

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISIONS.
2. THE BRIDGE IS DESIGNED FOR HL-93 LIVE LOADING.
3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
4. ITEM 653.50 "BARRIER FENCE" SHALL BE USED TO ESTABLISH A BARRIER AROUND HISTORIC FLOOD PLAQUE AND BOULDER LOCATED AT STA 27+19.87 OFFSET 29.88 FEET RIGHT FROM THE VT12 MAINLINE.
5. THE EXISTING STRUCTURAL STEEL IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED EXISTING STRUCTURAL STEEL.
6. DUE TO STABILITY CONCERNS AT THE ABUTMENTS DURING THE ERECTION OF THE SUPERSTRUCTURE, THE CONTRACTOR SHALL SUBMIT THE ERECTION PLAN A MINIMUM OF 30 WORKING DAYS PRIOR TO ERECTING THE SUPERSTRUCTURE.

EARTHWORK

7. REMOVAL OF THE EXISTING STRUCTURE SHALL BE PAID UNDER ITEM 529.15, "REMOVAL OF STRUCTURE". THIS WORK SHALL INCLUDE REMOVAL OF ANY PORTIONS OF THE EXISTING STRUCTURE THAT FALL OUTSIDE THE LIMITS OF ANY OF THE EXCAVATION ITEMS.
8. EXCAVATION OF SOILS TO THE LIMITS SHOWN ON THE TYPICAL ABUTMENT SECTION SHALL BE PAID FOR UNDER ITEM 204.25, "STRUCTURE EXCAVATION" AND ITEM 203.27, "UNCLASSIFIED CHANNEL EXCAVATION". ANY EXCAVATION OUTSIDE THESE LIMITS, WHICH IS NOT REMOVAL OF STRUCTURE, WILL BE AT THE CONTRACTOR'S EXPENSE.
9. "STONE FILL, TYPE IV" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE SUPERSTRUCTURE IS SET.
10. BACKFILL BEHIND THE ABUTMENTS SHALL NOT BE PLACED HIGHER THAN THE BRIDGE SEATS UNTIL THE ABUTMENTS AND DECK CONSTRUCTION ARE COMPLETED. THE DIFFERENCE IN ELEVATION OF FILL BEHIND THE ABUTMENTS AT ANY TIME DURING BACKFILLING OPERATIONS SHALL NOT EXCEED 2 FEET.
11. THE AREA DISTURBED BY THE TWO-WAY TEMPORARY BRIDGE SHALL BE SEEDED AND MULCHED AFTER ALL THE FILL IS REMOVED TO THE ORIGINAL GROUND SURFACE. THE COST OF THE SEED, FERTILIZER, ETC. WILL BE PAID FOR UNDER THEIR RESPECTIVE BID ITEMS.

CONCRETE AND REINFORCING STEEL

12. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH BY 1 INCH, UNLESS OTHERWISE NOTED.
13. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
14. ITEM 501.33, "HIGH PERFORMANCE CONCRETE, CLASS A" SHALL BE USED FOR THE DECK, CURBS AND INTEGRAL ABUTMENT CURTAIN WALL AND WING WALLS ABOVE THE PILE CAP CONSTRUCTION JOINT.
15. ITEM 501.34, "HIGH PERFORMANCE CONCRETE, CLASS B" SHALL BE USED FOR APPROACH SLABS AND ALL SUBSTRUCTURE BELOW THE PILE CAP CONSTRUCTION JOINT.
16. ITEM 514.10, "WATER REPELLENT, SILANE", SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON THE BRIDGE SUPERSTRUCTURE, INCLUDING THE CURBS, AND SUBSTRUCTURE, WITH THE EXCEPTION OF THE BOTTOM OF THE DECK BETWEEN THE DRIP NOTCHES.
17. THE TOP SURFACE OF THE PILE CAP SHALL BE GIVEN A FLOAT FINISH TO GRADE. THE CONCRETE WITHIN THE REINFORCING CAGE SHALL BE ROUGHENED BY RAKING PARALLEL TO THE FACE OF THE ABUTMENT TO AN AMPLITUDE OF 1/2 INCH. THE CONCRETE OUTSIDE THE REINFORCING CAGE SHALL REMAIN SMOOTH.
18. ALL REINFORCING STEEL IN THE DECK, CURBS, AND SUBSTRUCTURE ABOVE THE PILE CAP CONSTRUCTION JOINT, INCLUDING WINGWALLS, SHALL MEET THE REQUIREMENTS FOR LEVEL II CORROSION RESISTANCE IN ACCORDANCE WITH SECTION 507. ALL OTHER REINFORCING STEEL SHALL MEET THE REQUIREMENTS FOR LEVEL I CORROSION RESISTANCE. PAYMENT WILL BE MADE UNDER THE APPROPRIATE SECTION 507 CONTRACT ITEM.
19. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCE: +/- 1/4 INCH

