

EARTHWORK REPORT

SR 69 @ SR 169

PROJECT NO. 069 YV 280 F0288 01C
069-A-NFA

Prepared for:



Arizona Department of Transportation

Prepared by:



501 North 44th Street
Suite 300
Phoenix, AZ 85008

June 2026



SR 69 @ SR 169
PROJECT NO. 069 YV 280 F0288 01C, 069-A-NFA
EARTHWORK SUMMARY - MAINLINE AND TEMPORARY ROADS

Location	EXCAVATION									EMBANKMENT			Excess
	Roadway Exc	Channel Exc	Drainage Exc	Structural Exc	Detour Exc	Pipe Exc	Shrink Value	Shrink [d]	Available for Embankment	Fill	Trench Backfill	Str. Backfill	
	CY	CY	CY	CY	CY	CY	%	CY	CY	CY	CY		
Temporary Roads Earthwork (EAV) [a]	1,288						5	186	4,187	3,526			475
Roundabout Earthwork (EAV) [a]	6,178						5	186	0	3,540			(3,726)
Hardscape Removals [b]	(3,279)						5	0	0				0
Drainage Excavation			245				5	0	245	0			245
Structural Excavation							5	0	0	0			0
Structural Backfill [c]							5	0	0	0		19	(19)
Borrow (In-Place)							5	0	0	0			0
Pipes [a][e]						1,589	5	97	1,589	785	1,054		(347)
Pipe Bedding [f]							5	0	356	356			0
Borrow Subtotal	4,187	0	245	0	0	1,589		469	6,377	8,207	1,054	19	(3,372)
Totals	4,187	0	245	0	0	1,589		469	6,377	8,207	1,054	19	(3,372)

<---Borrow

[a] - There is more net embankment than excavation. Therefore, the shrink has been applied to the embankment totals.

[b] - This is an adjustment to the roadway excavation number. By default, the roadway excavation quantity from InRoads includes items such as pavement, curbing, and sidewalk, but they are being priced separately. This adjustment is to avoid double-counting this work, and also to ensure the amount of import required accounts for the existing hardscape.

[c] - This is an adjustment to the roadway embankment quantity since structural backfill is measured and paid for separately.

[d] - The Shrink value comes from the MDR.

[e] - Pipe backfill is listed in the Fill column.

[f] - Pipe bedding is assumed to be import material and increases the amount of dirt available for use on the project.

Chart for Plans

Roadway Excavation	4,187	CY
Pipe Excavation	1,589	CY
Drainage Excavation	245	CY
Structural Excavation	0	CY
Pipe Backfill	785	CY
Trench Backfill	1,054	CY
Structure Backfill	19	CY
Embankment (incl Ground Compactio	7,066	CY
Shrink (5%)	469	CY
Borrow	(3,372)	CY

End Area Volume Report Temporary Road

Report Created: Thursday, March 5, 2026
Time: 1:01:56 PM

Cross Section Set Name: SR69
Alignment Name: SR69
Input Grid Factor:

Note: All units in this report are in feet, square feet and
cubic yards unless specified otherwise.

