

DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

NOTE: 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 EARTHWORK
 IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + %	BORROW	WASTE
PROJECT SUBTOTAL (PHASE 1 + PHASE 2 + PHASE 3)	190,699		205,083	24,351	9,967
ESTIMATED SHOULDER MATERIAL			7,728	7,728	
ESTIMATED LOSS DUE TO CLEARING AND GRUBBING	-18,500			18,500	
ADDITIONAL CONT. UNDERCUT			19,550	19,550	
PROJECT TOTAL	172,199		232,361	70,129	9,967
ESTIMATED 5% FOR REPLACING TOPSOIL				3,507	
PROJECT TOTAL (CY)	172,199		232,361	73,636	9,967
R-3100A SAY (CY)	172,200			73,700	
R-3100B SAY (CY)	37,400			142,200	
GRAND TOTAL SAY (CY)	209,600			215,900	

ESTIMATED PAVEMENT STRUCTURE VOLUME -L- LINE
 R-3100A = 50,550 CY
 R-3100B = 53,189 CY
 GRAND TOTAL = 103,739 CY

ESTIMATED PAVEMENT STRUCTURE VOLUME -Y- LINES AND DRIVES
 R-3100A = 2,740 CY
 R-3100B = 2,531 CY
 GRAND TOTAL = 5,271 CY

ESTIMATED DDE
 R-3100A = 6,425 CY
 R-3100B = 2,780 CY
 GRAND TOTAL = 9,205 CY

THE FOLLOWING QUANTITIES ARE PER THE "GEOTECHNICAL-DESIGN AND CONSTRUCTION RECOMMENDATIONS" LETTER DATED (R-3100A) NOVEMBER 7, 2013 AND (R-3100B) MARCH 21, 2014

SELECT GRANULAR MATERIAL (CONTINGENCY, TO BE USED IN THE UNDERCUT FOR EMBANKMENT STABILITY OR UNDERCUT FOR SUBGRADE STABILITY LOCATIONS AS DIRECTED BY THE ENGINEER.)
 R-3100A = 1,000 CY
 R-3100B = 1,000 CY
 GRAND TOTAL = 2,000 CY

SELECT UNDERCUT
 R-3100A = 9,500 CY
 R-3100B = 7,500 CY
 GRAND TOTAL = 17,000 CY

SHALLOW UNDERCUT (CONTINGENCY, TO BE USED FOR UNDERCUT FOR SUBGRADE STABILITY, AS DIRECTED BY THE ENGINEER.)
 R-3100A = 1,000 CY
 R-3100B = 1,000 CY
 GRAND TOTAL = 2,000 CY

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