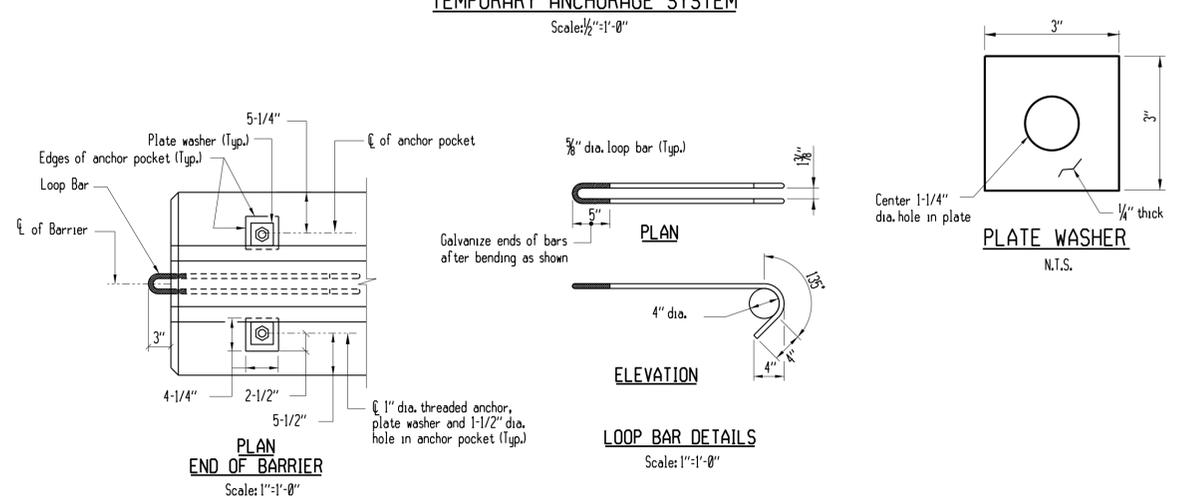
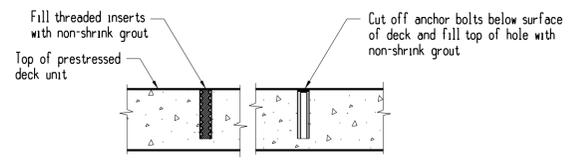


NOTES FOR CONNECTION ROD DETAILS (SEE "ELEVATION-BARRIER CONNECTION DETAILS")

A. Plain circular steel washers shall be manufactured with the following dimensions:
 Outside diameter = 2-3/4" (+1/4", -0")
 Inside diameter = 1-1/4" (+1/16", -0")
 Thickness = 3/16"

B. The nuts on the connection rod shall be turned until the bottom washer is drawn up against the loop bar. The loop bars shall not be bent due to the tightening process.

C. For ease of removal the threads on the connection rods and nuts shall be waxed.



ENCAPSULATED LENS REFLECTIVE SHEETING TO CONFORM TO ARTICLE M18.09

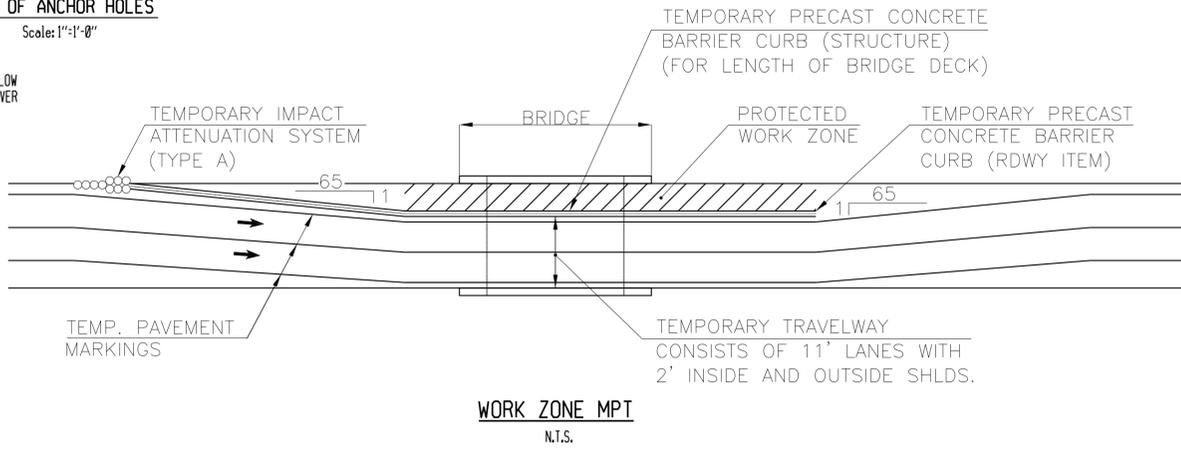
COLOR APPLICATION
 Left side of all roadways and ramps - YELLOW
 Right side of all roadways and ramps - SILVER

