DRAINAGE AND ITEM QUANTITY SHEET

STATE OF VERMONT AGENCY OF TRANSPORTATION

PROJECT HIGHGATE NO. BRS 0285(1) S

APPROXIMATE SUMMARY OF QUANTITIES

GRAND TOTAL	UNIT	ITEM	RNDG.	ITEM NO.
1	LS	CLEARING & GRUBBING PLUS IND. TREES AND STUMPS		201.10
1	EA	REMOVAL OF EXISTING SUPERSTRUCTURE		202.20
615	LF	REMOVAL & DISPOSAL OF EXISTING GUARD RAIL		202.40
2160	CY	COMMON EXCAVATION		203.15
102	CY	SOLID ROCK EXCAVATION		203.16
620	CY	UNCLASSIFIED CHANNEL EXCAVATION	8	203.27
300	CY	EARTH BORROW	EST	203.30
1220	CY	SAND BORROW		203.31
640	CY	GRANULAR BORROW	EST	203.32
14400	SY	FINE GRADING - SUBGRADE		203.40
310	CY	TRENCH EXCAVATION OF EARTH		204.20
30	CY	TRENCH EXCAVATION OF ROCK	EST	204.21
1055	CY	GRANULAR BACKFILL FOR STRUCTURES		204.30
70	CY	SUBBASE OF GRAVEL	4	301.15
2300	CY	SUBBASE OF DENSE GRADED CRUSHED STONE		301.35
50	CY	GRAVEL SHOULDERS		402.10
6	GAL	EMULSIFIED ASPHALT		404.66
300	TON	BITUMINOUS CONCRETE PAVEMENT		406.25
115	CY	CONCRETE CLASS A		501.20
416	CY	CONCRETE CLASS B		501.25
1	LS	FURNISHING EQUIPMENT FOR DRIVING PILES		504.10
2100	LF	STEEL PILING - HP 14X73 (PLUS 30 SHOES)		505.17
1	EA	PILE LOADING TESTS		505.40
	LS	STRUCTURAL STEEL		506.94
10	EA	BEARING DEVICE ASSEMBLY		506.99
41960	LB	REINFORCING STEEL		507.15
	LS	SHEAR CONNECTORS (1080 EA 7/8"X7" STUDS)		508.15
9	GAL	WATER REPELLENT		514.10
384	SY	SHEET MEMBRANE WATERPROOFING		519.20
	LS	COFFERDAM		530.10
200	LF	6" UNDERDRAIN		605.10
50	LF	6" UNDERDRAIN CARRIER PIPE		605.15
	EA	UNDERDRAIN FLUSHING BASINS		605.95
1	HR	ROADWAY PATROL MAINTENANCE	EST	607.10
	HR	BULLDOZER RENTAL, TYPE I (NOT A BID ITEM)	EST	608.10
	HR	ALL PURPOSE EXCAVATOR RENTAL TYPE I (NOT A BID ITEM)	EST	608.25
	HR	TRUCK RENTAL (NOT A BID ITEM)	EST	608.37
3	M/GAL	DUST CONTROL WITH WATER	EST	609.10
	TON	DUST CONTROL W/CALCIUM CHLORIDE	EST	609.15
2.5	CY	STONE FILL TYPE II	2	613.11
5	CY	STONE FILL TYPE III	3	613.12

