STATE OF VERMONT
AGENCY OF TRANSPORTATION

RAILROAD EARTHWORKS

VAOT Metric

STATION km + m	DIST m	TOT. EXCAVATION EARTH AND ROCK AREA m²	TOT. EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³		
50+120.00		0.00		0.00		0.10			0.10
	20		18.9		0.0		2.0		
50+140.00		1.89		0.00		0.10			
	20		38.2		0.0		1.9	CUT	109.8
50+160.00		1.93		0.00		0.09		ROCK	0.0
	20		39.4		0.0		4.7	R.FAC	0.495
50+180.00		2.01		0.00		0.39		FILL	11.2
	7		13.3		0.0		2.6	F.FAC	1.15
50+187.00		2.01		0.00		0.39		EX.C	96.9
50+193.00		1.30		0.00		18.37			
	7		11.6		0.0		65.7	CUT	121.4
50+200.00		1.30		0.00		18.37		ROCK	0.0
	20		32.7		0.0		391.4	R.FAC	0.495
50+220.00		1.97		0.00		20.77		FILL	1297.2
	20		43.6		0.0		485.8	F.FAC	1.15
50+240.00		2.39		0.00		27.81		EX.F	1370.4
	14		33.5		0.0		354.3		
50+254.00		2.39		0.00		22.81			
50+286.00		0.65		0.00		1.75			
	14		9.1		0.0		24.5		
50+300.00		0.65		0.00		1.75			
	20		49.8		0.0		42.2		
50+320.00		4.33		0.00		2.47			
	20		68.0		0.0		107.2		
50+340.00		2.47		0.00		8.25			
	20		49.1		0.0		137.7		
50+360.00		2.44		0.00		5.52			
	20		59.7		0.0		150.5		
50+380.00		3.53		0.00		9.53		CUT	554.3
	20		64.9		0.0		123.9	ROCK	0.0
50+400.00		2.96		0.00		2.86		R.FAC	0.495
	20		52.7		0.0		39.2	FILL	728.7
50+420.00		2.31		0.00		1.06		F.FAC	1.15
	20		41.6		0.0		17.2	EX.F	283.7
50+440.00		1.85		0.00		0.66			
	20		31.4		0.0		15.0		
50+460.00		1.29		0.00		0.84			
	20		31.5		0.0		13.9		
50+480.00		1.86		0.00		0.55			
	20		33.8		0.0		9.70		
50+500.00		1.52		0.00		0.42			
	20		28.1		0.0		20.4		
50+520.00		1.29		0.00		1.62			
	20		21.5		0.0		21.3		
50+540.00		0.86		0.00		0.51			
	20		13.1		0.0		6.0		
50+560.00		0.45		0.00		0.09			
COLUMN TOTAL		785.5		0.0		2037.1			

SUMMARY AND BALANCES

STATION TO STATION km + m		TOTAL EXC. EARTH+ROCK m³	ROCK EXCAVATION m³	EMBANKMENT m³	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
WORK PERFORMED - RAILROAD								
50+120.00	50+187.00	110	0	11	97		97	
50+193.00	50+254.00	121	0	1297		1370		1273
50+286.00	50+560.00	554	0	729		284		1557
SUBTOTAL		785	0	2037				1557
WORK PERFORMED - ROADWAY (SEE SHEET 21 OF 145)								
30+091.00	20+350.00	11803	1028	11	12299		12299	
DRIVES		458	200	0	557		12856	
SUBTOTAL		12261	1228	11			12856	
TOTAL		13046	1228	2048			12299	

REMARKS

	RAILROAD	ROADWAY	TOTAL
EARTH AND ROCK EXCAVATION	785	12261	13048
SOLID ROCK EXCAVATION	0	1228	1228
EARTH EXCAVATION	785	11033	11820
PLANIMETERED FILL	2037	11	2050
LESS FACTORED SOLID ROCK	0	0	1596
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	0	0	0
NET PLANIMETERED FILL	2037	11	454
FACTOR	305	2	68
PLANIMETERED FILL INCLUDING FACTOR	2342	13	522
MATERIALS AVAILABLE FOR FILLS			
EARTH EXCAVATION	785	11033	11820
CHANNEL EXCAVATION	138	77	215
CHANNEL EXCAVATION ROCK		289	289
UNDERDRAIN EXCAVATION		403	403
STRUCTURE EXCAVATION	3589	336	3924
TOTAL MATERIAL AVAILABLE FOR FILL	4511	12138	16651
TOTAL FILL INCLUDING FACTOR			522
TOTAL MATERIAL FOR FILL			16651
BORROW			
EXCESS EXCAVATION			16129
NOTE: VALUES SHOWN ABOVE ARE FOR VTrans WORK ONLY.			

PROJECT NAME : BRATTLEBORO

PROJECT NO. : NH 010-2(2)

DESIGN FILE NAME: RR_earthworks.dgn
IPARM FILE NAME:
DESIGNED BY: GJB/TJM
PROJECT LEADER: J H READ

PLOT DATE: 10-01-2002
DRAWN BY: DHL
CHECKED BY: TTT
SHEET: 22 OF 145