



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

October 29, 2013

TO: Prospective Bidders

FROM: Curtis Barbee, Proposals Engineer

SUBJECT: Addendum #1 – Removal of Contractors option to submit a Pre-Cast Alternative to NCDOT for WBS#17BP.10.R.19.

The existing Structure Plans have a note on Page # C-1 that states the Contractor has the option to submit a Design to the Department for a PRECAST REINFORCED CONCRETE BOX CULVERT as an alternative for the CAST in PLACE CULVERT, this **WILL NOT** be an option.

All Prospective Bidders should be aware that all line item quantities in the proposal are correct and there are no changes to these items. Therefore, this addendum **does not need** to be attached to your proposal when returned with the completed bid package to the North Carolina Department of Transportation for the bid opening on November 6, 2013.

cc: Mr. Ritchie Hearne, PE
Mr. Garland Haywood, PE
Ms. Kellie Crump
Mr. Joel Laster
File

NOTES:

HYDRAULIC DATA

DESIGN DISCHARGE = 650 CFS
 FREQUENCY OF DESIGN FLOOD = 10 YRS.
 DESIGN HIGH WATER ELEVATION = 611.9
 DRAINAGE AREA = 2.1 SQ. MI.
 BASIC DISCHARGE (Q100) = 1,185 CFS
 BASIC HIGH WATER ELEVATION = 613.79

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 650 CFS
 FREQUENCY OF OVERTOPPING FLOOD = 10 YRS.
 OVERTOPPING FLOOD ELEVATION = 611.9

GRADE DATA

GRADE POINT ELEVATION @ STA. 12+20.97 -L- = 612.27
 BED ELEVATION @ STA. 12+20.97 -L- = 607.25
 ROADWAY SLOPES = 2:1 MAX

ASSUMED LIVE LOAD -----HS20-44 OR ALTERNATE LOADING.
 MAX. DESIGN FILL----- 5'
 MIN. DESIGN FILL----- 6"
 FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.
 3"Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
 CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:

1. WING FOOTINGS 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.

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.

THIS BARREL STANDARD TO BE USED ONLY ON CULVERT ON 75° SKEW AND TO BE USED WITH STANDARD WING SHEET WITH THE SAME SKEW AND VERTICAL CLEARANCE.

DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.

STEEL IN THE BOTTOM SLAB MAY BE SPLICED AT THE PERMITTED CONSTRUCTION JOINT AT THE CONTRACTOR'S OPTION. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY CONTRACTOR.

AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL AND BOTH FACES OF INTERIOR WALLS 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.

AT THE CONTRACTOR'S OPTION HE MAY SUBMIT, TO THE ENGINEER FOR APPROVAL, DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE DESIGN. FOR PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL PROVISIONS.

THE EXISTING STRUCTURE CONSISTING OF A 18'-6" LONG SINGLE SPAN; A 17'-3" CLEAR ROADWAY WIDTH ON A TIMBER JOIST SUPPORTED TIMER DECK ON THE ABUTMENTS WITH TIMBER CAPS, POSTS, SILLS AND BULKHEADS AT THE PROPOSED STRUCTURE SITE, SHALL BE REMOVED.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATION.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

EXCAVATE 1 FOOT BELOW CULVERT AND FOOTINGS AND REPLACE WITH FOUNDATION CONDITIONING MATERIAL IN ACCORDANCE WITH ARTICLE 414 OF THE STANDARD SPECIFICATIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

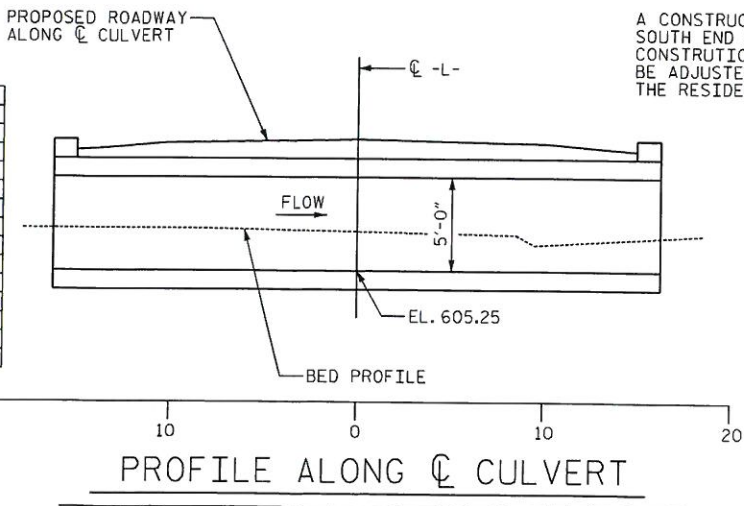
RIP RAP CLASS II IS INCLUDED IN THE QUANTITY SHOWN ON THE DRAINAGE PLANS.

A CONSTRUCTION JOINT SHALL BE CONSTRUCTED A MINIMUM OF 26'-11" FROM THE SOUTH END OF THE CULVERT AS SHOWN ON SHEET C-2 TO FACILITATE STAGED CONSTRUCTION. THE REINFORCING STEEL DETAILED IN THE TABLE ON SHEET 2 SHALL BE ADJUSTED IN THE SHOP DRAWING REVIEW PROCESS SUBJECT TO THE APPROVAL OF THE RESIDENT ENGINEER.

TOTAL STRUCTURE QUANTITIES			
REMOVAL OF EXISTING STRUCTURE		LUMP SUM	
CLASS A CONCRETE			
BARREL @ 2.57	CY/FT	83.4	C.Y.
WING ETC.	18.4		C.Y.
TOTAL	101.8		C.Y.
REINFORCING STEEL			
BARREL	18,700		LBS.
WINGS ETC.	744		LBS.
TOTAL	19,444		LBS.
FOUNDATION CONDITIONING MATERIAL			
		62	TONS
CULVERT EXCAVATION		LUMP SUM	



AT THE CONTRACTOR'S OPTION HE MAY SUBMIT, TO THE ENGINEER FOR APPROVAL, DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE DESIGN. FOR PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL PROVISIONS.



PROJECT NO. 17BP.10.R.19

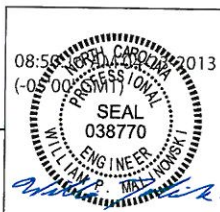
UNION COUNTY

STATION: 12+20.97 -L-

SHEET 1 OF 3 REPLACES BR. NO. 366

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

DOUBLE 12 FT. X 5 FT.
 CONCRETE BOX CULVERT
 75° SKEW



PREPARED IN THE OFFICE OF:
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			C-1
2			4			3