COLOR OF DELINEATORS
 DE-7A One Way Yellow
 DE-7 One Way Silver
 DE-7B Two Way Yellow
 DE-7C Silver/Yellow Back to Back

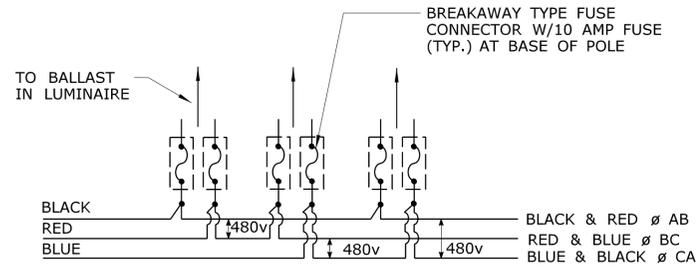
Delineators shall be mounted in the center of temporary barriers as required.

SPACING OF DELINEATORS
 On leading tapered sections - every unit (20').
 On the first 100' of parallel sections - every unit (20').
 On the remaining length - every fifth (5th) unit (100').
 Minimum of 2 if less than 100'.
 Alternating one way traffic - every unit (20').
 All other roadways shall be delineated in accordance with M.U.T.C.D.
 Paid for under Item "Delineators"

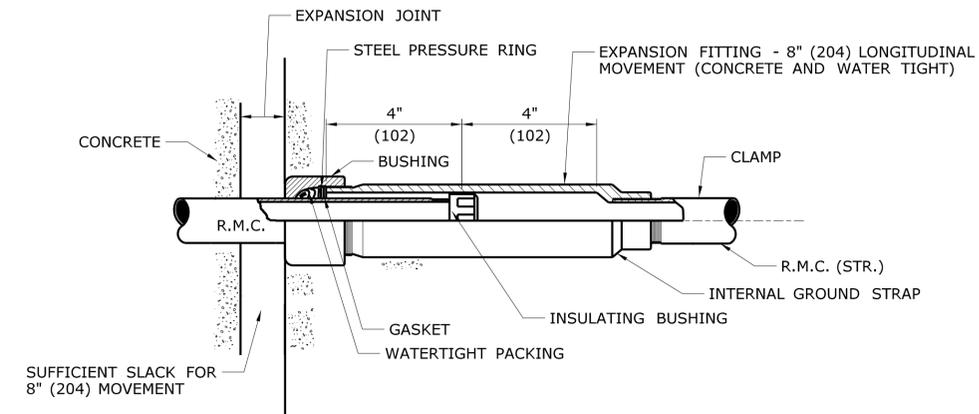
DELINEATORS
N.T.S.



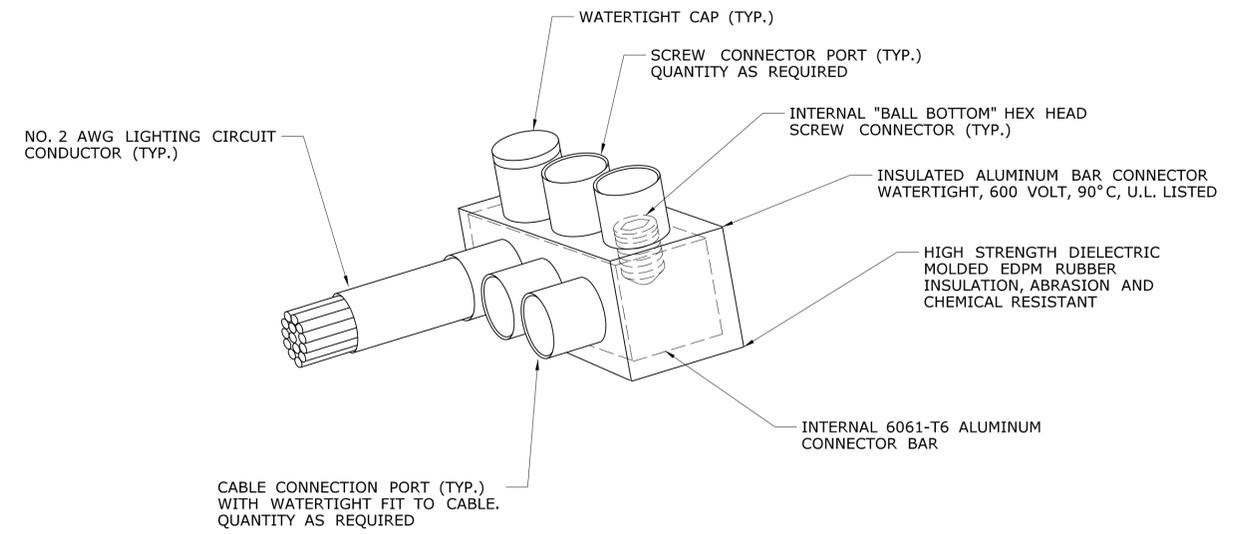
<p>DESIGNER/DRAFTER: D.P. WURST</p> <p>CHECKED BY: A.L. NAFIS</p> <p>SCALE AS NOTED</p>	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p>WESTON & SAMPSON 273 Divisend Road, Rocky Hill, CT 06067 (860) 515-1473 1800 SAMPSON www.westonandsampson.com</p>	<p>PROJECT TITLE: RESURFACING, BRIDGE, AND SAFETY IMPROVEMENTS ON RT. 2</p>	<p>TOWN: GLASTONBURY</p>	<p>PROJECT NO. 53-186</p>
<p>REV. DATE REVISION DESCRIPTION SHEET NO.</p>	<p>THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.</p> <p>Plotted Date: 3/13/2013</p>	<p>FILENAME: ...SB_MSH_0053_0186_06_11-TPCBC_DETAILS.dgn</p>	<p>DRAWING TITLE: TEMPORARY PRECAST CONCRETE BARRIER CURB</p>	<p>SHEET NO. S-11</p> <p>SHEET NO. 04.11</p>



