EARTHWORK

V.C.	% GRD	STATION	ELEVATION ON TAN.	ELEVATION ON V.C.	CORR. V.C.	DIST.	COMMON EXCAVATION AREA	COMMON EXCAVATION CU. YDS.	SUBBASE OF GRAVEL (12") AREA	SUBBASE OF GRAVEL (12") CU. YDS.	GRAVEL SURFACE COURSE AREA	GRAVEL SURFACE COURSE CU. YDS.	FILL AREA	FILL CU. YDS.
				TH #26										
	0.000 %	11+50	1010.50											
						5								
PVC		11+55	1010.50	1010.50	0.00									
						20								
		11+75	1010.50	1010.60	+0.10									
						20								
PVI		11+95	1010.50	1010.90	+0.40									
						5								
	+4.00 %	12+00	1010.70	1011.01	+0.31		30		25		13			
						35				32		17		
PVCC		12+35	1012.10	1012.10	0.00			32	25		13			
						15				17		8		
		12+50	1012.70	1012.60	-0.10		5		36		17			
						10		1		14		7		
PVI		12+60	1013.10	1012.82	-0.28		0		38		21			
						25				33		17		
PVT		12+85	1012.98	1012.98	0.00				33		16			
						3				4		2		
	-0.500 %	12+88	1012.96	BEGIN BRIDGE					36		16			
						12								
		13+00	1012.90											
						48								
		13+48	1012.66	END BRIDGE					35		13			
						2				3		1		
		13+50	1012.65						35		16			
						22.34				46		23		
		13+72.34= TH 430+00.00	1012.54						77		39			
						27.66				67		34		
MATCH EXISTING		14+00	1012.40						54		27			
								33 cy		216 cy		109 cy		
					ROUNDING			7 cy		4 cy		1 cy		
					TOTAL			40 cy		220 cy		110 cy		
				TH #4										
		29+47		BEGIN APPROACH CONSTRUCTION										
						3								
		29+50	1011.50											
						10								
		29+60	1011.71											
						3								
		29+63					55	(BUTT)						
						7		14						
	+2.08 %	29+70	1011.92				55							
						7.3								
		29+77.3	1012					18					28	(BUTT)
						2.7								3
		29+80	1012.12				40						28	
						10		16						10
		29+90	1012.33										26	
						10	46	16						12
PVI		TH 430+00.00= TH 26 13+92.34	1012.54				40						38	
														15
						10		15						
		30+10	1012.33				43						45	
						10		16						13
		30+20					46						27	(BUTT)
						10		21						
		30+30					65							53 cy
						10		23					ROUNDING	7 cy
		30+40					58						TOTAL	60 cy
						10		19						
		30+50					43							
						25		21						
		30+75					3							
						25		6						
		31+00					4							
						25		4						
		31+25					4	(BUTT)						
								189 cy						
					ROUNDING			1 cy						
					TOTAL			190 cy						

TOTAL FILL NEEDED = 69
TOTAL AVAILABLE FILL = 512
WASTE = 443

SUMMARY OF EARTHWORK

PLANIMETERED FILL 60(1.15) = 69

MATERIAL AVAILABLE FOR FILL

COMMON EXCAVATION 230 x 1.0 = 230
UNCLASSIFIED CHANNEL EXCAVATION 190 x 0.6 = 114
STRUCTURE EXCAVATION 280 x 0.6 = 168
TOTAL AVAILABLE FOR FILL = 512

BRIDGE QUANTITY SHEET

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE DIVISION

QUANTITY BREAKDOWN

NO.	ITEM	UNIT	SUPER-STRUCTURE	ABUTMENT #1	ABUTMENT #2	ROADWAY	CHANNEL	TOTAL	FINAL
203.15	COMMON EXCAVATION	CY				230		230	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	CY					190	190	
203.30	EARTH BORROW	CY				50		50	
204.25	STRUCTURE EXCAVATION	CY		140	140			280	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CY		100	100			200	
301.15	SUBBASE OF GRAVEL	CY				220		220	
401.10	GRAVEL SURFACE COURSE	CY				110		110	
406.25	BITUMINOUS CONCRETE PAVEMENT	TON				90		90	
501.20	CONCRETE, CLASS A	CY	53					53	
501.25	CONCRETE, CLASS B	CY		52	51			103	
506.90	STRUCTURAL STEEL (ROLLED BEAM)	LBS	33690					33690	
506.99	BEARING DEVICE ASSEMBLY	EA		4	4			8	
507.15	REINFORCING STEEL	LBS	6400	4420	4180			15000	
507.17	REINFORCING STEEL (EPOXY COATED)	LBS	6610					6610	
508.15	SHEAR CONNECTORS (560 - 7/8" ϕ x 7")	LS	1					1	
514.10	WATER REPELLENT	GAL	14	1	1			16	
608.25	ALL PURPOSE EXCAVATOR RENTAL (TYPE I)	HR				10		10	
613.11	STONE FILL, TYPE II	CY					130	130	
617.35	BRIDGE RAIL-HEAVY DUTY STEEL BEAM	LF	125					125	
621.10	GUARD RAIL PLANK W/WOOD POSTS	LF				32		32	
621.38	GUARD RAIL HEAVY DUTY STEEL BEAM W/WOOD POSTS TYPE II	LF				276		276	
621.70	ANCHOR FOR STEEL BEAM GUARD RAIL WITH STEEL OR WOOD POSTS @ OPENINGS	EA				4		4	
635.10	MOBILIZATION	LS				1		1	
675.20	TRAFFIC SIGN, TYPE A	SF				7		7	
675.35	SIGN POST, TYPE A	LBS				28		28	
614.10	JOINT SEALER, HOT POURED	GAL				2		2	

NOTE: AN ESTIMATED QUANTITY OF 50 cy OF EARTH BORROW HAS BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER, IF REQUIRED.

BRIDGE (℄) AT STATION (℄) 12+88.00 ~ 13+48.00
LOCATION (℄) TH 26 OVER WHITE RIVER

Prepared by: C.C. GATES
Checked by: D.W. NEWTON
SUPERVISOR: F. W. Bolkum

GRANVILLE
BR ___ OF ___

PROJECT NO. BRZ-1444(9)
SHEET NO. 8 OF 41

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