

Detail Estimate for proposed Construction of Pump House

The Rates of items are based on Schedule of rates (2018- Building Construction Departments): Rate of Unskilled Labour- 237.38 Rs/mandays/day : Rate of Skilled Labour- 327.81 Rs/mandays/day

S.No	Item No	Description of Work	Unit	Nos	L (Ft)	B (Ft)	H/D (Ft)	Total Quantity (Sqft/CFT)	In SqM/C M	Rate (Rs)	Amount (Rs)	Labour Cost (Rs)	Material Cost (Rs)
1	5.1.1	Earthwork in excavation in foundation trenches in ordinary soil (vide classification of soil item -A) and disposal of excavated earth as obtained to a distance upto 50 M. Including all lifts, lavelling, remaining the foundation trenches, removing roots of trees, shrubs all complete as per approved design, building specification and direction of E/I	CM										
		a. Foundation for Pillars		4	3	3	3	108					
		b. Foundation for Installation of Pump Machine		1	3	3	2.5	22.5					
								130.5	3.699	109.36	404.52	404.52	0.00
2	5.1.7	Filling in foundation trenches in layers and pleneth not exceeding 150 mm thick well watered, rammed, fully, compacted and fine dressed with earth obtained form eacavation of foundation trenches within a lead of 50 m and lift of 1.5m all complete as per building specification and direction of e/i (Mode of measurement compacted volume)	CM										
		a. Foundation for Pillars Back filling		4	2.167	2.167	1.5	28.167					
		b. In Floor Back filling		1	7.16	7.16	0.5	25.633					
								53.799	1.525	39.82	60.72	60.72	0.00
3	5.1.10	Providing coarse clean sand in filling in foundation trenches or in plinth including ramming and watering in layers not exceeding 150mm thick with all leads and lifts including cost of all materials labour, royalty and taxes all complete as per building specification and direction of E/I (Mode of measurement compacted volume)	CM										
		a. In Foundation		4	3	3	0.25	9.000					
		b. In Machine Foundation		1	3	3	0.5	4.500					
		c. In Floor		1	8	8	0.5	32.000					
								45.500	1.290	223.35	288.05	108.96	179.09

4	5.6.3	Providing designation 75B on brick flat soling joints filled with local sand including cost of watering taxes royalty all complete as per building specification and direction of E/I.	Sq M										
		a. In Foundation		4	3	3		36	3.35	231.26	756.46	144.46	612.00
5	5.3.2	Providing P.C.C M- 150 in nominal mix of (1:2:4)in foundation with approved quality of stone chips 20mm to 6 mm size graded and clean coarses sand of F.M 2.5 to 3 including screening shuttering mixing cement concrete in mixer and placing in position , vibrating , striking , curing , taxes and royalty all completed as per building specification and direction of E/I	CM										
		a. In Foundation		4	3	3	0.25	9.000					
		b. Machine Foundation		1	3	3	0.167	1.500					
		c. In Floor		1	8.33	8.33	0.25	17.347					
								27.847	0.79	5358.83	4229.834	1143.21	3086.62
6	5.2.6	Providing designation 75 B work in C.M. (1:6) in foundation and plinth with approved quality of clean coarses sand of F.M. 2 to 2.5 including providing 10mm thick mortar joints, cost of screeming materials, racking up joints to 15mm depth, curing, taxes and royalty all complete as per building specification and direction of E/I.	CM										
		a. Below Tie Beam		4	8.33	0.833	0.75	20.825	0.59	3750.37	2213.7601	483.97	1729.79
7	5.2.14	Providing designation 75 B work in C.M. (1:6) in superstructure with approved quality of clean coarses sand of F.M. 2 to 2.5 including providing 10mm thick mortar joints, cost of screeming materials, racking up joints to 15mm depth, curing, taxes and royalty all complete as per building specification and direction of E/I.	CM										
		a. Superstructure Work above Tie Beam		4	8.33	0.833	9.16	254.241					
		b. Minus Door		1	5	0.833	7	29.155					
		c. Minus Window		1	2	0.833	2	3.332					
		d. Minus Lintel Band at Door		1	5.5	0.833	0.5	2.291					
		e. Minus Lintel Band at Window		1	2.6	0.833	0.33	0.715					
								218.748	6.20	3846.77	23851.333	4986.91	18864.42

