

31 23 Excavation and Fill

31 23 16 - Excavation

31 23 16.46 Excavating, Bulk, Dozer		Crew	Daily Output	Labor-Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
							Labor	Equipment		
4420	Common earth	B-10B	270	.044	B.C.Y.		2.47	4.99	7.46	9.15
4440	Clay	↓	170	.071			3.92	7.95	11.87	14.60
5000	300 HP, 50' haul, sand & gravel	B-10M	1900	.006			.35	.86	1.21	1.46
5010	Sandy clay & loam		1850	.006			.36	.88	1.24	1.51
5020	Common earth		1650	.007			.40	.99	1.39	1.69
5040	Clay		1025	.012			.65	1.59	2.24	2.72
5200	150' haul, sand & gravel		920	.013			.72	1.77	2.49	3.03
5210	Sandy clay & loam		895	.013			.74	1.82	2.56	3.12
5220	Common earth		800	.015			.83	2.04	2.87	3.48
5240	Clay		500	.024			1.33	3.26	4.59	5.55
5400	300' haul, sand & gravel		470	.026			1.42	3.47	4.89	5.95
5410	Sandy clay & loam		455	.026			1.46	3.59	5.05	6.10
5420	Common earth		410	.029			1.62	3.98	5.60	6.80
5440	Clay	↓	250	.048			2.66	6.55	9.21	11.15
5500	460 HP, 50' haul, sand & gravel	B-10X	1930	.006			.34	1.28	1.62	1.92
5506	Sandy clay & loam		1880	.006			.35	1.32	1.67	1.98
5510	Common earth		1680	.007			.40	1.48	1.88	2.21
5520	Clay		1050	.011			.63	2.36	2.99	3.54
5530	150' haul, sand & gravel		1290	.009			.52	1.92	2.44	2.88
5535	Sandy clay & loam		1250	.010			.53	1.98	2.51	2.97
5540	Common earth		1120	.011			.59	2.21	2.80	3.31
5550	Clay		700	.017			.95	3.54	4.49	5.30
5560	300' haul, sand & gravel		660	.018			1.01	3.76	4.77	5.65
5565	Sandy clay & loam		640	.019			1.04	3.87	4.91	5.80
5570	Common earth		575	.021			1.16	4.31	5.47	6.45
5580	Clay	↓	350	.034			1.90	7.10	9	10.65
6000	700 HP, 50' haul, sand & gravel	B-10V	3500	.003			.19	1.14	1.33	1.53
6006	Sandy clay & loam	"	3400	.004			.20	1.17	1.37	1.58
6010	Common earth	B-10V	3035	.004	B.C.Y.		.22	1.31	1.53	1.77
6020	Clay		1925	.006			.35	2.06	2.41	2.78
6030	150' haul, sand & gravel		2025	.006			.33	1.96	2.29	2.65
6035	Sandy clay & loam		1960	.006			.34	2.03	2.37	2.74
6040	Common earth		1750	.007			.38	2.27	2.65	3.07
6050	Clay		1100	.011			.61	3.61	4.22	4.87
6060	300' haul, sand & gravel		1030	.012			.65	3.86	4.51	5.20
6065	Sandy clay & loam		1005	.012			.66	3.96	4.62	5.35
6070	Common earth		900	.013			.74	4.42	5.16	5.95
6080	Clay	↓	550	.022			1.21	7.25	8.46	9.75

31 23 16.50 Excavation, Bulk, Scrapers

0010 EXCAVATION, BULK, SCRAPERS		R312316-40								
0100	Elev. scraper 11 C.Y., sand & gravel 1,500' haul, 1/4 dozer	B-33F	690	.020	B.C.Y.		1.14	2.02	3.16	3.93
0150	3,000' haul		610	.023			1.29	2.29	3.58	4.44
0200	5,000' haul		505	.028			1.56	2.77	4.33	5.35
0300	Common earth, 1,500' haul		600	.023			1.31	2.33	3.64	4.51
0350	3,000' haul		530	.026			1.48	2.64	4.12	5.10
0400	5,000' haul		440	.032			1.79	3.18	4.97	6.15
0410	Sandy clay & loam, 1,500' haul		648	.022			1.21	2.16	3.37	4.18
0420	3,000' haul		572	.024			1.37	2.44	3.81	4.74
0430	5,000' haul		475	.029			1.66	2.94	4.60	5.70
0500	Clay, 1,500' haul		375	.037			2.10	3.73	5.83	7.20
0550	3,000' haul		330	.042			2.38	4.23	6.61	8.20
0600	5,000' haul	↓	275	.051	↓		2.86	5.10	7.96	9.85