STRUCTURAL STEEL

20. ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270/M 270, GRADE 50 AND SHALL BE PAID FOR UNDER ITEM 506.50 "STRUCTURAL STEEL, ROLLED BEAM (GALVANIZED)".
21. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
22. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.
23. BEAM WEBS AND DIAPHRAGMS SHALL BE PLUMB IN FINAL POSITION.
24. CONNECTIONS NOT SHOWN IN THE PLANS SHALL BE DETAILED BY THE FABRICATOR IN THE FABRICATION DRAWINGS.
25. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 726.08.
26. AFTER THE SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF BEAMS SHALL BE TAKEN FOR USE IN DETERMINING THE FINAL GRADE AND HAUNCH DEPTHS.
27. FLEMING BRACKETS OR SIMILAR FALSE WORK, AS REQUIRED BY DESIGN, SHALL HAVE A MAXIMUM SPACING OF 4'-0". THE BRACKETS SHALL BEAR NEAR THE BOTTOM FLANGE AND IN NO CASE SHALL THEY BEAR ABOVE THE BOTTOM QUARTER OF THE WEB. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
28. FILL ANY BOLT HOLES IN THE WEBS OF THE BEAMS NOT OTHERWISE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS MEETING AASHTO M164 TYPE I. TIGHTEN THE BOLTS IN ACCORDANCE WITH SUBSECTION 506.19.

H-PILES

29. TO PREVENT DAMAGE TO THE PILES, PILE SHOES ARE REQUIRED AND SHALL CONFORM TO SUBSECTION 505.04 (f).
30. A MINIMUM OF ONE DYNAMIC PILE TEST, ITEM 505.45 "DYNAMIC PILE LOADING TEST", SHALL BE CONDUCTED PER ABUTMENT. THE NOMINAL PILE DRIVING RESISTANCE FOR EACH PILE IS 432 KIPS. A PILE RESISTANCE FACTOR OF 0.65 WAS USED BASED ON THE DYNAMIC TESTING REQUIREMENT.
31. THE TOPS OF THE PILES AFTER DRIVING SHALL NOT VARY FROM THE POSITION SHOWN ON THE PLANS BY MORE THAN 3 INCHES. THE PILE ORIENTATION SHALL NOT VARY BY MORE THAN 5 DEGREES. THE CONTRACTOR SHALL DEMONSTRATE TO THE SATISFACTION OF THE ENGINEER HOW THE TOLERANCES WILL BE MET. THESE MEASURES SHALL BE DEMONSTRATED IN A SUBMITTAL TO BE ACCEPTED BEFORE PILE DRIVING COMMENCES.
32. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AND ARE SHOWN ON THE BORING LOGS. THE ACTUAL IN PLACE LENGTHS MAY VARY. PILES SHALL HAVE A MINIMUM EMBEDMENT OF 30 FT MEASURED FROM THE BOTTOM OF THE PILE CAP OR BE DRIVEN TO BEDROCK.
33. THE DAM SAFETY ENGINEER OF THE AGENCY OF NATURAL RESOURCES SHALL BE NOTIFIED AT LEAST 5 DAYS PRIOR TO ANY PILE DRIVING ACTIVITY.
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TRAFFIC CONTROL

34. TRAFFIC SHALL BE MAINTAINED ON A TWO-WAY TEMPORARY BRIDGE PLACED DOWNSTREAM OF THE EXISTING BRIDGE.
35. THE TEMPORARY BRIDGE APPROACHES SHALL BE PAVED.
36. FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL."
37. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. WHERE CONFLICTS EXIST BETWEEN THE MUTCD AND THE PLANS, THE MUTCD SHALL GOVERN. FOR ADDITIONAL SIGNING DETAILS AND REQUIREMENTS SEE THE T SERIES OF THE CONTRACT STANDARD DRAWINGS.

PROJECT NAME: MIDDLESEX
PROJECT NUMBER: BRF 024-1(37)

FILE NAME: sl0c220gen.dgn	PLOT DATE: 06-FEB-2015
PROJECT LEADER: C. CARLSON	DRAWN BY: C. BURRALL
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PROJECT NOTES	SHEET 5 OF 46