

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION, AND ITS LATEST REVISIONS.
2. DURING CONSTRUCTION, TRAFFIC SHALL BE MAINTAINED ON A ONE-WAY TEMPORARY BRIDGE CONSTRUCTED UP STREAM OF THE EXISTING STRUCTURE. THE TEMPORARY BRIDGE SHALL NOT BE OPENED TO TRAFFIC UNTIL APRIL 1ST 2013 WITHOUT WRITTEN APPROVAL FROM THE AGENCY. CONSTRUCTION AND MAINTENANCE OF THE TEMPORARY BRIDGE AND ITS APPROACHES SHALL BE PAID FOR UNDER ITEM 528.10, "ONE-WAY TEMPORARY BRIDGE." THE APPROACHES TO THE TEMPORARY BRIDGE SHALL BE PAVED. ACCESS TO ALL DRIVES WITHIN PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, AS DIRECTED BY THE RESIDENT ENGINEER AND SECTION 105.
4. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.
5. THE DETAILS AND DIMENSIONS SHOWN ON THE PROJECT SPECIFIC PLAN AND DETAIL SHEETS TAKE PRECEDENCE OVER THE MORE GENERAL "STRUCTURES DETAIL SHEETS" PROVIDED AFTER THE PLAN SHEETS IN THE INDEX.
6. PLACEMENT OF THE NEW HYDRANT SHALL BE COORDINATED WITH THE TOWN.

EARTHWORK AND RELATED ITEMS

7. TEMPORARY CONSTRUCTION FILLS WITHIN THE WATERCOURSE FOR ANY PURPOSE SHALL CONSIST OF CLEAN STONE FILL AND ONLY UP TO THE ELEVATION INDICATED ON THE CHANNEL CROSS-SECTION DRAWINGS. NO OTHER FILLING IN THE RIVER SHALL OCCUR WITHOUT THE APPROVAL OF THE STREAM ALTERATION ENGINEER.
8. ITEM 529.15 "REMOVAL OF STRUCTURE" SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE EXISTING BRIDGE SUPERSTRUCTURE, AND PORTIONS OF EXISTING ABUTMENT 1 AND ABUTMENT 2 THAT INTERFERE WITH THE CONSTRUCTION OF THE NEW ABUTMENTS, EXISTING SEWER/WATER MAINS WITHIN THE BRIDGE LIMITS, AND THE REMOVAL OF THE PIER ABOVE THE ELEVATION PROVIDED ON THE PLAN AND ELEVATION. AND ANY EXCAVATION NOT SPECIFICALLY INCLUDED IN:
ITEM 203.15 COMMON EXCAVATION
ITEM 203.27 UNCLASSIFIED CHANNEL EXCAVATION
ITEM 204.20 TRENCH EXCAVATION EARTH
OR ITEM 204.25 STRUCTURE EXCAVATION
SHALL BE PAID FOR UNDER "REMOVAL OF STRUCTURE." REFER TO TYPICAL ABUTMENT SECTION.
9. THE COST OF THE TEMPORARY CAUSEWAY FOR REMOVAL OF THE EXISTING PIER SHALL BE INCIDENTAL TO PAY ITEM 529.15 "REMOVAL OF STRUCTURE."
10. REMOVAL OF THE EXISTING SEWER/WATER MAINS OUTSIDE OF THE BRIDGE LIMITS WILL BE PAID FOR UNDER "TRENCH EXCAVATION OF EARTH".
11. ITEM 613.13 "STONE FILL, TYPE IV" SHALL BE PLACED UNDER THE BRIDGE (AS SHOWN IN THE PLANS) BEFORE THE NEW STRUCTURAL STEEL IS SET.
12. THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN ON THE PLANS. THE SUBBASE MATERIAL SHALL BE THE TYPE SPECIFIED AND PLACED AS REQUIRED. IF THIS SUBSTITUTION IS MADE, A GEOTEXTILE MEETING THE REQUIREMENTS OF SECTION 649 FOR "GEOTEXTILE FOR ROAD BED SEPARATOR" SHALL BE PLACED BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH SUBSTITUTION (INCLUDING GEOTEXTILE) WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 203.31 "SAND BORROW."
13. THE HEIGHT OF THE FILL BEHIND THE NEW ABUTMENTS SHALL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND CURED.

