

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (DATED 2001), AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.
2. DESIGN IS FOR MS 22.5 LOADING, USING SERVICE LOAD METHOD.
3. WORKING STRESS METHOD IS USED TO DESIGN THE CURVED STEEL PLATE GIRDER. THE BRIDGE SHALL BE LOAD RATED USING THE LOAD FACTOR METHOD.
4. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH SECTION 506.03 OF THE STANDARD SPECIFICATIONS.
5. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF BEAMS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINAL GRADE.
6. ANY HOLES IN FASCIA BEAMS OR FASCIA GIRDER WEBS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SECTION 506.19.
7. FASCIA OVERHANG BRACKETS SHALL BE SPACED AT A MAXIMUM OF 1.2 m, AND SHALL BE DESIGNED BY THE CONTRACTOR.
8. ALL FIELD CONNECTIONS SHALL BE MADE WITH THE FOLLOWING:
 - A. UNPAINTED AREAS: 22 mm DIAMETER BOLTS, MEETING ASTM DESIGNATION A-325 M (AASHTO M164, TYPE III)
 - B. PAINTED AREAS: 22 mm DIAMETER BOLTS, MEETING ASTM DESIGNATION A-325 M (AASHTO M164, TYPE I, GALVANIZED)
 HOLES SHALL BE 24 mm DIAMETER. CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR.
9. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".
10. MINIMUM COVER FOR REINFORCING STEEL IN SUBSTRUCTURES SHALL BE 50 mm ALONG BACK FACES OF WALLS AGAINST EARTH AND 80 mm ELSEWHERE, UNLESS OTHERWISE DESIGNATED ON PLANS.
11. REINFORCING PLACEMENT TOLERANCES SHALL BE:
 - SPACING +/- 25 mm
 - CLEARANCE +/- 6 mm
12. CONCRETE FOR DECK AND CURBS SHALL BE "CONCRETE, HIGH PERFORMANCE CLASS A". ALL OTHER CONCRETE SHALL BE "CONCRETE, HIGH PERFORMANCE CLASS B", UNLESS OTHERWISE DESIGNATED ON THE PLANS.
13. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25 X 25.
14. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.
15. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20° C.
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.
18. DECK POURS ARE TO BE CONSTRUCTED IN ONE CONTINUOUS OPERATION WITH A MAXIMUM DURATION OF EIGHT HOURS. IF, DURING THE PLACEMENT, UNFORESEEN CIRCUMSTANCES MAKE PLACEMENT WITHIN THE EIGHT HOUR PERIOD IMPOSSIBLE, THE CONTRACTOR SHALL BE PREPARED TO PLACE A BULKHEAD, AS DIRECTED BY THE ENGINEER, TO LIMIT THE PLACEMENT TO EIGHT HOURS. IF THE PLACEMENT IS STOPPED AND A BULKHEAD IS PLACED, NEW CONCRETE SHALL NOT BE PLACED AGAINST THE VERTICAL CONSTRUCTION JOINT UNTIL THE PREVIOUSLY PLACED CONCRETE HAS BEEN IN PLACE A MINIMUM OF SEVENTY TWO HOURS.
19. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 12 PER 300. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD CENTER SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTHED WITH EITHER A WOOD OR MAGNESIUM FLOAT FINISH.
20. ALL STRUCTURAL STEEL WITHIN 2.5 m OF ABUTMENT NO. 2 SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 513. THE COLOR OF PAINT WILL BE BROWN, COLOR CHIP 20059.
21. PAYMENT FOR REMOVAL OF ALL EXISTING BRIDGE BITUMINOUS CONCRETE PAVEMENT SHALL BE MADE UNDER ITEM 529.10. THE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY AT AN OFF SITE LOCATION.
22. ITEM 529.15, REMOVAL OF STRUCTURE, SHALL INCLUDE THE REMOVAL OF THE SUPERSTRUCTURE; REMOVAL OF THE SOUTH PIER; REMOVAL OF THE INTERMEDIATE BENT; REMOVAL OF THE EXISTING RETAINING WALL AT THE SOUTH ABUTMENT TO 0.300 m BELOW THE SUBBASE LAYER; REMOVAL OF THE NORTH ABUTMENT LOCATED OUTSIDE THE STRUCTURE EXCAVATION. THE SOUTH PIER AND THE INTERMEDIATE PIER REPRESENTS 0.20 OF THE TOTAL REMOVAL OF STRUCTURE AND IS SHOWN IN THE CHANNEL COLUMN OF THE BRIDGE QUANTITY SHEET.