Baseline Station	----- Station Quantities -----								Mass Ordinate
	----- Cut -----				----- Fill -----				
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted	
4209+75.000	1	0	0	0	1	0	0	0	0
4210+00.000	1	0	0	0	1	0	0	0	0
4210+25.000	1	0	0	0	1	0	0	0	0
4210+50.000	1	4.105	1.9	1.9	1	1.912	0.885	0.885	1.015
4210+75.000	1	5.906	4.634	4.634	1	3.992	2.733	2.733	2.916
4211+00.000	1	9.569	7.164	7.164	1	9.139	6.08	6.08	4.001
4211+21.828	1	10.611	9.127	9.127	1	19.574	12.991	12.991	0
4211+25.000	1	10.762	9.413	9.413	1	21.09	13.995	13.995	-0.581
4211+50.000	1	7.976	8.675	8.675	1	78.433	46.076	46.076	-37.982
4211+75.000	1	11.89	9.197	9.197	1	141.758	101.941	101.941	-130.726
4212+00.000	1	14.468	12.203	12.203	1	158.926	139.206	139.206	-257.729
4212+25.000	1	18.932	15.463	15.463	1	120.269	129.257	129.257	-371.523
4212+50.000	1	26.174	20.883	20.883	1	111.061	107.097	107.097	-457.737
4212+75.000	1	18.953	20.892	20.892	1	108.177	101.499	101.499	-538.344
4213+00.000	1	36.075	25.476	25.476	1	112.756	102.284	102.284	-615.153
4213+25.000	1	13.721	23.054	23.054	1	187.755	139.125	139.125	-731.224
4213+50.000	1	16.647	14.059	14.059	1	210.676	184.459	184.459	-901.624
4213+75.000	1	22.411	18.082	18.082	1	229.005	203.556	203.556	-1087.1
4214+00.000	1	33.378	25.828	25.828	1	192.786	195.274	195.274	-1256.54
4214+25.000	1	32.307	30.41	30.41	1	159.154	162.936	162.936	-1389.07
4214+50.000	1	35.323	31.31	31.31	1	103.427	121.565	121.565	-1479.32
4214+75.000	1	21.368	26.246	26.246	1	41.438	67.067	67.067	-1520.15
4215+00.000	1	35.289	26.23	26.23	1	24.691	30.615	30.615	-1524.53
4215+25.000	1	21.159	26.133	26.133	1	22.085	21.656	21.656	-1520.05
4215+50.000	1	32.271	24.736	24.736	1	6.557	13.26	13.26	-1508.58
4215+75.000	1	34.743	31.025	31.025	1	0	3.036	3.036	-1480.59
4216+00.000	1	9.621	20.539	20.539	1	17.035	7.887	7.887	-1467.94
4216+25.000	1	31.675	19.119	19.119	1	14.901	14.785	14.785	-1463.6
4216+50.000	1	17.254	22.652	22.652	1	44.077	27.305	27.305	-1468.26
4216+75.000	1	11.924	13.508	13.508	1	56.329	46.484	46.484	-1501.23
4217+00.000	1	9.426	9.884	9.884	1	59.554	53.649	53.649	-1545
4217+25.000	1	16.224	11.875	11.875	1	69.992	59.975	59.975	-1593.1
4217+50.000	1	34.176	23.333	23.333	1	21.675	42.438	42.438	-1612.2
4217+75.000	1	32.673	30.948	30.948	1	7.917	13.7	13.7	-1594.95
4218+00.000	1	21.514	25.087	25.087	1	23.201	14.407	14.407	-1584.27
4218+25.000	1	21.428	19.881	19.881	1	97.694	55.97	55.97	-1620.36
4218+50.000	1	26.967	22.405	22.405	1	119.256	100.44	100.44	-1698.4
4218+75.000	1	27.191	25.073	25.073	1	124.156	112.691	112.691	-1786.02
4219+00.000	1	32.202	27.497	27.497	1	103.743	105.509	105.509	-1864.03
4219+25.000	1	39.609	33.246	33.246	1	114.28	100.937	100.937	-1931.72
4219+50.000	1	47.561	40.356	40.356	1	109.796	103.739	103.739	-1995.1
a 4220+00.000	1	48.851	14.728	14.728	1	107.09	33.132	33.132	-2013.51
a 4220+25.000	1	48.622	45.127	45.127	1	94.078	93.133	93.133	-2061.51
a 4220+50.000	1	65.86	53.001	53.001	1	50.298	66.841	66.841	-2075.35
a 4220+75.000	1	89.399	71.879	71.879	1	47.195	45.136	45.136	-2048.61
a 4221+00.000	1	80.377	78.6	78.6	1	35.67	38.363	38.363	-2008.37
a 4221+25.000	1	40.101	55.777	55.777	1	36.583	33.451	33.451	-1986.05
a 4221+50.000	1	13.679	24.898	24.898	1	52.483	41.235	41.235	-2002.38
a 4221+75.000	1	13.425	12.548	12.548	1	43.404	44.392	44.392	-2034.23
a 4222+00.000	1	11.783	11.67	11.67	1	33.629	35.663	35.663	-2058.22
a 4222+25.000	1	14.014	11.943	11.943	1	22.398	25.939	25.939	-2072.22
a 4222+50.000	1	11.037	11.598	11.598	1	19.303	19.306	19.306	-2079.92
a 4222+75.000	1	10.031	9.753	9.753	1	12.069	14.524	14.524	-2084.7
a 4223+00.000	1	8.472	8.566	8.566	1	1.894	6.464	6.464	-2082.59
a 4223+25.000	1	3.711	5.64	5.64	1	0.039	0.895	0.895	-2077.85
a 4223+50.000	1	0.548	1.972	1.972	1	0.002	0.019	0.019	-2075.9
a 4223+75.000	1	0	0.254	0.254	1	0	0.001	0.001	-2075.64
Grand Total:			1176.369	1176.369			3252.011	3252.011	

