

## Earthwork Balance Sheet

Volumes in Cubic Yards

PROJECT:     R-5861    

COUNTY:     CHEROKEE    

DATE:     8/2/2023    

COMPILED BY:     Eric Price    

CHAIN	STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE				
			TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK (+)20%	EARTH	EMBANK. (+)20%		ROCK	SUITABLE	UNSUIT.	TOTAL	
SUMMARY 1																	
-L- (L_DET1)	12+09.43	24+50.00	186				186	21,469		21,469	25,763	25,577					
-L- (L_DET1)	26+00.00	42+38.95	22,516	1,500			21,016	15,752	1,500	13,952	18,242			4,274			4,274
-L-	54+37.00	63+21.00	409				409	1,993		1,993	2,392	1,983					
-L- (L_DET2)	79+85.99	104+00.00	79,655	10,600			69,055	3,969	3,308		3,308		7,293	69,055			76,348
-L-	101+50.00	107+00.00	17,485				17,485	1,180		1,180	1,416			16,069			16,069
-L- (L_DET3)	121+83.12	134+61.40	8,475		1,298		8,475	18,871		18,871	22,645	14,170				1,298	1,298
-L- (L_DET4)	140+70.08	173+66.15	46,284	10,110			36,174	20,861	10,110	8,729	20,585			25,699			25,699
-Y12-	18+67.00	25+31.00	107				107	61		61	73			34			34
-Y12-	29+81.00	35+00.00	115				115	2		2	2			113			113
-DR7-	10+09.43	13+75.00	20,117				20,117							20,117			20,117
-DR20-	10+55.00	10+98.32	31				31	21		21	25			6			6
SUBTOTAL			195,380	22,210	1,298		173,170	84,179	14,918	66,278	94,451	41,730		7,293	135,366	1,298	143,957
SUMMARY 2																	
-L-	49+50.00	54+37.00	780				780	2,813		2,813	3,376	2,596					
-Y3-	10+31.53	13+50.00	2,838				2,838	3,063		3,063	3,676	838					
-Y3A-	11+50.00	12+40.00	40				40	73		73	88	48					
-DR6-	12+22.00	12+81.40	37				37	11		11	13			24			24
SUBTOTAL			3,695				3,695	5,960		5,960	7,152	3,481		24			24
SUMMARY 3																	
-L- (L_DET1)	24+50.00	26+00.00						5,437		5,437	6,524	6,524					
-DET Y1-	10+40.00	13+13.59	333				333	1,719		1,719	2,063	1,730					
SUBTOTAL			333				333	7,156		7,156	8,587	8,254					
SUMMARY 4																	
-L- RT	10+25.00	40+00.00	81,895	600			81,295	7,443	600	6,723	8,668			73,227			73,227
-L- RT	40+00.00	49+50.00	145,771	4,960			140,811	147	123		123		4,838	140,811			145,649
-Y2-	10+18.00	14+70.00	14,188				14,188	108		108	130			14,058			14,058
SUBTOTAL			241,854	5,560			236,294	7,698	723	6,831	8,920		4,838	228,097			232,934
SUMMARY 5																	
-L- LT	25+00.00	30+00.00	8,865				8,865	59		59	71			8,794			8,794
-L- (REMOVE L_DET1)	25+00.00	30+00.00	4,803				4,803	611		611	733			4,070			4,070
-Y1-	10+30.00	16+59.03	4,587				4,587	754		754	905			3,682			3,682
-Y1- (REMOVE DET Y1)	13+00.00	15+50.00						132		132	158	158					
SUBTOTAL			18,255				18,255	1,556		1,556	1,867	158		16,546			16,546
SHEET TOTALS			459,517	27,770	1,298		431,747	106,549	15,640	87,781	120,977	53,623		12,130	380,033	1,298	393,461

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.

