

GENERAL

- 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, DATED 2010, AND ITS LATEST REVISIONS.
- DURING CONSTRUCTION, TRAFFIC SHALL BE MAINTAINED ON A TWO-WAY TEMPORARY BRIDGE CONSTRUCTED DOWNSTREAM OF THE EXISTING STRUCTURE. THE TEMPORARY BRIDGE AND DETOUR SHALL BE PAVED. CONSTRUCTION AND MAINTENANCE OF THE TEMPORARY BRIDGE AND ITS APPROACHES SHALL BE PAID FOR UNDER ITEM 528.11, TWO-WAY TEMPORARY BRIDGE.
- THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
- 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.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT THE CONDITION OF ALL STRUCTURES THAT HAVE THE POTENTIAL FOR DAMAGE FROM CONSTRUCTION ACTIVITIES. THIS DOCUMENTATION SHALL BE IN THE FORM OF VIDEO OR PICTURES, WITH SUFFICIENT DESCRIPTION, AND SHALL BE SUPPLIED TO THE ENGINEER PRIOR TO ANY EXCAVATION OR DRIVING OF PILING OR SHEET PILING. THE COST OF PREPARING THIS DOCUMENTATION WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO ALL CONTRACT ITEMS. SEE SPECIAL PROVISIONS.
- ITEM 529.15 REMOVAL OF STRUCTURE SHALL INCLUDE THE REMOVAL AND DISPOSAL OF EXISTING BRIDGE SUPERSTRUCTURES, WATER LINE ON THE BRIDGE AND REMOVAL OF THE ABUTMENTS AND PIERS ABOVE THE ELEVATION SHOWN IN THE PLANS, WHERE THEIR REMOVAL IS OUTSIDE OF THE AREAS COVERED BY ANY OF THE EXCAVATION ITEMS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, IN PARTICULAR THE DISCHARGE OF RAW CONCRETE INTO THE THIRD BRANCH OF THE WHITE RIVER, AS DIRECTED BY THE RESIDENT ENGINEER AND STANDARD SPECIFICATIONS SECTION 105.
- FOR INFORMATION REGARDING UTILITIES, SEE THE SPECIAL PROVISIONS.
- ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- ANY FALSEWORK SHALL BE SUBMITTED TO THE RESIDENT ENGINEER FOR APPROVAL A MINIMUM OF 14 DAYS PRIOR TO THE ANTICIPATED PLACEMENT DATE. NO FALSEWORK SHALL BE PLACED PRIOR TO APPROVAL OF THE PLAN.
- ALL EXISTING SIGNS AND SIGN POSTS NOT RE-USED SHALL REMAIN THE PROPERTY OF THE STATE OF VERMONT. THE CONTRACTOR SHALL DELIVER AND STOCKPILE THE PROJECT SALVAGED MATERIALS AT THE TRANSPORTATION DISTRICT #4 FACILITY. THE CONTRACTOR SHALL CONTACT TREVOR STARR AT TRANSPORTATION DISTRICT #4 @ 296-5566 WHEN THESE ITEMS ARE READY FOR DELIVERY FROM THE PROJECT SITE.
- THE EXISTING TRUSS AND APPROACH SPANS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AFTER DEMOLITION. RECORD PLANS HAVE BEEN PROVIDED.
- 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.
- "STRUCTURES DETAIL SHEETS" LISTED ON THE INDEX ARE PROVIDED AFTER THE PLAN SHEETS. DETAILS AND DIMENSIONS SHOWN IN THE PROJECT PLAN SHEETS SHALL TAKE PRECEDENCE OVER THOSE SHOWN IN THE "STRUCTURES DETAIL SHEETS"
- EXISTING DRAINAGE CONDITIONS AND DRAINAGE STRUCTURES RELATIVE TO THIS PROJECT SHOULD BE FIELD VERIFIED, FOR ELEVATION, SIZE, AND TYPE PRIOR TO CONSTRUCTION OR EXCAVATION. ALSO, ELEVATION TO LOCATION OF SEWER LINE SHOULD ALSO BE FIELD VERIFIED. THERE WILL BE NO EXTRA COMPENSATION PAID TO THE CONTRACTOR FOR ANY INCONVENIENCE CAUSED BY WORKING AROUND AND WITH THE UTILITY COMPANIES.

