02 32 Geotechnical Investigations

02 32	19 -	Exploratory	Excavations

02 32 19.10 Test Pits	Crew	Daily Output	Labor- Hours	Unit	Material	2022 Ba Labor	re Costs Equipment	Total	Total Incl O&P
0010 TEST PITS									
0020 Hand digging, light soil	- 1 Clab	4.50	1.778	C.Y.		81		81	121
0100 Heavy soil	, n	2.50	3.200			146		146	217
0120 Loader-backhoe, light soil	B-11M	28	.571			30.50	14.35	44.85	61
0130 Heavy soil	"	20	.800			42.50	20	62.50	85
1000 Subsurface exploration, mobilization				Mile				6.75	8.40
1010 Difficult access for rig, add				Hr.				260	320
1020 Auger borings, drill rig, incl. samples				L.F.				26.50	33
1030 Hand auger								31.50	40
1050 Drill and sample every 5', split spoon								31.50	40
1060 Extra samples		:		Ea.				36	45.50

02 41 Demolition

02 41 13 - Selective Site Demolition

02 41 13.15 Hydrodemolition

0010	HYDRODEMOLITION						
0015	Hydrodemolition, concrete pavement						
0120	Includes removal but excludes disposal of concrete						
0130	² depth	B-5E 1000 .064	S.F.	3.23	3	6.23	8.10
0410	4" depth	080. 088	1 1	4.04	3.75	7.79	10.15
0420	6" depth	[600 .107		5.40	5	10.40	13.50
0520	8" depth	→ 300 .213	1 + 1	10.75	10	20.75	27

02 41 13.16 Hydroexcavation

0010	HYDROEXCAVATION						
0015	; Hydroexcavation						
0105	Assumes onsite disposal						
0110	Mobilization or Demobilization	B-6D 8 2.500 Ea.		130	165	295	375
0130	Normal Conditions	[48 ; .417 B.C.Y.]		21.50	27.50	49	62
0140	Adverse Conditions	[30 .667 "	-	34.50	44	78.50	100
0160	Minimum labor/equipment charge	4 5 Ea.		260	330	590	750

