

**GENERAL PROJECT NOTES**

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SEVENTH EDITION DATED 2014, AND ITS LATEST REVISIONS.
2. THE BRIDGE IS DESIGNED FOR AN HL-93 LIVE LOAD.
3. ITEM 529.15 "REMOVAL OF STRUCTURE" IS FOR THE REMOVAL OF THE EXISTING STRUCTURE INCLUDING THE SUPERSTRUCTURE, ABANDONED UTILITIES AND APPURTENANCES AND ABUTMENTS INCLUDING THE FOOTING AND ANY PORTION OF THE SUBSTRUCTURE OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION.
4. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
5. ALL CONSTRUCTION AND ACCESS SHALL BE WITHIN THE RIGHT OF WAY UNLESS SHOWN ON THE ROW PLANS OR APPROVED IN WRITING BY THE PROPERTY OWNER AND VTRANS ENVIRONMENTAL PERMITTING. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE PROPERTY OWNER(S) TO OBTAIN WRITTEN APPROVAL OF LAND USE OUTSIDE THE RIGHT OF WAY. THE CONTRACTOR SHALL SUBMIT COPIES OF THE WRITTEN PROPERTY AGREEMENTS TO THE RESIDENT ENGINEER.

**CONCRETE AND REINFORCING STEEL**

6. ITEM 514.10 WATER REPELLANT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.
7. ALL REINFORCEMENT IN THE SUPERSTRUCTURE (INCLUDING CURTAIN WALLS) SHALL PROVIDE LEVEL II CORROSION RESISTANCE. LEVEL I CORROSION RESISTANCE IS REQUIRED FOR THE SUBSTRUCTURE.
8. CONCRETE FOR THE DECK AND CURTAIN WALL SHALL BE ITEM 501.33, CONCRETE, HIGH PERFORMANCE CLASS A. CONCRETE FOR THE SUBSTRUCTURE SHALL BE HIGH PERFORMANCE CLASS B AND WILL BE PAID FOR UNDER ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B.
9. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/4 INCH PER FOOT. THE ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD MIDSPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH. THE COST FOR FINISHING THE BRIDGE SEAT SURFACES WILL BE CONSIDERED INCIDENTAL TO ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B.
10. NO CONCRETE SHALL BE PLACED IN THE ABUTMENTS OR WINGWALLS ABOVE THE ADJACENT BEAM SEAT ELEVATIONS UNTIL THE BEAMS HAVE BEEN SET.
11. CLEAR COVER ON REINFORCING STEEL SHALL BE PER THE FOLLOWING LIST UNLESS NOTED OTHERWISE:
 

LOCATION	CLEAR COVER (INCHES)
UNDERSIDE OF BRIDGE DECK	1.5
EXPOSED TO EARTH OR WEATHER	2
TOP OF PAVED BRIDGE DECK	2.5
DIRECT EXPOSURE TO DEICING SALTS (CURBS, DECK FASCIA AND EXPOSED FACES OF WALLS)	3
CAST AGAINST EARTH	3


**STRUCTURAL STEEL**


12. ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M 270M/M 270 GRADE 50 AND WILL BE PAID FOR UNDER ITEM 506.50, "STRUCTURAL STEEL, ROLLED BEAM". ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 726.08. GALVANIZING WILL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (GALVANIZING STRUCTURAL STEEL)". ALL WELDING TO THE STRUCTURAL STEEL SHALL BE COMPLETED PRIOR TO GALVANIZING.
13. AFTER THE SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF EACH GIRDER UNDER THE DIRECTION OF THE ENGINEER. THESE ELEVATIONS SHALL BE USED IN DETERMINING FINAL GRADE.
14. ALL CONNECTIONS USING 7/8 INCH DIAMETER BOLTS CONFORMING TO AASHTO M 164 TYPE I GALVANIZED. HOLES SHALL BE 15/16 INCH DIAMETER, UNLESS OTHERWISE NOTED. BOLTS THAT HAVE BEEN FULLY TIGHTENED SHALL NOT BE REUSED.

15. ANY HOLES IN THE FASCIA BEAMS NOT OTHERWISE FILLED SHALL BE FITTED WITH BUTTON HEAD OR HEX HEAD BOLTS CONFORMING TO TYPE 1 GALVANIZED. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.
16. BEAMS ARE TO BE CHARPY-V NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01.
17. BEAM WEBS SHALL BE PLUMB IN THEIR FINAL POSITION.
18. WHERE GALVANIZING HAS BEEN REMOVED BY ANY MEANS FROM BRIDGE COMPONENTS INCLUDING ASSOCIATED HARDWARE, IT SHALL BE REPAIRED IN ACCORDANCE WITH SUBSECTION 726.08 OF THE SPECIFICATIONS. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO THE ITEM UNDER WHICH THE GALVANIZED COMPONENT IS PROVIDED.
19. CONNECTIONS NOT DETAILED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
20. SHEAR STUDS SHALL BE INSTALLED IN THE SHOP, PRIOR TO GALVANIZING.
21. CONTRACTOR MAY SUBSTITUTE PLATE GIRDERS FOR ROLLED BEAMS AT NO ADDITIONAL COST TO THE STATE. CONTRACTOR MUST PROVIDE DRAWINGS AND CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER. THE PLATE GIRDER SHALL HAVE SECTION PROPERTIES THAT ARE EQUAL TO OR GREATER THAN THE SECTION PROPERTIES OF THE ROLLED BEAM AND THE OVERALL DEPTH SHALL BE EQUAL TO OR LESS THAN THE ROLLED BEAM DEPTH.

