STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

Metric

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
km + m	m	m^2	m^3	m^2	m^3	m^2	m^3	m^2	m^3
	20						7025		
1+220						367			
	20						7700		
1+240						403			
	20						8611		
1+260						458			
	20						9303	CUT	0
1+280						472		ROCK	0
	20						10283	R.FAC	0.495
1+300						556		FILL	70760
	20						12730	F.FAC	1.15
1+320						717		EX. F	-81374
	20						11139		
1+340						397			
	20						3969		
1+360						0			
SWALE 3									
2+981		0							
	19		206						
3+000		22							
	20		240				13		
3+020		2				1			
	20		148				13		
3+040		12							
	20		433						
3+060		31							
	20		887					CUT	6085
3+080		58						ROCK	0
	20		1217					R.FAC	.495
3+100		64						FILL	26
	20		1144					F.FAC	1.15
3+120		51						EX. C	6055
	20		819						
3+140		31							
	20		573						
3+160		26							
	20		417						
3+180		16							
	20		241						
3+200		8							
	20		103				23		
3+220		2				2			
	20		20				183		
3+240						16			
	20						503		
3+260						34			
	20						779	CUT	364
3+280						44		ROCK	0
	20						794	R.FAC	.495
3+300						36		FILL	4725
	20						671	F.FAC	1.15
3+320						31		EX. F	5070
	20						626		
3+340						31			
	20						599		
3+360						28			
	20						547		
3+380						26			
	20						613		
3+400						35			
	20						564	CUT	0
3+420						21		ROCK	0
	20						331	R.FAC	.495
3+440						12		FILL	1619
	19						111	F.FAC	1.15
3+459								EX. F	1862
Exit 2									
1+240		0		0					
	20		670		650				
1+260		67		65					
	20		1330		1300				
1+280		66		65					
	20		1490		1460				
1+300		83		81					
	20		2010		1970			CUT	27430
1+320		118		116				ROCK	27220
	20		3290		3250			R.FAC	0.495
1+340		211		209				FILL	0
	20		4890		4870			F.FAC	1.15
1+360		278		278				EX. C	40904
	20		6190		6190				
1+380		341		341					
	20		7560		7530				
1+400		415		412					
	24		10392		10332				
1+420		451		449					
	26		11830		11778				
1+440		459		457					
	26		12922		12870				
1+460		535		533					
	26		13559		13520				

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
km + m	m	m^2	m^3	m^2	m^3	m^2	m^3	m^2	m^3
1+480		508		507					
	26		12987		12961			CUT	101052
1+500		491		490				ROCK	100638
	26		12155		12116			R.FAC	0.495
1+520		444		442				FILL	0
	25		9363		9325			F.FAC	1.15
1+540		305		304				EX. C	150867
	24		7452		7428				
1+560		316		315					
	24		6156		6120				
1+580		197		195					
	24		4236		4188				
1+600		156		154					
	23		3278		3232				
1+620		129		127					
	23		2438		2404			CUT	7300
1+640		83		82				ROCK	7187
	23		1277		1254			R.FAC	0.495
1+660		28		27				FILL	0
	22		308		297			F.FAC	1.15
1+680		0		0				EX. C	10858
Stormwater Pond			31625				1104	CUT	31625
								ROCK	0
								R.FAC	0.50
								FILL	1104
								F.FAC	1.15
								EX. C	30355

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
km + m	m	m^2	m^3	m^2	m^3	m^2	m^3	m^2	m^3

SUMMARY AND BALANCES

STATION TO STATION		TOT EXC. EARTH & ROCK	ROCK EXCAV	EMBANK	EXCESSES		ACUMULATIVE EXCESSES	
km + m	km + m	m^3	m^3	m^3	CUT	FILL	CUT	FILL
SI FILL								
1+000	1+200			110,122		-126,641	221,256	
1+200	1+360			70,760		-81,374	139,882	
SWALE 3								
2+981	3+180	6085		26	6055		145,937	
3+180	3+380	364		4,725		-5070	140,867	
3+380	3+459			1,619		-1,862	139,005	
EXIT 2								
1+240	1+400	27,430	27,220		40,904		179,909	
1+400	1+600	101,052	100,638		150,867		330,776	
1+600	1+680	7,300	7,187		10,858		341,634	
OVERBREAKAGE			7,359					
STRMWTR POND		31,625		1,104	30,355		30,355	
STAGE ONE SITES		6,500		187,146		-216,200	-185,845	
SWALE 2 (FROM DRAINAGE SUMM.)		426			426		-185,419	
FURNACE BROOK BRIDGE		14,900			14,900		-170,519	
PROJECT TOTALS								
NB MAINLINE TOT.		305,617		20,405				
CROSSOVER TOT.		52,669		1,160				
EAST ROAD TOT.		1,447		5,312				
RAMP G TOT.		19,371		260				
SI FILL TOT.				180,882				
SWALE 3 TOT.		6,449		6,370				
SWALE 2 TOT.		426						
EXIT 2 TOT.		135,782	142,404					
STAGE ONE SITES		6,500		187,146				
STRMWTR POND		31,625		1,104				
FB BRIDGE		14,900						
TOTALS		574,786	142,404	402,639				

REMARKS

EARTH AND ROCK EXCAVATION	574,786
SOLID ROCK EXCAVATION	142,404
EARTH EXCAVATION	432,382
PLANIMETERED FILL	402,639
LESS FACTORED SOLID ROCK (0.30)	185,125
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	-
NET PLANIMETERED FILL	217,514
FACTOR (0.15)	32,627
PLANIMETERED FILL INCLUDING FACTOR	250,141
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION	432,382
CHANNEL EXCAVATION	3,300
UNDERDRAIN EXCAVATION	3,901
STRUCTURE EXCAVATION	2,076
UNCLASSIFIED EXCAVATION	3,690
TOTAL MATERIAL AVAILABLE FOR FILL	445,349
TOTAL FILL INCLUDING FACTOR	250,141
TOTAL MATERIAL FOR FILL	445,349
BORROW	0
EXCESS EXCAVATION	195,208

PROJECT NAME: **BENNINGTON**
PROJECT NUMBER: **AC NH 019-1(53)**

FILE NAME: zd307c3ew.xls
PROJECT LEADER: GREG EDWARDS
DESIGNED BY: MARC FOISY
EARTHWORK SHEET #2

PLOT DATE: 3/13/2007
DRAWN BY: STANTEC
CHECKED BY: GARY SANTY
SHEET 24 OF 577