EARTHWORKS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

+20 827.25 -060 66 15/9 29.55

GRADES

V.C.	% GRADE	STATION	ELEVATION ON TANGENT	ELEVATION ON CURVES	CORR V.C.	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	ROCK EXCAVATION AREA	ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.	AREA	CU. YDS.
						TH # 54								
				Rev. Main Line POC 121+77.38 = TH 54 POT 9+90.39										
		10+0												
	Rev.													
	-3.4840%	10+10.39	831.93				0	Begin Approach			0			
		10+20	831.50	831.50	0.00							405		
						39.75		6						
		10+50	830.45	830.26	-0.19									
		10+60.5	830.29	830.09										
		10+50.14	830.44	830.25	-0.19		8				550			
		10+75.75	828.91	828.91	0.00									
		10+80	828.65	828.65	0.00	46.54		14				694		
		10+96.68	827.65				8				255			
		11+00	827.45			50.20		14				458		
		11+46.88	824.64				7				218			
		11+50	824.45			50		6				412		
	-6.0000%	11+96.88	821.64				0				209			
		12+00	821.45			50.05						365		
		12+46.93	818.63				0				185			
		12+50	818.45					13				256		
		12+95.14	815.74			~~43.18~~ 48.21	15				102			
		13+00	815.45	815.45	0.00	50.12		60				126		
		13+45.26	812.73	813.09	+0.36		50				34			
	Rev.													
		13+50	812.45	812.89	+0.44	54.74		~~51~~ 55				34		
		Rev PT 13+96.95 = Surv POT 14+01.95 Eq = -5.00												
	-2.5000%	14+05	811.20	811.20	0.00		0	End Construction			0			
		CARRIED FORWARD COLUMN FOOTINGS						164				2750		

GRADES

V.C.	% GRADE	STATION	ELEVATION ON TANGENT	ELEVATION ON CURVES	CORR V.C.	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	ROCK EXCAVATION AREA	ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.	AREA	CU. YDS.
						TH # 46								
				Rev. Main Line POC 159+85.00 = Rev. TH 46 13+90.64										
		14+0												
	Rev.													
	-2.0065%	14+07.64	864.05					Begin Approach			0			
		14+25	863.70	863.70	0.00									
						45.83						93		
		14+50	863.20	862.89	-0.31									
		14+53.47	862.96	862.73	-0.23						110			
		14+75	861.46	861.46	0.00	26.72						101		
		14+80.19	861.10				0				95			
		15+00	859.72			55.06		3				207		
		15+35.25	857.27				3				108			
		15+50	856.25			54.40		11				207		
	-6.9538%	15+89.65	853.49				8				97			
		16+00	852.77			53.69		20				196		
		16+43.34	849.76				12				100			
		16+50	849.29											
		16+75	847.55	847.55	0.00	52.94		25				195		
		16+96.28	846.07	846.13	+0.06		14				99			
		17+00	845.82	845.89	+0.07	52.14		52				163		
		17+48.42	842.45	843.09	+0.64		40				70			
		17+50	842.34	843.00	+0.66									
		17+75	840.60	841.79	+1.19	51.32		78				76		
		17+99.74	840.06	840.73	+0.67		42				10			
		18+00	840.05	840.71	+0.66	50.26		93				9		
	Rev.	18+50	838.95	839.02	+0.07		58				0			
	-2.2000%	18+75	838.40	838.40	0.00	50		~~52~~ 54						
		19+00	837.85				0	End Construction						
		CARRIED FORWARD COLUMN FOOTINGS						334				1247		

SUMMARY AND BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK	ROCK EXCAV CUBIC YARDS	EMBANKMENT CUBIC YARDS	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
113+25	118+94.40	13010	622	19	13297		13296	
118+94.40	124+00	1117		8018		8104	5193	
124+00	129+00	346		5960		6508		1315
129+00	134+00	1573		965	463			852
134+00	139+00	8272		113	8142		7290	
139+00	144+00	4905		1215	3508		10798	
144+00	149+00	1411		2337		1277	9521	
149+00	153+99.89	4923		142	4760		14281	
153+99.89	158+97.88	2382		2261		218	14063	
158+97.88	164+00	15474	426	162	15499		29562	
164+00	169+00	3328	250	1997	1155		30717	
169+00	174+00	7087	501	4397	2278		32995	
174+00	179+20.85	6770	629	2670	4011		37006	
179+20.85	181+50	15043		0	15043		52049	
181+50	183+90.91	5099		0	5099		57148	
MAINLINE TOTALS		90740	2428	30256	56952			
TH # 54		164		2750		2999	54149	
TH # 46		334		1247		1100	53049	
Drives		1733		666	967		54016	
PROJECT TOTALS		92971	2428	34919	54016			

C=168 R=0✓

C=336 R=0✓

SUMMARY BY COLUMNS

SHEET NO.	COL. NO.	EXCAVATION TOTAL CU YDS	EXCAVATION ROCK CU YDS	EMBANKMENT CUBIC YARDS
1	1	14393	622	12780
1	2	14456		2295
1	3	6721		4790
2	1	26626	686	3324
2	2	28544	1110	7067
3	1	164		2750
3	2	334		1247
Drives		1733		666
Totals		92971	2428	34919

REMARKS

EARTH AND ROCK EXCAVATION	92971
SOLID ROCK EXCAVATION	2428
EARTH EXCAVATION	90543
PLANIMETERED FILL	34919
LESS FACTORED SOLID ROCK (1.30)	3156
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	
NET PLANIMETERED FILL	31763
FACTOR (0.15)	4764
PLANIMETERED FILL INCLUDING FACTOR	36527
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION	90543
CHANNEL EXCAVATION	1305
UNDERDRAIN EXCAVATION (3000 CY x 75%)	2250
STRUCTURE EXCAVATION	—
TOTAL MATERIAL AVAILABLE FOR FILL	94098
TOTAL FILL INCLUDING FACTOR	36527
TOTAL MATERIAL FOR FILL	
BORROW	
EXCESS EXCAVATION	57571

PROJECT NAME EAST MONTPELIER
PROJECT NUMBER RS 0246(1)

NG 65083