EARTHWORK AND RELATED ITEMS

- 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.
- A COFFERDAM IS REQUIRED FOR THE CONSTRUCTION OF ABUTMENT #2. REFER TO "SUBSTRUCTURE EARTHWORK SHEETS" FOR COFFERDAM NOTES.
- THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN ON THE PLANS. THE SUBBASE MATERIAL SHALL BE THE TYPE SPECIFIED IN THE CONTRACT AND SHALL BE PLACED TO MEET THE SUBBASE SPECIFICATIONS. IF SUBBASE IS PLACED IN LIEU OF SAND BORROW, A GEOTEXTILE MEETING THE REQUIREMENTS OF SECTION 649 "GEOTEXTILE FOR ROAD BED SEPARATOR" SHALL BE PLACED BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING THE GEOTEXTILE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 203.31 "SAND BORROW".
- ANY TEMPORARY EXCAVATION AND FILL NECESSARY TO MAINTAIN TRAFFIC SHALL BE INCIDENTAL TO ITEM 528.11, TWO-WAY TEMPORARY BRIDGE.
- ANY TEMPORARY MEANS OF SUPPORTING EXCAVATION NECESSARY TO MAINTAIN TRAFFIC SHALL BE INCIDENTAL TO ITEM 528.11, TWO-WAY TEMPORARY BRIDGE, AND SHALL MEET THE REQUIREMENTS OF SECTION 204. ASSOCIATED CONSTRUCTION DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH SECTION 105.
- ALL TEMPORARY MEANS OF SUPPORTING EXCAVATION AND FILL SHALL BE ADEQUATELY SEPARATED FROM THE TRAVELING PUBLIC PER THE AASHTO ROADSIDE DESIGN GUIDE, AND SHALL NOT OBSCURE SIGHT DISTANCE TO TRAFFIC ON VT 107 AND TRAFFIC ENTERING OR EXITING VT 107.
- THE COST OF THE TEMPORARY CAUSEWAY FOR CONSTRUCTION OF THE PROPOSED TRUSS SUPERSTRUCTURE WILL BE INCIDENTAL TO ALL CONTRACT ITEMS.
- THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND THE CURING PERIOD IS UP.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO SUBSECTION 301.06 REGARDING THE COMPACTION OF THE SUBBASE MATERIAL.
- THE "STONE FILL, TYPE IV" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE NEW SUPERSTRUCTURES ARE SET.
- "STONE FILL, TYPE I" SHALL BE USED FOR EROSION CONTROL AS SHOWN IN THE PLANS AND AT THE DISCRETION OF THE RESIDENT ENGINEER. PAYMENT FOR MATERIAL AND PLACEMENT SHALL BE MADE UNDER ITEM 613.10, "STONE FILL, TYPE I".
- THE AREA DISTURBED BY THE TEMPORARY DETOUR SHALL BE RESTORED TO ITS ORIGINAL GRADE AND VEGETATED. THE COST OF THE SEED, FERTILIZER, MULCH AND LIME WILL BE INCIDENTAL TO ITEM 528.11, TWO-WAY TEMPORARY BRIDGE.

STRUCTURAL STEEL

- UNLESS OTHERWISE NOTED, ALL NEW STRUCTURAL STEEL FOR THE ROLLED BEAM APPROACH SPAN SHALL CONFORM TO SECTION 714 AND SHALL BE PAID FOR UNDER ITEM 506.50, "STRUCTURAL STEEL, ROLLED BEAM".
- THE END OF THE ROLLED BEAMS FOR THE APPROACH SPAN SHALL BE PAINTED FOR A DISTANCE OF 10'-0" AT THE PIER END OF THE SPAN. ALL CHANNELS AND CONNECTION PLATES LOCATED IN THIS AREA SHALL ALSO BE PAINTED. THE PAINT SYSTEM SHALL CONFORM TO SECTION 513 OF THE STANDARD SPECIFICATIONS AND THE FINAL COLOR SHALL BE BROWN, CONFORMING TO SUBSECTION 708.03. GREASE SHALL ALSO BE APPLIED IN THIS AREA AS SPECIFIED IN SUBSECTION 513.06 (d). THE GREASE SHALL BE BROWN.
- APPROACH SPAN FIELD CONNECTIONS LOCATED IN THE UNPAINTED SECTIONS OF THE BEAM SHALL BE MADE USING 7/8 INCH DIAMETER BOLTS MEETING AASHTO M 164, TYPE 3 SPECIFICATIONS. CONNECTIONS MADE IN THE PAINTED SECTIONS OF THE BEAMS SHALL BE MADE USING 7/8 INCH DIAMETER BOLTS MEETING AASHTO M 164, TYPE 1 SPECIFICATIONS. UNLESS OTHERWISE NOTED, HOLE DIAMETER SHALL BE 15/16 INCH. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
- ALL TRUSS STEEL SHALL BE GALVANIZED ACCORDING TO SUBSECTION 506.15 OF THE STANDARD SPECIFICATIONS.
- ALL NEW STRUCTURAL STEEL FOR THE TRUSS PRIMARY MEMBERS, LATERAL MEMBERS, CONNECTIONS PLATES, AND FILLER PLATES SHALL CONFORM TO SECTION 714 GRADE 50 STEEL, WITH THE FOLLOWING EXCEPTIONS;