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COUNTY:     CHEROKEE    

DATE:     8/2/2023    

COMPILED BY:     Eric Price    

CHAIN	STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE					
			TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK (+)20%	EARTH	EMBANK. (+)20%		ROCK	SUITABLE	UNSUIT.	TOTAL		
SUMMARY 6																		
-L- LT	137+29.00	143+22.00	3,358				3,358	11		11	13				3,345			3,345
SUBTOTAL			3,358				3,358	11		11	13				3,345			3,345
SUMMARY 7																		
-L-	63+21.00	78+00.00	1,314				1,314	5,406		5,406	6,487	5,173						
-L- RT	78+00.00	104+68.00	31,623	440			31,183	18,744	440	18,216	22,299			9,324			9,324	
-L-	106+16.00	107+00.00	2,640				2,640	29		29	35			2,605			2,605	
-L-	107+00.00	108+29.00	2,606				2,606	7		7	8			2,598			2,598	
-L- LT	108+29.00	133+82.00	44,045	1,860	626		42,185	24,379	1,860	22,147	28,436			15,609	626		16,235	
-L- RT	142+67.00	157+00.00	815				815	16,706		16,706	20,047	19,232						
-L-	174+00.00	183+25.00	124,370				124,370	54,338		54,338	65,206			59,164			59,164	
-L- (L_DET6)	183+25.00	199+00.00	84,904				84,904	522		522	626			84,278			84,278	
-L- RT	199+50.00	209+49.00	41				41	497		497	596	555						
-Y5-	10+20.07	11+40.00						405		405	486	486						
-Y6-	11+30.00	17+06.36	10,279				10,279	322		322	386			9,893			9,893	
-Y8-	10+50.00	12+64.64	1				1	689		689	827	826						
-DR8-	12+00.00	13+68.26	79				79	115		115	138	59						
-DR11-	10+13.88	11+75.00	6				6	2,785		2,785	3,342	3,336						
-DR12-	10+18.00	11+55.00						1,223		1,223	1,468	1,468						
-DR13-	10+11.55	11+40.00	11				11	22		22	26	15						
-DR18-	10+18.00	11+45.00						1,113		1,113	1,336	1,336						
-DET_DR18-	10+09.97	11+40.00	354				354	22		22	26			328			328	
-DR18B-	10+54.96	11+85.00	13				13	474		474	569	556						
-DET_DR18B-	10+21.08	11+40.00	684				684							684			684	
-DR19-	10+13.46	11+75.00	1				1	599		599	719	718						
-DET_DR19-	10+17.17	11+40.00	34				34	104		104	125	91						
-DET_DR22-	10+43.66	14+12.68	9,914				9,914	76		76	91			9,823			9,823	
-DR29-	10+15.28	12+01.12	5,076				5,076	49		49	59			5,017			5,017	
SUBTOTAL			318,810	2,300	626		316,510	128,626	2,300	125,866	153,339	33,851		199,321	626		199,947	
SUMMARY 8																		
-L- RT	139+60.00	142+01.00	75				75	394		394	473	398						
SUBTOTAL			75				75	394		394	473	398						
SUMMARY 9																		
-L-	142+01.00	145+00.00	7				7	1,765		1,765	2,118	2,111						
SUBTOTAL			7				7	1,765		1,765	2,118	2,111						
SHEET TOTALS			322,250	2,300	626		319,950	130,796	2,300	128,036	155,943	36,359		202,666	626		203,292	

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.



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PROJECT:     R-5861    

COUNTY:     CHEROKEE    

DATE:     8/2/2023    

COMPILED BY:     Eric Price    

CHAIN	STATION	STATION	EXCAVATION					EMBANKMENT				BORROW	WASTE			
			TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK (+)20%	EARTH	EMBANK. (+)20%		ROCK	SUITABLE	UNSUIT.	TOTAL
SUMMARY 13																
-L- LT	10+25.00	25+00.00	4,432				4,432	1,404		1,404	1,685			2,747		2,747
-L- (REMOVE L_DET1)	14+50.00	25+00.00	20,063				20,063	44		44	53			20,010		20,010
-L- LT	30+00.00	44+00.00	3,218				3,218	465		465	558			2,660		2,660
-L- (REMOVE L_DET1)	30+00.00	42+00.00	12,338				12,338	2,079		2,079	2,495			9,843		9,843
-L- LT	48+00.00	51+77.00	144				144	466		466	559	415				
-L- LT	78+00.00	101+50.00	1,141				1,141	4,299		4,299	5,159	4,018				
-L- (REMOVE L_DET2)	84+00.00	103+00.00	1,311				1,311	19,347		19,347	23,216	21,905				
-L-	104+68.00	106+16.00	11				11	96		96	115	104				
-L- RT	114+00.00	139+60.00	21,231				21,231	594		594	713			20,518		20,518
-L- (REMOVE L_DET3)	122+00.00	133+00.00	15,215				15,215	7,284		7,284	8,741			6,474		6,474
-L- LT	133+82.00	141+50.00	2,389				2,389	679		679	815			1,574		1,574
-L- LT	151+78.00	172+50.00	38,502				38,502	302		302	362			38,140		38,140
-L- (REMOVE L_DET4)	151+78.00	173+50.00	2,847				2,847	3,311		3,311	3,973	1,126				
-L-	183+25.00	197+00.00	31,760		546		31,760	5,573		5,573	6,688			25,072	546	25,618
-L- LT	199+30.00	209+00.00	17				17	785		785	942	925				
-Y4-	12+72.00	15+28.75	564				564	5,730		5,730	6,876	6,312				
-Y9-	10+12.02	13+50.00	420		60		420	327		327	392			28	60	88
-Y10B-	14+00.00	19+08.01	27,610				27,610	103		103	124			27,486		27,486
-Y12- RT	18+66.98	24+00.00	104				104							104		104
-DR1-	9+80.00	11+11.20	11				11	423		423	508	497				
-DR2-	10+20.00	12+20.00	1,135				1,135	720		720	864			271		271
-DR5-	11+20.00	12+45.23	6				6	70		70	84	78				
-DR9-	10+10.00	11+72.31						312		312	374	374				
-DR10-	11+10.00	12+15.84						419		419	503	503				
-DR15-	10+12.00	13+30.00	2,635				2,635	275		275	330			2,305		2,305
-DR21-	10+00.00	10+94.73	437				437							437		437
-DR25-	10+05.00	12+29.68	846				846	33		33	40			806		806
-DR27-	9+82.00	11+07.42	21				21	130		130	156	135				
SUBTOTAL			188,408		606		188,408	55,270		55,270	66,324	36,393		158,477	606	159,083
SUMMARY 14																
-Y10B-	11+86.00	14+00.00	1,034				1,034	129		129	155			879		879
-Y13-	10+12.47	12+75.00	3,829				3,829	1		1	1			3,828		3,828
SUBTOTAL			4,863				4,863	130		130	156			4,707		4,707
SUMMARY 15																
-L- (REMOVE L_DET6)	179+50.00	197+00.00	1,051				1,051	64,330		64,330	77,196	76,145				
-L-	197+00.00	199+50.00	519				519	250		250	300			219		219
-DR22-	10+12.00	11+00.00	683				683							683		683
SUBTOTAL			2,253				2,253	64,580		64,580	77,496	76,145		902		902
SHEET TOTALS			195,524		606		195,524	119,980		119,980	143,976	112,538		164,086	606	164,692

