

# GENERAL NOTES

## GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SIXTEENTH EDITION, AND ITS LATEST REVISIONS.
2. BRIDGE IS DESIGNED FOR HS 25 LIVE LOAD WITH NO ALLOWANCE FOR FUTURE PAVEMENT.
3. THE CONTRACTOR SHALL ERECT, MAINTAIN, REMOVE AND/OR RESET AS REQUIRED ALL ON PROJECT SIGNS AND BARRICADES. THE COST OF ON-PROJECT SIGNS AND BARRICADES REQUIRED SHALL BE PAID FOR UNDER THE ITEM 641.10, TRAFFIC CONTROL.
4. TWO-WAY TRAFFIC WILL BE MAINTAINED ON THE TEMPORARY STRUCTURE, ALTHOUGH DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR MAY, AT TIMES, USE ONE-WAY TRAFFIC WITH FLAGGERS. THE TEMPORARY BRIDGE AND TEMPORARY DETOUR SHALL BE MAINTAINED IN GOOD CONDITION AT ALL TIMES, PAYMENT FOR THIS WORK WILL BE UNDER ITEM 528.11, TWO-WAY TEMPORARY BRIDGE.
5. ACCESS TO ALL DRIVES WILL BE MAINTAINED AT ALL TIMES, DURING THE CONSTRUCTION OF THIS PROJECT.
6. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68°F UNLESS OTHERWISE NOTED.
7. THE STONE FILL TYPE IV UNDER THE BRIDGE SHALL BE PLACED BEFORE THE BEAMS ARE SET. AS MUCH OF THE EXISTING STONE FILL AROUND THE ABUTMENTS AS POSSIBLE SHALL BE RETAINED.
8. THE FOLLOWING TABLE OF ALLOWABLE STRESSES AND WEIGHTS APPLY TO THESE PLANS FOR DESIGN PURPOSES:
 

|  |   |
|--|---|
| STRUCTURAL STEEL, AASHTO M270/M270 GRADE 50W |   |
| F <sub>y</sub> = 50,000 PSI                  |   |
| CONCRETE, CLASS A (QA/QC):                   | f'c = 4,000 PSI    f <sub>c</sub> = 1,600 PSI |
| CONCRETE, HIGH PERFORMANCE CLASS A:          | f'c = 4,000 PSI    f <sub>c</sub> = 1,600 PSI |
| CONCRETE, HIGH PERFORMANCE CLASS B:          | f'c = 3,500 PSI    f <sub>c</sub> = 1,400 PSI |
| REINFORCING STEEL:                           | Ft 24,000    PSI GRADE 60                     |
| SOIL: UNIT WEIGHT                            | 140 PCF                                       |
| FOOTING PRESSURE DESIGN:                     |   |
|  | ABUTMENT NO. 1    6.2 KSF                     |
|  | PIER NO. 1        3.1 KSF                     |
|  | PIER NO. 2        3.1 KSF                     |
|  | ABUTMENT NO. 2    6.2 KSF                     |
9. TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.015 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.
10. THE BRIDGE PLAQUE AND BENCH MARK SHALL BE FURNISHED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AS SHOWN ON THE PLANS. ALL COSTS SHALL BE INCLUDED IN ITEM 501.25, CONCRETE CLASS HPC-B.
11. THE ITEM 529.15 REMOVAL OF STRUCTURE SHALL CONSIST OF REMOVING THE FOLLOWING PARTS OF THE EXISTING STRUCTURE. THE EXISTING SUPERSTRUCTURE SHALL BE REMOVED IN ITS ENTIRETY. THE TWO PIERS SHALL ALSO BE REMOVED, DOWN TO STREAMBED ELEVATION. THE WEST ABUTMENT SHALL BE REMOVED ABOVE ELEVATION 1135.00. THE EAST ABUTMENT SHALL BE REMOVED ABOVE ELEVATION 1139.00.
12. THE EXISTING STRUCTURAL STEEL TO BE REMOVED UNDER THE ITEM 529.15 "REMOVAL OF STRUCTURE" IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. ALL STEEL REMOVED UNDER THIS ITEM IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR MAY DISPENSE OF IT OR RETAIN IT FOR FUTURE USE. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE STRUCTURAL STEEL.
13. PAYMENT FOR REMOVAL OF EXISTING BITUMINOUS CONCRETE PAVEMENT ON THE BRIDGE SHALL BE MADE UNDER THE ITEM 529.10, "REMOVAL OF BRIDGE PAVEMENT". THE MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY AT AN OFF-SITE LOCATION.
14. PAYMENT FOR REMOVING THE PAVEMENT THAT IS USED ON THE TEMPORARY DETOUR WILL BE MADE UNDER ITEM 203.28, EXCAVATION OF SURFACES AND PAVEMENTS.