STRUCTURAL STEEL

14. 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.

15. UNLESS OTHERWISE NOTED, ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270M/M270 GRADE 345W AND SHALL BE PAID FOR UNDER ITEM 506.55, "STRUCTURAL STEEL, PLATE GIRDER".
16. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01.
17. ALL FIELD CONNECTIONS SHALL BE MADE USING M22 BOLTS MEETING ASTM A325, TYPE 3. UNLESS OTHERWISE NOTED, HOLE DIAMETER SHALL BE 24MM. IN PAINTED AREAS ALL FIELD CONNECTIONS SHALL BE MADE WITH M22, TYPE 1 BOLTS MEETING THE REQUIREMENTS OF ASTM A325. ALL TYPE 1 BOLTS SHALL BE GALVANIZED PER AASHTO M232M/M232. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
18. 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.
19. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN, BUT SHALL BE LIMITED TO A MAXIMUM SPACING OF 1.22 M. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND REMOVAL OF FALSEWORK WITH THE RELOCATION OF THE SEWER AND WATER LINES. BOTTOM SUPPORT OF FLEMING BRACKET OR FALSEWORK SHALL BE NO HIGHER THAN ¼ OF THE WEB DEPTH MEASURED FROM THE BOTTOM FLANGE.
20. 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.
21. THE ENDS OF GIRDERS ARE TO BE VERTICAL IN FINAL POSITION.
22. THE NORTHERN ENDS OF THE 5 GIRDERS SHALL BE PAINTED FOR A DISTANCE OF 3.0 M FROM ABUTMENT #2. ALL CROSS FRAMES, DIAPHRAGM CONNECTION PLATES, DOWNSPOUTS AND BEARING STIFFENERS LOCATED WITHIN THIS ZONE SHALL ALSO BE PAINTED. THE PAINT SYSTEM UTILIZED SHALL CONFORM TO THE REQUIREMENTS OF SECTION 513 AND THE FINAL COLOR SHALL BE BROWN, COLOR CHIP NO. 20059 IN CONFORMANCE WITH SUBSECTION 708.03. BROWN GREASE, CONFORMING TO SUBSECTION 708.04, SHALL BE APPLIED PER SUBSECTION 513.06 TO THE SPECIFIED SURFACES WITHIN THE 3.0M ZONE.
23. BRIDGE DOWNSPOUTS, WITH THE EXCEPTION OF PAINTING SHALL BE PAID FOR UNDER ITEM 506.60, "STRUCTURAL STEEL".

ELASTOMERIC BEARINGS AND ANCHOR BOLTS

24. ELASTOMERIC BEARING SHALL COMPLY WITH THE REQUIREMENTS OF SUBSECTION 731.03 AND BE PAID FOR UNDER ITEM 531.11.
25. ANCHOR BOLTS FOR BEARINGS SHALL MEET THE REQUIREMENTS OF AASHTO M314, (ASTM F1554), 380 MPa (55ksi).

CONCRETE

26. SUBSTRUCTURE AND APPROACH SLAB CONCRETE SHALL BE HIGH PERFORMANCE CLASS B AND SHALL BE PAID FOR UNDER ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". THE BRIDGE DECK INCLUDING BACK WALLS, APPROACH SLAB BRACKETS AND SIDEWALK CONCRETE SHALL BE SPECIAL PROVISION HIGH PERFORMANCE CONCRETE CLASS A LOW CEMENT AND SHALL BE PAID FOR UNDER ITEM 900.608, "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT)". REFER TO SPECIAL PROVISIONS FOR CONCRETE FOR BRIDGE RAILING. (ALL CONCRETE/GROUT FOR MICROPILES IS COVERED BY A SPECIAL PROVISION, SEE NOTE 36.)
27. ALL BRIDGE RAILING SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH THE SPECIAL PROVISION 900.640, "(BRIDGE RAILING, GALVANIZED STEEL TUBING/CONCRETE COMBINATION)." THE CONCRETE FOR THIS BRIDGE RAILING SHALL MEET THE REQUIREMENTS OF SPECIAL PROVISION HIGH PERFORMANCE CONCRETE CLASS A LOW CEMENT AND SHALL BE PAID FOR UNDER ITEM 900.640, "SPECIAL PROVISION (BRIDGE RAILING, GALVANIZED STEEL TUBING/CONCRETE COMBINATION)."
28. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. ALL OTHER AREAS OF BRIDGE SEATS SHALL BE SLOPED (AWAY FROM THE BEARING DEVICES) AT 80MM PER METER. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.
29. CONCRETE PORTIONS OF ABUTMENTS AND WINGWALLS ABOVE BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL FINISH GRADES HAVE BEEN DETERMINED BY THE RESIDENT ENGINEER.

