

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SIXTEENTH EDITION, AND ITS LATEST REVISIONS.
2. BRIDGE IS DESIGNED FOR MS 22.5 LIVE LOAD WITH NO ALLOWANCE FOR FUTURE PAVEMENT.
3. IN-STREAM CONSTRUCTION SHALL BE RESTRICTED TO JUNE 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO DO WORK OUTSIDE OF THAT TIME FRAME.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE, INTO ANY BROOK, STREAM OR RIVER.
5. THE COST OF INSTALLING, MAINTAINING, AND REMOVING SIGNS & BARRICADES NOT SHOWN ON SHEET 14 "DETOUR PLAN & TRAFFIC CONTROL SHEET", OR AS DEEMED NECESSARY BY THE RESIDENT ENGINEER, WILL BE INCIDENTAL TO ITEM 635.11 - MOBILIZATION-DEMOBILIZATION.
6. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20 DEGREES CELSIUS UNLESS OTHERWISE NOTED.
7. ITEM 529.15 "REMOVAL OF STRUCTURE" SHALL BE USED FOR REMOVAL OF EXISTING STRUCTURE INCLUDING THE SUPERSTRUCTURE AND ANY PORTIONS OF THE SUBSTRUCTURE OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION. THE EXISTING ABUTMENTS SHALL BE REMOVED TO THE GROUND ELEVATION. IF PORTIONS OF THE EXISTING ABUTMENTS (FOOTING, WOOD PILES, ETC.) BELOW THE GROUND SURFACE ARE INTERFERING WITH THE PLACEMENT OF THE INTEGRAL ABUTMENT PILES, THEY SHALL BE REMOVED UNDER ITEM 529.15 "REMOVAL OF STRUCTURE."
8. THE EXISTING STRUCTURAL STEEL ON THIS PROJECT WAS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. THE REMOVED STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTORS USE OR DISPOSITION OF THE STEEL.
9. EXISTING SIGNS NOT REUSED SHALL REMAIN THE PROPERTY OF THE STATE OF VERMONT. THESE SIGNS SHALL BE STOCKPILED ON THE PROJECT AND THEN LOADED ON A TRUCK SUPPLIED BY THE DISTRICT. CONTACT THE DISTRICT 6 AT 828-2691 TO ARRANGE REMOVAL OF THE SIGNS FROM THE PROJECT.

STONE FILL

10. THE STONE FILL, TYPE IV SHALL BE PLACED IN FRONT OF THE ABUTMENTS BEFORE THE BEAMS ARE SET.
11. UNTIL THE BEAMS ARE SET, THE FILL IN FRONT AND BEHIND THE ABUTMENT WILL BE THE SAME ELEVATION.
12. BACKFILL BEHIND ABUTMENT 1 AND ABUTMENT 2 SHALL BE PLACED AND COMPACTED IN A MANNER TO LIMIT THE DIFFERENCE IN ELEVATION OF FILL BEHIND THE ABUTMENTS TO 600 mm.
13. NOTE NOT USED

14. NOTE NOT USED

15. NOTE NOT USED

CONCRETE

16. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO 600mm BELOW THE THEORETICAL BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND THE CURING PERIOD IS COMPLETED.
17. NO TRAFFIC SHALL BE ALLOWED ON THE NEW DECK UNTIL THE CURE PERIOD IS COMPLETED AND THE 28 DAY DESIGN STRENGTH IS ATTAINED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.
18. THE KEY-IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
19. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25 mm BY 25 mm.
20. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
21. ALL REINFORCING STEEL SHALL BE EPOXY COATED. WHEN EPOXY COATED REINFORCING STEEL IS CUT THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REINFORCING STEEL WILL NOT BE PERMITTED.
22. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING + - 25 mm
CLEARANCE + - 5 mm
23. MINIMUM COVER FOR REINFORCING STEEL SHALL BE 50 mm ALONG THE BACK FACES OF WALLS AGAINST EARTH, 60 mm ALONG THE TOP SURFACE OF THE DECK, 40 mm ALONG THE BOTTOM SURFACE OF THE DECK AND 80 mm ELSEWHERE. UNLESS OTHERWISE NOTED.
24. FOR BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ANY ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM OF 96 HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF OTHER ADJACENT POURS. ALL INDIVIDUAL DECK POURS SHALL START FROM THE LOW END OF THE BRIDGE. THE POUR SEQUENCE SHALL FOLLOW THAT SHOWN ON SHEET 36.
25. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP BEADS.
26. NO CONCRETE IN THE ABUTMENTS OR WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT ELEVATIONS UNTIL THE BEAMS/GIRDERS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.
27. ALL SUBSTRUCTURE CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE NOTED.
28. THE DECK SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A.
29. THE CURBS SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A.

STRUCTURAL STEEL

30. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
31. ANY HOLES IN THE WEBS OF THE FASCIA BEAMS/GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH VERMONT SPECIFICATION 506.19.
32. ALL FIELD CONNECTIONS SHALL BE MADE WITH 22 mm DIAMETER AASHTO DESIGNATION M 164M TYPE III BOLTS IN 24 mm DIAMETER HOLES.
33. FLEMING BRACKETS OR SIMILAR FALSE WORK SHALL BE PLACED AT A MAXIMUM SPACING OF 1.2 m.
34. AFTER THE SUPERSTRUCTURE HAS BEEN SET ON THE ANCHOR BOLTS, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE BEAMS/GIRDERS, AS DIRECTED BY THE RESIDENT ENGINEER, FOR USE

IN DETERMINING THE FINISHED GRADE.

