

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.
2. ALL WORK AND ANY ASSOCIATED ACTIVITY ON THIS PROJECT SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY LIMITS SHOWN ON THE PLANS.
3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
4. IT IS EXPECTED THAT FILLING VOIDS UNDER THE CULVERT, CONSTRUCTION OF REINFORCED CONCRETE INVERT, WINGWALLS, CRADLE WALL, WEIRS AND STONE FILL WILL BE THE EXTENT OF THE WORK.
5. HAND PROBES TAKEN IN THE VICINITIES OF NEW HEADWALLS DID NOT INDICATE THE PRESENCE OF BEDROCK. IF BEDROCK IS ENCOUNTERED, IT SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER BEFORE ADVANCING THE WORK.
6. BED MATERIAL TO BE PLACED UPSTREAM AND DOWNSTREAM OF CULVERT IS INTENDED TO MIMIC THE NATIVE CHANNEL. THIS MATERIAL WILL BE PAID FOR UNDER ITEM 900.608 SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL).
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STAGING SCHEME. ALL WORK MUST BE DONE IN THE DRY AND ALL CAST-IN-PLACE CONCRETE SHALL BE CURED BEFORE THE STREAM IS ALLOWED TO FLOW THROUGH IT. A TEMPORARY STREAM DIVERSION SYSTEM IS NECESSARY TO CARRY THE STREAM DURING CONSTRUCTION. THE CONTRACTOR SHALL PREPARE AND SUBMIT A TEMPORARY STREAM DIVERSION PLAN FOR APPROVAL. THE PLAN SHALL DEPICT MEASURES PROPOSED TO PREVENT EROSION AND SEDIMENTATION AND MAINTAIN STREAM WATER QUALITY. THE COST OF STREAM DIVERSION, INCLUDING ANY TEMPORARY PIPING AND/OR DEWATERING, WILL BE PAID FOR UNDER ITEM 900.645, SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM).

PIPE REHABILITATION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ACCESS TO THE CULVERT REHABILITATION SITE. ALL RESULTING DISTURBED EARTH SHALL BE STABILIZED AND RESTORED UPON COMPLETION OF CONSTRUCTION. PAYMENT FOR THIS WORK WILL BE MADE UNDER CONTRACT ITEM 900.645, SPECIAL PROVISION (TEMPORARY ACCESS ROAD AND STAGING AREAS, CULVERT).
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION OF THE EXISTING PIPE TO THE SATISFACTION OF THE ENGINEER. IT IS ANTICIPATED THAT IT WILL BE NECESSARY FOR THE CONTRACTOR TO REMOVE SEDIMENT, LARGE STONES, AND/OR DEBRIS FROM INSIDE THE EXISTING CULVERT. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 900.640, SPECIAL PROVISION (REINFORCED CONCRETE INVERT) (EXISTING 142"x91" PIPE).
3. THE CONTRACTOR SHALL FILL ANY VOIDS UNDER THE CULVERT FROM WITHIN THE CULVERT BEFORE INSTALLING THE NEW CONCRETE INVERT. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 541.31, CONCRETE, CLASS D.
4. A NEW CONCRETE CRADLE AND WINGWALLS SHALL BE CONSTRUCTED AT THE INLET AND OUTLET OF THE PIPE AS SHOWN ON PLANS.
5. IT IS ANTICIPATED THAT A PORTION OF THE EXISTING CORRUGATED INVERT PLATES MAY NEED TO BE TEMPORARILY REMOVED TO COMPLETE THE WORK. THE CONTRACTOR SHOULD BE AWARE THAT IT MAY BE NECESSARY TO INTERNALLY BRACE THE EXISTING CULVERT TO PREVENT DEFORMATION. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO ITEM 900.640, SPECIAL PROVISION (REINFORCED CONCRETE INVERT) (EXISTING 142"x91" PIPE).
6. THE NEW REINFORCED CONCRETE INVERT SHALL BE SCREEDED TO A CONCAVE SHAPE AS SHOWN ON THE PLANS AND SHALL BE LEFT WITH A ROUGH RAKE FINISH. CAST-IN-PLACE CONCRETE WEIRS SHALL BE LOCATED AS SHOWN IN THE PROFILE.

CONCRETE NOTES

1. CONCRETE PAYMENT AND CLASSIFICATION WILL BE AS FOLLOWS:
CRADLE AND WINGWALLS:
ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B
FILLING VOIDS BELOW PIPE FLOW LINE:
ITEM 541.31, CONCRETE CLASS D
2. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH BY 1 INCH, UNLESS OTHERWISE NOTED.
3. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
4. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. PAYMENT WILL BE MADE UNDER ITEM 514.10, WATER REPELLENT, SILANE.