23. ITEM 204.25 STRUCTURE EXCAVATION, SHALL INCLUDE THE REMOVAL OF THE SOUTH ABUTMENT AND PART OF THE EXISTING SOUTHEAST RETAINING WALL, PART OF THE NORTH ABUTMENT AND PART OF THE EXISTING NORTHEAST RETAINING WALL LOCATED INSIDE THE STRUCTURE EXCAVATION.
24. TRAFFIC WILL BE MAINTAINED ON A TEMPORARY ONE WAY BRIDGE WITH TRAFFIC CONTROL SIGNALS
25. THE STRUCTURAL STEEL OF THE EXISTING BRIDGE ON THIS PROJECT IS PAINTED WITH A MATERIAL WHICH MAY CONTAIN LEAD. THE STRUCTURAL STEEL BECOMES THE PROPERTY OF THE CONTRACTOR AND THE CONTRACTOR MAY DISPOSE OF IT OR RETAIN IT FOR FUTURE USE. THE CONTRACTOR WILL INFORM THE ENGINEER OF HIS/HER PLANS FOR THE DISPOSAL OR RETAINAGE OF THE STRUCTURAL STEEL PRIOR TO ITS REMOVAL.
26. EXISTING BRIDGE PLANS (BUILT 1926) ARE AVAILABLE FOR THIS PROJECT AND CAN BE OBTAINED THROUGH THE VERMONT AGENCY OF TRANSPORTATION.
27. WHERE TOP OF SOUND LEDGE IS BELOW THE FOOTING ELEVATION, A SUB-FOOTING SHALL BE POURED SEPERATELY, UP TO THE BOTTOM OF THE FOOTING, USING "CONCRETE, HIGH PERFORMANCE CLASS B". THE SUB-FOOTING SHALL BE FOUNDED ON LEDGE WHICH HAS BEEN CLEANED OF ALL LOOSE ROCK AND OTHER DEBRIS. THE TOP OF THE SUB-FOOTING SHALL BE INTENTIONALLY ROUGHENED TO CREATE A BOND WITH THE FOOTING CONCRETE. THE OUTSIDE LIMITS OF THE SUB-FOOTING SHALL BE 300 mm OUTSIDE THE FOOTING.
28. WHERE LEDGE IS STEEPLY SLOPED, A 1200 X 1200 GRID PATTERN OF #25 DOWELS SHALL BE DRILLED INTO LEDGE UNDER FOOTING. THE DOWELS SHOULD HAVE 600 mm EMBEDMENT INTO LEDGE AND SHALL EXTEND 450 mm INTO FOOTING.
29. UPON COMPLETION OF THE STRUCTURE EXCAVATION, AND PRIOR TO THE PLACING OF THE CONCRETE FORMS, THE RESIDENT ENGINEER SHALL CONTACT THE SOILS AND FOUNDATIONS ENGINEER/ENGINEERING GEOLOGIST FROM THE VERMONT AGENCY OF TRANSPORTATION, TO INSPECT THE ROCK TO DETERMINE IF IT IS COMPETENT TO SUPPORT THE DESIGN BEARING PRESSURE SHOWN ON THE PLANS. THE GEOLOGIST SHALL BE ALLOWED 5 WORKING DAYS FROM NOTICE OF EXCAVATION TO MAKE HIS INSPECTION AND REPORT HIS DETERMINATION ON THE COMPETENCY OF THE ROCK.
30. UNCLASSIFIED CHANNEL EXCAVATION SHALL INCLUDE EITHER EARTH EXCAVATION OR SOLID ROCK EXCAVATION, OR BOTH. PART OF THE EXISTING NORTHEAST RETAINING WALL ABOVE THE BOTTOM OF THE EXISTING FOOTING SHALL BE REMOVED UNDER ITEM 203.27, UNCLASSIFIED CHANNEL EXCAVATION.
31. ROCK CUT FOR BEAM CLEARANCE SHALL BE PAID UNDER UNCLASSIFIED CHANNEL EXCAVATION, ITEM 203.27. A QUANTITY OF 34 m³ WAS ADDED TO THE QUANTITY SHEET.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	HARTLAND	Bridge No.	60
Highway No.	U.S. ROUTE 5	Log Sta.	
		Surv. Sta.	
U.S. ROUTE 5 OVER LULLS BROOK			
GENERAL NOTES			
Designed By	S. BAKI	Drawn By	B. TYLER
Checked By	Date	Bridge Design Supervisor	
		J. MIECZKOWSKI	Date
PROJECT	HARTLAND	PROJECT NO.	BRS No. 0113(22)
I.G.C. Info. M:\456201\VAOT Hartland\struct\zf204gen.dgn			
Bridge Sheet No.	BRI02	Sheet	37 of 86