

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

PLANS PREPARED BY:  
**PARSONS  
 BRINCKERHOFF**  
 434 FAYETTEVILLE STREET  
 SUITE 1500  
 RALEIGH, NC 27601  
 LICENSE NO. F-0165

**SUMMARY OF EARTHWORK  
 (IN CUBIC YARDS)**

STATION	STATION	UNCL. EXCAV.	UNDERCUT EXCAV.	EMBANK. +%	BORROW	WASTE	STATION	
-L- 12+35.00	-L- 18+91.95	625	0	3,690	3,065	0		
-Y1- 11+42.00	-Y1- 12+91.01	17	0	239	222	0		
-Y2- 10+66.24	-Y2- 12+25.00	9	0	9	0	0		
-DRI- 10+16.45	-DRI- 13+71.63	113	0	113	0	0		
SUBTOTALS:		764	0	4,050	3,286	0		
-L- 18+91.95	-L- 21+50.00	143	0	5,705	5,562	0		
-Y3- 13+65.00	-Y3- 19+29.42	1,324	0	618	0	706		
-Y3- 20+39.97	-Y3- 30+50.00	682	0	13,254	12,572	0		
SUBTOTALS:		2,149	0	19,577	18,134	706		
-L- 21+50.00	-L- 29+00.00	203	0	59,101	58,898	0		
SUBTOTALS:		203	0	59,101	58,898	0		
-L- 30+46.17	-L- 34+43.06	0	0	144,451	144,451	0		
SUBTOTALS:		0	0	144,451	144,451	0		
-L- 35+72.31	-L- 42+75.00	522	2,200	21,020	20,963	2,665		
-Y8- 11+75.00	-Y8- 13+29.31	9	0	333	324	0		
REMOVAL EXISTING ROADWAY EMBANKMENT (SEE PLAN SHEET 16)		44,100	0	0	0	44,100		
SUBTOTALS:		44,631	2,200	21,353	21,287	46,765		
TOTALS		47,747	2,200	248,532	246,056	47,471		
LOSS DUE TO CLEARING & GRUBBING								
ADDITIONAL UNDERCUT			600	750	750	600		
SELECT GRANULAR MATERIAL TO REPLACE BORROW				-2500	-2500			
WASTE IN LIEU OF BORROW					-706	-706		
PROJECT TOTALS:		47,747	2,800	246,782	243,600	47,365		
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT					12,180			
GRAND TOTALS:		47,747	2,800	246,782	255,780	47,365		
SAY:		47,800			255,800			

EST. DDE = 2,480 CUBIC YARDS  
 SELECT GRANULAR MATERIAL = 2,600 CY

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.

**SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT**

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD'
-L-	13+95	17+38	RT	1,567
-L-	23+77	28+99	RT	3,793
RALEIGH ST.				663
-L-	30+98	34+28	RT	854
TOTAL:				6,877
SAY:				6,880

**PAVEMENT REMOVAL SUMMARY**

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD'
-L-	14+00	17+38	LT & RT	2,008
-Y1- WASHINGTON DRIVE			LT & RT	818
-L-	17+60	24+01	RT	3,792
-Y3- MURCHINSON ST.	17+00	20+17	LT	2,357
-DRI-	10+60	12+39	LT	765
-DRI-	12+86	15+11	LT	2,359
ROWAN ST. NC 210/RAMPS			LT & RT	6,129
RALEIGH STREET			LT & RT	189
-Y5- HILLSBOROUGH ST.	13+45	15+46	RT	321
-Y5- HILLSBOROUGH ST. W ROWAN	13+45	15+77	LT	520
-Y4- HILLSBOROUGH ST.	14+35	19+36	RT	2,700
-L-	35+86	37+98	RT	166
-L- SEE SHEET TMP-4	16+93	20+46	LT	49
-Y3- SEE SHEET TMP-4	17+45	17+56	LT	6
-L- SEE SHEET TMP-10	18+70	20+46	LT	4
-L- SEE SHEET TMP-15	12+35	15+93	LT	41
TOTAL:				22,224
SAY:				22,230

"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					"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS									IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS					
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	III	XI	GRAU 350 TL-3	M-350	XIII	CAT-1	VI MOD	TES	AT-1	EA G NG											
																								EA	G	NG									
-L-	27+92.38	29+42.38	RT.	150'			29+42.38																												
-L-	29+93.46	34+41.30	LT.	448'			29+93.46																												
-L-	30+93.94	34+48.51	RT.	354.5'			34+48.51																												
-L-	35+66.87	37+16.87	LT.	150'			35+66.87																												
-DRI-	13+71.63		LT. & RT.	26.5'																															
-Y5-	13+07.19	13+22.79	RT.	15.5'																															
LESS ANCHOR DEDUCTIONS																																			
TYPE 350				2 @ 50'																															
TYPE III				6 @ 18.75'																															
TOTAL				932'																															
SAY				950'																															

ADDITIONAL GUARDRAIL POSTS = 5 EA

12/06/07  
 24\_APR\_2016\_15:03  
 R:\Road\311008\15-03\_B4490\_r.dwg\_3B-1.dgn