

GRADING (LUMP SUM)

(THIS COMPUTATION SHEET APPLIES ONLY TO PROJECTS WHICH HAVE BEEN PREDETERMINED TO USE THIS PAY ITEM. SEE ROADWAY DESIGN MANUAL, PART I, 11-6)

ITEM	QUANTITIES	UNIT
CLEARING AND GRUBBING	<u>0.50</u>	ACRES
UNCLASSIFIED EXCAVATION	<u>7,900</u>	YD ³
BORROW EXCAVATION	<u>2,900</u>	YD ³
SHOULDER BORROW	<u> </u>	YD ³
FINE GRADING	<u>3,460</u>	YD ²
REMOVAL OF EXISTING ASPHALT PAVEMENT	<u>3,245</u>	YD ²
REMOVAL OF EXISTING CONCRETE PAVEMENT	<u> </u>	YD ²
BREAKING OF EXISTING ASPHALT PAVEMENT	<u> </u>	YD ²
BREAKING OF EXISTING CONCRETE PAVEMENT	<u> </u>	YD ²

EARTHWORK SUMMARIES

Volumes in Cubic Yards

PROJECT: 17BP.7.R.27

COUNTY

DATE

Oct-24-2013

1 OF SHEETS

RD10S01C	LINE	STATION	STATION	TOTAL EXCAV. (UNCL.)	ROCK EXCAV.	UNDERCUT	UNSUIT. EXCAV.	SUITABLE EXCAV.	TOTAL EMB.	ROCK EMB.	EARTH EMB.	EMBANK. +20%	BORROW	SUITABLE WASTE	UNSUIT. WASTE	TOTAL WASTE
	-DET-	11+50.00	23+08.25	183				183	7235		7235	8682	8499			
	-L-	14+00.00	22+00.00	24				24	1060		1060	1272	1248			
	-DET-	Removal		7235				7235	183		183	220		7015		7015
	TOTAL OF SUBTOTALS			7442				7442	8478		8478	10174	9747	7015		7015
	WASTE IN LIEU OF BORROW												-7015	-7015		-7015
	TOTAL			7442									2732			
SHEET TOTALS:				7,900									2,900			

5% SAY 7814

ESTIMATED DDE = 52 CUBIC YARDS

2869

-L-

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
14+00.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	3.34	0	0	1.20	0
14+50.0000	A2					
	Common Exc	3.72	3	3	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	12.86	15	18	1.20	-15
15+00.0000	A2					
	Common Exc	2.83	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	68.52	75	90	1.20	-99
15+50.0000	A2					
	Common Exc	1.00	4	4	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	76.75	135	161	1.20	-256
16+00.0000	A2					
	Common Exc	0.00	1	1	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	75.24	141	169	1.20	-424
16+50.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	65.70	131	157	1.20	-581
17+00.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	68.06	124	149	1.20	-730

-L-

18+50.0000 A2	Common Exc	0.32	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	46.60	106	127	1.20	-857
19+00.0000 A2	Common Exc	2.25	2	2	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	39.97	80	96	1.20	-951
19+50.0000 A2	Common Exc	2.74	5	5	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	48.08	82	98	1.20	-1044
20+00.0000 A2	Common Exc	0.00	3	3	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	50.24	91	109	1.20	-1150
20+50.0000 A2	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	36.27	80	96	1.20	-1246

G R A N D S U M M A R Y T O T A L S

Material Name	Unadjusted	Adjusted	Mult
	Volumes	Volumes	Factor
	(cu. yd.)	(cu. yd.)	

A2		24	24	1.00
	Common Exc			
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	1060	1270	1.20

- DET -

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
11+50.0000	A2					
	Common Exc	1.33	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	2.99	0	0	1.20	0
12+00.0000	A2					
	Common Exc	1.75	3	3	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	2.75	5	6	1.20	-3
12+50.0000	A2					
	Common Exc	4.74	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	2.61	5	6	1.20	-3
13+00.0000	A2					
	Common Exc	21.40	24	24	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	2	3	1.20	18
13+50.0000	A2					
	Common Exc	31.00	49	49	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.01	0	0	1.20	67
14+00.0000	A2					
	Common Exc	10.35	38	38	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	2.14	2	2	1.20	103
14+50.0000	A2					
	Common Exc	5.86	15	15	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	244.62	228	274	1.20	-156
15+00.0000	A2					
	Common Exc	0.00	5	5	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	567.12	752	902	1.20	-1053
15+50.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	614.85	1094	1313	1.20	-2366
16+00.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	515.42	1047	1256	1.20	-3622
16+50.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	

-DET-

	Fill	399.41	847	1016	1.20	-4638
17+00.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	362.48	705	847	1.20	-5485
18+50.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	307.17	682	818	1.20	-6303
19+00.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	286.87	550	660	1.20	-6963
19+50.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	250.00	497	597	1.20	-7560
20+00.0000	A2					
	Common Exc	0.00	0	0	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	186.77	404	485	1.20	-8045
20+50.0000	A2					
	Common Exc	2.03	2	2	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	99.06	265	318	1.20	-8361
21+00.0000	A2					
	Common Exc	4.90	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	24.03	114	137	1.20	-8492
21+50.0000	A2					
	Common Exc	6.25	10	10	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	3.69	26	31	1.20	-8513
22+00.0000	A2					
	Common Exc	6.97	12	12	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	1.99	5	6	1.20	-8507
22+50.0000	A2					
	Common Exc	2.30	9	9	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.93	3	3	1.20	-8501
23+00.0000	A2					
	Common Exc	1.72	4	4	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	1.12	2	2	1.20	-8499

- OCT -

GRAND	SUMMARY	TOTALS		
Material Name	Unadjusted	Adjusted	Mult	
	Volumes	Volumes	Factor	
	(cu. yd.)	(cu. yd.)		

A2

Common Exc	183	183	1.00
Subgrade Exc	0	0	1.00
Subsoil Exc	0	0	1.00
Fill	7235	8682	1.20

DDE

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate
14+00.00	A2					
	Common Exc	8.75	8	8	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.20	8
14+50.00	A2					
	Common Exc	2.90	11	11	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.20	19
15+00.00	A2					
	Common Exc	4.06	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.07	0	0	1.20	25
15+50.00	A2					
	Common Exc	1.88	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.10	0	0	1.20	31
16+00.00	A2					
	Common Exc	2.72	4	4	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.02	0	0	1.20	35
16+50.00	A2					
	Common Exc	3.49	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.20	41
17+00.00	A2					
	Common Exc	2.60	6	6	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.20	47
17+50.00	A2					
	Common Exc	2.72	5	5	1.00	
	Subgrade Exc	0.00	0	0	1.00	
	Subsoil Exc	0.00	0	0	1.00	
	Fill	0.00	0	0	1.20	52

G R A N D S U M M A R Y T O T A L S

Material Name	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor
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A2	Common Exc	52	52	1.00
	Subgrade Exc	0	0	1.00
	Subsoil Exc	0	0	1.00
	Fill	0	0	1.20