

GRADING REPORT

COMPUTED BY: Jack Ballard
CHECKED BY: Edward Henderson, P.E.
FEDERAL PROJECT NO: BR-NH-29(115)
ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET 1 OF 30
STATE NO.: 73008-3245-94
PIN: 124526.00
COUNTY: ROANE

Copy the Grading Quantities table from the Estimated Quantities sheet here.

S.R. 29 Over S.R. 61

ESTIMATED GRADING QUANTITIES

ESTIMATED GRADING QUANTITIES									
DESCRIPTION	UNADJUSTED VOLUMES (CY)		ADJUSTED VOLUMES (CY)	BALANCE SUMMARY					
	EXC.	EMB.	EXC.	SHRINK = 15 %	SWELL = 15 %				
MAINLINE: SR 29	288	7187	245	EMB.	EXC.				
SIDE ROAD: SR 61	6824	355	5801						
*TEMPORARY RAMPS	145	310	124						
INDEPENDENT DITCHES									
TEMPORARY CONSTRUCTION EXITS	43	0	37	7852	VS.	-6205			
OTHER (BRIDGE EXCAVATION, PAVEMENT, ETC...)				AVAILABLE	=	1647			
TOPSOIL (EMB.)	1435								
TOPSOIL (EXC.)	289								
TOPSOIL TOTALS (SEE TOPSOIL TABLE)				BORROW MATERIAL	=	1895			
ROCK (C.Y.)		TOTALS (C.Y.)							
EXC.	EMB	EXC.	EMB.	EXC.					
	.	(UNCL.)	(UNCL.)	EXC (COMMON)	(AVAIL.)	EXC. (ADJ.)			
0	0	9024	7852	9024	7300	6205			

SR 29 GRADING QUANTITIES

Input File: ewkprj.inp

Output File: SR29Topsoil.log

- 111
- 122
- 133 Earthwork
- 144
- 155 tolerance = 0.010000
- 166
- 177 vertical search distance = 250.000000

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 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET 2 OF 30
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

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1      8      8

1      9      9 xs dgn = P:\2022\Projects\1110\22-1110-0006 TDOT E2368 PIN 124526.00 SR over SR 61
Dgn\Working\Civil\Plans Production\ROSR29MainlineXSections.dgn

1     10     10

1     11     11     Proposed Finish Grade

1     12     12         soil type = Topsoil

1     13     13         roadway exc mult factor = 1.000000

1     14     14         subsoil exc mult factor = 1.000000

1     15     15         fill mult factor = 1.000000

1     16     16             type = line, line_string

1     17     17             lvname = DESIGN - TYPICAL - Finished Grade and Subgrade

1     18     18             lvname = DESIGN - PUBLIC HEARING - Shapes

1     19     19             lvname = DESIGN - SURFACE - Bridge Surface Construction Lines

