

GENERAL NOTES

- 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 7TH EDITION, AND ITS LATEST REVISIONS.
- 2. PREPARATION OF THE SITE WILL BE ALLOWED PRIOR TO THE BRIDGE CLOSURE PERIOD. HOWEVER, EXCAVATION FOR AND PLACEMENT OF BOX SECTIONS SHALL BE PERFORMED DURING BRIDGE CLOSURE PERIOD ONLY.
- 3. ITEM 529.15 "REMOVAL OF STRUCTURE" WILL BE USED FOR ALL WORK REQUIRED TO REMOVE THE EXISTING CONCRETE STRUCTURE UNDER VT 18.
- 4. THE CONTRACTOR SHALL INSTALL TEMPORARY TRAFFIC BARRIER AT THE LIMITS OF WORK AT EACH END OF THE PROJECT (TO PREVENT VEHICLES FROM ENTERING WORK ZONE) TO REMAIN IN PLACE UNTIL FINAL GRADE IS ESTABLISHED AND PROPOSED GUARDRAIL IS INSTALLED BETWEEN STA 104+71.3 AND STA 108+43.4. PAYMENT WILL BE INCLUDED IN THE BID PRICE FOR ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)."
- 5. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F UNLESS OTHERWISE NOTED.
- 6. EXCAVATED STREAM BED MATERIAL SUPPLEMENTED WITH E-STONE TYPE E3 SHALL BE PLACED INSIDE THE BOX SECTIONS AND AS SHOWN IN THE PLANS. PAYMENT WILL BE UNDER ITEM 900.608 "SPECIAL PROVISIONS (E-STONE TYPE E3)." SEE SPECIAL PROVISIONS.

TRAFFIC CONTROL

- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED PRIOR TO, DURING, AND AFTER THE BRIDGE CLOSURE PERIOD. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE, AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. THE CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC CONTROL PLANS TO THE PROJECT MANAGER FOR APPROVAL PER SUBSECTION 105.03. ALL COSTS WILL BE INCLUDED IN ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)."

PRECAST CONCRETE

- 8. DESIGN CRITERIA (PRECAST BOX):
 - A. SOIL UNIT WEIGHT = 125 PCF
 - B. DESIGN LIVE LOAD = HL-93
 - C. NOMINAL BEARING RESISTANCE (BEDROCK) = N/A
 - D. NOMINAL BEARING RESISTANCE (GRANULAR BACKFILL) = 13.3 KSF
 - E. BEARING RESISTANCE FACTOR = 0.45
 - F. DESIGN FILL OVER BOX = 3 FEET
 - G. AT-REST EARTH PRESSURE (K_o) = 0.398
 - H. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)
- 9. DESIGN CRITERIA (PRECAST WINGWALLS):
 - A. SOIL UNIT WEIGHT = 125 PCF
 - B. DESIGN LIVE LOAD = HL-93
 - C. NOMINAL BEARING RESISTANCE (BEDROCK) = N/A
 - D. NOMINAL BEARING RESISTANCE (GRANULAR BACKFILL) = 13.3 KSF (SEE CHART IN GEOTECH REPORT)
 - E. BEARING RESISTANCE FACTOR = 0.45
 - F. DESIGN FILL OVER BOX = N/A
 - G. AT-REST EARTH PRESSURE (K_o) = 0.398
 - H. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)
- 10. ALL CONCRETE SHALL BE PRECAST. ITEM 540.10 "PRECAST CONCRETE STRUCTURE" WHICH INCLUDES ALL BOX SEGMENTS, HEADWALLS, WINGWALLS, AND CUTOFF WALLS. ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND WILL BE CONSIDERED INCIDENTAL TO ITEM 540.10.
- 11. THE PRECAST CONCRETE STRUCTURE SHALL BE DESIGNED FOR HYDROSTATIC PRESSURE UNLESS RAPID DRAINING MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 704.18 IS USED. IF USED, RAPID DRAINING MATERIAL WILL BE PAID AT THE UNIT PRICE BID FOR ITEM 204.30 "GRANULAR BACKFILL FOR STRUCTURES." NO WEEPHOLES IN THE BOX SECTIONS WILL BE ALLOWED.
- 12. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR. THE MINIMUM INSIDE DIMENSIONS SHALL BE 8'-0" IN HEIGHT AND 16'-0" IN WIDTH. THE EXPOSED ENDS OF THE FIRST AND LAST UNITS SHALL BE VERTICAL.
- 13. ALL LIFTING HOLES AND BOLT POCKETS 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 "PRECAST CONCRETE STRUCTURE." FILLING THE JOINTS BETWEEN BOX SEGMENTS WITH GROUT IS NOT REQUIRED.
- 14. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED EXTERIOR SURFACES OF THE PRECAST CONCRETE STRUCTURE. PAYMENT FOR SILANE WILL BE INCLUDED IN THE UNIT BID PRICE FOR CONTRACT ITEM 514.10 "WATER REPELLENT, SILANE."
- 15. A TWO (2) FOOT WIDE STRIP OF SHEET MEMBRANE WATERPROOFING MEETING THE REQUIREMENTS OF SUBSECTION 519.02, CENTERED ON THE JOINT, SHALL BE PLACED AT EACH JOINT. THE SHEET MEMBRANE SHALL COVER 1 FOOT TO EACH SIDE OF THE JOINT BOTH ON TOP AND THE FULL HEIGHT OF THE SIDES OF THE STRUCTURE. ANY OVERLAPPING OF THE MEMBRANE SHALL BE DONE IN A SHINGLE TYPE STYLE AND SHALL OVERLAP A MINIMUM OF ONE FOOT. PAYMENT FOR THE MEMBRANE WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10 "PRECAST CONCRETE STRUCTURE."
- 16. PERMANENT CLOSURE HARDWARE SHALL BE REQUIRED BETWEEN ALL BOX SECTIONS AND WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10 "PRECAST CONCRETE STRUCTURE."

REINFORCING STEEL

- 17. ALL REINFORCING STEEL SHALL BE LEVEL 1 (EPOXY COATED) REINFORCING STEEL IN ACCORDANCE WITH SECTION 507. PAYMENT FOR ALL REINFORCING STEEL WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10 "PRECAST CONCRETE STRUCTURE."
- 18. ALL REINFORCING STEEL SHALL HAVE A MINIMUM CLEAR COVER OF 2".



PROJECT NAME:	WATERFORD		
PROJECT NUMBER:	BF 0225(4)		
FILE NAME:	z13c268gen.dgn	PLOT DATE:	09/27/2017
PROJECT LEADER:	T. LEVINS	DRAWN BY:	B. WILLIAMS
DESIGNED BY:	B. WILLIAMS	CHECKED BY:	T. LEVINS
PROJECT NOTES		SHEET	5 OF 63