8	5.3.5	Providing RCC M-150 with nominal mix of (1:2:4) in foundation and plinth with approved quality of stone chips 20mm to 6mm size graded and clean coarse sand of FM 2.5 to 3 including screening, shuttering, mixing, vibrating, striking, curing (but excluding the cost of reinforcement, taxes and royalty all complete, as per building specification and direction of E/I.	CM										
		a. Mat Footing		4	3	3	0.5	18.000					
		b. Trapezoidal $((3*3+0.833*0.833)/2)= 4.846$ Sqft		4	4.85		2.25	43.614					
								61.614	1.75	5358.83	9358.81	952.32	8406.49
9	5.3.13	Providing RCC M-150 with nominal mix of (1:2:4) in columns with approved quality of stone chips 20mm to 6mm size graded and clean coarse sand of FM 2.5 to 3 including screening, shuttering, mixing, vibrating, striking, curing (but excluding the cost of reinforcement, taxes and royalty all complete, as per building specification and direction of E/I.	CM										
		a. Coloumn		4	12	0.833	0.833	33.307	0.944	6502.56	6138.85	1454.98	4683.87
10	5.3.10	Providing RCC M-150 with nominal mix of (1:2:4) in beams of all types with approved quality of stone chips 20mm to 6mm size graded and clean coarse sand of FM 2.5 to 3 including screening, shuttering, mixing, vibrating, striking, curing (but excluding the cost of reinforcement, taxes and royalty all complete, as per building specification and direction of E/I.	CM										
		a. For Tie Beam		4	10	0.833	0.833	27.756					
		b. For Roof Beam		4	10	0.833	0.833	27.756					
								55.511	1.573	7754.25	12200.88	3400.98	8799.91
11	5.3.8	Providing RCC M-150 with nominal mix of (1:2:4) in lintel with approved quality of stone chips 20mm to 6mm size graded and clean coarse sand of FM 2.5 to 3 including screening, centering, shuttering, mixing, vibrating, striking, curing (but excluding the cost of reinforcement, taxes and royalty all complete, as per building specification and direction of E/I.	CM										
		a. Lintel Band at Door		1	5.6	0.833	0.5	2.332					
		b. Lintel Band at Window		1	2.6	0.833	0.33	0.715					
								3.047	0.09	6869.88	593.35	155.077	438.27

12	5.3.9	Providing RCC M-150 with nominal mix of (1:2:4) in roof slab with approved quality of stone chips 20mm to 6mm size graded and clean coarse sand of FM 2.5 to 3 including screening, centering, shuttering, mixing, vibrating, striking, curing (but excluding the cost of reinforcement, taxes and royalty all complete, as per building specification and direction of E/I.	CM										
		a. Roof Slab		1	10.6	10.6	0.37	41.573	1.178	7053.11	8311.23	2177.88	6133.35
13	5.3.15	Providing av. 63 mm thick R.C.C. M-150 with nominal mix of (1:2:4) chajja with approved quality of stone chips 20mm to 6 mm size graded and clean coarse sand of F.M 2.5 to 3 including making drip courses in concrete, screening, centyering, shuttering amnd mixing cement concrete in mixer and placing in position, vibrating, striking 6 mm, cement concrete in moixer and placing in position, vibrating, striking 6mm cement plaster (1:4) in ceiling and sides of chajja with sand of F.M 1.5 curing (buit excluding the cost of reinforcement)taxes, and royalty all complete as per building specification and direction of E/I	Sq M										
		a. Chajja at Door		1	5	1.6		8.000					
		b. Chajja at Window		1	2	1.6		3.200					
								11.200	1.041	960.88	1000.32	218.93	781.39
14	5.7.3	Providing 12mm thick cement plaster (1:6) with clean coarse sand of F. M. 1.5 including screeing, curing with all leads and lifts of water, scaffolding taxes and royalty all complete as per building specification of E/I.	Sq M										
		a. Outside Plaster		4	10	10		400.000					
		b. Minus Door		1	7	5		35.000					
		c. Minus Window		1	2	2		4.000					
								361.000	33.555				
		d. Inside Plaster		4	8.33	10		333.200					
		e. Minus Door		1	7	5		35.000					
		f. Minus Window		1	2	2		4.000					
								294.200	27.346				
									60.901	124.6	7588.30	5606.75	1981.54