**GEOTECHNICAL**

22. BEDROCK ELEVATIONS MAY VARY AND ADJUSTMENTS IN BOTTOM OF FOOTING ELEVATION AND GEOMETRY ARE EXPECTED.
23. IN AREAS WHERE THE FOOTINGS WILL BEAR ON BEDROCK ALL SOIL, WEATHERED ROCK AND FRACTURED ROCK SHALL BE REMOVED FROM THE BEDROCK SURFACE PRIOR TO PLACING CONCRETE FOR THE FOOTING.
24. UPON COMPLETION OF THE EXCAVATION FOR SUBSTRUCTURES FOUNDED ON BEDROCK AND PRIOR TO PLACING FORMWORK, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER AND THE VTRANS GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER WILL DETERMINE IF THE BEDROCK IS COMPETENT TO OBTAIN THE NOMINAL BEARING RESISTANCE AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE VTRANS GEOTECHNICAL ENGINEER 72 HOURS IN ADVANCE WHEN THE ANALYSIS WILL BE NEEDED.
25. A MAXIMUM OF 6" OVER BREAKAGE WILL BE REPLACED WITH "HIGH PERFORMANCE CLASS B CONCRETE. OVER BREAKAGE BEYOND 6" SHALL BE REPLACED WITH "HIGH PERFORMANCE CLASS B CONCRETE" AT THE EXPENSE OF THE CONTRACTOR.
26. THE ABUTMENTS HAVE BEEN DESIGNED FOR THE TOP OF THE FOOTING ELEVATIONS AS SHOWN ON PLANS. FOR ALL SUBSTRUCTURES, WHERE BEDROCK IS WITHIN ONE FOOT BELOW THE BOTTOM OF THE AS DESIGNED FOOTING, THE FOOTING MAY BE POURED TO THE TOP OF THE BEDROCK USING "CONCRETE, HIGH PERFORMANCE CLASS B". IF THE BEDROCK ELEVATION IS GREATER THAN 1'-0" BELOW THE DESIGN BOTTOM OF FOOTING, A SUB-FOOTING SHALL BE POURED SO THAT THE DESIGN TOP OF FOOTING IS AT THE REQUIRED ELEVATION, USING "CONCRETE, CLASS C". THE LIMITS OF THE SUBFOOTING SHALL BE 1'-0" OUTSIDE THE LIMITS OF THE FOOTING.
27. IN THE EVENT THAT A SUB-FOOTING IS REQUIRED, #8 DOWELS SPACED 4'-0" ON CENTER SHALL BE EMBEDDED A MINIMUM OF 1'-6" INTO THE FOOTING, THROUGH THE SUB-FOOTING, AND 2'-0" INTO BEDROCK. DOWEL REINFORCEMENT SHALL HAVE LEVEL 1 CORROSION RESISTANCE AND WILL BE PAID FOR UNDER ITEM 507.11, REINFORCING STEEL, LEVEL 1.
28. IF BEDROCK IS ABOVE THE DESIGN BOTTOM OF FOOTING, THE FOOTING MAY BE RAISED. BEFORE ANY UPWARD ADJUSTMENT IS MADE IN FOOTING ELEVATION, THE PROJECT MANAGER SHALL BE CONTACTED AND PROVIDED WITH A BEDROCK PROFILE. NO FURTHER WORK SHALL BE DONE UNTIL APPROVAL OF THE CONFIGURATION IS RECEIVED.
29. ABUTMENT AND WINGWALL FOOTINGS SHALL BEAR ON BEDROCK.
30. AN EXISTING 10" PRESSURE SEWER AND PIPE BRIDGE IS LOCATED NEAR THE UPSTREAM SIDE OF THE ROADWAY BRIDGE. THE CONTRACTOR SHALL PROTECT THE SEWER AND PIPE BRIDGE FROM DAMAGE DURING CONSTRUCTION, INCLUDING THE PIPE BRIDGE PIERS AND FOOTINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIR COSTS ASSOCIATED WITH ANY DAMAGE TO THE SEWER PIPE AND PIPE BRIDGE DURING CONSTRUCTION.

-  31. IT HAS BEEN DETERMINED THAT THE SOILS IN THE AREA OF THE PROJECT HAVE NATURALLY OCCURRING ASBESTOS (NOA). THE CONTRACTOR IS REQUIRED TO PREPARE AND IMPLEMENT A NATURALLY OCCURRING ASBESTOS COMPLIANCE PLAN, AS INDICATED IN THE SPECIAL PROVISIONS.

REVISIONS		
	09.27.16	ADDED NOTE 31.
PROJECT NAME: JAY		
PROJECT NUMBER: BHF 0278(3)		
FILE NAME: z12ci54gen_n.ts.dgn	PLOT DATE: 9/26/2016	
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