1     20     20             co = 1-3,7-8,11-12,16,18,161,ByLevel

1     21     21

1     22     22     Existing Ground Line

1     23     23         soil type = EARTH

1     24     24         roadway exc mult factor = 1.000000

1     25     25         subsoil exc mult factor = 1.000000

1     26     26         fill mult factor = 1.000000

1     27     27             type = line, line_string

1     28     28             lvname = SURVEY - GROUND - Top of Ground

1     29     29             lc = ByLevel

1     30     30

1     31     31     Existing Unsuitable Material

1     32     32         soil type = Topsoil

1     33     33         roadway exc mult factor = 1.000000

1     34     34         subsoil exc mult factor = 1.000000

1     35     35         fill mult factor = 1.000000
    
```

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ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET 3 OF 30

STATE NO.: 73008-3245-94

PIN: 124526.00

COUNTY: ROANE

1	36	36	type = line, line_string
1	37	37	lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1	38	38	lc = 2
1	39	39	wt = 2
1	40	40	co = 2
1	41	41	
1	42	42	Excavation Limit
1	43	43	type = line
1	44	44	lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1	45	45	lc = 0
1	46	46	wt = 0
1	47	47	co = 0
1	48	48	
1	49	49	Skip Areas
1	50	50	from 106+40.57 R 1 to 107+81.67 R 1
1	51	51	
1	52	52	Ignore Areas
1	53	53	from 106+50.00 R 1 to 107+50.00 R 1
1	54	54	
1	55	55	
1	56	56	Add Accumulated Adjusted Volume Column
1	57	57	
1	58	58	Add Accumulated Unadjusted Volume Column
1	59	59	
1	60	60	End Area Decimal Places = 0
1	61	61	
1	62	62	write column base ascii file = SR29Earth_Topsoil.txt
1	63	63	
1	64	64	column 1 formula = abs(["EARTH", Common Exc, End Area])

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SHEET 4 OF 30

STATE NO.: 73008-3245-94

PIN: 124526.00

COUNTY: ROANE

1	65	65	column 1 number of decimal place = 0
1	66	66	column 1 total length = 10
1	67	67	
1	68	68	column 2 formula = abs(["EARTH", Fill, End Area])
1	69	69	column 2 number of decimal place = 0
1	70	70	column 2 total length = 10
1	71	71	
1	72	72	column 3 formula = abs(["Topsoil", Subsoil Exc, End Area])
1	73	73	column 3 number of decimal place = 0
1	74	74	column 3 total length = 10
1	75	75	
1	76	76	
1	77	77	Process Earthwork for Baseline = SR29
1	78	78	job number = 1gk
1	79	79	
1	80	80	beg sta = 100+00.00 R 1
1	81	81	end sta = 115+80.00 R 1
0	0	82	END_OF_FILE

COMPUTING EARTHWORKS FOR BASELINE = SR29

COMPUTING EARTHWORKS FOR JOB = 1GK

FORMING LIST OF XSCELLS

BEGINNING EARTHWORKS COMPUTATION

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SHEET 5 OF 30
 STATE NO.: 73008-3245-94
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Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate	Accum Unadj Vol (cu. yd.)	Accum Adj Vol (cu. yd.)
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100+50.00 EARTH

Common Exc	0	0	0	1.00		0	0
Subgrade Exc	0	0	0	1.00		0	0
Subsoil Exc	0	0	0	1.00		0	0
Fill	53	18	18	1.00	0	18	18

100+68.76 EARTH

Common Exc	0	0	0	1.00		0	0
Subgrade Exc	0	0	0	1.00		0	0
Subsoil Exc	0	0	0	1.00		0	0
Fill	53	18	18	1.00	0	36	36

101+00.00 EARTH

Common Exc	46	57	57	1.00		57	57
Subgrade Exc	0	0	0	1.00		0	0
Subsoil Exc	0	0	0	1.00		0	0
Fill	0	0	0	1.00	0	36	36

101+50.00 EARTH

Common Exc	34	74	74	1.00		131	131
Subgrade Exc	0	0	0	1.00		0	0
Subsoil Exc	0	0	0	1.00		0	0
Fill	6	6	6	1.00		42	42

102+00.00 TOPSOIL

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 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **6** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

EARTH

Common Exc	7	38	38	1.00	169	169
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	28	31	31	1.00	73	73

102+21.55 EARTH

Common Exc	2	4	4	1.00	173	173
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	54	33	33	1.00	106	106

102+50.00 EARTH

Common Exc	0	1	1	1.00	174	174
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	85	73	73	1.00	179	179

103+00.00 EARTH

Common Exc	39	68	68	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	142	210	210	1.00	389	389