15	5.7.6	Providing 6mm thick cement plaster (1:4) in ceiling with clean coarse sand of F. M. 1.5 including screeing, curing with all leads and lifts of water, scaffolding taxes and royalty all complete as per building specification of E/I.	Sq M	1	8.33	8.33		69.389	6.450	136.62	881.16	670.17	211.00
16	5.8.24	Providing two coats of snowcem of approved shade and make over a coat of cement primer over new surface including preparing plastered surface by rubbing smooth with pumice stone or fine sand paper, applying putty wherever required, scaffolding, washing, of floors and taxes all complete as per building specification of E/I.	Sq M										
		a. Outside Surface of Pump House Room		4	10	10		400.000					
		b. Minus Door		1	7	5		35.000					
		c. Minus Window		1	2	2		4.000					
								361.000	33.555	85.55	2870.65	1951.57	919.08
17	5.8.3	White washing three coats over new surface with approved quality of lime including cost of cleaning surface thoroughly and removing the scales of smoke and mosh marks with jhama rubbing, scaffolding, washing, of floors and taxes all complete as per building specification of E/I.	Sq M										
		a. Outside Surface of Pump House Room		4	10	10		400.000					
		b. Minus Door		1	7	5		35.000					
		c. Minus Window		1	2	2		4.000					
								361.000	33.555	12.77	428.50	324.14	104.36
18	5.5.12	Supplying, fitting and fixing M.S. grill made of 20X6cmm MS flat as per approved design and drawing, properly fabricated with joints continuous fillet welded finished smooth, carriage of grill to work site, hoisting as per building specification and direction of E/I. (where material is not supplied by deptt.)	Per KG										
		a. For Door		1	24	0.066	0.02	0.031					
		b. For Window		1	8	0.066	0.02	0.010					
		Note Density of Steel is 7800 Kg/CM						0.042	7	73.74	516.18	18.36	497.82

19	5.8.21	Providing two coats of plastic emulsion paint of approved shade and make over a coat of cement primer over new surface including preparing plastered surface by rubbing smooth with pumice stone or fine sand paper, applying putty wherever required, scaffolding, washing, of floors and taxes all complete as per building specification of E/I.	Sq M										
		a. Primer one coat over Steel Surface		1	2	2		4.000	0.37	187.02	69.53	46.24	23.29
20	5.5.5	Providing tor steel reinforcement of 8mm, 12mm dia bars as per approved design and drawing excluding carriage of bars to work site, cutting, bending and binding with annealed wire with cost of wire, removal of rust, placing the road in position as per building specification and direction of E/I. TMT Fe 500 (only valid for SAIL & TATA Steel, JSPL, Electro Steel Ltd. and Vizal Steel)	MT										
		Iron Bars							0.64	63762.52	40808.013	4080.22	36727.80
21	5.6.7	Providing 25mm thick first class patent stone flooring (1:2:4) with stone chips in two layers, bottom layers 19mm thick (1:2:4) with 12mm to 6mm. Size graded stone chips and top layer 6mm thick (1:2) with 6mm down stone chips, in panels including cost of curing, finishing the surface smooth by rubbing with carborandum stone, taxes and royalty with all complete as per building specification of E/I.	Sq M	1	8.33	8.33		69.389	6.450	257.98	1663.90	917.04	746.86
22	5.5.29	Supplying, fitting and fixing 20 gauge G.C.I sheet gate fitted on MS angle frame of size 60*60*6mm including cost of fabrication providing necessary locking arrangements with haskal and domny duly fixed in PCC(1:2:4) blocks of required size applying a priming lead red paint over steel work taxes all complete as per drawing specification and direction of E/I	Sq M										
		Door		1	7	5		35.000					
		Window		1	2	2		4.000					
								39.000	3.625	3518.16	12753.59	3383.54	9370.05
23		Total-A									136987.96	32690.96	104297.00
24		Add 12 % GST-B									16438.56	3922.91	12515.64
25		Minus 9.09% CP-C									12452.21	2971.61	9480.60
26	Chapter-3	Carriage of Materials -D									7087.00	0.00	7087.00
27		Sub Total (A+B-C+D)									148061.31	33642.26	114419.05

28		Contigency. 1%									1480.61	336.42	1144.19
29		Grand Total									149541.92	33978.69	115563.24
		SAY									149542	33979	115563.24