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		
US 7									
19+200	Cold Plane	4.67		0.00		0.00			
	20		46.7		0.0		0.0		
19+220	Cold Plane	0.00		0.00		0.00			
	14		22.1		0.0		0.0		
19+234		3.15		0.00		0.00			
	6		32.4		5.0		0.0		
19+240		7.66		1.67		0.00			
	20		282.0		33.4		0.0		
19+260	Full Depth	20.54		1.67		0.00			
	20		427.3		33.4		0.0		
19+280		22.19		1.67		0.00			
	20		420.5		33.4		0.5		
19+300		19.86		1.67		0.05			
	20		384.6		33.4		0.8		
19+320		18.60		1.67		0.03			
	20		373.2		33.4		0.3		
19+340		18.72		1.67		0.00			
	20		356.4		33.4		3.3		
19+360		16.92		1.67		0.33			
	20		344.5		33.4		9.5		
19+380		17.53		1.67		0.62			
	20		324.5		33.4		11.2		
19+400		14.92		1.67		0.50			
	20		291.5		33.4		11.5		
19+420		14.23		1.67		0.65			
	20		278.1		33.4		10.5		
19+440		13.58		1.67		0.40			
	20		283.2		33.4		7.5		
19+460		14.74		1.67		0.35			
	20		297.8		33.4		5.4		
19+480		15.04		1.67		0.19			
	20		302.5		33.4		4.0		
19+500		15.21		1.67		0.21			
	20		312.2		33.4		7.3		
19+520		16.01		1.67		0.52			
	20		308.3		33.4		7.8		
19+540		14.82		1.67		0.26			
	20		308.5		33.4		6.4		
19+560		16.03		1.67		0.38			
	20		331.9		33.4		3.9		
19+580		17.16		1.67		0.01			
	20		326.6		33.4		68.0		
19+600		15.50		1.67		6.79			
	20		358.5		33.4		75.0		
19+620		20.35		1.67		0.71		CUT	20147.6
	20		465.0		33.4		7.1	ROCK	3489.3
19+640		26.15		1.67		0.00		R.FAC	0.495
	20		554.6		33.4		0.0	FILL	1977.8
19+660		29.31		1.67		0.00		F.FAC	1.15
	20		473.2		33.4		4.8	EX. C	19600.3
19+680		18.01		1.67		0.48			
	20		342.3		33.4		226.7		
19+700		16.22		1.67		22.19			
	20		361.4		33.4		320.6		
19+720		19.92		1.67		9.87			
	20		377.1		33.4		327.9		
19+740		17.79		1.67		22.92			
	20		355.6		33.4		244.0		
19+760		17.77		1.67		1.48			
	20		499.7		33.4		14.8		
19+780		32.20		1.67		0.00			
	20		737.6		111.1		0.0		
19+800		41.56		9.44		0.00			
	20		633.5		111.1		3.2		
19+820		21.79		1.67		0.32			
	20		550.3		46.0		14.3		
19+840		33.24		2.93		1.11			
	20		563.4		102.6		15.9		
19+860		23.10		7.33		0.48			
	20		486.1		92.2		19.3		
19+880		25.71		1.89		1.45			
	20		538.8		35.6		56.6		
19+900		28.17		1.67		4.21			
	20		564.8		33.4		74.7		
19+920		28.31		1.67		3.26			
	20		546.6		123.4		37.4		
19+940		26.35		10.67		0.48			
	20		640.7		303.2		14.5		
19+960		37.72		19.65		0.97			
	20		745.3		372.7		25.5		
19+980		36.81		17.62		1.58			
	20		781.4		295.5		38.2		
20+000		41.33		11.93		2.24			
	20		794.8		208.7		75.8		
20+020		38.15		8.94		5.34			
	20		848.4		175.1		93.9		
20+040		46.69		8.57		4.05			
	20		945.4		207.1		80.6		
20+060		47.85		12.14		4.01			
	20		926.3		364.8		49.1		
20+080		44.78		24.34		0.90			
		-44.8		-545.0		-20.2			
			20102.8		2944.3		1957.6		