End Area Volume Report Temporary Road

Report Created: Thursday, March 5, 2026
Time: 1:30:19 PM

Cross Section Set Name: SR169
Alignment Name: SR169
Input Grid Factor:

Note: All units in this report are in feet, square feet and cubic yards unless specified otherwise.

Baseline Station	----- Station Quantities -----										Mass Ordinate
	----- Cut -----					----- Fill -----					
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted			
0+00.000	1	0		0	0	1	0	0	0	0	
0+25.000	1	0		0	0	1	0	0	0	0	
0+50.000	1	16.399		0	0	1	5.675	0	0	0	
0+75.000	1	10.026		0	0	1	30.442	0	0	0	
1+00.000	1	67.296		0	0	1	19.349	0	0	0	
1+25.000	1	42.486		0	0	1	99.902	0	0	0	
1+50.000	1	29.411		33.286	33.286	1	176.559	127.991	127.991	-94.706	
1+75.000	1	25.8		25.56	25.56	1	67.662	113.066	113.066	-182.211	
2+00.000	1	30.041		25.852	25.852	1	0.661	31.631	31.631	-187.99	
2+25.000	1	10.603		18.817	18.817	1	0	0.306	0.306	-169.479	
2+50.000	1	3.313		6.442	6.442	1	0	0	0	-163.037	
2+75.000	1	0		1.534	1.534	1	0	0	0	-161.503	
3+00.000	1	0		0	0	1	0	0	0	-161.503	
Grand Total:				111.491	111.491			272.994	272.994		

End Area Volume Report

Report Created: Tuesday, October 28, 2025
Time: 8:38:36 AM

Cross Section Set Name: SR69
Alignment Name: SR69
Input Grid Factor:

Note: All units in this report are in feet, square feet and
cubic yards unless specified otherwise.

