STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

Metric

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
VT. ROUTE 118									
10+030		0.0				0.0			
	20		12.0				6.0	C = 392.0	
10+050		1.2				0.6		F = 660.0	
			122.0				7.0	F. FAC.= 0.15	
10+070		11.0				0.1		EX. F. = 367	
			181.0				7.0		
10+090		7.1				0.6			
			74.0				11.0		
10+110		0.3				0.5			
			3.0				95.0		
10+130		0.0				9.0			
	20						275.0		
10+150						18.5			
	14						259.0		
10+164	STOP ROADWAY BEGIN BRIDGE					18.5			
10+208	END BRIDGE RESUME ROADWAY					53.2			
	2						106.4	C = 0.0	
10+210						53.2		F = 6350.4	
	20						1080.0	F. FAC.= 0.15	
10+230						54.8		EX. F. = 7303	
							1168.0		
10+250						62.0			
							1277.0		
10+270						65.7			
							1352.0		
10+290						69.5			
							1367.0		
10+310						67.2			
	20						1170.0		
10+330						49.8			
	13						647.4	C = 6.0	
10+343						49.8 / 24.1		F = 5180.3	
	7						168.7	F. FAC.= 0.15	
10+350						24.1		EX. F. = 5951	
	20						444.0		
10+370						20.3			
	16						324.8		
10+386						20.3 / 40.1			
	4						160.4		
10+390						40.1			
	20						828.0		
10+410						42.7			
							869.0		
10+430		0.0				44.2			
			6.0				568.0		
10+450		0.6				12.6			
			89.0				138.0		
10+470		8.3				1.2			
			136.0				22.0	C = 528.1	
10+490		5.3				1.0		F = 170.0	
			155.0				10.0	F. FAC.= 0.15	
10+510		10.2				0.0		EX. C. = 333	
	20		189.0						
10+530		8.7							
	3		13.1						
10+533		0.0							

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
T.H. #42									
19+867		1.9							
	3		5.7					C = 257.7	
19+870		1.9						F = 2447.5	
	10		21.5					F. FAC.= 0.15	
19+880		2.4						EX. F. = 2557	
	10		48.0						
19+890		7.2							
	10		65.0						
19+900		5.8							
	10		43.5						
19+910		2.9 / 0.0							
	90		0.0						
20+000		0.0				0.0			
	20		37.0				57.0		
20+020		3.7				5.7			
			37.0				289.0		
20+040		0.0				23.2			
							655.0		
20+060						42.3			
	20						868.0		
20+080						44.5			
	13						578.5		
20+093						44.5			
OLD VT. ROUTE 118									
30+002		0.0							
	8		18.4					C = 842.3	
30+010		4.6						F = 0.0	
	10		97.0					F. FAC.= 0.15	
30+020		14.8						EX. C. = 842	
	20		355.0						
30+040		20.7							
	20		304.0						
30+060		9.7							
	7		67.9						
30+067		9.7							
DRIVEWAYS @STA 10+423 RT									
40+025						0.0			
	21						71.4	C = 0.0	
40+046						6.8		F = 1769.0	
	19						164.4	F. FAC.= 0.15	
40+065						10.5		EX. F. = 2034	
	19						306.9		
40+084						21.8			
	19						663.1		
40+103						48.0			
	19						456.0		
40+122						0.0			
@STA 20+070 LT							91.9		
@STA 10+482 LT							15.3		

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
WETLAND MITIGATION IMPACT AREA									
TOPSOIL			•620.0				620.0	C = 1898.0	
SILT			•620.0				620.0	F = 1240.0	
								F.FAC. = 0.15	
								EX. C. = 472	
MITIGATION AREA									
TOPSOIL			•790.0						
SILT			•790.0						
SUBSOIL			1898.0						
• UNAVAILABLE FOR FILL									
WETLAND MITIGATION MEASURES									

STOCKPILE	PLANTING AREA A m³	B m³	C m³	D m³	TOTAL m³	EXCESS m³
A - REQUIRED		273			273	
A - AVAILABLE					620	347
B - REQUIRED			165	106	271	
B - AVAILABLE					790	519
C - REQUIRED	450	273	165	106	994	
C - AVAILABLE					1410	416
					TOTAL EXCESS	1282

SURCHARGE			
10+209		14.5	
	34		493.0
10+243		14.5	
	23		332.4
10+266		14.4	
	7		100.8
10+273		14.4	

UNDERCUT UNAVAILABLE FOR FILL				
10+212		36		
	18		666	
10+230		38		C = 2180
	20		700	
10+250		32		
	20		700	
10+270		38		
	3		114	
10+273		38		

SUMMARY AND BALANCES

STATION TO STATION km + m	km + m	TOTAL EXC. EARTH+ROCK m³	ROCK EXCAVATION m³	EMBANKMENT m³	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
10+030	10+170	392.0		660.0		367		367
10+170	10+310			6350.4		7303		7670
10+310	10+450	6.0		5180.3		5951		13621
10+450	10+533	528.1		170.0	333			13288
VT. RTE 118	TOTAL	926.1		12360.7	333	13621		13288
TH #42		257.7		2447.5		2557		15845
OLD VT. RTE 118		842.3			842			15003
DRIVEWAYS				1769.0		2034		17037
DRAINAGE		39.9		12.4	28			17009
WETLAND		1898.0		1540.0	127			16882
		3964.0		18129.6	1330	18212		16882

REMARKS

EARTH AND ROCK EXCAVATION	3964.0
WETLAND SOIL UNAVAILABLE FOR FILL	2820.0
SURCHARGE	926.2
UNDERCUT UNAVAILABLE FOR FILL	2180.0
TOTAL EXCAVATION	9877.9
EMBANKMENT	18129.6
LESS FACTORED SOLID ROCK	0.0
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	0.0
NET EMBANKMENT	18129.6
FACTOR 0.15	2719.4
EMBANKMENT INCLUDING FACTOR	20849.0
SURCHARGE	926.2
TOTAL FILL	21775.2
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION •(AVAILABLE FOR FILL)	3964.0
CHANNEL EXCAVATION	1003.0
UNDERDRAIN EXCAVATION	0.0
STRUCTURE EXCAVATION	0.0
TOTAL MATERIAL AVAILABLE FOR FILL	4967.0
TOTAL FILL INCLUDING FACTOR & SURCHARGE	21775
TOTAL MATERIAL FOR FILL	4967
BORROW	16808
EXCESS EXCAVATION (WETLAND SOILS)	1282
WASTE (SURCHARGE)	926
(UNDERCUT)	2180
TOTAL WASTE	3106

NOTE: THE AREAS & VOLUMES SHOWN ON THIS SHEET ARE BASED ON THE 1985 GROUND SURVEY, AND DO NOT REFLECT THE RECENT CHANGES IN THE LOCATION OF THE TROUT RIVER.

PROJECT NAME : BERKSHIRE

PROJECT NO.: BRF-RS 0283(7)

DESIGN FILE NAME: 02837FRM.DGN
IPARM FILE NAME: EARTHWK2.I
SURVEYED BY:
SQUAD LEADER:

PLOT DATE: 11-FEB-2000
SURVEY DATE:
DRAWN BY: C. MABY
SHEET: 14 OF 140

78f184/zf184EWK