02 41 13.17 Demolish, Remove Pavement and Curb

13.17 Demolish, Remove Pavellient and Curo										
DEMOLISH, REMOVE PAVEMENT AND CURB	R024119-10									
Pavement removal, bituminous roads, up to 3" thick		B-38	690	.058	S.Y.		2.97	1.94	4.91	6.55
4"-6" thick			420	.095			4.88	3.20	8.08	10.75
Bituminous driveways			640	.063			3.20	2.10	5.30	7.10
Concrete to 6" thick, hydraulic hammer, mesh reinforced			255	.157			8.05	5.25	13.30	17.75
Rod reinforced	The state of the s		200	.200			10.25	6.70	16.95	22.50
Concrete, 7"-24" thick, plain			33	1.212	C.Y.		62	40.50	102.50	137
Reinforced	Monthone	+	24	1.667	PF.		85.50	56	141.50	189
With hand held air equipment, bituminous, to 6" thick		B-39	1900	.025	S.F.		1.21	.17	1.38	1.99
Concrete to 6" thick, no reinforcing			1600	.030			1.43	.21	1.64	2.37
Mesh reinforced			1400	.034			1.64	.24	1.88	2.70
Rod reinforced		+	765	.063	÷	£	3 ,	.43	. 3.43	4.95
Curbs, concrete, plain		B-6	360	.067	L.F.		3.29	.91	4.20	5.90
Reinforced	and the second		275	.087			4.31	1.20	5.51	7.70
Granite			360	.067			3.29	.91	4.20	5.90
Bituminous		+	528	.045	-		2.25	.62	2.87	4.03
	Pavement removal, bituminous roads, up to 3" thick 4"-6" thick Bituminous driveways Concrete to 6" thick, hydraulic hammer, mesh reinforced Rod reinforced Concrete, 7"-24" thick, plain Reinforced With hand held air equipment, bituminous, to 6" thick Concrete to 6" thick, no reinforcing Mesh reinforced Rod reinforced Curbs, concrete, plain Reinforced Granite	Pavement removal, bituminous roads, up to 3" thick 4"-6" thick Bituminous driveways Concrete to 6" thick, hydraulic hammer, mesh reinforced Rod reinforced Concrete, 7"-24" thick, plain Reinforced With hand held air equipment, bituminous, to 6" thick Concrete to 6" thick, no reinforcing Mesh reinforced Rod reinforced Curbs, concrete, plain Reinforced Granite	Pavement removal, bituminous roads, up to 3" thick 4"-6" thick Bituminous driveways Concrete to 6" thick, hydraulic hammer, mesh reinforced Rod reinforced Concrete, 7"-24" thick, plain Reinforced With hand held air equipment, bituminous, to 6" thick Concrete to 6" thick, no reinforcing Mesh reinforced Rod reinforced Curbs, concrete, plain Reinforced Granite	Pavement removal, bituminous roads, up to 3" thick 4"-6" thick 420 Bituminous driveways Concrete to 6" thick, hydraulic hammer, mesh reinforced Rod reinforced Concrete, 7"-24" thick, plain Reinforced With hand held air equipment, bituminous, to 6" thick Concrete to 6" thick, no reinforcing Mesh reinforced Rod reinforced	DEMOLISH, REMOVE PAVEMENT AND CURB R024119-10 Povement removal, bituminous roads, up to 3" thick B-38 690 .058 4"-6" thick 420 .095 Bituminous driveways 640 .063 Concrete to 6" thick, hydraulic hammer, mesh reinforced 255 .157 Rod reinforced 200 .200 Concrete, 7"-24" thick, plain 33 1.212 Reinforced 4 24 1.667 With hand held air equipment, bituminous, to 6" thick B-39 1900 .025 Concrete to 6" thick, no reinforcing 1600 .030 Mesh reinforced 1400 .034 Rod reinforced 765 .063 Curbs, concrete, plain B-6 360 .067 Reinforced 360 .067 Granite 360 .067	DEMOLISH, REMOVE PAVEMENT AND CURB R024119-10 Povement removal, bituminous roads, up to 3" thick B-38 690 .058 S.Y. 4"-6" thick 420 .095 640 .063 Bituminous driveways 640 .063 255 .157 200 .200 200 .200 200 .200 200 .200 200 .200 200 .200 200 .200 200 .200 200 .200 200 .200 200 .200 .200 200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200 .200	DEMOLISH, REMOVE PAVEMENT AND CURB R024119-10 Povement removal, bituminous roads, up to 3" thick B-38 690 .058 S.Y. 4"-6" thick 420 .095 Bituminous driveways 640 .063 Concrete to 6" thick, hydraulic hammer, mesh reinforced 255 .157 Rod reinforced 200 .200 ↓ Concrete, 7"-24" thick, plain 33 1.212 C.Y. Reinforced ↓ 24 1.667 " With hand held air equipment, bituminous, to 6" thick B-39 1900 .025 S.F. Concrete to 6" thick, no reinforcing 1600 .030 Mesh reinforced ↓ 765 .063 ↓ Rod reinforced ♣ 6 360 .067 L.F. Reinforced 360 .067 L.F. Granite 360 .067 L.F.	DEMOLISH, REMOVE PAVEMENT AND CURB Povement removal, bituminous roads, up to 3" thick B-38 690 .058 S.Y. 2.97 4"-6" thick 420 .095 4.88 Bituminous driveways 640 .063 3.20 Concrete to 6" thick, hydraulic hammer, mesh reinforced 255 .157 8.05 Rod reinforced 200 .200 10.25 Concrete, 7"-24" thick, plain 33 1.212 C.Y. 62 Reinforced 24 1.667 85.50 With hand held air equipment, bituminous, to 6" thick B-39 1900 .025 S.F. 1.21 Concrete to 6" thick, no reinforcing 1600 .030 1.43 Mesh reinforced 1600 .034 1.64 Rod reinforced 765 .063 3 Curbs, concrete, plain B-6 360 .067 L.F. 3.29 Reinforced 275 .087 4.31 Granite 360 .067 2.25	DEMOLISH, REMOVE PAVEMENT AND CURB Povement removal, bituminous roads, up to 3" thick B-38 690 .058 S.Y. 2.97 1.94 4"-6" thick 420 .095 4.88 3.20 2.10 Concrete to 6" thick, hydraulic hammer, mesh reinforced 255 1.57 8.05 5.25 Rod reinforced 200 .200 10.25 6.70 Concrete, 7"-24" thick, plain 33 1.212 C.Y. 62 40.50 Reinforced 24 1.667 85.50 56 With hand held air equipment, bituminous, to 6" thick 8-39 1900 .025 S.F. 1.21 .17 Concrete to 6" thick, no reinforcing 1600 .030 1.43 .21 Mesh reinforced 765 .063 3 .43 Curbs, concrete, plain 8-6 360 .067 L.F. 3.29 .91 Reinforced 275 .087 4.31 1.20 Granite 360 .067 3.2	DEMOLISH, REMOVE PAVEMENT AND CURB Pavement removal, bituminous roads, up to 3" thick B-38 690 .058 S.Y. 2.97 1.94 4.91 4"-6" thick 420 .095 4.88 3.20 8.08 Bituminous driveways 640 .063 3.20 2.10 5.30 Concrete to 6" thick, hydraulic hammer, mesh reinforced 255 .157 8.05 5.25 13.30 Rod reinforced 200 .200 10.25 6.70 16.95 Concrete, 7"-24" thick, plain 33 1.212 CY. 62 40.50 102.50 Reinforced 24 1.667 85.50 56 141.50 With hand held air equipment, bituminous, to 6" thick 8-39 1900 .025 S.F. 1.21 .17 1.38 Concrete to 6" thick, no reinforcing 1600 .030 1.43 .21 1.64 Mesh reinforced 765 .063 3 .43 3.43 Curbs, concrete, plain 8-6 360