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		
US 7									
20+080		44.78		24.34		0.90			
	20		707.7		282.7		26.9		
20+100		25.99		3.93		1.79			
	20		488.0		56.0		39.8		
20+120		22.81		1.67		2.19			
	20		443.8		33.4		40.8		
20+140		21.57		1.67		1.89			
	20		418.8		33.4		38.3		
20+160		20.31		1.67		1.94			
	20		389.0		33.4		25.4		
20+180		18.59		1.67		0.60			
	20		377.5		76.0		12.9		
20+200		19.16		5.93		0.69			
	20		461.2		155.0		7.4		
20+220		26.96		9.57		0.05			
	20		484.5		147.3		3.5		
20+240		21.49		5.16		0.30			
	20		389.1		68.3		4.2		
20+260		17.42		1.67		0.12			
	20		421.0		33.4		1.2		
20+280		24.68		1.67		0.00			
	20		483.8		33.4		0.6		
20+300		23.70		1.67		0.06			
	20		509.7		33.4		3.2		
20+320		27.27		1.67		0.26			
	20		461.2		33.4		12.1		
20+340		18.85		1.67		0.95			
	20		392.6		33.4		20.9		
20+360		20.41		1.67		1.14			
	20		492.6		126.8		17.1		
20+380		28.85		11.01		0.57			
	20		571.2		275.2		8.9		
20+400		28.27		16.51		0.32			
	20		514.8		265.6		7.0		
20+420		23.21		10.05		0.38			
	20		341.1		149.0		44.3		
20+440		10.90		4.85		4.05			
	20		152.8		73.1		117.4		
20+460		4.38		2.46		7.69			
	20		70.4		41.3		139.1		
20+480		2.66		1.67		6.22			
	20		107.1		71.4		100.6		
20+500		8.05		5.47		3.84			
	20		408.1		188.2		55.1		
20+520		32.76		11.35		1.67			
	20		808.1		260.0		23.3	CUT	22729.4
20+540		48.05		14.65		0.68		ROCK	10964.4
	20		914.8		346.1		10.0	R.FAC	0.5
20+560		43.43		19.96		0.34		FILL	767.70
	20		1042.6		552.1		3.6	F.FAC	1.2
20+580		60.83		35.25		0.02		EX. C	27274
	20		1194.8		762.1		0.2		
20+600		58.65		40.96		0.00			
	20		1182.8		816.8		0.0		
20+620		59.63		40.72		0.00			
	20		1258.8		905.5		0.0		
20+640		66.25		49.83		0.00			
	20		1405.8		1042.8		0.0		
20+660		74.33		54.45		0.00			
	20		1508.0		1196.0		0.0		
20+680		76.47		65.15		0.00			
	20		1562.9		1347.2		1.1		
20+700		79.82		69.57		0.11			
	20		1328.8		1107.1		1.1		
20+720		53.06		41.14		0.00			
	10		380.2		241.0		0.6		
20+730		22.98		7.05		0.12			
	10		198.3		43.6		0.8		
20+740		16.67		1.67		0.03			
	20		324.2		33.4		0.3		
20+760		15.75		1.67		0.00			
	20		311.0		33.4		0.0		
20+780	End Proj	15.35		1.67		0.00			
	24		207.6		40.1		0.0		
20+804		1.95		1.67		0.00			
	8		10.6		9.7		0.0		
20+812		0.70		0.75		0.00			
	8		4.1		4.4		0.0		
20+820	End Appr	0.34		0.35		0.00			
			22729.4		10964.4		767.7		