Baseline Station	----- Station Quantities -----								Mass Ordinate
	----- Cut -----				----- Fill -----				
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted	
4204+25.000	1	0	0	0	1	0	0	0	0
4204+50.000	1	11.129	5.152	5.152	1	0	0	0	5.152
4204+75.000	1	17.584	13.293	13.293	1	4.992	2.311	2.311	16.134
4205+00.000	1	18.401	16.66	16.66	1	5.571	4.89	4.89	27.903
4205+25.000	1	19.149	17.384	17.384	1	5.945	5.331	5.331	39.956
4205+50.000	1	19.78	18.023	18.023	1	5.69	5.386	5.386	52.592
4205+75.000	1	20.35	18.579	18.579	1	6.264	5.534	5.534	65.637
4206+00.000	1	20.957	19.123	19.123	1	6.201	5.771	5.771	78.989
4206+25.000	1	21.48	19.647	19.647	1	6.511	5.885	5.885	92.75
4206+50.000	1	21.989	20.125	20.125	1	6.23	5.899	5.899	106.976
4206+75.000	1	21.924	20.33	20.33	1	6.649	5.963	5.963	121.343
4207+00.000	1	22.051	20.359	20.359	1	7.332	6.473	6.473	135.229
4207+25.000	1	21.831	20.316	20.316	1	9.595	7.837	7.837	147.708
4207+50.000	1	22.617	20.578	20.578	1	8.602	8.425	8.425	159.861
4207+75.000	1	21.667	20.502	20.502	1	13.07	10.033	10.033	170.329
4208+00.000	1	21.701	20.078	20.078	1	11.889	11.555	11.555	178.852
4208+25.000	1	21.729	20.106	20.106	1	13.204	11.617	11.617	187.341
4208+50.000	1	22.176	20.326	20.326	1	12.897	12.084	12.084	195.583
4208+75.000	1	26.387	22.483	22.483	1	14.572	12.717	12.717	205.35
4209+00.000	1	103.032	59.916	59.916	1	14.372	13.4	13.4	251.866
4209+25.000	1	105.863	96.711	96.711	1	12.82	12.589	12.589	335.987
4209+50.000	1	37.307	66.282	66.282	1	22.087	16.16	16.16	386.109
4209+75.000	1	39.789	35.693	35.693	1	29.275	23.778	23.778	398.024
4210+00.000	1	39.256	36.595	36.595	1	31.766	28.26	28.26	406.359
4210+25.000	1	36.558	35.099	35.099	1	43.058	34.641	34.641	406.817
4210+50.000	1	34.553	32.921	32.921	1	38.175	37.608	37.608	402.13
4210+75.000	1	36.045	32.684	32.684	1	44.515	38.282	38.282	396.532
4211+00.000	1	38.83	34.664	34.664	1	30.606	34.778	34.778	396.418
4211+25.000	1	40.426	36.693	36.693	1	40.654	32.991	32.991	400.12
4211+50.000	1	42.846	38.552	38.552	1	39.725	37.212	37.212	401.46
4211+75.000	1	46.573	41.397	41.397	1	11.457	23.696	23.696	419.162
4212+00.000	1	46.961	43.303	43.303	1	11.182	10.481	10.481	451.983
4212+25.000	1	44.393	42.293	42.293	1	10.156	9.879	9.879	484.398
4212+50.000	1	51.826	44.546	44.546	1	12.91	10.679	10.679	518.265
4212+75.000	1	56.393	50.101	50.101	1	10.675	10.919	10.919	557.448
4213+00.000	1	71.672	59.289	59.289	1	3.743	6.675	6.675	610.062
4213+25.000	1	93.309	76.38	76.38	1	1.509	2.431	2.431	684.011
4213+50.000	1	131.355	104.011	104.011	1	7.362	4.107	4.107	783.915
4213+75.000	1	155.673	132.883	132.883	1	6.222	6.289	6.289	910.509
