

## PROJECT NOTES

### GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION AND ITS LATEST REVISIONS AND THE 5TH EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND ITS LATEST REVISIONS.
2. THE CONTRACTOR WILL BE ALLOWED TO CLOSE BRIDGE BR2 FOR ONE FIVE DAY (120 HOUR) PERIOD AND WILL BE ALLOWED TO CLOSE BRIDGE BR5 FOR ONE THREE DAY (72 HOUR) PERIOD. DURING THAT TIME THE CONTRACTOR WILL BE ALLOWED TO WORK 24 HOURS PER DAY. THE CONTRACTOR SHALL SCHEDULE THEIR WORK SUCH THAT THE BRIDGE IS NOT CLOSED DURING HOLIDAY PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. THE CONTRACTOR SHALL ENSURE ACCESS TO ALL DRIVES AND SIDE ROADS AT ALL TIMES DURING CONSTRUCTION.
4. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68°F.
5. IN-STREAM CONSTRUCTION SHALL OCCUR ONLY WITHIN THE TIMEFRAME IN THE PROJECT PERMITS INCLUDED IN THE CONTRACT DOCUMENTS. IF THE CONTRACTOR PROPOSES TO PERFORM IN STREAM WORK OUTSIDE OF THESE TIMEFRAMES, THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE APPROPRIATE REGULATING ENTITIES PRIOR TO PERFORMING THE WORK.

### PRECAST CONCRETE BOX CULVERTS AND WINGWALLS

1. THE BOX CULVERT INCLUDING SILLS, HEADWALLS, CUT-OFF WALLS, AND WINGWALLS WILL BE PAID FOR UNDER THE APPROPRIATE SECTION 540 CONTRACT ITEM.
2. THE BOX CULVERT INCLUDING THE SILLS, HEADWALLS AND WINGWALL STEMS SHALL BE PRECAST. THE CUT-OFF-WALL AND WINGWALL FOOTINGS MAY BE EITHER PRECAST OR CAST IN PLACE. THE DESIGN OF THESE CULVERTS SHALL BE THE RESPONSIBILITY OF THE FABRICATOR. CULVERT SHALL BE DESIGNED FOR AN HL-93 LIVE LOAD. CAST-IN-PLACE CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 501 FOR CONCRETE, HIGH PERFORMANCE CLASS B.
3. THE CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS FOR THE BOX CULVERTS AND ALL ASSOCIATED DETAILS IN ACCORDANCE WITH SUBSECTION 105.03.
4. THE BOX CULVERT TYPICAL SECTIONS SHOWN IN THE DRAWINGS ARE FOR SCHEMATIC PURPOSES ONLY. THE ACTUAL SHAPE OF THE BOX CULVERT AND ITS COMPONENTS WILL BE DEPENDENT ON THE FABRICATOR.
5. ALL BOX CULVERT JOINTS SHALL BE STRENGTHENED WITH PERMANENT CLOSURE HARDWARE. ALL HARDWARE COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH SUBSECTION 726.08.
6. ALL REINFORCING TO BE LEVEL I (UNCOATED). PAYMENT FOR REINFORCING WILL BE INCLUDED UNDER THE APPROPRIATE SECTION 540 CONTRACT ITEM.
7. AFTER BOX CULVERT SECTIONS HAVE BEEN SET IN THEIR FINAL POSITION, THE EXTERIOR (TOP AND SIDES) AND INTERIOR (SIDES AND BOTTOM) OF ALL BOX CULVERT JOINTS, AND ALL LIFTING HOLES, SHALL BE GROUTED WITH MORTAR, TYPE IV. PRIOR TO THE APPLICATION OF ANY WATERPROOFING, ALL MORTAR SHALL BE WET CURED A MINIMUM OF 12 HOURS OR UNTIL THE COMPRESSIVE STRENGTH HAS REACHED 2000 psi.
8. A TWO FOOT WIDE STRIP OF SHEET MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH SIDE JOINT IN ACCORDANCE WITH SUBSECTION 540.10. THE MEMBRANE SHALL BE CENTERED ON THE JOINT AND SHALL RUN THE ENTIRE HEIGHT OF THE JOINT. THE ENTIRE TOP OF THE BOX CULVERT SHALL THEN BE COVERED WITH TORCH APPLIED MEMBRANE. TORCH APPLIED MEMBRANE WILL BE PAID SEPARATELY UNDER CONTRACT ITEM 519.20. THE MEMBRANE SHEETS SHALL OVERLAP THE EDGES OF THE CULVERT BY ONE FOOT ON EACH SIDE AS SHOWN IN THE PLANS.
9. WATER REPELLENT IN ACCORDANCE WITH ITEM 514.10 SHALL BE APPLIED TO ALL EXPOSED SURFACES EXCEPT THE INSIDE OF THE BOX.