103+50.00 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	238	352	352	1.00	741	741

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SHEET 7 OF 30
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

104+00.00 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	394	585	585	1.00	1326	1326

104+50.00 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	520	269	269	1.00	1595	1595

105+00.00 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	539	981	981	1.00	2576	2576

105+50.00 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	536	995	995	1.00	3571	3571

105+66.29 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0

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SHEET 8 OF 30
 STATE NO.: 73008-3245-94
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Fill	413	286	286	1.00	3857	3857
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105+85.57 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	324	263	263	1.00	4120	4120

106+00.00 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	287	163	163	1.00	4283	4283

106+40.57 EARTH

Common Exc	0	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	15	15	1.00	4298	4298

SKIP STATION RANGE = 106+40.57 to 108+31.79

108+31.79 EARTH

Common Exc	3	0	0	1.00	339	339
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	129	129	129	1.00	4427	4427

108+50.00 EARTH

Common Exc	4	2	2	1.00	341	341
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0

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SHEET 9 OF 30
 STATE NO.: 73008-3245-94
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Fill	194	109	109	1.00	4536	4536
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109+00.00 EARTH

Common Exc	6	9	9	1.00	350	350
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	367	519	519	1.00	5055	5055

109+44.43 EARTH

Common Exc	6	10	10	1.00	360	360
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	333	576	576	1.00	5631	5631

109+50.00 EARTH

Common Exc	6	1	1	1.00	361	361
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	326	68	68	1.00	5699	5699

109+79.43 EARTH

Common Exc	5	6	6	1.00	367	367
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	241	309	309	1.00	6008	6008

110+00.00 EARTH

Common Exc	4	3	3	1.00	370	370
Subgrade Exc	0	0	0	1.00	0	0

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SHEET **10** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Subsoil Exc	0	0	0	1.00	0	0
Fill	198	167	167	1.00	6175	6175

110+50.00 EARTH

Common Exc	12	15	15	1.00	385	385
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	127	301	301	1.00	6476	6476

111+00.00 EARTH

Common Exc	35	44	44	1.00	429	429
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	49	163	163	1.00	6639	6639

111+37.08 EARTH

Common Exc	48	57	57	1.00	486	486
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	44	64	64	1.00	6703	6703

111+50.00 EARTH

Common Exc	48	23	23	1.00	509	509
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	40	20	20	1.00	6723	6723

111+72.65 EARTH

Common Exc	48	48	48	1.00	557	557
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 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **11** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	18	24	24	1.00	6747	6747

112+00.00 EARTH

Common Exc	0	24	24	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	1	10	10	1.00	6757	6757

113+00.00 EARTH

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

113+50.00 EARTH

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

114+00.00 EARTH

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

114+50.00 EARTH

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 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **12** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

115+00.00 EARTH

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

115+50.00 EARTH

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

115+62.00 EARTH

Common Exc	0	0	0	1.00	581	581
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	6757	6757

SR 61 GRADING QUANTITIES

Input File: ewkprj.inp

Output File: SR61Topsoil.log

