

NOTE: UNLESS NOTED OTHERWISE, ALL STATIONS ARE IN KILOMETERS, ALL ELEVATIONS ARE IN METERS, AND ALL DIMENSIONS ARE IN MILLIMETERS.

GENERAL NOTES:

1. THE FOLLOWING NOTES SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION - 2001 AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS (17TH EDITION) FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.
3. ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL CONFORM TO THE LATEST ANSI/AASHTO/AWS WELDING CODE AND ITS LATEST REVISIONS.
4. MINIMUM COVER FOR REINFORCING STEEL IN SUBSTRUCTURE SHALL BE 50 mm ALONG BACK FACES OF WALLS AGAINST EARTH, AND 75 mm ELSEWHERE UNLESS NOTED OTHERWISE.
5. REINFORCEMENT PLACEMENT TOLERANCES SHALL BE:
SPACING ±25 mm
CLEARANCE ±5 mm
6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25 mm BY 25 mm.
7. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 4%. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH WITH FLOAT FINISH AS PER SUBSECTION 50J6.
8. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 20 DEGREES CELSIUS UNLESS OTHERWISE NOTED.
9. THE EXTENT OF SUPERSTRUCTURE AND SUBSTRUCTURE CONCRETE REPAIR, AND THE APPROPRIATE CONCRETE REPAIR ITEMS SHALL BE AS DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION. REPAIRS SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS.
10. IF A COLD PLANNER IS USED TO STRIP PAVEMENT FROM THE APPROACH SLABS, CONCRETE PAVEMENT OR DECK, THE FINAL 12 mm SHALL BE REMOVED BY LOADER, GRADER OR EQUIPMENT APPROVED BY THE RESIDENT ENGINEER. THIS WORK SHALL ALL BE INCLUDED IN THE UNIT PRICE BID FOR "REMOVAL OF BRIDGE PAVEMENT". THE ENTIRE AREA OF APPROACH SLABS, CONCRETE PAVEMENT AND DECK SHALL BE STRIPPED TO BARE CONCRETE.
11. ALL DIMENSIONS OF EXISTING MATERIAL SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO START OF WORK.
12. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED NEW CONCRETE SURFACES.
13. SHOP DRAWINGS ARE TO BE SENT TO DALE GOZALKOWSKI AT CLOUGH, HARBOUR & ASSOCIATES, LLP AND TO JEFF CLARK OF THE STATE OF VERMONT AGENCY OF TRANSPORTATION FOR REVIEW.
14. THIS WORK WILL BE PERFORMED ABOVE A RAILROAD AND TWO ROADS, THE CONTRACTOR SHALL EXERCISE CARE TO AVOID DROPPING ANY MATERIALS ON THESE UNDER FEATURES.
15. EXISTING DECK WEEPS EXPOSED BY REMOVAL OF THE BRIDGE PAVEMENT SHALL HAVE ANY REMAINING ASPHALT CLEARED FROM THEIR OPENINGS. CARE SHALL BE TAKEN NOT TO COVER THE WEEPS WITH SHEET MEMBRANE WATERPROOFING AND THEIR ENDS SHALL BE FILLED WITH STEEL WOOL.

MEMBRANE INFORMATION:

1. BEFORE APPLYING THE SHEET MEMBRANE WATERPROOFING, THE EXISTING DECK SURFACE SHALL BE MADE SMOOTH TO THE SATISFACTION OF THE RESIDENT ENGINEER, USING ONE OR BOTH OF THE FOLLOWING METHODS:

FILL IN ALL POCK MARKS, GOUGES OR OTHER DEPRESSIONS WITH "RAPID SETTING CONCRETE REPAIR MATERIAL", ITEM 580J7, CONTACT VERMONT AGENCY OF TRANSPORTATION MATERIALS SECTION TO OBTAIN A LIST OF ACCEPTABLE MATERIALS FOR "RAPID SETTING CONCRETE REPAIR MATERIAL". ANY RAPID SET CONCRETE USED SHALL BE INSTALLED BY THE METHOD AND TO THE LIMITS AS GIVEN BY THE MANUFACTURER AND AS DIRECTED BY THE RESIDENT ENGINEER.

