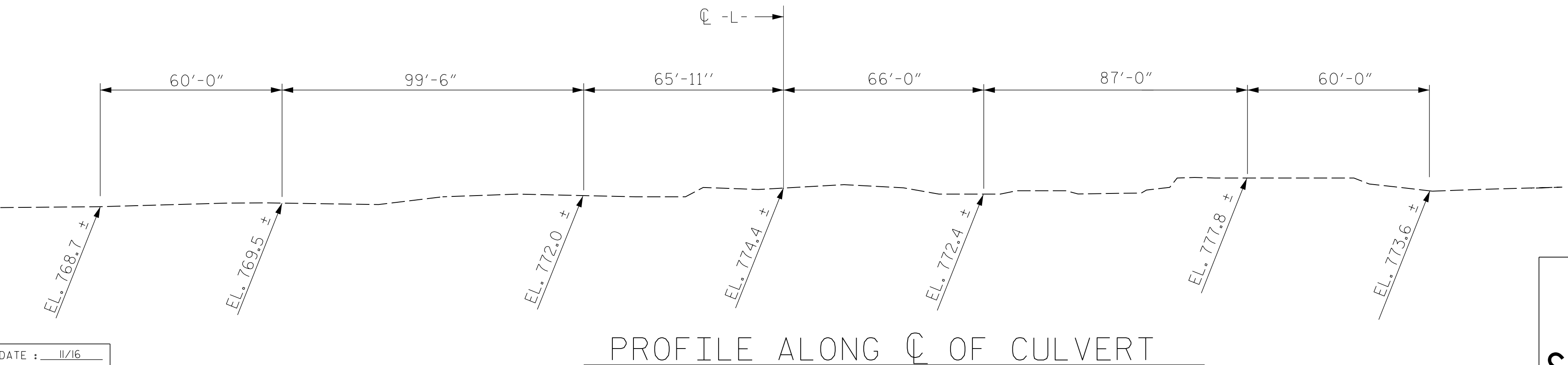


LOCATION SKETCH

FOUNDATION NOTES

1. THE REINFORCED CONCRETE BOX CULVERT SHALL BE PLACED ON THE STANDARD 1.0 FOOT BLANKET OF FOUNDATION CONDITIONING MATERIAL SEE SECTION 414 OF THE STANDARD SPECIFICATIONS.
2. CONSTRUCT THE REINFORCED CONCRETE BOX CULVERT WITH 4 INCHES OF CAMBER TO ACCOUNT FOR ANTICIPATED SETTLEMENT.

TOTAL STRUCTURE QUANTITIES			
CLASS A CONCRETE			
BARREL @	1.65	CY/FT	524.7
WING ETC.			26.6
TOTAL			551.3
REINFORCING STEEL			
BARREL		65,834	LBS.
WINGS ETC.		1,547	LBS.
TOTAL		67,381	LBS.
FOUNDATION COND. MAT'L. 318 TONS			
CULVERT EXCAVATION LUMP SUM			



NOTES:

1. ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.
2. DESIGN FILL IS 46.0 FEET.
3. TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BARREL, SPACED TO LIMIT THE POURS TO A MAXIMUM OF 70 FEET. LOCATION OF JOINTS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
4. THERE ARE 49 "C" BARS IN SECTION OF BARREL.
5. THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.
6. FOR CULVERT DIVERSION DETAILS AND PAY ITEM, SEE EROSION CONTROL PLANS.
7. A 3 FOOT STRIP OF FILTER FABRIC SHALL BE ATTACHED TO THE FILL FACE OF THE WING COVERING THE ENTIRE LENGTH OF THE EXPANSION JOINT.
8. NATIVE MATERIAL PLACED BETWEEN SILLS IN THE CULVERT SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL BETWEEN THE LOWER SILLS. THE NATIVE MATERIAL SHALL BE MATERIAL THAT IS EXCAVATED FROM THE STREAM BED AT THE PROJECT SITE DURING CONSTRUCTION. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.
9. NO PRECAST REINFORCED BOX CULVERT OPTION WILL BE ALLOWED.
10. FOR OTHER DESIGN DATA & NOTES SEE STANDARD NOTE SHEET.
11. 3" ∅ WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
12. CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:
 1. WING FOOTINGS, CURTAIN WALLS AND FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
 2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS
13. THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.
14. DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.
15. AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL ABOVE LOWER WALL CONSTRUCTION JOINT. THE SPLICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.
16. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
17. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
18. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
19. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

PROJECT NO. R-2707C

CLEVELAND COUNTY

STATION: 453+07.00 -L-

SHEET 1 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SINGLE 8 FT. X 8 FT.
CONCRETE BOX CULVERT
70°SKEW



2/10/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STEWART

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REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. C12-01

TOTAL SHEETS 5

DRAWN BY:	HASSFOURA	DATE:	11/16
CHECKED BY:	D. RUGGLES	DATE:	11/16
DESIGN ENGINEER OF RECORD:	D. RUGGLES	DATE:	11/16

R 2707C-SITE 3

2/10/2017

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USER: dcfault