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 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **13** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

1	1	1	
1	2	2	
1	3	3	Earthwork
1	4	4	
1	5	5	tolerance = 0.010000
1	6	6	
1	7	7	vertical search distance = 250.000000
1	8	8	
1	9	9	xs dgn = P:\2022\Projects\1110\22-1110-0006 TDOT E2368 PIN 124526.00 SR over SR 61 Dgn\Working\Civil\Plans Production\ROSR29MainlineXSections.dgn
1	10	10	
1	11	11	Proposed Finish Grade
1	12	12	soil type = Topsoil
1	13	13	roadway exc mult factor = 1.000000
1	14	14	subsoil exc mult factor = 1.000000
1	15	15	fill mult factor = 1.000000
1	16	16	type = line, line_string
1	17	17	lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1	18	18	lvname = DESIGN - PUBLIC HEARING - Shapes
1	19	19	lvname = DESIGN - SURFACE - Bridge Surface Construction Lines
1	20	20	co = 1-3,7-8,11-12,16,18,161,ByLevel
1	21	21	
1	22	22	Existing Ground Line
1	23	23	soil type = EARTH
1	24	24	roadway exc mult factor = 1.000000
1	25	25	subsoil exc mult factor = 1.000000
1	26	26	fill mult factor = 1.000000
1	27	27	type = line, line_string
1	28	28	lvname = SURVEY - GROUND - Top of Ground

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 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET 14 OF 30
 STATE NO.: 73008-3245-94
 PIN: 124526.00
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1	29	29	lc = ByLevel
1	30	30	
1	31	31	Existing Unsuitable Material
1	32	32	soil type = Topsoil
1	33	33	roadway exc mult factor = 1.000000
1	34	34	subsoil exc mult factor = 1.000000
1	35	35	fill mult factor = 1.000000
1	36	36	type = line, line_string
1	37	37	lvname = SURVEY - GROUND - Bottom of Topsoil Layer
1	38	38	lc = 2
1	39	39	wt = 2
1	40	40	co = 2
1	41	41	
1	42	42	Excavation Limit
1	43	43	type = line
1	44	44	lvname = DESIGN - EARTHWORK - Excavation Limit Lines
1	45	45	lc = 0
1	46	46	wt = 0
1	47	47	co = 0
1	48	48	
1	49	49	
1	50	50	
1	51	51	
1	52	52	
1	53	53	
1	54	54	
1	55	55	
1	56	56	Add Accumulated Adjusted Volume Column
1	57	57	

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FEDERAL PROJECT NO: BR-NH-29(115)

ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET 15 OF 30

STATE NO.: 73008-3245-94

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COUNTY: ROANE

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1   58   58   Add Accumulated Unadjusted Volume Column
1   59   59
1   60   60   End Area Decimal Places = 0
1   61   61
1   62   62   write column base ascii file = SR29Earth_Topsoil.txt
1   63   63
1   64   64   column 1 formula = abs( ["EARTH", Common Exc, End Area] )
1   65   65   column 1 number of decimal place = 0
1   66   66   column 1 total length = 10
1   67   67
1   68   68   column 2 formula = abs( ["EARTH", Fill, End Area] )
1   69   69   column 2 number of decimal place = 0
1   70   70   column 2 total length = 10
1   71   71
1   72   72   column 3 formula = abs( ["Topsoil", Subsoil Exc, End Area] )
1   73   73   column 3 number of decimal place = 0
1   74   74   column 3 total length = 10
1   75   75
1   76   76
1   77   77   Process Earthwork for Baseline = SR29
1   78   78       job number = 1gk
1   79   79
1   80   80       beg sta = 200+50.00 R 1
1   81   81       end sta = 206+50.00 R 1
0    0   82 END_OF_FILE

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COMPUTING EARTHWORKS FOR BASELINE = SR61

COMPUTING EARTHWORKS FOR JOB = 1GK

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

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 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET 16 OF 30
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate	Accum Unadj Vol (cu. yd.)	Accum Adj Vol (cu. yd.)

200+50.00	EARTH							
	Common Exc	0	0	0	1.00		0	0
	Subgrade Exc	0	0	0	1.00		0	0
	Subsoil Exc	0	0	0	1.00		0	0
	Fill	0	0	0	1.00		0	0
201+00.00	EARTH							
	Common Exc	0	0	0	1.00		0	0
	Subgrade Exc	0	0	0	1.00		0	0
	Subsoil Exc	0	0	0	1.00		0	0
	Fill	0	0	0	1.00		0	0
201+50.00	EARTH							
	Common Exc	233	432	432	1.00		432	432
	Subgrade Exc	0	0	0	1.00		0	0
	Subsoil Exc	0	0	0	1.00		0	0
	Fill	13	24	24	1.00		24	24
202+00.00	EARTH							
