EARTHWORK SHEET

VC	% GRADE	STATION	GRADES ELEVATION ON TANGENT	GRADES ELEVATION ON CURVE	GRADES CORR VC	DIST.	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	SOLID ROCK EXCAVATION AREA	SOLID ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.	BASE AREA	BASE CU. YDS.
		189+50	237.00	236.84	-0.16									
		190	236.63	236.56	-0.07				190+50 BEGIN APPROX CONSTRUCTION					
		+50	236.25	236.23	-0.02		78		16		5			
		191	235.89	235.89	0	50	123	186	16	30	0	5		
	-0.7429 %	+50	235.51	235.48	-0.03		112		16		0			
		+95	235.18	235.08	-0.10			218		30				
		192	235.14	235.03	-0.11		115		16		10		C	2166
		+50	231.77	234.53	-0.24		103	202	16	30	3	9	F	37
400' VC		193	234.40	233.97	-0.43		120		16		3		F.FAC	1.15
		+50	233.60	233.36	-0.24		153	206	16	30	1	12	EXC	2,123
		+75	233.20	233.03	-0.17			253		30		6	R	210
		194	232.80	232.69	-0.11		140		16		0	4		
		+50	232.00	231.97	-0.03		165	271	16	30				
		195	231.20	231.20	0		200		16		0	1		
		+50	230.40				180	282	16	30	2			
		+95	229.68					338		30		2		
		196	229.60				123		16		3			
		+50	228.80				100	281	16	30	6	5		
		197	228.00				105		16		5		C	1704
		+50	227.20				85	206	16	30	35	10	F	612
		+88	226.91					190		30		19	F.FAC	1.15
	-1.6000 %	198	226.40				79	176	0		37		EXC	1000
		+50	225.60				78	152		15		49	R	165
		199	224.80				70	145			58	88		
		+50	224.00				0	137			70	119		
		200	223.20	223.20	0			65			89	139		
		+50	222.40	222.40	0						103	169		
		+60	222.24	222.24	0						60	151		
		201	221.60	221.60	0						92	141	C	10
		+50	220.00	220.79	-0.01						77	156	F	1474
		202	220.00	219.99	-0.01						60	127	F.FAC	1.15
		+50	219.19	219.18	-0.01		0				34	87	EXF	1685
400' VC		203	218.38	218.38	0		2	2			48	76		
		+50	217.56	217.56	0		0	2			75	114		
		204	216.75	216.75	0						92	155		
		+50	215.94				0				126	202		
		205	215.13				7	6			160	265		
		+50	214.31				0	6			211	346		
		206	213.50								240	420		
		+88	213.37									472		
		+50	212.69								270			
	-1.6250 %	207	211.88								343	573		
		+32	211.36									745		
		+50	211.06								156			
		208	210.25	210.25	0						59	915		
		+50	209.44	209.44	0	50	0	15	0	15	240	715		
		209	208.63	208.64	+0.01		16		16		50	269		
			CARRIED FORWARD					21		15		4455		
			COLUMN FOOTINGS					3901		450		6578		