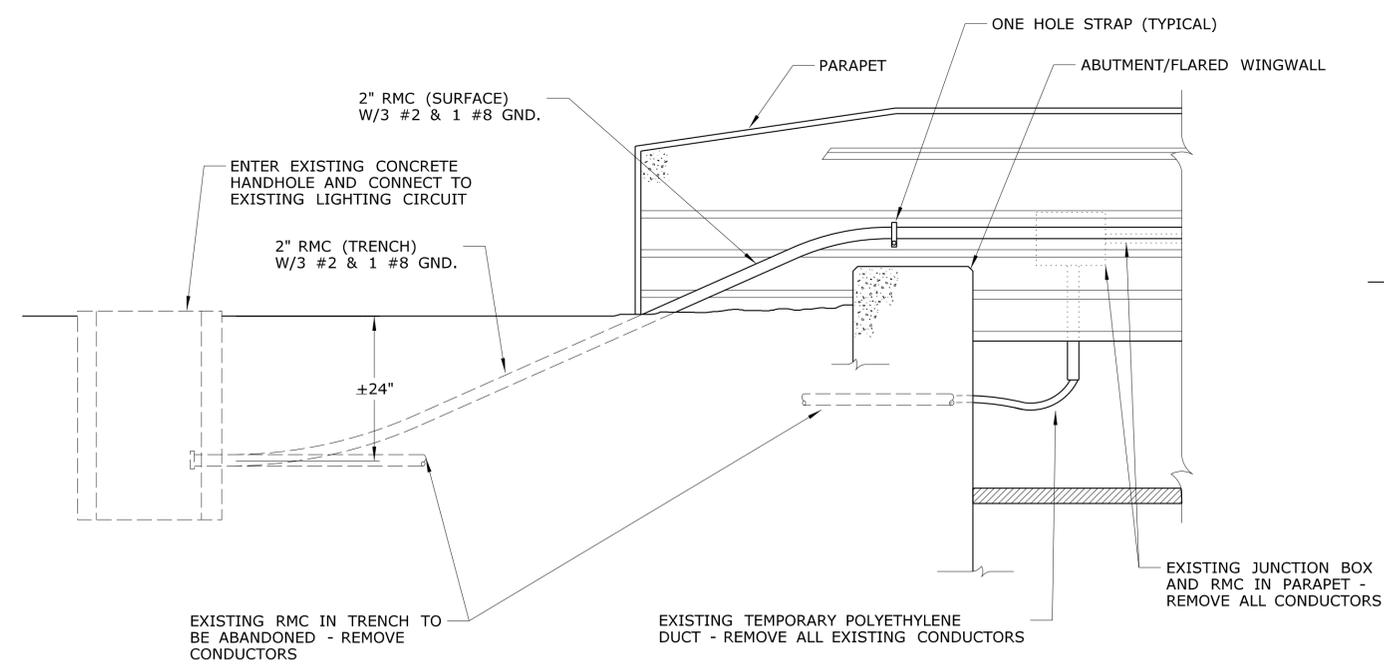
3 PHASE 3 WIRE SYSTEM



EXPANSION FITTING TYPE 1

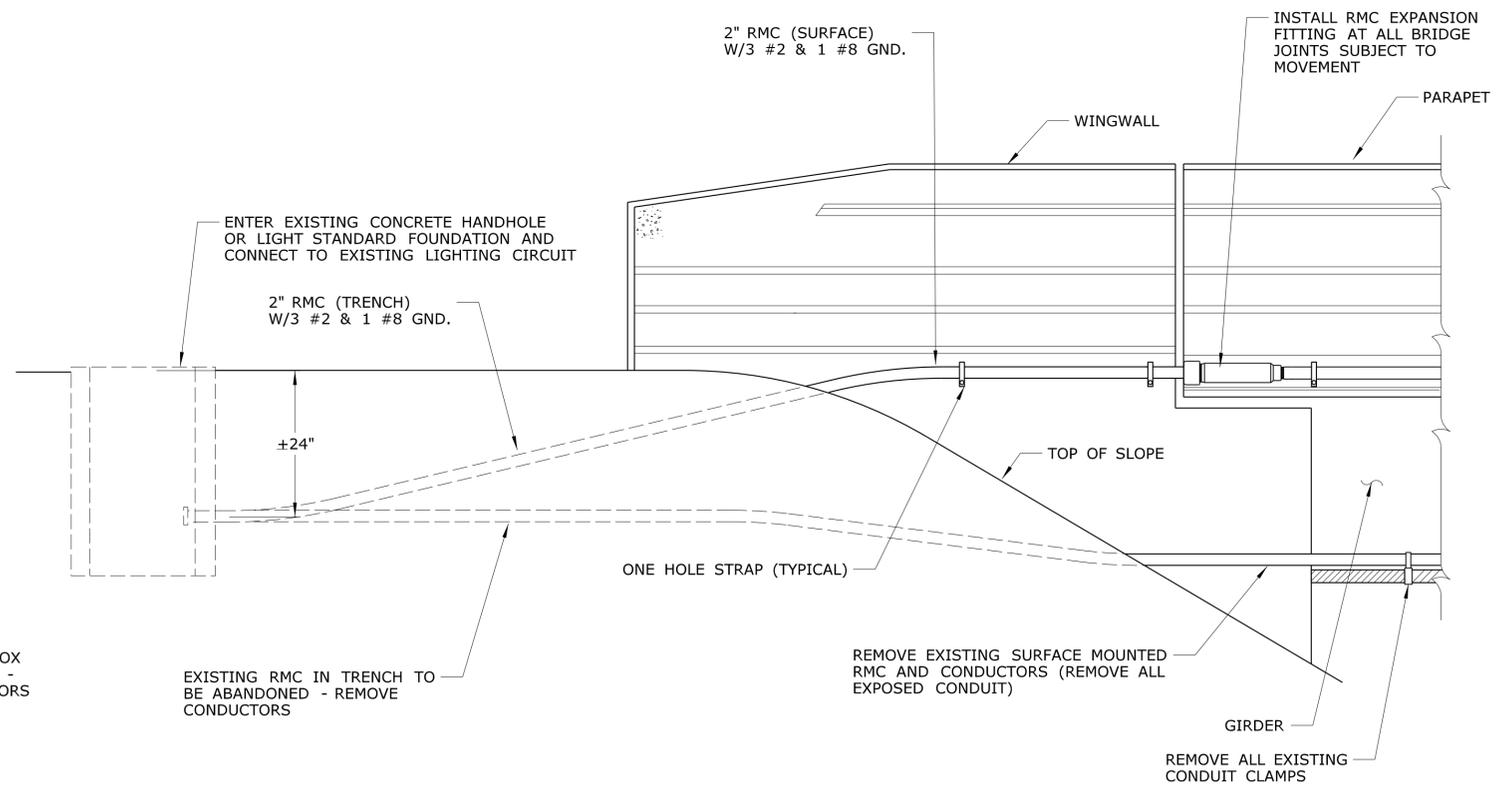


WATERTIGHT CONNECTOR
TO BE USED IN HANDHOLES



CONDUIT INSTALLATION AT BRIDGE NO. 01704B *

* SOUTHEAST CORNER SHOWN. INSTALLATION SIMILAR AT NORTHEAST CORNER OF STRUCTURE



CONDUIT INSTALLATION AT BRIDGE NOS. 01702 AND 01703

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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DESIGNER/DRAFTER: **MSB**
CHECKED BY: **JA**
NO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

File name: ...SB_MSH_0053_0186_06_12-ELECTRICAL_DETAILS.dgn

SIGNATURE/BLOCK:
Weston & Sampson
273 Dividend Road, Rocky Hill, CT 06067
(860) 515-1473 1800 SAMPSON
www.westonandsampson.com

PROJECT TITLE:
RESURFACING, BRIDGE AND SAFETY IMPROVEMENTS ON RT. 2

TOWN: **GLASTONBURY**
DRAWING TITLE:
ELECTRICAL DETAILS

PROJECT NO.: **53-186**
DRAWING NO.: **S-12**
SHEET NO.: **04.12**