

## PROJECT NOTES

### GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION, 2001 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 2002, AND ITS LATEST REVISIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY PROJECT SIGNING. THE COSTS WILL BE INCIDENTAL TO THE ITEM 641.10, "TRAFFIC CONTROL".
3. DURING CONSTRUCTION, TRAFFIC WILL BE MAINTAINED ON A ONE-WAY TEMPORARY BRIDGE LOCATED DOWNSTREAM OF THE EXISTING STRUCTURE. THE BRIDGE SHALL SPAN THE STREAM IN ACCORDANCE WITH THE REQUIREMENTS INDICATED ON SHEET 2.
4. ACCESS TO ALL EXISTING SIDE ROADS, DRIVES, AND PARKING AREAS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
5. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AT 68 DEGREES FAHRENHEIT.
6. IN-STREAM CONSTRUCTION SHALL BE CONDUCTED ONLY DURING THE PERIOD OF JUNE 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO WORK OUTSIDE OF THAT TIME FRAME.

### EARTHWORK AND RELATED ITEMS

7. ITEM 529.20 "REMOVAL, PARTIAL, OF STRUCTURE" IS RECORDED ON CONTRACT ITEM 529.15, "REMOVAL OF STRUCTURE" SHALL BE USED FOR REMOVAL OF EXISTING SUPERSTRUCTURE AND ANY PORTIONS OF THE SUBSTRUCTURE NOT REMOVED UNDER THE ITEMS 203.27, "UNCLASSIFIED CHANNEL EXCAVATION" OR 204.25, "STRUCTURE EXCAVATION". THE ABUTMENTS SHALL BE REMOVED IN THEIR ENTIRETY. THE WOOD PILES SHALL REMAIN IN PLACE UNLESS THEY ARE REMOVED UNDER THE ITEMS 203.27 OR 204.25. THE PIERS SHALL BE REMOVED TO THE TOP OF THEIR FOOTINGS. REMOVAL AND DISPOSAL OF THE BRIDGE PAVEMENT SHALL BE PAID FOR UNDER ITEM 529.10, "REMOVAL OF BRIDGE PAVEMENT". THE EXISTING STRUCTURAL STEEL ON THIS PROJECT WAS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. 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 STRUCTURAL STEEL.
8. THE "STONE FILL, TYPE IV" UNDER THE BRIDGE SHALL BE PLACED BEFORE THE GIRDERS ARE SET.

### CONCRETE AND REINFORCING STEEL

9. CONCRETE FOR THE DECK, SIDEWALK AND CURB SHALL BE HIGH PERFORMANCE CLASS A AND WILL BE PAID FOR UNDER ITEM 501.33, "CONCRETE, HIGH PERFORMANCE CLASS A". ALL OTHER CONCRETE SHALL BE HIGH PERFORMANCE CLASS B AND WILL BE PAID FOR UNDER ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B" UNLESS OTHERWISE NOTED.
10. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED  $\frac{1}{2}$ " PER FOOT. THE ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD MIDSPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.

11. NO CONCRETE SHALL BE PLACED IN THE ABUTMENTS OR WINGWALLS ABOVE THE ADJACENT BEAM SEAT ELEVATIONS UNTIL THE BEAMS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED BY THE ENGINEER.
12. NO CONSTRUCTION TRAFFIC SHALL BE ALLOWED ON THE NEW DECK UNTIL THE CURE PERIOD IS UP AND THE 28-DAY DESIGN STRENGTH IS ATTAINED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.
13. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. UPWARD KEYS SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
14. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
15. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED ONE (1) INCH.
16. ITEM 514.10, "WATER REPELLENT (MOD.-SILANE)" SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.
17. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH AND APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE."
18. MINIMUM COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURES SHALL BE TWO (2) INCHES ALONG WALL FACES AGAINST EARTH, AND THREE (3) INCHES ELSEWHERE, UNLESS DETAILED OTHERWISE.
19. ALL REINFORCING STEEL IN THE CONCRETE DECK, BRIDGE SIDEWALK, APPROACH SLABS, BACKWALLS AND BRIDGE CURB SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17, "EPOXY COATED REINFORCING STEEL". WHEN EPOXY COATED REINFORCING STEEL IS TO BE 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.
20. REINFORCING PLACEMENT TOLERANCES SHALL BE:  
SPACING  $\pm 1"$   
CLEARANCE  $\pm \frac{1}{4}"$

### STRUCTURAL STEEL

21. ALL STRUCTURAL STEEL PAID FOR UNDER ITEM 506.55, "STRUCTURAL STEEL (PLATE GIRDER)" SHALL CONFORM TO AASHTO M270 GRADE 50W UNLESS OTHERWISE NOTED.
22. THE CHARPY V-NOTCH TEST IS REQUIRED ONLY FOR THOSE MEMBERS DESIGNATED AS SUCH ON THE PLANS AS SPECIFIED IN SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
23. 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.
24. ALL FIELD CONNECTIONS IN UNPAINTED AREAS SHALL BE MADE USING  $\frac{7}{8}$ " DIAMETER BOLTS, CONFORMING TO AASHTO M 164 TYPE 3. IN PAINTED AREAS USE  $\frac{3}{8}$ " DIAMETER BOLTS CONFORMING TO AASHTO M 164 TYPE 1. HOLES SHALL BE  $\frac{15}{16}$ " DIAMETER, UNLESS OTHERWISE NOTED. CONNECTIONS NOT DESIGNED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL.