### SIMULATED STREAM BED

1. BED MATERIAL TO BE PLACED IN THE RECONSTRUCTED CHANNEL AND BOX CULVERT IS INTENDED TO MIMIC THE NATIVE CHANNEL. THE MATERIAL SHALL BE STONE FILL TYPE II SUPPLEMENTED WITH THE TAILINGS OF A TOPSOIL SCREENING OPERATION WITH GRADATION ADJUSTED TO CONFORM TO THE FOLLOWING TABLE:

STONE/SIEVE SIZE	% FINER, BY WEIGHT
36"	100
12"	30-85
#4	4-30
#200	4-12

2. INSTALLATION OF THE BED MATERIAL MAY REQUIRE INDIVIDUAL PLACEMENT OF LARGE STONES AT SPECIFIC LOCATIONS, AS DIRECTED BY THE ENGINEER. THE MATERIAL ACCEPTANCE AND PLACEMENT WILL BE PER THE STREAM ALTERATIONS ENGINEER, AND WILL BE IN ACCORDANCE WITH ITEM 900.608, SPECIAL PROVISION (STONE FILL, CULVERT LINING).

### UTILITY COORDINATION

1. THE CONTRACTOR IS ADVISED TO EXERCISE CAUTION WHILE WORKING IN AREAS OF OVERHEAD UTILITIES. OVERHEAD UTILITIES WILL BE RELOCATED BY THE UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR COORDINATION WITH THE UTILITIES IS ENCOURAGED FOR THE CONTRACTORS CONVENIENCE. THE FOLLOWING UTILITY CONTACT INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. UTILITIES INCLUDE BUT ARE NOT LIMITED TO:

-GREEN MOUNTAIN POWER: 1-802-747-5460

-WAITSFIELD AND CHAMPLAIN VALLEY TELECOM: 1-802-496-8323

-TRI-TOWN WATER DISTRICT #1: 1-802-758-2202

2. THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS IS APPROXIMATE. EXISTING UNDERGROUND UTILITIES TO BE LOCATED WITH EXPLORATORY EXCAVATION AS DIRECTED BY THE ENGINEER. IF RELOCATION IS REQUIRED IT WILL BE THE RESPONSIBILITY OF THE UTILITY OWNER.

ALL DIG SAFE REQUIREMENTS ARE STILL APPLICABLE.

3. SEE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

### TRAFFIC CONTROL

1. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS OR CORNER SIGHT DISTANCE FROM HIGHWAYS OR DRIVES.
2. ORANGE SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM D 4956) TYPE VII, VIII OR IX REQUIREMENTS, UNLESS OTHERWISE NOTED.
3. SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
4. FIXED SIGNS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE EDGE OF PAVEMENT. THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT OR FOUR FEET OUTSIDE GUARDRAIL. EACH POST SHALL HAVE 2 (MIN.) BOLTS WHERE ATTACHED TO SIGN.
5. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A ONE FOOT MINIMUM ABOVE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
6. WHERE SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 COMPLIANT. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POST(S). WHEN ANCHORS ARE INSTALLED, STUB SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
7. THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED AT THE DISCRETION OF THE ENGINEER AND IN ACCORDANCE WITH SECTION 6F.60 OF THE MUTCD.

PROJECT NAME: BRIDPORT  
PROJECT NUMBER: STP CULV(29)

FILE NAME: zllc264frm.dgn  
PROJECT LEADER: M. CHENETTE  
DESIGNED BY: J. HUNGERFORD  
PROJECT NOTES

PLOT DATE: 9/12/2014  
DRAWN BY: L. BUXTON  
CHECKED BY: M. CHENETTE  
SHEET 4 OF 57

