

# GENERAL NOTES

**GENERAL**

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATION FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION DATED 2002, AND ITS LATEST REVISIONS.
2. BRIDGE IS DESIGNED FOR HS-25 LIVE LOAD WITH NO ALLOWANCE FOR FUTURE PAVEMENT.
3. EAST STREET WILL BE CLOSED TO THROUGH TRAFFIC DURING THE RECONSTRUCTION OF BRIDGE 61. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS.
4. ITEM 529.15, "REMOVAL OF STRUCTURE (36 FEET - TIMBER STAIRS)" SHALL BE USED TO PAY FOR THE REMOVAL AND DISPOSAL OF THE EXISTING TIMBER STAIRS.
5. ALL MATERIAL REMOVED THAT IS NOT OTHERWISE NOTED WILL BECOME PROPERTY OF THE CONTRACTOR.
6. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE" INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF THE EXISTING SUPERSTRUCTURE AND ALL PORTIONS OF BOTH ABUTMENTS THAT ARE NOT REMOVED AS STRUCTURE EXCAVATION.
7. THE EXISTING SUPERSTRUCTURE IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, TOWN, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE DISPOSITION OF THIS MATERIAL.
8. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT UNLESS OTHERWISE NOTED.
9. EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.015 GALLONS PER SQUARE YARD BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.
10. BACKFILL SHALL BE LIMITED TO TWO FEET BELOW ABUTMENT BRIDGE SEAT ELEVATIONS UNTIL THE SUPERSTRUCTURE IS ERECTED.
11. THE LEDGE IN FRONT OF THE ABUTMENTS IS INTENDED TO BE STRIPPED CLEAN. IT MAY BE NECESSARY TO USE STONEFILL TYPE IV TO STABILIZE THE SLOPES ADJACENT TO THE WINGWALLS.
12. ALL ON AND OFF PROJECT SIGNS THAT ARE REQUIRED FOR THE DETOUR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. PAYMENT WILL BE PAID UNDER 641.10 TRAFFIC CONTROL.

**CONCRETE**

13. REINFORCEMENT PLACEMENT TOLERANCES SHALL BE:  
SPACING +/- 1 INCH  
CLEARANCE +/- 1/4 INCH
14. MINIMUM COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURES SHALL BE 2 INCHES ALONG BACK FACES OF WALLS AGAINST EARTH AND 3 INCHES ELSEWHERE, UNLESS OTHERWISE NOTED.
15. ALL REINFORCING STEEL IN THE CONCRETE DECK AND IN APPROACH SLABS SHALL BE EPOXY COATED AND PAID FOR UNDER THE ITEM 507.17. WHEN EPOXY COATED REINFORCING STEEL IS 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.
16. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
17. 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.
18. CONCRETE PORTIONS OF THE ABUTMENT AND WINGWALLS ABOVE THE BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL THE FINISH GRADE HAS BEEN DETERMINED BY THE RESIDENT ENGINEER.
19. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE PLACED AT A SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.  
MAXIMUM SPACING OF 4'-0".

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20. SURFACES OF BRIDGE SEATS UNDER THE BEARING DEVICES SHALL BE LEVEL. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.
21. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH BY 1 INCH.
22. THE DECK IS TO BE POURED IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF THE DECK CAN NOT BE PLACED IN EIGHT HOURS, A CONSTRUCTION JOINT SHALL BE USED. A 96 HOUR DELAY SHALL BE OBSERVED BETWEEN SUCCESSIVE POURS.
23. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP NOTCHES.
24. 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.

**STEEL**

25. THE DOWNSPOUT FOR THE EXPANSION JOINT WILL BE PAID AS ITEM 506.60 STRUCTURAL STEEL.
26. PAINT THE LAST 10 FEET OF THE GIRDERS AND THE ABUTMENT DIAPHRAGMS AT THE EXPANSION END WITH BROWN PAINT, CHIP # 20059
27. ALL HOLES IN THE FASCIA GIRDERS NOT OTHERWISE FILLED, SHALL BE FITTED WITH BUTON HEAD OR HEX BOLTS, CONFORMING TO AASHTO M164 TYPE 3. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH THE 506.19 SPECIFICATION.
28. ANY CONNECTION THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
29. AFTER THE SUPERSTRUCTURE HAS BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE GIRDERS AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING THE FINISH GRADE.
30. ALL FIELD CONNECTIONS NOT OTHERWISE DETAILED SHALL BE MADE WITH 7/8 INCH DIAMETER BOLTS CONFORMING TO AASHTO M164 TYPE 3. TYPE 1 GALVANIZED BOLTS SHALL BE USED IN PAINTED AREAS. HOLES SHALL BE 15/16 INCH DIAMETER.