	Common Exc	356	659	659	1.00		1091	1091
	Subgrade Exc	0	0	0	1.00		0	0
	Subsoil Exc	0	0	0	1.00		0	0
	Fill	12	23	23	1.00		47	47

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **17** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

202+50.00 EARTH

Common Exc	486	900	900	1.00	1991	1991
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	16	30	30	1.00	77	77

203+00.00 EARTH

Common Exc	556	1030	1030	1.00	3021	3021
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	23	43	43	1.00	120	120

203+50.00 EARTH

Common Exc	533	987	987	1.00	4008	4008
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	30	56	56	1.00	176	176

204+00.00 EARTH

Common Exc	590	1093	1093	1.00	5101	5101
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	22	41	41	1.00	217	217

204+50.00 EARTH

Common Exc	500	926	926	1.00	6027	6027
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	22	41	41	1.00	258	258

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **18** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

205+00.00 EARTH

Common Exc	273	506	506	1.00	6533	6533
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	27	50	50	1.00	308	308

205+50.00 EARTH

Common Exc	117	217	217	1.00	6750	6750
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	25	47	47	1.00	355	355

206+00.00 EARTH

Common Exc	40	74	74	1.00	6824	6824
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	355	355

206+50.00 EARTH

Common Exc	0	0	0	1.00	6824	6824
Subgrade Exc	0	0	0	1.00	0	0
Subsoil Exc	0	0	0	1.00	0	0
Fill	0	0	0	1.00	355	355

ON RAMP GRADING QUANTITIES

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **19** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Output File: OnRampEarth.log

1	1	1	
1	2	2	
1	3	3	Earthwork
1	4	4	
1	5	5	tolerance = 0.010000
1	6	6	
1	7	7	vertical search distance = 250.000000
1	8	8	
1	9	9	xs dgn = P:\2022\Projects\1110\22-1110-0006 TDOT E2368 PIN 124526.00 SR over SR 61

Dgn\Working\Civil\Plans Production\ROSR29OnRampXSections.dgn

1	10	10	
1	11	11	Proposed Finish Grade
1	12	12	soil type = Earth
1	13	13	roadway exc mult factor = 1.000000
1	14	14	subsoil exc mult factor = 1.000000
1	15	15	fill mult factor = 1.000000
1	16	16	type = line
1	17	17	lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1	18	18	co = 2,6-8,18
1	19	19	
1	20	20	Existing Ground Line
1	21	21	soil type = Earth
1	22	22	roadway exc mult factor = 1.000000
1	23	23	subsoil exc mult factor = 1.000000
1	24	24	fill mult factor = 1.000000
1	25	25	type = line, line_string
1	26	26	lvname = SURVEY - GROUND - Top of Ground
1	27	27	lc = ByLevel

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **20** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

1	28	28	
1	29	29	combine common exc + subgrade exc + subsoil exc
1	30	30	
1	31	31	
1	32	32	Add Accumulated Adjusted Volume Column
1	33	33	
1	34	34	Add Accumulated Unadjusted Volume Column
1	35	35	
1	36	36	End Area Decimal Places = 0
1	37	37	
1	38	38	Process Earthwork for Baseline = TCONRAMP
1	39	39	job number = 1gk
1	40	40	
1	41	41	beg sta = 400+00.00 R 1
1	42	42	end sta = 40150 R 1
0	0	43	END_OF_FILE

COMPUTING EARTHWORKS FOR BASELINE = TCONRAMP

COMPUTING EARTHWORKS FOR JOB = 1GK

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **21** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate	Accum Unadj Vol (cu. yd.)	Accum Adj Vol (cu. yd.)

400+00.00	EARTH							
	Excavation	0	0	0	1.00		0	0
	Fill	0	0	0	1.00	0	0	0
400+25.00	EARTH							
	Excavation	11	5	5	1.00		5	5
	Fill	64	30	30	1.00		30	30
400+50.00	EARTH							
	Excavation	8	9	9	1.00		14	14
	Fill	95	74	74	1.00		104	104
400+75.00	EARTH							
	Excavation	31	18	18	1.00		32	32
	Fill	60	72	72	1.00		176	176
401+00.00	EARTH							
	Excavation	4	16	16	1.00		48	48
	Fill	27	40	40	1.00		216	216
401+25.00	EARTH							
	Excavation	21	12	12	1.00		60	60
	Fill	0	13	13	1.00		229	229

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **22** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

401+50.00 EARTH

Excavation	0	10	10	1.00	70	70
Fill	0	0	0	1.00	229	229

OFF RAMP GRADING QUANTITIES

Input File: ewkprj.inp

Output File: OffRampEarth.log