REINFORCING STEEL NOTES

1. ALL REINFORCING STEEL SHALL BE GRADE 60.
2. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE 3" UNLESS NOTED OTHERWISE.
3. REINFORCEMENT STEEL PLACEMENT TOLERANCES SHALL BE:
SPACING = +/- 1 INCH
CLEARANCE = +/- 1/4 INCH

TRAFFIC CONTROL NOTES

1. ALL TRAFFIC CONTROL MEASURES FOR THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE VTRANS STANDARD DRAWINGS, AS NEEDED. CONFLICTS BETWEEN THE MUTCD AND THE VTRANS STANDARD DRAWINGS WILL DEFER TO THE MUTCD.
2. TWO WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A SPECIFIC TRAFFIC CONTROL PLAN TO THE ROADWAY, TRAFFIC AND SAFETY ENGINEER FOR APPROVAL PER SUBSECTION 105.03. THIS WORK WILL BE PAID FOR UNDER ITEM 641.10, TRAFFIC CONTROL.
3. LARGE CONSTRUCTION VEHICLES MAY BE REQUIRED TO BACK DOWN THE TEMPORARY ACCESS ROADS. THESE VEHICLES WILL LIKELY NOT HAVE ADEQUATE SPACE AT THE INTERSECTION OF THE ACCESS ROADS AND THE MAIN ROAD TO PERFORM THE NECESSARY TURNING MOVEMENTS. AT THE OPTION OF THE CONTRACTOR, TEMPORARY CLOSURE OF ONE LANE WILL BE ALLOWED FOR ACCESS TO THE PROJECT SITE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
4. TEMPORARY BARRIER, IF USED, SHALL MEET THE REQUIREMENTS OF SECTION 621. BARRIER ENDS FACING ONCOMING TRAFFIC SHOULD BE TAPERED BEYOND THE CLEAR ZONE. IF NECESSARY, PAYMENT FOR INSTALLING, RESETTING, AND REMOVING ANY TEMPORARY TRAFFIC BARRIER WILL BE INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
5. ENERGY ABSORPTION ATTENUATORS, IF USED, SHALL MEET THE REQUIREMENTS OF SECTION 621. PAYMENT FOR INSTALLING AND REMOVING ANY ENERGY ABSORPTION ATTENUATORS WILL BE INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
6. SIGNS, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE CLEANED WEEKLY OR AS DIRECTED BY ENGINEER. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 641.10, TRAFFIC CONTROL.
7. DESIGN OF THE SIGNAL SUPPORTS AND ANY REQUIRED GUYING IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. SIGNAL TIMING/TIMING ADJUSTMENTS REQUESTED BY THE ENGINEER SHALL BE ACCOMPLISHED WITHIN A 48 HOUR PERIOD AND PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 678.40, TEMPORARY TRAFFIC SIGNAL SYSTEM. THE ENGINEER SHALL MAKE SEVERAL TRIAL RUNS TO DETERMINE THE PROPER ALL-RED CLEARANCE INTERVAL.

TRAFFIC CONTROL NOTES (CONTINUED)

9. THE TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS AND POSTS, TEMPORARY PAVEMENT MARKINGS, WARNING SIGNS, LUMINARIES, FLASHING BEACONS, HARD WIRED PREEMPTION SYSTEM AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COSTS ASSOCIATED WITH PROVIDING ELECTRICAL POWER. THE HARD WIRED PREEMPTION SYSTEM SHALL BE ACTIVATED BY MANUALLY OPERATED BUTTONS LOCATED NEXT TO THE STOP BARS AT EACH END OF THE PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER, TOWN FIRE, AMBULANCE, POLICE AND ANY OTHER APPROPRIATE DEPARTMENTS TO DETERMINE THE PROPER TIMING REQUIRED FOR EMERGENCY VEHICLES TO CLEAR THE PROJECT AREA ONCE PREEMPTION IS ACTIVATED. SEVERAL TRIAL RUNS SHALL BE MADE. PAYMENT FOR THE TEMPORARY TRAFFIC SIGNAL SYSTEM AND ANY OTHER INCIDENTALS REQUIRED TO INSTALL, MAINTAIN & REMOVE THE FULLY OPERATIONAL SIGNAL SYSTEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 678.40 TEMPORARY TRAFFIC SIGNAL SYSTEM.
10. SIGNAL FACES SHALL CONSIST OF 12" LENSES. (RED, YELLOW, AND GREEN)
11. THE BOTTOM OF THE HOUSING OF A SIGNAL FACE SUSPENDED OVER A ROADWAY SHALL NOT BE LESS THAN 16.5 FEET NOR MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE GROUND.
12. SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER FACES.
13. SIGNAL HEADS MAY BE HUNG ON A SPAN WIRE OR ON A CANTILEVER MAST ARM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED, LOCATED AT A DISTANCE OF NO GREATER THAN 14.5 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE CURRENT EDITION OF THE M.U.T.C.D. FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
14. SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES.
15. INSTALL WIRING BETWEEN SIGNAL POLES BY WHATEVER MEANS POSSIBLE OR CONVENIENT TO PROVIDE FOR A SAFE INSTALLATION. ATTACHMENT TO UTILITY POLES TO BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY COMPANY. THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 678.40, TEMPORARY TRAFFIC SIGNAL SYSTEM.
16. PLACE TEMPORARY POLES BEHIND GUARDRAIL WHERE POSSIBLE.
17. POLES SUPPORTING SPAN WIRES AND/OR MAST ARMS SHALL BE ADEQUATELY BRACED OR GUYED AND SHALL NOT BE PLACED SO AS TO CREATE A HAZARD TO THE TRAVELING PUBLIC.
18. ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL. THIS INCLUDES ANY TEMPORARY PAVEMENT MARKINGS, UTILITY POLES, WIRES, ETC. THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 678.40, TEMPORARY TRAFFIC SIGNAL SYSTEM.

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PROJECT NOTES 1 SHEET 2 OF 21