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		
McCONNELL ROAD									
1+000									
1+007		10.04		0.00		0.07			
	13		121.9		0.0		0.4		
1+020		9.01		0.00		0.00			
	20		169.0		0.0		0.0	CUT	395.5
1+040		7.89		0.00		0.00		ROCK	0.0
	5		39.5		0.0		0.0	R.FAC	0.495
1+045		7.89		0.00		0.00		FILL	3.3
	15		62.3		0.0		1.9	F.FAC	1.15
1+060		0.41		0.00		0.25		EX. C	391.7
	8		2.8		0.0		1.0		
1+068	Limit of Work	0.28		0.00		0.00			
			395.5		0.0		3.3		
NICKERSON ROAD									
2+000									
2+008		6.14		0.00		0.00			
	12		73.7		0.0		0.0		
2+020		6.14		0.00		0.00		CUT	162.1
	5		30.7		0.0		0.0	CUT	162.1
2+025		6.14		0.00		0.00		ROCK	0.000
	15		51.7		0.0		0.0	R.FAC	0.5
2+040		0.75		0.00		0.00		FILL	0.00
	8		6.0		0.0		0.0	F.FAC	1.2
2+048	Limit of Work	0.75		0.00		0.00		EX. C	162
			162.1		0.0		0.0		
DRIVES									
16+430.0	RT	2.89	15.9						
16+475.0	LT	4.90	26.5						
16+502.8	RT	2.96	10.7						
16+575.9	RT	2.33	8.4						
16+655.4	LT	4.52	32.5						
16+730.0	RT	2.21	15.0						
16+775.0	LT	3.70	26.6						
16+960.0	RT	0.91	3.3						
17+096.0	RT	3.10	12.4						
17+101.1	LT	4.12	14.8						
17+320.0	RT		61.4						
17+349.0	LT	7.86	39.3						
17+380.0	RT		65.3						
17+410.0	RT		31.9			2.2			
17+420.0	LT	2.38	16.7						
17+465.0	RT		23.0						
17+530.0	LT	5.64	62.0						
17+570.0	LT	4.85	50.9						
17+620.0	RT	3.40	40.8						
1+040.0	RT	3.11	18.7						
1+060.0	LT	2.99	35.9						
17+660.0	LT	2.72	31.0						
17+770.0	LT	1.73	21.8						
17+868.0	RT	1.69	6.6						
17+905.0	RT	1.21	5.9						
17+943.0	RT	1.83	6.6						
18+017.0	RT	3.12	17.5						
18+164.0	LT	0.54	3.9						
18+291.0	LT	2.38	10.0						
18+515.0	LT	2.36	11.8						
18+681.0	LT	2.50	9.0						
18+778.6	LT	0.87	4.6						
18+848.6	LT	3.77	18.5						
18+895.5	LT	3.38	12.2						
19+215.2	RT	2.59	10.4						
19+270.0	RT	3.92	47.0						
19+386.0	RT	3.31	23.8						
19+450.5	LT	2.55	16.6						
19+501.7	RT	5.12	18.4						
19+507.0	LT	6.38	47.9						
19+539.0	LT	1.32	8.2						
19+540.0	RT	1.31	9.2						
19+570.0	RT	0.87	10.1						
19+809.0	LT	2.68	19.3						
19+826.9	RT		179.4		68.6				
20+173.0	RT	0.86	3.1						
2+032.0	RT	0.33	1.3						
2+042.0	RT	0.88	3.2						
20+270.0	LT	5.12	30.7						
20+296.5	LT	2.32	27.8						
20+334.9	LT	2.65	31.8						
20+403.0	LT	2.92	17.5						
20+620.0	RT	3.03	36.4	1.15	13.8				
20+665.0	RT	4.39	52.7						
20+720.0	RT	4.18	50.2	0.98	11.8				
20+786.0	RT	0.76	2.3						
20+797.0	LT	0.64	7.4						
			1426.1		94.2		2.2		

SUMMARY AND BALANCES

STATION TO STATION km + m		TOT EXC EARTH & ROCK m³	ROCK EXCAV m³	EMBANK m³	EXCESSES CUT	EXCESSES FILL	ACUMULATIVE EXCESSES CUT	ACUMULATIVE EXCESSES FILL

REMARKS

EARTH AND ROCK EXCAVATION
SOLID ROCK EXCAVATION
EARTH EXCAVATION
PLANIMETERED FILL
LESS FACTORED SOLID ROCK
LESS DISPLACEMENT OF ANY LARGE STRUCTURES
NET PLANIMETERED FILL
FACTOR
PLANIMETERED FILL INCLUDING FACTOR
MATERIALS AVAILABLE FOR FILLS
EARTH EXCAVATION
CHANNEL EXCAVATION
STRUCTURE EXCAVATION
TRENCH EXCAVATION, EARTH
TEMPORARY TRAFFIC CONTROL
TOTAL MATERIAL AVAILABLE FOR FILL
TOTAL FILL INCLUDING FACTOR
TOTAL MATERIAL FOR FILL
BORROW
EXCESS EXCAVATION

PROJECT NAME: BRANDON
PROJECT NUMBER: NH 019-3(495)

FILE NAME: zb008_5Earth.xls
PROJECT LEADER: CRB
DESIGNED BY: PTS
EARTHWORK SHEET #2

PLOT DATE: 9/2/2009
DRAWN BY: BTW
CHECKED BY: PTS
SHEET 20 OF 546

zb008s5-earth02.dgn