

**GENERAL**

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2006 STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 3RD EDITION, AND ITS LATEST REVISIONS.
2. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20 DEGREES CELSIUS.

**CONSTRUCTION**

1. WATER QUALITY. PREVENT POLLUTION, AND DISCHARGE OF SILT OR RAW CONCRETE INTO THE WATERWAY AS DIRECTED BY THE RESIDENT ENGINEER.
2. IN-STREAM CONSTRUCTION. PERMITS DESIGNATE AND LIMIT THE PERIOD FOR IN-STREAM CONSTRUCTION. THE AGENCY OF NATURAL RESOURCES MUST APPROVE ANY DEVIATION FROM THIS PERIOD IN WRITING.
3. ITEM 528.11 "TWO-WAY TEMPORARY BRIDGE". MAINTAIN TRAFFIC DURING CONSTRUCTION ON A TWO-WAY TEMPORARY BRIDGE CONSTRUCTED UPSTREAM OF THE EXISTING STRUCTURE. PAYMENT FOR THIS ITEM SHALL INCLUDE THE DESIGN AND DETAIL OF THE METHOD OF SEPARATING THE TRAVELING PUBLIC FROM THE NEW BRIDGE CONSTRUCTION. INCLUDE DESIGN AND METHOD IN THE TEMPORARY BRIDGE SUBMITTAL.
4. ITEM 641.10 "TRAFFIC CONTROL". PAYMENT FOR THIS ITEM SHALL INCLUDE THE FOLLOWING WORK. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE RESIDENT ENGINEER. FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES.

**EARTHWORK**

1. ITEM 301.35 "SUBBASE OF DENSE GRADED CRUSHED STONE". SEE SUBSECTION 301.06 "COMPACTION" OF THE STANDARD SPECIFICATIONS FOR TESTING REQUIREMENTS.
2. ITEM 529.20 "PARTIAL REMOVAL OF STRUCTURE". REMOVE ALL OF THE SUPERSTRUCTURE. REMOVE THE SOUTH ABUTMENT TO ELEVATION 195.0. REMOVE BOTH OF THE PIERS TO ELEVATION 192.5. REMOVE ALL OF THE NORTH ABUTMENT INCLUDING TIMBER PILES THAT MAY INTERFERE WITH DRIVING NEW PILES.
3. UNDERGROUND FIBER OPTIC CABLES OWNED BY VERIZON COMMUNICATIONS ARE NEAR THE PROJECT ON THE WEST SIDE OF US 7. THE CABLES ARE NEAR THE TOE OF SLOPE OF THE STONE FILL FOR WING WALL 1 AT STA 2+284. SEE SPECIAL PROVISIONS FOR MORE UTILITIES INFORMATION AND REQUIREMENTS.

**REINFORCED CONCRETE**

1. ITEM 501.33 "CONCRETE, HIGH PERFORMANCE CLASS A". USE FOR THE DECK, CURBS, AND INTEGRAL ABUTMENT BACK WALL AND WING WALLS ABOVE THE PILE CAP CONSTRUCTION JOINT. PAYMENT FOR THIS ITEM SHALL INCLUDE INSTALLING THE BRIDGE PLAQUE PROVIDED BY THE AGENCY.
2. ITEM 501.34 "CONCRETE, HIGH PERFORMANCE CLASS B". USE FOR THE APPROACH SLABS, AND INTEGRAL ABUTMENT PILE CAPS AND WING WALLS BELOW THE PILE CAP CONSTRUCTION JOINT.
3. ITEM 507.17 "EPOXY COATED REINFORCING STEEL". ALL REINFORCING STEEL SHALL BE EPOXY COATED REINFORCING STEEL.
4. CONCRETE JOINTS. CONSTRUCT CONCRETE JOINTS AS INDICATED ON THE PLANS OR DIRECTED BY THE RESIDENT ENGINEER. CONSTRUCT SHEAR KEYS MONOLITHICALLY AND CONTINUOUSLY UNLESS OTHERWISE INDICATED. TERMINATE SHEAR KEYS 150 MM FROM ENDS OF JOINTS. IN HORIZONTAL JOINTS, PLACE SHEAR KEYS UPWARD.
5. CHAMFERS. CHAMFER ALL EXPOSED EDGES OF CONCRETE WITH 25 MM BY 25 MM CHAMFERS, UNLESS OTHERWISE NOTED. ROUND THE TOP INSIDE CORNER OF CURBS WITH A 15 MM RADIUS.
6. SCORE MARKS. CONSTRUCT SCORE MARKS AS INDICATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
7. SUPPLEMENTAL SPECIFICATION 514.10 "WATER REPELLENT, SILANE". APPLY REPELLENT TO ALL EXPOSED SURFACES OF CONCRETE ON THE BRIDGE, EXCEPT THE BOTTOM OF THE DECK BETWEEN THE DRIP NOTCHES.