4214+00.000	1	155.685	144.147	144.147	1	43.918	23.213	23.213	1031.443
4214+25.000	1	152.807	142.821	142.821	1	42.3	39.916	39.916	1134.348
4214+50.000	1	162.272	145.87	145.87	1	65.052	49.7	49.7	1230.518
4214+75.000	1	291.123	209.905	209.905	1	16.631	37.816	37.816	1402.606
4215+00.000	1	225.389	239.126	239.126	1	90.675	49.679	49.679	1592.053
4215+25.000	1	121.775	160.724	160.724	1	188.209	129.113	129.113	1623.664
4215+50.000	1	164.354	132.467	132.467	1	287.89	220.416	220.416	1535.715
4215+75.000	1	217.447	176.76	176.76	1	166.532	210.381	210.381	1502.094
4216+00.000	1	359.628	267.164	267.164	1	2.549	78.278	78.278	1690.98
4216+25.000	1	171.857	246.058	246.058	1	65.643	31.57	31.57	1905.467
4216+50.000	1	123.986	136.965	136.965	1	56.87	56.719	56.719	1985.713
4216+75.000	1	121.822	113.8	113.8	1	53.432	51.066	51.066	2048.447
4217+00.000	1	122.666	113.189	113.189	1	42.292	44.317	44.317	2117.319
4217+25.000	1	112.277	108.77	108.77	1	61.08	47.857	47.857	2178.231
4217+50.000	1	103.334	99.82	99.82	1	35.895	44.896	44.896	2233.155
4217+75.000	1	61.649	76.381	76.381	1	29.408	30.233	30.233	2279.303
4218+00.000	1	61.493	57.01	57.01	1	31.139	28.031	28.031	2308.282
4218+25.000	1	60.327	56.398	56.398	1	29.834	28.228	28.228	2336.452
4218+50.000	1	61.205	56.265	56.265	1	28.347	26.935	26.935	2365.782
4218+75.000	1	48.707	50.885	50.885	1	41.095	32.149	32.149	2384.518
4219+00.000	1	141.878	88.234	88.234	1	108.166	69.102	69.102	2403.649
4219+25.000	1	146.275	133.404	133.404	1	93.721	93.466	93.466	2443.587
4219+50.000	1	143.113	133.976	133.976	1	99.621	89.51	89.51	2488.053
a 4220+00.000	1	142.606	43.647	43.647	1	87.64	28.606	28.606	2503.094
a 4220+25.000	1	139.945	130.811	130.811	1	93.923	84.057	84.057	2549.848
a 4220+50.000	1	150.754	134.583	134.583	1	30.831	57.757	57.757	2626.674
a 4220+75.000	1	166.316	146.792	146.792	1	15.826	21.6	21.6	2751.866
a 4221+00.000	1	165.672	153.698	153.698	1	10.328	12.108	12.108	2893.456
a 4221+25.000	1	105.851	125.705	125.705	1	12.238	10.447	10.447	3008.714
a 4221+50.000	1	22.155	59.262	59.262	1	10.595	10.571	10.571	3057.405
a 4221+75.000	1	21.903	20.398	20.398	1	8.557	8.867	8.867	3068.936
a 4222+00.000	1	14.287	16.755	16.755	1	7.725	7.538	7.538	3078.153
a 4222+25.000	1	14.474	13.316	13.316	1	6.757	6.705	6.705	3084.764
a 4222+50.000	1	14.407	13.371	13.371	1	6.821	6.286	6.286	3091.849
a 4222+75.000	1	14.419	13.345	13.345	1	6.484	6.16	6.16	3099.034
a 4223+00.000	1	11.694	12.09	12.09	1	0	3.002	3.002	3108.122
a 4223+25.000	1	0	5.414	5.414	1	0	0	0	3113.536
Grand Total:			5412.401	5412.401			2298.865	2298.865	

