

GENERAL

- 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AND ITS LATEST REVISIONS, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION, DATED 2010 AND ITS LATEST REVISIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS THIRD EDITION, DATED 2010 AND ITS LATEST REVISIONS.
- 2. THE BRIDGE WAS DESIGNED FOR THE HL-93 LIVE LOAD.
- 3. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE" SHALL BE USED FOR REMOVAL OF THE EXISTING STRUCTURE INCLUDING THE SUPERSTRUCTURE, PIERS AND ANY PORTION OF THE ABUTMENTS OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION. THE PIERS SHALL BE REMOVED TO STREAMBED ELEVATION.
- 4. THERE ARE 3 DROP INLETS INSIDE THE PROJECT AREA; THEY WILL NEED TO BE PROTECTED DURING CONSTRUCTION. PAYMENT FOR THE ADJUSTMENT OF ELEVATION OF ANY DROP INLET TO MATCH THE NEW FINAL GRADE WILL BE MADE UNDER ITEM 604.40 "CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES". THE DROP INLETS SHALL BE CLEANED AND FLUSHED AT THE END OF THE PROJECT. PAYMENT FOR CLEANING AND FLUSHING WILL BE CONSIDERED INCIDENTAL TO ALL OTHER CONTRACT ITEMS.
- 5. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- 6. THE TEMPORARY BRIDGE APPROACHES SHALL BE PAVED.

EARTHWORK AND RELATED ITEMS

- 7. TEMPORARY CONSTRUCTION FILLS WITHIN THE WATERCOURSE FOR ANY PURPOSE SHALL CONSIST OF CLEAN STONE FILL ONLY. NO OTHER FILLING IN THE STREAM SHALL OCCUR WITHOUT THE APPROVAL OF THE STREAM ALTERATION ENGINEER. THE STONE FILL, TYPE III SHALL BE PLACED IN FRONT OF THE ABUTMENTS BEFORE THE STEEL GIRDERS ARE SET.
- 8. THE BACKFILL BEHIND THE ABUTMENTS SHALL NOT BE PLACED HIGHER THAN THE BRIDGE SEAT UNTIL THE ABUTMENT AND DECK CONSTRUCTION IS COMPLETED. THE DIFFERENCE IN ELEVATION OF FILL BEHIND THE TWO ABUTMENTS AT ANY TIME DURING BACKFILLING OPERATIONS SHALL NOT EXCEED 2 FEET.

STRUCTURAL STEEL

- 9. 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.
- 10. THE PILES SHALL BE HP 12 X 84.
- 11. PILE SHOES SHALL BE REQUIRED AND SHALL CONFORM TO SUBSECTION 505.04.
- 12. TO ENSURE THAT THE NOMINAL CAPACITY HAS BEEN ATTAINED AND TO PREVENT THE OVERSTRESSING OF THE PILES DURING DRIVING OPERATIONS, DYNAMIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 505.04 OF THE STANDARD SPECIFICATIONS. PAYMENT FOR PILE TESTING SHALL BE MADE UNDER ITEM 505.45 "DYNAMIC PILE LOADING TEST". A MINIMUM OF ONE DYNAMIC PILE TEST SHALL BE CONDUCTED ON THE FIRST PILE DRIVEN FOR EACH SUBSTRUCTURE UNIT, FOR A TOTAL OF 2 TESTS. MORE TESTS MAY BE REQUIRED BY THE RESIDENT ENGINEER.
- 13. THE PILES SHALL BE DRIVEN TO A NOMINAL RESISTANCE OF 486 KIPS, AS DETERMINED BY THE RESULTS OF DYNAMIC TESTING, AS INTERPRETED BY THE RESIDENT ENGINEER. HOWEVER, THE PILES SHALL BE DRIVEN TO A MINIMUM DEPTH OF 35 FEET BELOW THE BOTTOM OF STEM ELEVATION.
- 14. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED TO BE AS SHOWN ON THE BORING LOGS SHEET IN THE PLANS. THE ACTUAL IN PLACE LENGTH MAY VARY.
- 15. UNLESS OTHERWISE NOTED, ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270M/M 270 GRADE 50 AND SHALL BE PAID FOR UNDER ITEM 506.55 "STRUCTURAL STEEL, PLATE GIRDER". ALL NEW STRUCTURAL STEEL SHALL BE PAINTED BROWN (COLOR CHIP #20059)
- 16. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.

- 17. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.
- 18. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN, BUT SHALL BE LIMITED TO A MAXIMUM SPACING OF 4 FEET. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 19. ANY BOLT HOLES IN THE WEBS OF FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.
- 20. ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY FOR PLACING THE PILES IN THEIR ACCEPTED FINAL POSITION SHALL BE CONSIDERED INCIDENTAL TO ITEM 505.165 "STEEL PILING, HP 12 X 84." THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE METHOD OF DRIVING FOR APPROVAL BY THE RESIDENT ENGINEER.
- 21. THE PRE-EXCAVATION OF PILES MAY BE NEEDED ON THIS PROJECT. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 900.640 "SPECIAL PROVISION (OBSTRUCTION REMOVAL FOR DRIVING PILES)".