- ALL STANDARD SINGLE LEG ANGLE AND DOUBLE LEG ANGLE ROLLED SHAPES EXCEPT FOR THE ANGLES CONNECTING THE END FLOOR BEAM SHALL CONFORM TO SECTION 714 GRADE 36 STEEL HAVING A MINIMUM YIELD STRESS OF 36 KSI AND A MINIMUM ULTIMATE STRESS OF 58 KSI.
 - THE TWO END FLOORBEAM MEMBERS SHALL BE AASHTO M 270 HIGH PERFORMANCE STEEL GRADE HPS 70W STEEL.
 - ALL TOP CHORD GUSSET PLATES SHALL BE AASHTO M 270 HIGH PERFORMANCE STEEL GRADE HPS 70W STEEL.
- THE TRUSS SPAN STEEL SHALL BE PAID FOR UNDER ITEM 506.57, "STRUCTURAL STEEL, TRUSS", AND SPECIAL PROVISION 900.635 "HIGH PERFORMANCE STEEL, GRADE HPS 70W(TRUSS)".
 - ALL NEW STRUCTURAL STEEL FOR THE DOWNSPOUT SHALL BE PAID FOR UNDER ITEM 506.60, "STRUCTURAL STEEL".
 - STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
 - ALL TRUSS SPAN FIELD CONNECTIONS SHALL BE MADE USING 7/8 INCH DIAMETER TYPE 1 BOLTS UNLESS OTHERWISE NOTED, MEETING THE REQUIREMENTS OF AASHTO M 164 SPECIFICATIONS. ALL TYPE 1 BOLTS SHALL BE GALVANIZED PER AASHTO M 232M/M 232. UNLESS OTHERWISE NOTED, HOLE DIAMETER SHALL BE 15/16 INCH. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
 - CONTRACTOR SHALL USE DIRECT TENSION INDICATOR METHOD AS SPECIFIED IN SUBSECTION 506.19 FOR PRETENSIONING OF ALL BOLTED TRUSS CONNECTIONS. NO OTHER BOLT TENSIONING METHOD SHALL BE PERMITTED ON THE BOLTED TRUSS CONNECTIONS.
 - AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE BEAMS AND STRINGERS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.
 - 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.
 - ANY BOLT HOLES IN MEMBERS NOT OTHERWISE FILLED SHALL BE FILLED WITH AASHTO M 164 BUTTON HEAD OR HEX HEAD BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.
 - ALL STRUCTURAL CONNECTIONS INCORPORATING THE BEVELED SIDE OF A STANDARD BEAM, CHANNEL OR ANGLE SHALL USE THE CORRESPONDING GALVANIZED ASTM F 436 BEVELED WASHERS.
 - ENDS OF APPROACH SPAN BEAMS ARE TO BE VERTICAL IN FINAL POSITION.
 - ALL BOLTED TRUSS CONNECTION FAYING SURFACES SHALL BE HAND WIRE BRUSHED, OR BRUSH BLASTED, AFTER GALVANIZING TO ACHIEVE AN AASHTO CLASS C SURFACE CONDITION. NO MECHANICAL OR POWER BRUSHING ALLOWED. THIS WORK WILL BE PERFORMED UNDER CONTROLLED CONDITIONS IN A SHOP, PRIOR TO ASSEMBLY IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS. THE PROCESS MUST ACHIEVE VISIBLE ROUGHENING OR SCORING OF THE FAYING SURFACE.
 - ANY DAMAGE CAUSED TO THE GALVANIZATION, INCLUDING THAT CAUSED BY THE CONCRETE OPERATIONS, SHALL BE REPAIRED AND THE COST SHALL BE INCIDENTAL TO ITEM 506.57, STRUCTURAL STEEL, TRUSS.
 - SHEAR CONNECTORS FOR TRUSS MEMBERS SHALL BE ATTACHED IN THE SHOP, PRIOR TO GALVANIZING.
 - JACKING STIFFENERS HAVE BEEN PROVIDED ON THE TRUSS TO HELP FACILITATE FUTURE BEARING REPAIR. HOWEVER, IT IS IMPORTANT TO NOTE THAT THE END FLOORBEAM CONNECTION COMPONENTS ARE NOT INTENDED TO SUPPORT FULL SERVICE LOADS IN THE JACKING CONDITION.
 - STRUCTURAL STEEL MEMBERS DESIGNATED AS "FCM" (FRACTURE CRITICAL MEMBERS) IN THE PLANS SHALL MEET THE FOLLOWING CONSTRUCTION AND TESTING REQUIREMENTS:
 - ALL FRACTURE CRITICAL MEMBERS SHALL BE FABRICATED ACCORDING TO SECTION 12 OF THE AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE.
 - ALL FRACTURE CRITICAL MEMBERS SHALL BE FABRICATED IN A PLANT HAVING AN AISC FRACTURE CRITICAL ENDORSEMENT OR THE FABRICATOR SHALL PROVIDE TO THE STRUCTURES ENGINEER AN ACCEPTABLE FRACTURE CONTROL PLAN MEETING THE REQUIREMENTS OF AASHTO/AWS D1.5 PRIOR TO FABRICATION.
 - ALL FRACTURE CRITICAL MEMBERS SHALL BE IMPACT TESTED TO THE FRACTURE CRITICAL REQUIREMENTS AS SPECIFIED IN AASHTO M 270.

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