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.

# Earthwork Balance Sheet

Volumes in Cubic Yards

PROJECT:     R-5861    

COUNTY:     CHEROKEE    

DATE:     10/10/2023    

COMPILED BY:     Eric Price    

CUMULATIVE TOTALS	EXCAVATION					EMBANKMENT				BORROW	WASTE			
	TOTAL UNCLASS.	ROCK	UNDERCUT	UNSUIT. UNCLASS.	SUITABLE UNCLASS.	TOTAL	ROCK (+) 20%	EARTH	EMBANK. (+) 20%		ROCK	SUITABLE	UNSUIT.	TOTAL
SHEET 1 SUMMARY	459,517	27,770	1,298		431,747	106,549	15,640	87,781	120,977	53,623	12,130	380,033	1,298	393,461
SHEET 2 SUMMARY	322,250	2,300	626		319,950	130,796	2,300	128,036	155,943	36,359		202,666	626	203,292
SHEET 3 SUMMARY	218,432	30,160			188,272	31,213	1,206	29,766	36,925	25,842	28,954	178,395		207,349
SHEET 4 SUMMARY	195,524		606		195,524	119,980		119,980	143,976	112,538		164,086	606	164,692
<b>SHEET TOTALS</b>	<b>1,195,723</b>	<b>60,230</b>	<b>2,530</b>		<b>1,135,493</b>	<b>388,538</b>	<b>19,146</b>	<b>365,563</b>	<b>457,821</b>	<b>228,362</b>	<b>41,084</b>	<b>925,179</b>	<b>2,530</b>	<b>968,794</b>
ADDITIONAL UNDERCUT			9,000			9,000		9,000	10,800	10,800			9,000	9,000
ROCK WASTE USED TO REPLACE BORROW							41,084	-41,084		-41,084	-41,084			-41,084
ADJUST FOR ROCK WASTE								-8,217	-8,217	-8,217				
ELIMINATE SHRINKAGE FACTOR ON ROCK UNSUITABLE MATERIAL	500			500					-9,860	-9,860			500	500
<b>EARTH WASTE IN LIEU OF BORROW</b>										<b>-180,001</b>		<b>-180,001</b>		<b>-180,001</b>
<b>GRAND TOTAL SAY</b>	<b>1,196,223</b>	<b>60,230</b>	<b>11,530</b>	<b>500</b>	<b>1,135,493</b>	<b>397,538</b>	<b>60,230</b>	<b>325,262</b>	<b>450,544</b>			<b>745,179</b>	<b>12,030</b>	<b>757,209</b>
-L- PAVEMENT STRUCTURE VOLUME	26,237													
SHOULDER BORROW	1,400													
DRAINAGE DITCH EXCAVATION	15,980													
SHALLOW UNDERCUT	500													
SHALLOW UNDERCUT (CONTINGENCY)	500													

**TOTAL UNCLASSIFIED EXCAVATION - ACCEPTABLE = 18,500 C.Y.  
 BUT NOT TO BE USED IN TOP 3' OF EMBANKMENT OR BACKFILL**

- L- STA. 21+75 TO STA. 26+75
- L- STA. 137+25 TO STA. 139+25
- L- STA. 170+75 TO STA. 172+75

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