End Area Volume Report

Report Created: Tuesday, October 28, 2025
Time: 9:14:02 AM

Cross Section Set Name: SR169
Alignment Name: SR169
Input Grid Factor:

Note: All units in this report are in feet, square feet and cubic yards unless specified otherwise.

Baseline Station	----- Station Quantities -----								Mass Ordinate
	----- Cut -----				----- Fill -----				
	Factor	Area	Volume	Adjusted	Factor	Area	Volume	Adjusted	
0+00.000	1	321.506	0	0	1	0	0	0	0
0+25.000	1	113.849	0	0	1	312.36	0	0	0
0+50.000	1	206.476	0	0	1	271.206	0	0	0
0+75.000	1	271.856	0	0	1	49.938	0	0	0
1+00.000	1	178.426	0	0	1	25.192	0	0	0
1+25.000	1	61.988	0	0	1	122.584	0	0	0
1+50.000	1	24.231	39.916	39.916	1	109.952	107.656	107.656	-67.739
1+75.000	1	0	11.218	11.218	1	209.835	148.05	148.05	-204.571
2+00.000	1	2.519	1.166	1.166	1	142.512	163.124	163.124	-366.529
2+25.000	1	22.714	11.682	11.682	1	93.428	109.231	109.231	-464.078
2+50.000	1	38.873	28.512	28.512	1	78.513	79.602	79.602	-515.168
2+75.000	1	48.266	40.342	40.342	1	44.531	56.964	56.964	-531.79
3+00.000	1	18.843	31.069	31.069	1	44.445	41.192	41.192	-541.914
3+25.000	1	23.169	19.45	19.45	1	63.061	49.771	49.771	-572.235
3+50.000	1	27.07	23.259	23.259	1	52.367	53.439	53.439	-602.415
3+75.000	1	32.843	27.737	27.737	1	30.355	38.297	38.297	-612.976
4+00.000	1	39.08	33.297	33.297	1	14.694	20.856	20.856	-600.534
4+25.000	1	59.446	45.614	45.614	1	22.534	17.235	17.235	-572.156
4+50.000	1	48.361	49.911	49.911	1	22.595	20.893	20.893	-543.138
4+75.000	1	29.508	36.05	36.05	1	23.868	21.511	21.511	-528.599
5+00.000	1	28.082	26.662	26.662	1	28.871	24.416	24.416	-526.353
5+25.000	1	25.246	24.689	24.689	1	31.957	28.161	28.161	-529.825
5+50.000	1	28.095	24.695	24.695	1	25.548	26.622	26.622	-531.753
5+75.000	1	26.788	25.409	25.409	1	22.953	22.454	22.454	-528.798
6+00.000	1	28.465	25.58	25.58	1	17.795	18.865	18.865	-522.083
6+25.000	1	28.715	26.472	26.472	1	16.919	16.071	16.071	-511.682
6+50.000	1	29.092	26.763	26.763	1	17.873	16.107	16.107	-501.026
6+75.000	1	29.312	27.039	27.039	1	21.512	18.234	18.234	-492.221
7+00.000	1	29.863	27.396	27.396	1	23.375	20.781	20.781	-485.607
7+25.000	1	29.688	27.57	27.57	1	23.278	21.599	21.599	-479.636
7+50.000	1	16.289	21.286	21.286	1	17.144	18.714	18.714	-477.064
7+75.000	1	15.973	14.936	14.936	1	15.898	15.297	15.297	-477.425
8+00.000	1	15.354	14.503	14.503	1	23.472	18.227	18.227	-481.149
8+25.000	1	15.849	14.446	14.446	1	16.151	18.344	18.344	-485.047
8+50.000	1	16.225	14.849	14.849	1	12.311	13.177	13.177	-483.375
8+75.000	1	17.542	15.633	15.633	1	10.777	10.689	10.689	-478.431
9+00.000	1	0	8.121	8.121	1	0	4.989	4.989	-475.299
Grand Total:			765.272	765.272			1240.571	1240.571	

Removal of Existing Hardscape Items Total:**3279 CY****Removal of Existing Pavement**SR 69 Area:

103959 sq ft

From roadway quantities

Thickness:

From geotechnical report

8 in AC

0.5 in AR-ARFC

8.5 in Total

Removed pavement volume:

103959 sq ft

Area

0.708333333 ft

Thickness

73637.625 cu ft

Volume

2727.319444 cu yd

Volume

Use

2727 CYSR 169 Area:

19872 sq ft

From roadway quantities

Thickness:

From geotechnical report

6 in AC

0.5 in AR-ARFC

6.5 in Total

Removed pavement volume:

19872 sq ft

Area

0.541666667 ft

Thickness

10764 cu ft

Volume

398.6666667 cu yd

Volume

Use

398 CY

Removal of Existing Concrete Curb and Gutter

Length:

1592 ft

From roadway quantities

Cross Sectional Area:

	width (in)	depth (in)	area (sq in)
Gutter	24	7	168
Curb	12	13	156
Total			324
Total (sq ft)			2.25

2.25 sq ft

Conservative estimate on pavement thickness

Removed curbing volume:

1592 ft

Length

2.25 sq ft

Cross Sectional Area

3582 cu ft

Volume

132.6666667 cu yd

Volume

Use

132 CY

Removal of Existing Sidewalk, Valley Gutter, etc

Area:

1188 sq ft

From roadway quantities

Thickness:

6 in

(Assumed)

Removed volume:

1188 sq ft

Area

0.5 ft

Thickness

594 cu ft

Volume

22 cu yd

Volume

Use

22 CY