**LEDGE NOTES**

31. FINAL LEDGE GRADE TO COMPETENT ROCK WILL BE DETERMINED BY THE SOILS AND FOUNDATIONS ENGINEER. LEDGE ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY VARY FROM ACTUAL FINAL LEDGE GRADE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE SOILS AND FOUNDATIONS ENGINEER AND THE RESIDENT ENGINEER, IN DETERMINING ACTUAL FINAL LEDGE GRADE. THE AGENCY WILL NOT GRANT ANY EXTENSION OF TIME DUE TO THE CONTRACTORS FAILURE TO PROPERLY COORDINATE THE FINAL LEDGE GRADE DETERMINATION.
32. IF COMPETENT ROCK IS BELOW WHAT IS SHOWN ON THE PLANS, A SUB-FOOTING WILL BE USED, (SEE SHEET 54 FOR DETAILS). IN AREAS WHERE THE MINIMUM SUB-FOOTING THICKNESS (EIGHT INCHES) CANNOT BE MET, THE CONTRACTOR HAS THE OPTION TO POUR CONCRETE, HIGH PERFORMANCE CLASS B TO THE FINAL LEDGE GRADE, OR EXCAVATE LEDGE UNTIL A MINIMUM THICKNESS IS MET. ANY CONCRETE POURED BELOW THE BOTTOM OF FOOTING ELEVATIONS SHOWN ON THE PLANS WILL BE PAID AT THE "CONCRETE CLASS C" BID PRICE.
33. THE LIMITS FOR THE SUB-FOOTING SHALL BE ONE FOOT OUTSIDE THE LIMITS OF THE FOOTING SHOWN. DOWELS SHALL BE DRILLED AND GROUTED INTO THE LEDGE UNDER THE SUB-FOOTING AS SHOWN ON SHEET 54.
34. FOOTINGS OR SUB-FOOTINGS SHALL BE FOUNDED ON COMPETENT LEDGE WHICH HAS BEEN CLEANED OF ALL LOOSE ROCK AND DEBRIS.
35. IF SOUND LEDGE IS ABOVE THE ELEVATIONS SHOWN ON THE PLANS, THE FOOTING WILL BE RAISED. BEFORE ANY UPWARD ADJUSTMENT IS MADE TO THE FOOTING ELEVATION, THE STRUCTURES ENGINEER SHALL BE CONTACTED FOR THE DESIGN OF THE MODIFIED CONFIGURATION.
36. DOWELS SHALL BE DRILLED AND GROUTED INTO LEDGE AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. THE DOWELS SHALL HAVE A 1'-6" EMBEDMENT INTO THE LEDGE AND SHALL EXTEND INTO THE FOOTING A MINIMUM OF 1'-6".
37. WATER SHALL NOT BE ALLOWED TO POOL AROUND THE NEW ABUTMENT

FOOTINGS. A TROUGH(S) IN THE LEDGE SHALL BE EXCAVATED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER ITEM 203.16 SOLID ROCK EXCAVATION.

**STONE FILL**

38. STONE FILL, TYPE IV MAY NOT BE REQUIRED IN AREAS OF EXPOSED LEDGE AS DETERMINED BY THE ENGINEER.
39. BLOCKS FROM THE EXISTING ABUTMENT #2 SHALL BE USED TO ANCHOR STONE FILL SLOPES. ALL SALVAGING, STORING AND PLACEMENT OF THE BLOCKS WILL BE INCIDENTAL TO ITEM 529.20 PARTIAL REMOVAL OF STRUCTURE. SEE SHEET 82 FOR MORE DETAIL.

**ASPHALTIC PLUG BRIDGE JOINT**

40. THE JOINT SHALL BE LOCATED CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
41. THE JOINT SHALL BE EXCAVATED AS SHOWN ON THE PLANS BY USE OF SAWS AND PNEUMATIC HAMMER OR A HAMMER AND CHISEL.
42. THE JOINT AREA SHALL BE BLAST CLEANED OF DEBRIS AND ASPHALT. THE JOINT AREA SHALL BE THOROUGHLY DRIED USING HOT COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
43. SPALLED AND DEFECTIVE CONCRETE SHALL BE REPAIRED WITH AN APPROVED MATERIAL AS AGREED UPON BY THE ENGINEER.
44. PROPERLY SIZED HEAT RESISTANT BACKER ROD SHALL BE PLACE IN THE MOVEMENT GAP ALLOWING FOR 1 INCH +/- OF BINDER ABOVE THE ROD.
45. THE BINDER MATERIAL SHALL BE HEATED AND PLACED AS RECOMMENDED BY THE MANUFACTURER.
46. PLACE 1/4 INCH THICK BY 8 INCH WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRESTAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE APPROACH SLAB IS COVERED WITH A STONE BASE OR BITUMINOUS PAVEMENT AND VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.
47. THE BINDER MATERIAL AND AGGREGATE SHALL BE HEATED AND MIXED AS RECOMMENDED BY THE MANUFACTURER.
48. THE INSTALLATION OF MATERIAL, COMPACTION, AND TOP COATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
49. IMMEDIATELY AFTER TOP COATING, AN ANTI-SKID MATERIAL SHALL BE CAST OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
50. JOINT SHALL BE PROTECTED FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 125 DEG F +/-.
51. BINDER MATERIAL SHALL BE APPLIED ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL: THE AMBIENT AIR TEMPERATURE IS AT LEAST 50 DEG F AND RISING, THE ROAD SURFACE IS SUFFICIENTLY DRY AND THE WEATHER CONDITIONS OR OTHER CONDITION ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

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