30. ALL NEW CONCRETE INDICATED ON CONSULTANT DRAWINGS (C1-C4, E1, E2) AND IN SPECIAL PROVISIONS FOR THE SEWER, WATER LINES (INCLUDING THE POWER PANEL WORK FOR THE HEAT TRACE SYSTEM AND THRUST BLOCKS) SHALL BE HIGH PERFORMANCE CLASS B AND SHALL BE INCIDENTAL TO THESE SPECIAL PROVISIONS.
31. IN ACCORDANCE WITH SUBSECTION 506.23(A) AND AS DIRECTED BY THE RESIDENT ENGINEER, THE CONTRACTOR SHALL TAKE MEASURES NECESSARY TO PROTECT ALL SUBSTRUCTURE CONCRETE FROM STAINING DUE TO OXIDE FORMATION ON THE STRUCTURAL STEEL PRIOR TO PLACEMENT OF THE DECK. THESE MEASURES WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". ANY SUCH STAINING THAT OCCURS PRIOR TO DECK PLACEMENT SHALL BE REMOVED AT NO ADDITIONAL COST TO THE STATE.
32. THE DECK IS TO BE POURED IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A TRANSVERSE CONSTRUCTION JOINT SHALL BE USED BETWEEN ADJACENT POURS. A MINIMUM 96 HOUR DELAY BETWEEN ADJACENT POURS SHALL BE OBSERVED.
33. LOADING ALLOWANCE ON THE NEW DECK SHALL BE IN ACCORDANCE WITH SUBSECTION 501.18(B).
34. WATER REPELLENT, SILANE, ITEM 514.10, SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.
35. ALL SUPERSTRUCTURE REINFORCING STEEL SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17, "EPOXY COATED REINFORCING STEEL". CUTTING AND REPAIRING DAMAGED AREAS OF COATED REINFORCING STEEL SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 507.04.

MICROPILES

36. ALL MATERIALS AND WORK RELATED TO THE INSTALLATION AND TESTING OF MICROPILES SHALL BE IN ACCORDANCE WITH SECTION 900 OF THE SPECIAL PROVISIONS FOR MICROPILES.

WATER AND SEWER MAINS ON BRIDGE

37. ALL WORK RELATED TO THE MAINTENANCE/TEMPORARY RELOCATION, TRANSFER OF SERVICE OR INSTALLATION AND SUPPORT OF NEW WATER OR SEWER SYSTEM PIPING SHALL BE PAID FOR UNDER SECTION 628, SECTION 629 AND THE SPECIAL PROVISIONS AS APPROPRIATE.
38. FOR INFORMATION REGARDING THE SEWER OR WATER MAIN CHANGES AND RELOCATIONS, REFER TO SPECIAL PROVISIONS AND DRAWINGS PREPARED BY DUFRESNE GROUP, INCLUDED IN THESE PLANS.

TRAFFIC CONTROL

39. PAYMENT FOR ALL TRAFFIC CONTROL SHALL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION, "TRAFFIC CONTROL, ALL-INCLUSIVE." THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES. FLAGGERS WILL BE PAID FOR SEPARATELY UNDER ITEM 630.15.

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DESIGNED BY:	W. PELLETTIER
PROJECT NOTES	
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