

Appendix C: Quantity Calculations

Gravel Coverage Chart Showing Depth of Gravel in Inches**

		Width of Road in Feet							
		10	12	14	16	18	20	22	24
Cubic Yards Per Mile	400	2.45	2.05	1.75	1.53	1.32	1.23	1.12	1.02
	500	3.07	2.56	2.19	1.92	1.70	1.53	1.39	1.28
	600	3.68	3.07	2.63	2.30	2.05	1.84	1.67	1.53
	700	4.30	3.58	3.07	2.68	2.39	2.15	1.95	1.79
	800	4.91	4.09	3.51	3.07	2.73	2.45	2.23	2.05
	900	5.52	4.60	3.94	3.45	3.07	2.76	2.51	2.30
	1000	6.14	5.12	4.39	3.84	3.41	3.07	2.79	2.56
	1100	6.75	5.63	4.82	4.22	3.75	3.38	3.07	2.81
	1200	7.36	6.14	5.26	4.60	4.09	3.68	3.35	3.07
	1300	7.99	6.66	5.71	4.99	4.44	4.00	3.63	3.33
	1400	8.61	7.17	6.15	5.38	4.78	4.30	3.91	3.59
	1500	9.19	7.65	6.56	5.74	5.10	4.59	4.18	3.83
	2000	12.29	10.24	8.79	7.68	6.83	6.14	5.59	5.12
	2500	15.36	12.80	10.97	9.60	8.53	7.68	6.98	6.40
	3000	18.37	15.31	13.12	11.48	10.21	9.19	8.35	7.65
	3500	21.47	17.89	15.34	13.42	11.93	10.73	9.76	8.95
	4000	24.41	20.34	17.44	15.26	13.56	12.21	11.10	10.20
4500	27.42	22.85	19.58	17.13	15.23	13.71	12.46	11.40	
5000	30.72	25.60	21.95	19.20	17.07	15.36	13.97	12.80	

**This chart shows gravel depth with no compaction. Ordinary compaction from traffic and rainfall will cause most gravels to shrink a minimum of 20 percent.

How to Use This chart

1. On the Coverage Chart, find the width of the road you will be graveling. Read down the column to the desired depth of gravel you wish to add. Then check the left hand column to determine how many cubic yards per mile you need.
2. Go to the Spreading Chart (next page). In the left hand column, find the number of cubic yards per mile that you need. At the top of the chart, find the capacity in cubic yards of the trucks you will be using. Then use the chart to find out how many feet each truck load will cover.

Gravel Spreading Chart in feet per truckload

		Truck Capacity in Cubic Yards					
		5	6	6.5	7	10	12
Cubic Yards Per Mile	400	66.0	79.2	85.8	92.4	132.0	158.4
	500	52.8	63.4	68.6	73.9	105.6	126.8
	600	44.0	52.8	57.2	61.6	88	105.6
	700	37.7	45.3	49.0	52.8	75.4	90.6
	800	33.0	39.6	42.9	46.2	66	79.2
	900	29.3	35.2	38.1	41.0	58.6	70.4
	1000	26.4	31.7	34.3	36.9	52.8	63.4
	1100	24.0	28.8	31.2	33.6	48.0	57.6
	1200	22.0	26.4	28.6	30.8	44.0	52.8
	1300	20.3	24.4	26.4	28.4	40.6	48.8
	1400	18.9	22.6	24.6	26.4	37.8	45.2
	1500	17.6	21.1	22.9	24.6	35.2	42.2
	2000	13.2	15.8	17.2	18.5	26.4	31.6
	2500	10.6	12.7	13.8	14.8	21.2	25.4
	3000	8.8	10.6	11.4	12.3	17.6	21.2
	3500	7.5	9.1	9.8	10.6	15	18.2
	4000	6.6	7.9	8.6	9.2	13.2	15.8
4500	5.9	7.0	7.7	8.2	11.8	14.0	
5000	5.3	6.3	6.9	7.4	10.6	12.6	

(This chart originally provided to the SD LTAP by Scott Construction of Lake Delton, WI.)