GRIND SMOOTH ALL ROUGH AREAS, RIDGES, OR OTHER HIGH SPOTS UNDER THE ITEM 580J6, "SURFACE PREPARATION FOR MEMBRANE".
2. THE MEMBRANE IS TO BE INSTALLED ACCORDING TO THE SPECIFICATIONS CALLED FOR UNDER ITEM 519.20, SHEET MEMBRANE WATERPROOFING (TORCH APPLIED) (MOD).

NOTES CONCERNING PATCHING EXISTING CONCRETE DECKS:

1. DECK AREAS TO BE REPAIRED SHALL BE MARKED ON THE STRIPPED DECK BY VERMONT AGENCY OF TRANSPORTATION PERSONNEL. THE METHODS USED FOR DEFINING AREAS NEEDING REPAIR MAY BE VISUAL INSPECTION, THE CHAIN DRAG METHOD, HAMMER SOUNDING, HALF-CELL POTENTIAL, ETC. THE RESIDENT ENGINEER MAY ORDER ANY OR ALL OF THESE TESTING METHODS. THE CONTRACTOR SHALL EMPLOY QUALIFIED PERSONNEL TO PERFORM THE TESTS. PAYMENT FOR TESTING SHALL BE SUBSIDIARY TO THE "REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE" ITEMS. ALL NECESSARY CLEANING OF THE DECK SURFACE PRIOR TO MARKING OF THE DECK REPAIR AREAS WILL BE PERFORMED BY THE CONTRACTOR AS DIRECTED BY THE RESIDENT ENGINEER. THIS WILL ALSO INCLUDE ADDITIONAL CLEANINGS AT OTHER TIMES AS THE WORK PROGRESSES. PAYMENT FOR CLEANING WILL BE CONSIDERED SUBSIDIARY TO ALL OTHER PAY ITEMS.
2. DECK SURFACE IS TO BE REPAIRED AS NECESSARY UNDER ITEMS 580J0, 580J1 OR 580J2, "REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS I, II OR III". ALL EDGES OF REPAIRED AREAS ARE TO BE SAW CUT SQUARE AND A MINIMUM OF 25 mm DEEP. "REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE CLASS I" SHALL INCLUDE REMOVAL OF CONCRETE TO A MAXIMUM DEPTH AS DETERMINED BY THE TOP OF THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL AND IS GENERALLY INTENDED FOR USE ONLY IN THOSE AREAS OF SURFACE SPALLING, APPROACH SLAB REPAIR, AND REPAIR UNDER CURB LINES AS LONG AS THE DEPTH LIMITS FOR CLASS I ARE NOT EXCEEDED.

BEARING NOTES:

1. BEARINGS SHALL CONFORM TO REQUIREMENTS OF SECTION 531. COMPONENTS SHALL CONFORM TO DESIGN, FABRICATION AND MATERIAL REQUIREMENTS OF THE APPLICABLE SUBSECTIONS OF SECTION 731-BEARING PADS FOR STRUCTURES.
2. BEARINGS SHALL BE PAID FOR UNDER ITEM 531J0 "BEARING DEVICE ASSEMBLY".
3. SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL INCLUDE WELDING AND BONDING PROCEDURES, SHOP DRAWINGS SHALL ALSO INDICATE WHETHER BEARING COMPONENTS ARE GALVANIZED OR METALIZED. IF METALIZED IS USED, THE SHOP DRAWINGS SHALL DENOTE THE TYPE OF SEAL COATING THAT WILL BE PLACED ON THE METALIZING. SEE GENERAL NOTE 13 ON THIS SHEET FOR SHOP DRAWING DISTRIBUTION LIST.
4. SOLE PLATES AND WASHERS ARE TO BE GALVANIZED OR METALIZED AS PER SUBSECTION 506J5 (a) OR (b) OF THE STANDARD SPECIFICATIONS.
5. THE WELD BETWEEN THE SOLE PLATE AND BOTTOM FLANGE SHALL BE SMAW 8018 (C3). AREAS OF GALVANIZING ON THE SOLE PLATE DESTROYED IN THE WELDING PROCESS SHALL BE PAINTED WITH AN APPROVED SEALER. REFER TO SUPPLEMENTAL SPECIFICATION 513.
6. THE CONCRETE SURFACE UNDER THE BEARING SHALL BE LEVEL.
7. ANCHOR BOLTS SHALL HAVE A 380 mm MINIMUM EMBEDMENT INTO CONCRETE. ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO SECTION 714.08 OF THE STANDARD SPECIFICATIONS.
8. PLATES AND PLATE WASHERS SHALL CONFORM TO AASHTO M 270M GRADE 250.
9. ALL WORK REQUIRED TO REMOVE THE EXISTING BEARINGS SHALL BE SUBSIDIARY TO PARTIAL REMOVAL OF STRUCTURE, ITEM 529.20.
10. THE ELASTOMER MATERIAL USED IN THE BEARING SHALL HAVE A SHORE A HARDNESS OF 50 - DUROMETER, SHEAR MODULUS OF 0.62 MPa AND A LOW TEMPERATURE GRADE OF 3.
11. FINISHED BEARINGS SHALL CONFORM TO THE DESIGN DIMENSIONS, TOLERANCES AND DETAILS LISTED BELOW:

BEARING TOLERANCES	
DIMENSION	TOLERANCE
OVERALL VERTICAL	-0,3 mm
OVERALL HORIZONTAL	-0,6 mm
POSITION OF HOLES AND SLOTS CENTERLINE	± 1,6 mm FROM CENTERLINE
SIZE OF HOLES, SLOTS AND INTERNAL STEEL PLATES	-0,16 mm
EDGE COVER OVER EXTERNAL STEEL PLATES	3 mm MIN.
BEDDING SURFACE (TOP AND BOTTOM) OVER INTERNAL STEEL PLATES	6 mm MIN.

- A. NO EDGE COVER WILL BE REQUIRED OVER INTERNAL DETAILS THAT WILL NOT BE EXPOSED AFTER ERECTION, I.E. - VERTICAL HOLES COVERED BY BEARING SEATS OR FLANGES).
- B. THE INTERNAL STEEL PLATES SHALL BE CHECKED FOR PARALLELISM BY MEASURING THE DISTANCE BETWEEN EACH INDIVIDUAL STEEL PLATE, AND BETWEEN THE TOP OR BOTTOM EDGE OF THE BEARING TO THE FIRST ADJACENT STEEL PLATE. THE MEASUREMENTS WILL BE TAKEN AT THE MIDPOINT OF EACH SIDE. THE SMALLEST OF THE FOUR MEASUREMENTS SHALL BE RECORDED FOR EACH PLATE. THE CUMULATIVE OF THESE MEASUREMENTS SHALL NOT BE LESS THAN 75% OF THE DESIGN EFFECTIVE RUBBER THICKNESS.
- C. THE AVERAGE THICKNESS OF THE INDIVIDUAL LAYERS OF THE ELASTOMER SHALL NOT VARY MORE THAN ± 20% OF THE DESIGN THICKNESS AND IN NO CASE EXCEED THE DESIGN THICKNESS BY 3 mm. AVERAGE THICKNESS WILL BE CALCULATED FROM MEASUREMENTS TAKEN AT THE MIDPOINT OF EACH SIDE.

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town of	BENNINGTON	Bridge No.	BRI100 & BRI200
Highway No.	VT. RTE. 279	Log Sta.	
		Surv. Sta.	17+331
VT. RTE. 279			
GENERAL NOTES AND DETAILS			
Designed By	D. STECIAK	Drawn by	K. RAPELLO
Checked By	Date	Bridge Design Supervisor	Date
M.W. OLSTAD	02/04	M.W. OLSTAD	02/04
PROJECT	BENNINGTON-HOOSICK	PROJECT NO.	D.P.I. 0146(1) C/6
I.G.C. Info.			
Bridge Sheet No.	BRI	Sheet	57 OF 83