CONCRETE

- 22. APPROACH SLABS AND SUBSTRUCTURE CONCRETE BELOW CONSTRUCTION JOINT SHALL BE HIGH PERFORMANCE CLASS B AND SHALL BE PAID FOR UNDER ITEM 501.34 "CONCRETE, HIGH PERFORMANCE CLASS B". THE DECK, INCLUDING SUBSTRUCTURE CONCRETE ABOVE CONSTRUCTION JOINT, SHALL BE HIGH PERFORMANCE CLASS A AND SHALL BE PAID FOR UNDER ITEM 501.33 "CONCRETE, HIGH PERFORMANCE CLASS A".
- 23. CONCRETE PORTIONS OF ABUTMENTS AND WINGWALLS ABOVE ADJACENT BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL FINISH GRADES HAVE BEEN DETERMINED BY THE RESIDENT ENGINEER.
- 24. LOADING ALLOWANCE ON THE NEW DECK SHALL BE IN ACCORDANCE WITH SUBSECTION 501.18(B) OF THE STANDARD SPECIFICATIONS.
- 25. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH X 1 INCH.
- 26. ITEM 514.10 "WATER REPELLENT, SILANE", SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.
- 27. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
- 28. 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.
- 29. ALL REINFORCING STEEL ABOVE THE CONSTRUCTION JOINT WILL BE CORROSION PROTECTION LEVEL III AND ALL REINFORCING STEEL BELOW THE CONSTRUCTION JOINT AND IN APPROACH SLABS WILL BE CORROSION PROTECTION LEVEL I. PAYMENT WILL BE MADE UNDER THE APPROPRIATE SECTION 507 CONTRACT ITEM.
- 30. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCE: +/- 1/4 INCH
- 31. INDIVIDUAL POUR SEGMENTS ARE TO BE PLACED IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF A POUR SEGMENT CANNOT BE PLACED IN THE EIGHT HOUR PERIOD, A CONSTRUCTION JOINT SHALL BE USED. A 96 HOUR DELAY BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF ANY OTHER ADJACENT POUR SHALL BE OBSERVED.
- 32. THE ABUTMENT AND WINGWALL CONCRETE ABOVE HORIZONTAL CONSTRUCTION JOINTS SHALL BE PLACED MONOLITHICALLY WITH DECK POURS.

TRAFFIC CONTROL

- 33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A DETAILED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR ALL STAGES OF CONSTRUCTION. NO WORK SHALL BEGIN UNTIL THE TRAFFIC CONTROL PLAN HAS BEEN APPROVED. SEE CONTRACT SPECIAL PROVISIONS FOR DETAILS. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".

- 34. ALL WORK ASSOCIATED WITH THE INSTALLATION AND REMOVAL OF THE TEMPORARY BRIDGE AND ITS APPROACHES, INCLUDING TEMPORARY TRAFFIC BARRIER, PAVEMENT, AND PAVEMENT MARKINGS WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 528.11 "TWO-WAY TEMPORARY BRIDGE".
- 35. ANY TEMPORARY MEANS OF SUPPORTING FILL SHALL BE INCIDENTAL TO THE ITEM 528.11 "TWO-WAY TEMPORARY BRIDGE". CONSTRUCTION DRAWINGS SHALL BE REQUIRED AS PER SUBSECTION 105.03.
- 36. PAYMENT FOR ALL ON AND OFF-PROJECT CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES, INCLUDING DRUMS AND BARRICADES, WILL BE PAID FOR UNDER ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
- 37. THE CONTRACTOR SHALL ADD SIGN G20-5AP TO THE TOP OF ALL TEMPORARY SPEED LIMIT SIGNS AS DETAILED IN THE MUTCD.
- 38. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION ON A TWO-WAY TEMPORARY BRIDGE WITH PAVED APPROACHES CONSTRUCTED UPSTREAM OF THE EXISTING STRUCTURE. THE TWO-WAY TEMPORARY BRIDGE WILL BE PAID FOR UNDER ITEM 528.11 "TWO-WAY TEMPORARY BRIDGE".
- 39. MAINTAIN FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS AT ALL TIMES. IF THE CONTRACTOR MUST RESTRICT ACCESS, THEN THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS IN ADVANCE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
- 40. FLAGGERS AND UNIFORM TRAFFIC OFFICERS WILL BE PAID FOR SEPARATELY UNDER THEIR INDIVIDUAL PAY ITEM.

PROJECT NAME:	ST. JOHNSBURY
PROJECT NUMBER:	BRF 028-4(25)S
FILE NAME:	s98b320gen.dgn
PROJECT LEADER:	C. CARLSON
DESIGNED BY:	H. SALLS
PROJECT NOTES	
PLOT DATE:	28-AUG-2012
DRAWN BY:	R. PELLETT
CHECKED BY:	C. CARLSON
SHEET	3 OF 62