**STEEL**

1. NEW STRUCTURAL STEEL SHALL BE AASHTO M 270M, GRADE 345W UNLESS OTHERWISE NOTED.
2. ALL STRUCTURAL STEEL WILL BE PAID FOR UNDER ITEM 506.55 "STRUCTURAL STEEL, PLATE GIRDER". (REV. 1)
3. ITEM 531.14 "BEARING DEVICE ASSEMBLY, INTEGRAL ABUTMENT". PAYMENT FOR THIS ITEM SHALL INCLUDE BOLTS, NUTS, WASHERS, AND PLATES. IT SHALL BE FULL COMPENSATION FOR ALL WORK REQUIRED FOR THE CONSTRUCTION INTEGRAL ABUTMENT BEARING DEVICE ASSEMBLY.
4. CHARPY V-NOTCH TEST. TEST STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
5. BOLTS FOR ALL BOLTED FIELD CONNECTIONS SHALL BE 22 MM DIAMETER HIGH STRENGTH BOLTS IN 24 MM DIAMETER HOLES UNLESS OTHERWISE NOTED.
6. CONNECTIONS NOT SHOWN IN THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE RESIDENT ENGINEER FOR APPROVAL.
7. ITEM 505.28 "STEEL PILING FOR INTEGRAL ABUTMENTS, HP 360 X 132". REINFORCE THE DRIVING TIP ACCORDING TO SUBSECTION 505.04(E) OF THE STANDARD SPECIFICATIONS. NO SUBSTITUTIONS FOR THE NUMBER, SIZE AND GRADE OF THE PILES WILL BE ALLOWED. PILE HEAD TOLERANCE. DRIVE OR CUT OFF THE PILE HEAD TO WITHIN 25 MM VERTICALLY OF THE POSITION SHOWN IN THE PLANS.
8. ITEM 505.45 "DYNAMIC PILE LOADING TEST". THE FACTORED AXIAL COMPRESSIVE LOAD FOR EACH PILE IS 2,133 kN. THE RESISTANCE FACTOR FOR DYNAMIC PILE LOADING TESTING IS 0.65. USING THIS RESISTANCE FACTOR, DRIVE PILES TO A REQUIRED NOMINAL PILE DRIVING RESISTANCE OF 3,282 kN.
9. GIRDER PROFILES. AFTER THE SUPERSTRUCTURE STEEL HAS BEEN SET ON THE ANCHOR BOLTS, TAKE ELEVATIONS ALONG THE TOP OF THE GIRDERS AS DIRECTED BY THE RESIDENT ENGINEER FOR DETERMINING HAUNCH DEPTHS.
10. FLEMING BRACKETS OR SIMILAR FALSEWORK. SPACE FLEMING BRACKETS OR SIMILAR FALSEWORK AS REQUIRED BY DESIGN WITH A MAXIMUM SPACING OF 1200 MILLIMETERS. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
11. HOLES IN WEB. FILL ANY BOLT HOLES IN THE WEBS OF FASCIA GIRDERS NOT OTHERWISE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS MEETING AASHTO M164M TYPE 3. TIGHTEN THE BOLTS IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.

**ASPHALTIC P LUG BRIDGE JOINT**

1. LOCATE THE JOINT CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
2. EXCAVATE THE JOINT AS SHOWN ON THE PLANS WITH SAWS AND PNEUMATIC HAMMER OR A HAMMER AND CHISEL.
3. BLAST CLEAN THE JOINT AREA OF DEBRIS AND ASPHALT. THOROUGHLY DRY THE JOINT AREA WITH HOT COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
4. REPAIR SPALLED AND DEFECTIVE CONCRETE WITH AN APPROVED MATERIAL AS AGREED UPON BY THE ENGINEER.
5. HEAT AND MIX THE BINDER MATERIAL AND AGGREGATE AS RECOMMENDED BY THE MANUFACTURER.
6. INSTALLATION OF MATERIAL, COMPACTION, AND TOP COATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
7. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
8. PROTECT JOINT FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 51 DEG C (125 DEG F) +/-.
9. WEATHER LIMITATIONS. APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL:  
THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 DEG C (50 DEG F) AND RISING;  
THE ROAD SURFACE IS SUFFICIENTLY DRY; AND  
WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

**INTEGRAL ABUTMENT CONSTRUCTION SEQUENCE**

1. DRIVE AND CUT OFF PILES AT THE ELEVATIONS SHOWN. BEWARE OF EXISTING WOODEN PILES AT THE NORTH ABUTMENT.
2. POUR CONCRETE ABUTMENT PILE CAPS.
3. BACKFILL ABUTMENT PILE CAPS TO 150 MM BELOW THE PILE CAP CONSTRUCTION JOINTS AND PLACE STONE FILL SLOPE PROTECTION AT THE SAME TIME.
4. INSTALL BEARING DEVICE ASSEMBLIES.
5. ERECT GIRDERS AND CROSS FRAMES.
6. PROFILE GIRDERS TO CALCULATE HAUNCHES.
7. POUR CONCRETE ABUTMENT BACKWALLS & DECK.
8. BACKFILL ABUTMENT BACKWALLS.
9. POUR CONCRETE CURBS & TOP OF WING WALLS.
10. POUR CONCRETE APPROACH SLABS.

**REVISIONS**

1. 04/03/08 REVISED NOTE STEEL 2.

**GENERAL NOTES**

PROJECT NAME:	RUTLAND TOWN
PROJECT NUMBER:	BRF 019-3(48)
FILE NAME:	sbl72gen.i
PROJECT LEADER:	R. WHITCOMB
DESIGNED BY:	T. LACKEY
95bl72/str/sbl72gen.dgn	
PLOT DATE:	04-APR-2008
DRAWN BY:	T. LACKEY
CHECKED BY:	R. WHITCOMB
SHEET	3 OF 75