## CONCRETE

15. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL WIDTH OF THE JOINT. ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
16. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".
17. JOINTS AND SCOREMARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
18. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
19. REINFORCING PLACEMENT TOLERANCES SHALL BE:
 

|                |
|----------------|
| SPACING ± 1"   |
| CLEARANCE ± ¼" |
20. ALL REINFORCING STEEL IN THE DECK, CURBS, AND THE TOPS OF THE BACKWALLS, SHALL BE EPOXY COATED AND PAID AS 507.17, EPOXY COATED REINFORCING STEEL. EPOXY COATED REINFORCING STEEL IS DESIGNATED IN REINFORCING STEEL SCHEDULE WITH A PREFIX OF "E".
21. MINIMUM COVER FOR REINFORCING STEEL SHALL BE TWO INCHES (2") ALONG THE BACK FACES OF WALLS AGAINST EARTH, TWO AND ONE-HALF INCHES (2 ½") ALONG THE TOP SURFACE OF THE DECK, ONE AND ONE-HALF INCHES (1 ½") ALONG THE BOTTOM SURFACE OF THE DECK AND THREE INCHES (3") ELSEWHERE, UNLESS OTHERWISE NOTED.
22. NO CONCRETE IN THE ABUTMENTS OR WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT ELEVATIONS UNTIL THE BEAMS/GIRDERS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.
23. FOR BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ANY ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM OF 96 HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF OTHER ADJACENT POURS. ALL INDIVIDUAL DECK POURS SHALL START FROM THE LOW END OF THE BRIDGE. THE SEQUENCE OF DECK POURS SHALL BE AS SHOWN ON SHEET 51.
24. ALL SUBSTRUCTURE CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE NOTED.
25. THE DECK SHALL BE CONCRETE, CLASS A QC/QA.
26. THE CURB SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A.
27. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL, OTHER BRIDGE SEAT AREAS SHALL BE SLOPED ¼" PER FOOT TOWARDS MID-SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISHED.
28. NO 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.
29. WATER REPELLENT (MOD. SILANE) SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP BEADS.

## STRUCTURAL STEEL

30. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
31. ITEM 506.55 - STRUCTURAL STEEL, PLATE GIRDER, SHALL INCLUDE THE PLATE GIRDERS, DOWNSPOUTS, CONNECTION PLATES, CROSSFRAMES AND BEARING STIFFENERS, ALONG WITH ALL REQUIRED FASTNERS.
32. SHEAR CONNECTORS SHALL BE FIELD WELDED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT AND SHALL BE PAID AS ITEM 508.15, SHEAR CONNECTORS.
33. THE ENDS OF THE GIRDERS SHALL BE VERTICAL UNDER FULL DEAD LOAD DEFLECTION.
34. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
35. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF VERMONT SPECIFICATION 506.10.
36. ANY HOLES IN THE WEBS OF THE FASCIA BEAMS/GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH VERMONT SPECIFICATION 506.19.

37. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER ASTM DESIGNATION A-325 TYPE III BOLTS IN 15/16" DIAMETER HOLES.
38. THE DESIGN OF THE FLEMING BRACKETS OR SIMILAR FALSEWORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE PLACED AT A MAXIMUM SPACING OF 4'-0".
39. AFTER THE SUPERSTRUCTURE HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE BEAMS/GIRDERS, AS DIRECTED BY THE RESIDENT ENGINEER, FOR USE IN DETERMINING THE FINISHED GRADE.
40. ALL STRUCTURAL STEEL INCLUDING GIRDERS, CROSSFRAMES AND CONNECTION PLATES, WITHIN A DISTANCE OF 10'-0" FROM THE EXPANSION END OF EACH GIRDER, WILL BE COATED WITH A PROTECTIVE PAINT SYSTEM AS PER VT SPECIFICATION 513. THE FINAL COLOR SHALL BE DARK BROWN, TO BLEND WITH THE COLOR OF THE WEATHERING STEEL. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEMS 513.25 AND 513.40, "STRUCTURAL PAINTING, SHOP APPLIED", AND "SURFACE PREPARATION".

PROJECT NAME: WOODFORD  
PROJECT NUMBER: BHF 010-1(29)

|                              |                      |
|------------------------------|----------------------|
| FILE NAME: se039gen.xls      | PLOT DATE: 8/3/2005  |
| PROJECT LEADER: A. Portalupi | DRAWN BY: R. PELLETT |
| DESIGNED BY: EVANS-MONGEON   | CHECKED BY: M.E.M    |
| GENERAL NOTES SHEET #1       | SHEET 49 OF 106      |