VC	% GRADE	STATION	GRADES ELEVATION ON TANGENT	GRADES ELEVATION ON CURVE	GRADES CORR VC	DIST.	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	SOLID ROCK EXCAVATION AREA	SOLID ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.	BASE AREA	BASE CU. YDS
		209+00	208.63	208.64	+0.01		16		16		50			
		+19	208.32	208.33	+0.01	50		77		30		46	C	242
		+50	207.81	207.83	+0.02		67		16		0		F	4501
	-1.6250 %	+71	207.47	207.50	+0.03			144		30			F.FAC	1.15
		210	207.00	207.03	+0.03		88		16				EXF	4934
		+50	206.22	206.24	+0.02		120	193	15	30			R	75
		211	205.44	205.45	-0.01		156	256	16	30				
		+50	204.67	204.67	0		137	271	16	30	0			
		212	203.89	203.89	0		90	210	16	30	18	17	C	1474
		+50	203.11				59	138	16	30	20	35	F	261
		213	202.33				41	93	16	30	22	39	F.FAC	1.15
		+50	201.56				90	121	16	30	3	23	EXC	1174
		214	200.78				29	110	16	30	26	27	R	300
	-1.5556 %	+50	200.00				20	45	16	30	30	52		
		215	199.22				20	37	16	30	43	68		
		+50	198.44				15	32	0	15	40	77		
		216	197.67				5	19			45	79		
		+50	196.89				9	13			72	108		
		217	196.11	196.11	0		0	8			83	144	C	164
		+50	195.33	195.38	+0.05		7	6			75	146	F	1255
		218	194.56	194.76	+0.20		6	12			81	144	F.FAC	1.15
		+50	193.78	194.23	+0.45		8	13			72	142	EXF	1279
		219	193.00	193.80	+0.80		9	16			74	135	R	30
		+50	193.03	193.48	+0.45		10	18	0		67	131		
		220	193.05	193.25	+0.20		20	27	16	15	94	149		
		+29	193.07	193.17	+0.10			37		30		167		
		+50	193.08	193.13	+0.05		20		16		86			
		221	193.11	193.11	0		31	47	16	30	59	134		
		+13	193.11					63		30		91	C	1334
		+50	193.13				37		16		39		F	511
		222	193.16				54	84	16	30	15	50	F.FAC	1.15
		+50	193.18				57	103	16	30	21	33	EXC	746
		+92	193.21					162		30		28	R	300
		223	193.21				118		16		9			
		+50	193.24				129	229	16	30	0	8		
		+77	193.25					218		30				
		224	193.26				106		16					
		+41	193.28					193		30				
		+46	193.29											
		+50	193.29			50	102	198	16	30				
		225	193.32	193.32	0		112		16					
			CARRIED FORWARD											
			COLUMN FOOTINGS				3193			690		2073		

EARTHWORK SUMMARY

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV EARTH & ROCK CUBIC YARDS	ROCK EXCAV CUBIC YARDS	EMBANKMENT CUBIC YARDS	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	BASE CUBIC YARDS
190+50	195+00	2166	270	37	2123				
195+00	200+00	1704	165	612	1000		2123		
200+00	205+00	10		1474		1685	3123		
205+00	210+00	242	75	4501		4934	1438		
210+00	215+00	1474	300	261	1174			3496	
215+00	220+00	164	30	1255		1279		2322	
220+00	225+00	1334	300	511	746			3601	
225+00	230+00	1991	300	235	1721			2855	
230+00	232+00	803	120	7	795			1134	
								339	
ML TOTALS		9888	1560	8893					
DRIVES		45		224		213		552	
PROJECT TOTALS		9933	1560	9117					

NOTE: THE ROCK IS NOT FACTORED AS IT IS OLD CONCRETE PAVEMENT. THIS MATERIAL MAY BE USED AS FILL OR WASTED AT THE DISCRETION OF THE ENGINEER IN THE FIELD.

SUMMARY BY COLUMNS

SHEET NO.	COL. NO.	EXCAVATION TOTAL CU YDS	EXCAVATION ROCK CU YDS	EMBANKMENT CUBIC YARDS	BASE CUBIC YARDS
5	1	3901	450	6578	
5	2	3193	690	2073	
6	1	2794	420	242	
DRIVES		45		387	
TOTALS		9933	1560	9280	

REMARKS

EARTH AND ROCK EXCAVATION	9933
SOLID ROCK EXCAVATION OLD PAVEMENT	1560
EARTH EXCAVATION	8373
PLANIMETERED FILL	9117
LESS FACTORED SOLID ROCK	
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	
NET PLANIMETERED FILL	9117
FACTOR 1.15	1368
PLANIMETERED FILL INCLUDING FACTOR	10485
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION	9933
CHANNEL EXCAVATION	
UNDERDRAIN EXCAVATION	
STRUCTURE EXCAVATION	
TOTAL MATERIAL AVAILABLE FOR FILL	9933
TOTAL FILL INCLUDING FACTOR	10485
TOTAL MATERIAL FOR FILL	9933
BORROW TOTAL	552
EST GRAN. BORROW	3675
EXCESS CUT	3123

PROJECT FERRISBURG

PROJECT FEGC-F NO 019-4(11)

SHEET 6 OF 62 SHEETS

BRUNING 4P-105 4P492