

**GENERAL NOTES**

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 4th EDITION, AND ITS LATEST REVISIONS.
2. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F UNLESS OTHERWISE NOTED.
3. ITEM 404.65 "EMULSIFIED ASPHALT" IS TO BE APPLIED AT A RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.
4. ITEM 514.10 "WATER REPELLENT, SILANE" SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE WINGWALLS AND HEADWALLS. WATER REPELLENT, SILANE SHALL BE APPLIED TO THE EXPOSED INSIDE SURFACE OF THE BOX STARTING AT THE OPENING AT EACH END AND EXTENDING 3 FEET INTO THE BOX, INCLUDING THE TOP SURFACE OF THE BOTTOM SLAB AND THE BOTTOM SURFACE OF THE TOP SLAB.
5. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:  
SPACING +/- 1"  
CLEARANCE +/- 1/4"
6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".
7. THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN ON THE PLANS. THE SUBBASE MATERIAL SHALL BE THE TYPE SPECIFIED IN THE CONTRACT AND SHALL BE PLACED TO MEET THE SUBBASE SPECIFICATIONS. IF SUBBASE IS PLACED IN LIEU OF SAND BORROW, A GEOTEXTILE MEETING THE REQUIREMENTS OF SECTION 649 AND 720 FOR "GEOTEXTILE FOR ROAD BED SEPERATOR" SHALL BE PLACED BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING THE GEOTEXTILE WILL BE INCLUDED IN THE UNIT PRICE BID FOR 203.31 "SAND BORROW".
8. ITEM 529.15 "REMOVAL OF STRUCTURE (6'-0" x 112'-0" CGMMP) SHALL BE USED FOR THE REMOVAL OF THE EXISTING PIPE UNDER VT ROUTE 103.
9. ITEM 529.15 "REMOVAL OF STRUCTURE (7'-0" x 7'-0" x 44'-0" BOX) SHALL BE USED FOR THE REMOVAL OF THE EXISTING BOX IN THE CHANNEL DOWNSTREAM OF VT ROUTE 103".

**TRAFFIC CONTROL**

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN. SEE CONTRACT SPECIAL PROVISIONS FOR DETAILS
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING THE LOCAL TRAFFIC CONTROL PACKAGE IDENTIFYING THE PROJECT BEFORE, DURING, AND AFTER THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE PROJECT MANAGER FOR ALL STAGES OF CONSTRUCTION. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645, SPECIAL PROVISION, (TRAFFIC CONTROL, ALL-INCLUSIVE).
12. ACCESS TO ALL EXISTING DRIVES SHALL BE MAINTAINED AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION.
13. INSTALLATION OF DETOUR SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL TRY TO MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES.

**PRECAST CONCRETE NOTES**

14. DESIGN CRITERIA:
  - A. SOIL UNIT WEIGHT = 140 PCF
  - B. DESIGN LIVE LOAD = HL-93
  - C. NOMINAL BEARING RESISTANCE = 6.7 KSF
  - D. BEARING RESISTANCE FACTOR = 0.45
  - E. DESIGN FILL OVER BOX = 11 FEET
  - F. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)
  - G. AT A MINIMUM ALL REINFORCING STEEL SHALL BE GRADE 60 BLACK REBAR.
15. ALL CONCRETE SHALL BE PRECAST. ITEM 540.10 PRECAST CONCRETE STRUCTURE INCLUDES ALL BOX SEGMENTS, HEADWALLS, AND WINGWALLS. ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10. ALL CONNECTIONS MUST BE SUBMITTED TO THE PROJECT MANAGER FOR APPROVAL.
16. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR. ALL UNITS EXCEPT THE FIRST AND LAST WILL BE THE SAME SHAPE AND THE SAME LENGTH. THE MINIMUM INSIDE DIMENSIONS SHALL BE 8'-0" IN HEIGHT AND 14'-0" IN WIDTH. THE OVERALL LENGTH OF THE BOX SHALL BE 84'-0" ALONG THE STREAMBED GRADE. THE EXPOSED ENDS OF THE FIRST AND LAST UNITS SHALL BE VERTICAL.
17. THE EXTERIOR (TOP AND SIDES) OF ALL CONCRETE BOX JOINTS ALONG WITH ALL LIFTING HOLES SHALL BE FILLED WITH MORTAR TYPE IV AFTER BEING SET IN THEIR FINAL POSITION. THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 540.10.
18. A TWO (2) FOOT WIDE STRIP OF MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH BOX JOINT (TOP AND SIDES). MEMBRANE SHALL BE CENTERED ON THE JOINT AND COVER THE FULL WIDTH OF THE TOP AND FULL HEIGHT OF THE SIDES. THE SIDES SHALL BE COVERED FIRST AND THE TOP WILL FOLLOW. ANY OVERLAPPING OF MEMBRANE SHALL BE DONE IN A SHINGLE TYPE STYLE TO SHED WATER AND SHALL OVERLAP A MINIMUM OF ONE FOOT. PAYMENT FOR MEMBRANE SHALL BE UNDER ITEM 519.20 SHEET MEMBRANE WATERPROOFING, TORCH APPLIED.
19. THE STRUCTURE WILL BE AT A 4.76% GRADE SIMULATING THAT OF THE STREAM.
20. THERE ARE OVERHEAD UTILITY LINES LOCATED ALONG THE SOUTH EDGE OF VT 103 OVER THE INLET OF THE NEW BOX CULVERT. NO PROVISIONS HAVE BEEN MADE TO RELOCATE THESE UTILITY LINES. THE CONTRACTOR SHALL CONSIDER

THE PLACEMENT OF THE BOX CULVERT SECTIONS AT THE INLET SO AS TO AVOID CONFLICT WITH THESE UTILITY LINES. ANY ACCESS ROAD CONSTRUCTED TO THE INLET LOCATION MUST STAY WITHIN THE RIGHT OF WAY SHOWN ON THE PLANS. ANY DISTURBANCE OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS SHALL BE GRADED AND RESEEDED TO ITS ORIGINAL CONDITION.

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