```

1    1    1
1    2    2
1    3    3 Earthwork
1    4    4
1    5    5 tolerance = 0.010000
1    6    6
1    7    7 vertical search distance = 250.000000
1    8    8
1    9    9 xs dgn = P:\2022\Projects\1110\22-1110-0006 TDOT E2368 PIN 124526.00 SR over SR 61
Dgn\Working\Civil\Plans Production\ROSR290ffRampXSections.dgn
1   10   10
1   11   11 Proposed Finish Grade
1   12   12 soil type = Earth
1   13   13 roadway exc mult factor = 1.000000
1   14   14 subsoil exc mult factor = 1.000000
1   15   15 fill mult factor = 1.000000
1   16   16 type = line
1   17   17 lvname = DESIGN - TYPICAL - Finished Grade and Subgrade
1   18   18 co = 2,6-8,18
    
```

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **23** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

1	19	19	
1	20	20	Existing Ground Line
1	21	21	soil type = Earth
1	22	22	roadway exc mult factor = 1.000000
1	23	23	subsoil exc mult factor = 1.000000
1	24	24	fill mult factor = 1.000000
1	25	25	type = line, line_string
1	26	26	lvname = SURVEY - GROUND - Top of Ground
1	27	27	lc = ByLevel
1	28	28	
1	29	29	combine common exc + subgrade exc + subsoil exc
1	30	30	
1	31	31	
1	32	32	Add Accumulated Adjusted Volume Column
1	33	33	
1	34	34	Add Accumulated Unadjusted Volume Column
1	35	35	
1	36	36	End Area Decimal Places = 0
1	37	37	
1	38	38	Process Earthwork for Baseline = TCOFFRAMP
1	39	39	job number = 1gk
1	40	40	
1	41	41	beg sta = 300+25.00 R 1
1	42	42	end sta = 302+70.01 R 1
0	0	43	END_OF_FILE

COMPUTING EARTHWORKS FOR BASELINE = TCOFFRAMP

COMPUTING EARTHWORKS FOR JOB = 1GK

FORMING LIST OF XSCCELLS

BEGINNING EARTHWORKS COMPUTATION

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **24** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

Station	Material Name	End Areas (sq. ft.)	Unadjusted Volumes (cu. yd.)	Adjusted Volumes (cu. yd.)	Mult Factor	Mass Ordinate	Accum Unadj Vol (cu. yd.)	Accum Adj Vol (cu. yd.)

300+25.00	EARTH							
	Excavation	0	0	0	1.00		0	0
	Fill	0	0	0	1.00		0	0
300+50.00	EARTH							
	Excavation	20	9	9	1.00		9	9
	Fill	0	0	0	1.00		0	0
300+75.00	EARTH							
	Excavation	21	19	19	1.00		28	28
	Fill	0	0	0	1.00		0	0
301+00.00	EARTH							
	Excavation	19	19	19	1.00		47	47
	Fill	0	0	0	1.00		0	0
301+25.00	EARTH							
	Excavation	25	20	20	1.00		67	67
	Fill	0	0	0	1.00		0	0
301+50.00	EARTH							
	Excavation	40	30	30	1.00		97	97
	Fill	0	0	0	1.00	71	0	0

GRADING REPORT

COMPUTED BY: Jack Ballard
 CHECKED BY: Edward Henderson, P.E.
 FEDERAL PROJECT NO: BR-NH-29(115)
 ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **25** OF **30**
 STATE NO.: 73008-3245-94
 PIN: 124526.00
 COUNTY: ROANE

301+75.00 EARTH

Excavation	55	44	44	1.00	141	141
Fill	0	0	0	1.00	0	0

302+00.00 EARTH

Excavation	27	38	38	1.00	179	179
Fill	19	9	9	1.00	9	9

302+25.00 EARTH

Excavation	12	18	19	1.00	198	198
Fill	17	17	17	1.00	26	26

302+50.00 EARTH

Excavation	8	9	9	1.00	207	207
Fill	59	35	35	1.00	61	61

302+70.00 EARTH

Excavation	49	21	21	1.00	228	228
Fill	0	22	22	1.00	130	83

GRADING REPORT

COMPUTED BY: Jack Ballard
CHECKED BY: Edward Henderson, P.E.
FEDERAL PROJECT NO: BR-NH-29(115)
ROUTE NO. OR STREET: SR-29 (US-27) Over SR-61

SHEET **26** OF **30**
STATE NO.: 73008-3245-94
PIN: 124526.00
COUNTY: ROANE

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

EARTH

Excavation	228	228	1.00
Fill	83	83	1.00