25. FASCIA OVERHANG BRACKETS OR SIMILAR FALSE WORK SHALL BE SPACED AT A MAXIMUM OF FOUR (4) FEET. THE DESIGN OF THE FALSE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
26. ANY HOLES IN THE FASCIA BEAMS NOT OTHERWISE FILLED SHALL BE FITTED WITH BUTTON HEAD OR HEX HEAD BOLTS CONFORMING TO AASHTO M 164 TYPE 3 (UNPAINTED AREA) OR TYPE 1 (PAINTED AREA). THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.
27. ALL STRUCTURAL STEEL INCLUDING, GIRDERS, CROSS FRAMES, BEARING PLATES AND GUSSET PLATES WITHIN A DISTANCE OF 10 FEET FROM THE EXPANSION END OF THE GIRDERS WILL BE COATED WITH A PROTECTIVE PAINT SYSTEM AND GREASE RUSTPROOFING COMPOUND. THE FINAL PAINT COAT TO BE DARK BROWN, FEDERAL COLOR CHIP NO. 20059. THIS WORK SHALL BE PAID FOR UNDER ITEM 513.25, "STRUCTURAL PAINTING, SHOP APPLIED" AND 513.40, "SURFACE PREPARATION". SEE SUPPLEMENTAL SPECIFICATION 513 FOR PAINTING STRUCTURAL STEEL.

### STEEL PILES

28. PILES SHALL BE HPI2x74 ASTM A572, GRADE 36. THE ESTIMATED LENGTH OF EACH PILE AT ABUTMENT NO. 1 IS 46 FEET AT ABUTMENT NO. 2 IS 47 FEET, AND AT THE PIER 53 FEET, INCLUDING THE 1 FOOT EMBEDMENT IN THE CONCRETE PILE CAP. NO SUBSTITUTIONS FOR THE NUMBER, SIZE AND GRADE OF THE PILES WILL BE ALLOWED.
29. THE DRIVING POINT OF ALL PILES SHALL BE REINFORCED. POINT REINFORCEMENT SHALL BE CAST STEEL AND SHALL CONFORM TO SUBSECTIONS 505.04 (E) AND 730.01 OF THE STANDARD SPECIFICATIONS.
30. THE PILES SHALL BE DRIVEN TO AN ULTIMATE AXIAL CAPACITY OF 326 KIPS AT THE ABUTMENTS AND 439 KIPS AT THE PIER, AS DIRECTED BY THE RESIDENT ENGINEER.
31. DYNAMIC MONITORING SHALL BE PERFORMED FOR THE FIRST PILE DRIVEN AT EACH SUBSTRUCTURE LOCATION TO DETERMINE THE DRIVING CRITERIA REQUIRED TO ACHIEVE THE SPECIFIED ULTIMATE AXIAL CAPACITY AND PREVENT DAMAGE TO THE PILES DURING DRIVING OPERATIONS. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 505.04 (C) -2 OF THE STANDARD SPECIFICATIONS. PAYMENT FOR PILE TESTING SHALL BE MADE UNDER ITEM 505.45, "DYNAMIC PILE LOADING TEST".
32. PILE HEAD CUT-OFF ELEVATION SHALL BE WITHIN 2 INCHES OF THE ELEVATION DETAILED IN THE PLANS. AT THE CUT-OFF ELEVATION, THE PILE SHALL BE FREE FROM DRIVING DAMAGE AS DETERMINED BY THE RESIDENT ENGINEER.

## STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of <b>HUNTINGTON</b>	Bridge No. <b>42</b>
Highway No. <b>T.H. 4</b>	Log Sta. Surv. Sta.
<b>EAST STREET (T.H. #4) OVER HUNTINGTON RIVER</b>	

### PROJECT NOTES

Designed By <b>S. BURBANK</b>	Drawn By <b>S. BURBANK</b>
Checked By <b>M. CHENETTE</b>	Bridge Design Supervisor <b>M. CHENETTE</b>
Date <b>03/05</b>	Date <b>09/05</b>
PROJECT <b>HUNTINGTON</b>	PROJECT NO. <b>BRO 1445 (29)</b>
DH Dgn: ... \Cadd\Trans\2014\302notes.dgn Plot Date: 1/12/2006	
Bridge Sheet No.	Sheet <b>28</b> of <b>63</b>