

GENERAL NOTES
PRECAST REINFORCED CONCRETE BOX

GENERAL

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 STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, AND ITS LATEST REVISIONS.
2. ITEM 404.65 EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF .015 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.
3. ITEM 900.625 SPECIAL PROVISION (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 BOTTOM SURFACE OF THE TOP OF THE BOX.
4. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
 SPACING +/- 1"
 CLEARANCE +/- 1/4"
5. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".
6. 12" HIGH BED RETENTION SILLS SHALL BE INSTALLED AT THE INLET AND OUTLET AND THE BOX SHALL BE BURIED SO THAT THE TOP OF THE SILLS ARE EVEN WITH THE CHANNEL

TRAFFIC CONTROL

1. ACCESS TO ALL EXISTING DRIVES SHALL BE MAINTAINED AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION.
2. INSTALLATION OF NECESSARY SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL ATTEMPT TO MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES.
3. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233 PRIOR TO BREAKING GROUND TO INSTALL ANY SIGN POSTS.
4. ALL SIGNS THAT ARE 36" X 36" OR LARGER SHALL BE MOUNTED ON TWO POSTS.

PRECAST CONCRETE NOTES

1. DESIGN CRITERIA:
 - A. SOIL UNIT WEIGHT = 140 PCF
 - B. DESIGN LIVE LOAD = HS-25-44
 - C. REINFORCING STEEL GRADE - 60 KSI
 - D. CONCRETE, HIGH PERFORMANCE CLASS A f_c : 4000
CONCRETE, HIGH PERFORMANCE CLASS B f_c : 3500
 - E. MAX. WINGWALL FOOTING PRESSURE = 4 KSF
 - F. FACTOR OF SAFETY FOR SLIDING \geq 2.0
 - G. FACTOR OF SAFETY FOR OVERTURNING \geq 1.5
 - H. DESIGN FILL OVER BOX: IN ADDITION TO MATCHING THE EXISTING PAVEMENT OF APPROXIMATELY X INCHES, ADDITIONAL SUBBASE MATERIAL WILL BE PLACED ABOVE THE BOX STRUCTURE OF APPROXIMATELY 7 FEET AT INLET, 8.6 FEET AT VT 104A CL AND 8 FEET AT OUTLET.
2. ALL CONCRETE SHALL BE PRECAST. PRECAST BOX STRUCTURE SHALL MEET THE REQUIREMENTS OF 2006 STANDARD SPECIFICATION FOR CONSTRUCTION SECTION 540 - PRECAST CONCRETE. 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.
3. 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 INSIDE DIMENSIONS SHALL BE 6'-0" RISE AND 7'-0" SPAN. THE OVERALL LENGTH OF THE BOX SHALL BE 54'-0" ALONG THE DEPICTED VERTICAL ALIGNMENT.
4. 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 SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10.
5. 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 519.21 SHEET MEMBRANE WATERPROOFING, PREFORMED SHEETS.
6. THE STRUCTURE WILL BE INSTALLED AT A 1.05% GRADE.

PROJECT NAME: FAIRFAX
PROJECT NUMBER: STP SCRIP (6)

FILE NAME: r10b196_def.dgn	PLOT DATE: 06-JUN-2011
PROJECT LEADER: K. UPMAL	DRAWN BY: S. PALMER
DESIGNED BY: S. PALMER	CHECKED BY: K. UPMAL
DETAIL SHEET	SHEET 6 OF 11