

NOTES:

TOTAL STRUCTURE		5
CLASS A CONCRETE	QUANTITI	_5
BARREL @CY/FT	85.0	C.Y.
WINGS, ETC	22.4	C.Y.
BOTTOM SLAB EXT.	11.1	C.Y.
LOW FLOW SILL	1.4	C.Y.
TOTAL	119.9	C.Y.
REINFORCING STEEL		
BARREL & SILL	16,136	LBS.
WINGS, ETC	1,074	LBS.
TOTAL	17,210	LBS.
CULVERT EXCAVATION	LUMP	SUM
FOUNDATION COND.MAT'L.	96 1	
FUUNDATION COND. MAIL.	50 1	CND

	.E BAR Cement
SIZE	LENGTH
#3	6′-2″
#4	7′-4″
#5	8'-6"
#6	9'-8"
#7	10'-10"
#8	12'-0"
# <u>9</u>	13'-2"
#10	14'-6"
#11	15'-10″

FOR OTH
3″Ø WEE
CONCRET
1.PHAS

SE I WING FOOTINGS AND FLOOR SLAB INCLUDING 4"OF ALL VERTICAL WALLS. 2. THE REMAINING PORTIONS OF PHASE I WALLS AND PHASE I WINGS FULL HEIGHT.

3. PHASE II WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF PHASE II VERTICAL WALLS.

4. THE REMAINING PORTIONS OF PHASE II WALLS AND PHASE II WINGS FULL HEIGHT. 5. ROOF SLAB AND HEADWALLS

OF THE FILL.

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.





ASSUMED LIVE LOAD ----- HL-93 OR ALTERNATE LOADING.

DESTGN ETLI ----- 5.4'

HER DESIGN DATA AND NOTES, SEE STANDARD NOTES SHEET.

EP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.

TE IN CULVERT TO BE POURED IN THE FOLLOWING ORDER:

THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE

STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE

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

FOR CULVERT DIVERSION DETAILS AND PAY ITEM, SEE EROSION CONTROL PLANS.

FOR CRANE SAFETY. SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

IF APPROVED BY THE ENGINEER, THE CONTRACTOR MAY USE THE EXISTING WINGS AS TEMPORARY SHORING FOR THE CONSTRUCTION OF THE CULVERT EXTENSION. IN THIS CASE, THE BOTTOM SLAB OF THE EXTENSION SHALL BE POURED AT LEAST 72 HOURS PRIOR TO CUTTING THE WINGS. THE WINGS MAY BE CUT EARLIER PROVIDED THE SLAB CONCRETE STRENGTH HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.

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 OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT.SEE SPECIAL

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 SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE SAMPLE BARS AND REPLACEMENT REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

EXCAVATE 1 FOOT BELOW CULVERT AND REPLACE WITH FOUNDATION CONDITIONING MATERIAL IN ACCORDANCE WITH ARTICLE 414-4 OF THE STANDARD SPECIFICATIONS. FOUNDATION CONDITIONING MATERIAL SHOULD CONSIST OF SELECT MATERIAL CLASS V OR VI FOR RCBC.

IF REQUIRED, UNDERCUT LOOSE SOILS THAT MAY BE ENCOUNTERED BENEATH THE BOTTOM OF THE FOUNDATION CONDITIONING MATERIAL.BACKFILL UNDERCUT AREAS WITH FOUNDATION CONDITIONING MATERIAL.

DOWELS SHALL BE USED TO CONNECT THE CULVERT EXTENSION TO THE EXISTING CULVERT AS SHOWN.FOR NOTE REGARDING SETTING OF DOWELS, SEE SHEET SN.

	PROJECT NO	D. <u>A-</u>	0009	CA		
	GRAHAM COUNTY					
STATION: 113+69.00 -L-						
	SHEET 1 OF 8	STRUC	TURE No.3	370133		
Marshall & Cauch, Jr. SEECALE3A4DC413 20125 NGINEER C. CHELL 6, CHELL 6/1/2022	DEPARTMEN TRIPLE CONCRET LEFT	raleigh	NSPORTA × 9.2 CULV NSION	FT. ERT		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	RE	VISIONS		SHEET NO.		
TGS ENGINEERS 804–C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476–0003 CORP. LICENSE NO.: C–0275	NO. BY: DATE: 1 2	NO. BY: 3 4	DATE:	C4-1 total sheets 8		