12/06/07

COMPUTED BY: DWG	DATE: 10/7/16
CHECKED BY: DB	DATE: 10/25/16

PROJECT REFERENCE NO.	SHEET NO.
B-5747	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
SUMMARY NO. 1					
–L– 12+20.00	–L– 13+93.88 (BB)	27	313	286	
TOTAL SUMMARY NO. 1		27	313	286	
SUMMARY NO. 2					
–L– 14+96.13 (EB)	–L– 16+30.00	12	205	193	
TOTAL SUMMARY NO. 2		12	205	193	
SUMMARY TOTALS		39	518	479	
EST. SHOULDER MATERIAL			96	96	
PROJECT TOTALS		39	614	575	
EST. 5% TO REPLACE TOPSOIL ON BORROW PIT				29	
GRAND TOTAL		39	614	604	
SAY		50		625	

Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

REMOVAL OF ASPHALT PAVEMENT SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD²
–L–	13+00.00	14+00.13	LT/RT	205.60
–L–	14+89.92	15+55.00	LT/RT	133.04
			TOTAL:	338.64
			SAY:	400.00

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH
–L–	15+07.00	15+25.00	18.00
–L–	15+07.00	15+25.00	18.00
		TOTAL:	36.00
		SAY:	40.00

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

NOTE: Invert Elevations are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300–5".

SUB–REGIONAL
LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE / THICKNESS OR GAUGE: 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
–L– 15+20.00	LT	0401		223.60															
		0401	0402		219.10	218.90			16										
–L– 15+20.00	RT	0403		223.60															
		0403	0404		218.60	217.70			16										
TOTALS									32										

STATION	C.S. PIPE 12"	15"	18"	24"	36"	42"	48"	R.C. PIPE (CLASS III) 15"	18"	24"	30"	36"	42"	48"	R.C. PIPE (CLASS IV) 12"	15"	18"	24"	30"	36"	42"	48"	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.
–L– 15+20.00																										
–L– 15+20.00																										
TOTALS																										

STATION	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	LIN. FT. A (5.0' THRU 10.0')	LIN. FT. B (10.0' AND ABOVE)	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION CATCH BASIN	DROP INLET	T.B.D.I. STD. 840.35	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	DRAINAGE PIPE ELBOWS NO. & SIZE	PIPE REMOVAL LIN.FT.	REMARKS
–L– 15+20.00	1									1	1			
–L– 15+20.00	1									1	1			
TOTALS	2									2	2			

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I. (N.S.)	GRATED DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON–GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH STRAIGHT	LENGTH SHOP CURVED	LENGTH DOUBLE FACED	WARRANT POINT APPROACH END	WARRANT POINT TRAILING END	"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH APPROACH END	FLARE LENGTH TRAILING END	W APPROACH END	W TRAILING END	ANCHORS TYPE III	ANCHORS GRAU 350	IMPACT ATTENUATOR TYPE 350 EA	G	NG	SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
–L–	13+18.88	13+93.88	LT.	75				13+93.88	5.42'	7'		56.25'		1.125'	1	1							
–L–	13+18.88	13+93.88	RT.	75			13+93.88		5.42'	7'	56.25'		1.125'		1	1							
–L–	14+96.13	15+71.13	LT.	75			14+96.13		5.42'	7'	56.25'		1.125'		1	1							
–L–	14+96.13	15+71.13	RT.	75				14+96.13	5.42'	7'		56.25'		1.125'	1	1							
			TOTALS	300											4	4							
		LESS DEDUCTION FOR ANCHORS																					
		GRAU–350 4 @ 50' =		–200																			
		TYPE III 4 @ 18.75' =		–75																			
			PROJECT TOTALS	25											4	4							
ADDITIONAL GUARDRAIL POSTS = 5 EA.			SAY	50																			

11/30/2006
...\Proj\B-5747_Rdy_sum_3B-1.dgn