DETAILED SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM
		COMMON EXCAVATION
1684	CY	MAINLINE - PLANIMETERED
112	CY	REMOVAL OF BIT. CONC. PVMT. BELOW SUBGRADE
26	CY	DRIVES
335	CY	ESTIMATED SAND BORROW
3	CY	ROUNDING
2160	CY	TOTAL
		SAND BORROW
877	CY	DESIGNED
343	CY	ESTIMATED
1220	CY	TOTAL
		GRANULAR BORROW
76	CY	DESIGNED (BRIDGE APPROACHES)
474	CY	ESTIMATED FOR CAPPING FILLS
83	CY	FACTOR (0.15X550)
7	CY	ROUNDING
640	CY	TOTAL
		TRENCH EXCAVATION OF EARTH
161	CY	DESIGNED (UNDERDRAIN)
122	CY	ESTIMATED (UNDERDRAIN)
7	CY	ROUNDING
290	CY	TOTAL
		SUBBASE OF GRAVEL
66	CY	DRIVES
4	CY	ROUNDING
70	CY	TOTAL
		SUBBASE OF DENSE GRADED CRUSHED STONE
1964	CY	MAINLINE
49	CY	ROADWAY APPROACHES
75	CY	EXTRA DEPTH FOR BRIDGE APPROACHES
12	CY	ROUNDING
2100	CY	TOTAL
		GRAVEL SHOULDERS
40	CY	MAINLINE
5	CY	APPROACHES
5	CY	ROUNDING
50	CY	TOTAL
		BITUMINOUS CONCRETE PAVEMENT
186	TON	MAINLINE
6	TON	DRIVES
20	TON	APPROACHES
38	TON	EXTRA DEPTH & WIDTH @ BRIDGE APPROACHES
3	TON	ROUNDING
253	TON	TOTAL
		TEMPORARY EROSION CONTROL ITEMS (INCLUDED W/EROSION CONTROL)
20	CY	TRENCH EXCAVATION OF EARTH
200	CY	SUBBASE OF DENSE GRADED CRUSHED STONE
10	CY	STONE FILL TYPE II
25	LBS	SEED, WINTER RYE
1	TON	HAY MULCH
40	SY	EROSION MATTING

DRAINAGE STRUCTURES

STA.	POS	OLD CULVERT	TYPE IN	TYPE OUT	A.C.C.G.M.P. D	L	TH.	C.G.M.P. D	L	TH.	C.A.A.C.P. D	L	TH.	R.C.P. D	L	CL.	M.E.S.	STONE FILL TYPE I	C.R.M	TRENCH EXCAV. EARTH	ROCK	MARKER POSTS LT	RT	ASKEW LT	RT	CONC. B	REINF. STEEL	DI GRATE	DEPTH DI	DITCHES IN	OUT	REMARKS

GUARD RAIL STANDARD STEEL BEAM W/WOOD POSTS, TYPE II

STA.	STA.	POS	MEAS LENGTH	FAC	POST SPACING	PAY LENGTH	BCT 621.77
222+07	222+32	LT					1
222+32	224+28	LT	200'	1.0	6'-3"	200'	
223+28	223+53	RT					1
223+53	224+28	RT	75'	1.0	6'-3"	75'	
226+78	229+28	LT	250'	1.0	6'-3"	250'	
229+28	229+53	LT					1
226+78	228+03	RT	125'	1.0	6'-3"	125'	
228+03	228+28	RT					1
			650'			650'	4

GUARD RAIL APPROACH SECTION TYPE I

STA	STA	POS	QUANTITY EACH
224+28	224+78	LT	1
226+28	226+78	LT	1
224+28	224+78	RT	1
226+28	226+78	RT	1
TOTAL			4

6" UNDERDRAIN

STA.	STA.	TYPE	POS.	LEN	TRENCH E	TRENCH R	CRM	FLUSHING BASINS	MARKER POSTS
224+50	232+50	U	LT	310'	133			1	1
ESTIMATED		U		90'	68			1	1
TOTALS		U		400'				2	2
232+50	CL	C		78'	28			1	1
ESTIMATED		C		72'	54			1	1
TOTALS		C		150'				2	2
TOTAL DESIGNED					161			2	2
TOTAL ESTIMATED					122			2	2

TYPE OF CONSTRUCTION: APPROACHES, NEW BRIDGE, GRADING, PAVEMENT, SUBBASE, DRAINAGE AND GUARD RAIL

STATIONS FROM	TO	PAVEMENT WIDTHS 20'-22'	22'	22'-32.67'	32.67	22'-24'	REMARKS
222+00	222+50	50'					APPROACH
222+50	223+79		129'				ROADWAY
223+79	224+79			100'			PAVEMENT WIDENING
224+79	225+07				28'		BRIDGE APPROACH
225+07	225+99				92'		BRIDGE
225+99	226+27				28'		BRIDGE APPROACH
226+27	227+27			100'			PAVEMENT WIDENING
227+27	232+50		523'				ROADWAY
232+50	233+00					50'	APPROACH

LENGTH OF PROJECT

STA.	STA.	FEET	MILES	REMARKS
222+50	225+07	257.00	0.049	ROADWAY
225+07	225+99	92.00	0.017	BRIDGE
225+99	232+50	651.00	0.123	ROADWAY
TOTALS		1000.00	0.189	

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