TEMPORARY DETOUR

35. DURING CONSTRUCTION TRAFFIC SHALL BE MAINTAINED ON A TWO-WAY, TWO LANE TEMPORARY BRIDGE LOCATED DOWNSTREAM OF THE EXISTING STRUCTURE. THE CONTRACTOR SHALL NOTIFY THE TOWN OF DUXBURY A MINIMUM OF TWO WEEKS IN ADVANCE OF DIVERTING TRAFFIC TO THE TEMPORARY BRIDGE. THE DUXBURY TOWN OFFICE MAY BE REACHED BY TELEPHONE AT (802) 244-6660.
36. THE ROADWAY APPROACHES TO THE TEMPORARY BRIDGE WILL BE PAVED.
37. THE CONTRACTOR SHALL ERECT, MAINTAIN, AND REMOVE ALL TEMPORARY SIGNS & TEMPORARY BARRICADES AS SHOWN ON SHEET 14 " DETOUR PLAN & TRAFFIC CONTROL SHEET". PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO ITEM 528.11 - TWO-WAY TEMPORARY BRIDGE - 110 SM-EST".
38. WHERE EXISTING PAVEMENT MARKING ARE NOT APPROPRIATE TO THE MOVEMENT OF TRAFFIC THROUGH THE CONSTRUCTION AREA, THEY SHALL BE REMOVED IN A MANNER APPROVED BY THE RESIDENT ENGINEER. TEMPORARY PAVEMENT MARKING SHALL BE APPLIED AS CALLED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
39. THE EXPOSED ENDS OF THE TEMPORARY BARRIERS SHALL BE PLACED BEYOND THE CLEAR ZONE OR PROTECTED BY AN APPROPRIATE CRASH CUSHION OR IMPACT ATTENUATOR AS OUTLINED IN AASHTO'S "ROAD SIDE DESIGN GUIDE."
40. ALL EXISTING SIGNS NOT REUSED SHALL REMAIN THE PROPERTY OF THE TOWN OF DUXBURY. THE CONTRACTOR SHALL STOCKPILE THESE ITEMS AT THE PROJECT SITE FOR REMOVAL BY TOWN FORCES. THE CONTRACTOR SHALL CONTRACT THE TOWN OFFICE WHEN THESE ITEMS ARE READY FOR REMOVAL FROM THE PROJECT SITE.

PILES

41. THE PILES SHALL BE 310 x 125 AASHTO M 223 GRADE 345. NO SUBSTITUTIONS FOR NUMBER, SIZE AND GRADE OF THE PILES WILL BE ALLOWED.
42. THE PILES WILL REQUIRE PILE SHOES. THE SHOES SHALL BE CAST STEEL AND SHALL CONFORM TO VAOT STANDARD SPECIFICATIONS NO. 505.04 AND 730.01
43. THE PILE SPLICING SEQUENCE SHOULD BE ARRANGED TO PRECLUDE SPLICES FROM THE 6 m SECTION BELOW THE FOOTING.
44. TO AID IN THE PROPER PILE PLACEMENT/ALIGNMENT, EACH PILE MAY BE PLACED IN A PRE-EXCAVATED HOLE. THE HOLE WILL BE AUGERED 2.2 METERS BELOW THE BOTTOM OF THE FOOTING PRIOR TO DRIVING THE PILES. AFTER DRIVING THE PILE, THE HOLE WILL BE BACKFILLED WITH MATERIAL MEETING THE REQUIRMENTS FOR PEASTONE, AS INDICATED IN SUBSECTION 704.11 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
45. PILE HEAD CUTOFF ELEVATIONS SHALL BE WITHIN 60MM OF THE ELEVATION DETAILED ON THE CONTRACT PLANS. THE PILE AT THE CUTOFF ELEVATION SHALL BE FREE FROM DRIVING DAMAGE AS DETERMINED BY THE RESIDENT ENGINEER. NO PILE SHALL BE NEARER THAN 150 mm FROM THE FACE OF THE CONCRETE STEM. THE PILES SHALL BE WITHIN 5 DEGREES FROM VERTICAL IN ITS FINAL POSITION. THE RESIDENT ENGINEER MAY REQUIRE THAT THE DRIVING BE STOPPED TO CHECK THE PILE ALIGNMENT. PULLING Laterally ON THE PILE TO CORRECT MISALIGNMENT, OR SPLICING A PROPERLY ALIGNED SECTION ON A MISALIGNED SECTION SHALL NOT BE ALLOWED. THE CONTRACTOR SHALL BEAR ALL COSTS, INCLUDING DELAYS, ASSOCIATED WITH NECESSARY CORRECTIVE ACTION TO BRING MISALIGNED PILES INTO THE TOLERANCES DESCRIBED ABOVE.
46. THE PILES SHALL BE DRIVEN TO LEDGE WITH AN ULTIMATE CAPACITY OF 1368 KILONEWTONS AS DETERMINED BY THE RESIDENT ENGINEER.
47. FOR ESTIMATING PURPOSES, THE PILE LENGTHS HAVE BEEN ASSUMED TO BE 10.0 METERS. ACTUAL IN PLACE LENGTHS MAY VARY.

PROJECT NAME:	DUXBURY		
PROJECT NUMBER:	STP 013-4(24)		
FILE NAME:	/PW/86e059/se059gen.xls	PLOT DATE:	10/12/2005
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