

31 23 Excavation and Fill

31 23 16 – Excavation

31 23 16.50 Excavation, Bulk, Scrapers

		Crew	Daily Output	Labor-Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
							Labor	Equipment		
1000	Self propelled scraper, 14 C.Y., 1/4 push dozer									
1050	Sand and gravel, 1,500' haul	B-33D	920	.015	B.C.Y.		.85	2.72	3.57	4.2
1100	3,000' haul		805	.017			.98	3.11	4.09	4.8
1200	5,000' haul		645	.022			1.22	3.88	5.10	6.1
1300	Common earth, 1,500' haul		800	.018			.98	3.13	4.11	4.9
1350	3,000' haul		700	.020			1.12	3.58	4.70	5.6
1400	5,000' haul		560	.025			1.40	4.47	5.87	7
1420	Sandy clay & loam, 1,500' haul		864	.016			.91	2.90	3.81	4.5
1430	3,000' haul		786	.018			1	3.19	4.19	5
1440	5,000' haul		605	.023			1.30	4.14	5.44	6.5
1500	Clay, 1,500' haul		500	.028			1.57	5	6.57	7.8
1550	3,000' haul		440	.032			1.79	5.70	7.49	8.9
1600	5,000' haul		350	.040			2.25	7.15	9.40	11.2
2000	21 C.Y., 1/4 push dozer, sand & gravel, 1,500' haul	B-33E	1180	.012			.67	2.18	2.85	3.3
2100	3,000' haul	"	910	.015			.86	2.83	3.69	4.4
2200	5,000' haul	B-33E	750	.019	B.C.Y.		1.05	3.43	4.48	5.3
2300	Common earth, 1,500' haul		1030	.014			.76	2.50	3.26	3.8
2350	3,000' haul		790	.018			1	3.26	4.26	5.0
2400	5,000' haul		650	.022			1.21	3.96	5.17	6.1
2420	Sandy clay & loam, 1,500' haul		1112	.013			.71	2.31	3.02	3.5
2430	3,000' haul		854	.016			.92	3.01	3.93	4.6
2440	5,000' haul		702	.020			1.12	3.66	4.78	5.7
2500	Clay, 1,500' haul		645	.022			1.22	3.99	5.21	6.2
2550	3,000' haul		495	.028			1.59	5.20	6.79	8.0
2600	5,000' haul		405	.035			1.94	6.35	8.29	9.9
2700	Towed, 10 C.Y., 1/4 push dozer, sand & gravel, 1,500' haul	B-33B	560	.025			1.40	3.94	5.34	6.4
2720	3,000' haul		450	.031			1.75	4.90	6.65	8
2730	5,000' haul		365	.038			2.15	6.05	8.20	9.8
2750	Common earth, 1,500' haul		420	.033			1.87	5.25	7.12	8.6
2770	3,000' haul		400	.035			1.97	5.50	7.47	9
2780	5,000' haul		310	.045			2.54	7.10	9.64	11.6
2785	Sandy clay & loam, 1,500' haul		454	.031			1.73	4.86	6.59	7.9
2790	3,000' haul		432	.032			1.82	5.10	6.92	8.3
2795	5,000' haul		340	.041			2.31	6.50	8.81	10.6
2800	Clay, 1,500' haul		315	.044			2.50	7	9.50	11.4
2820	3,000' haul		300	.047			2.62	7.35	9.97	12
2840	5,000' haul		225	.062			3.50	9.80	13.30	16
2900	15 C.Y., 1/4 push dozer, sand & gravel, 1,500' haul	B-33C	800	.018			.98	2.78	3.76	4.5
2920	3,000' haul		640	.022			1.23	3.47	4.70	5.6
2940	5,000' haul		520	.027			1.51	4.28	5.79	6.9
2960	Common earth, 1,500' haul		600	.023			1.31	3.71	5.02	6.0
2980	3,000' haul		560	.025			1.40	3.97	5.37	6.4
3000	5,000' haul		440	.032			1.79	5.05	6.84	8.2
3005	Sandy clay & loam, 1,500' haul		648	.022			1.21	3.43	4.64	5.6
3010	3,000' haul		605	.023			1.30	3.68	4.98	5.9
3015	5,000' haul		475	.029			1.66	4.68	6.34	7.6
3020	Clay, 1,500' haul		450	.031			1.75	4.94	6.69	8.0
3040	3,000' haul		420	.033			1.87	5.30	7.17	8.6
3060	5,000' haul		320	.044			2.46	6.95	9.41	11.3