

Detailed Cost Estimate

For Construction of

Sump

Of

Mr.P.K. Arkeyan

At

India

From:-



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1) Introduction

Dear Mr. P.K.Arkeyan,

First of all we would like to thank you for choosing GharExpert.com. Gharexpert.com can save you money during construction and if planned properly we all can save 10% or more on our home construction projects.

1) Benefits

Broad benefits of the detailed cost estimate are.

a. Don't let the contractor charge you more for a service

If you do not know the estimated quantity of material required to build your home, the contractor may charge more amount to do the same work. With the detail estimate sheet you can cross check the quotation provided by the contractor.

b. Better Planning can save big money

In most of the home construction projects, the money runs out before the home is completed. This happens because the home owners do not have a stage by stage cost estimate. A detailed cost estimate can help you avoid this problem. From detail estimate you will get the information about all type of materials required for the work and the information about the actual quantity of all the materials required. You can use this knowledge to make agreement with the supplier in advance to avoid fluctuation in the market.

c. Avoid Frustration, Material Wastage & Theft of the material

With the help of detail estimates we can arrange the materials according to the needs at site. This will avoid unnecessary storage of materials, save the wastage of materials and blockage of money. It will also save unnecessary carriage and time. It also reduces the chances of Theft as one can account for the material better

d. Complete your project on time

If all the materials and labor will be arranged according to need it will help for timely completion of construction work which will save the expenditure spent on storage, watchman etc. Timely completion means timely use of house.

e. Don't let the contractor use cheap quality raw material

Detail estimate also gives the specification of the material required for the construction which will help in checking of the quality of the materials at site.

1. Detail of Quantities and Abstract of Cost

Abstract or detail of quantities provides us quantities required to complete the construction. With the help of this we are able to know the quantities of each item stage wise, unit wise and this will help in doing agreement, procurement of raw materials according to need. Save wastage in materials , labour and timely construction

a) Earthwork

#	Particulars	Nos.	L	B	H	Q	Unit
1.	Earthwork in excavation in foundation of columns walls including dressing the side and ramming the bottom.						
	Tank in Ground	1	9	9	8	648.00	cft
				Total		648.00	cft

Recommendations

- If any soft place or roots of tree found at the bottom of the foundation then it should be removed and filled with cement concrete or coarse sand.
- If due to any negligence or due to rain, water enter in the foundation and create slush then the slush should be cleared before laying cement concrete

b) Concrete work

#	Particulars	Nos.	L	B	H	Q	Unit
1	Cement concrete with brick or stone blast 40 mm gauze in the ratio of 1:4:8 in foundation of walls etc. including ramming.	1	9	9	.5	40.5	cft
2	Cement Concrete 1:2:4 with stone blast for top slab of sump.	1	7.5	7.5	0.33	18.5625	cft
2	Deduction main hole	1	2	2	.33	1.33	cft
					Net Balance	18.2	cft

Recommendations

a. Cement Concrete laid should be compacted well by rammer.

c) Brick work

#	Particulars	Nos.	L	B	H	Q	Unit
1	First class brick work in cement motar 1:4	2	7.5	0.75	8.5	95.625	cft
2		2	6	0.75	8.5	76.5	cft
					Total	173.25	cft

Recommendations

- a) Bricks used should be of first class quality
- b) Wet bricks should be used in masonry work.
- c) Fill up all the masonry joints with cement mortar properly.

d) Plastering

#	Particulars	Nos.	L	B	H	Q	Unit
	Cement coarse sand plaster in cement mortar 1:4 including cement rendering.						
1	Out side storage tank	4	7.5		8.5	255	sft
	In side storage tank	4	6		8.5	204	sft
	On top of wall	2	7.5		0.75	11.25	sft
		2	6		.75	9	sft
					Total	479.25	cft

Recommendations

- a) Cement rendering should be done on plaster to prevent any leakage.
- b) Outer and inner face of the sump wall must be plastered to prevent leakage.

e) Flooring

#	Particulars	Nos.	L	B	H	Q	Unit
1	Cement concrete flooring with cement rendering	1	6	6		36	sft
					Total	36	cft

Recommendations

- a) Top surface of cement concrete flooring should be rendered properly to avoid any kind leakage.

f) Steel Work

#	Particulars	Nos.	L	B	H	Q	Unit
1	M.S steel					0.5	qtl
	Cost of main hole cover, foot rest, inlet and out let GI pipe pieces etc.					Lump sump	

Recommendations

- a) Inlet, outlet and overflow pipes etc. should be fixed during the masonry work.

Abstract of Cost

Abstract of cost is used for the planning purposes. From the abstract of cost, we will get stage wise and item wise expenditure. With the help of this we can control the expenditure item wise and stage wise and also in better position to deal with contractor & supplier.

#	Description	Quantity	Unit	Rate Rupees.	Amount Rupees
1	Earth work in excavation in foundation of columns walls including dressing the side and ramming the bottom	648	cft	2.5	1620
2	Cement concrete with brick or stone blast 40 mm gauze in the ratio of 1:4:8 in foundation of walls etc .including ramming.	40.5	cft	52	2106
3	Cement Concrete 1:2:4 with stone blast for top slab of sump.	18.2	cft	130	2366
4	First class brick work in cement mortar 1:4	173.125	cft	65	11253
5	Cement coarse sand plaster in cement mortar i:4 including cement rendering.	479.25	sft	10	4792
6	Cement concrete flooring with cement rendering	36	sft	15	540
7	M.S steel	0.5	Qtl	4000	2000
8	Cost of main hole cover, foot rest, inlet and out let GI pipe pieces etc.	Lump sump		L/S	3000
				Total	27677
				Say	28000-00

Recommendations

- It is advisable that at the time of purchasing or allotting the work to any contractor rates should be verified at least from three to four contractors from the local market with the quality of the materials and work. There is very high fluctuation in the rates. The rates vary with the quality and specification of the materials.
- Under ground storage tank should be 30 cm above the highest flood level or the ground level which ever is higher.
- The top of the tank should be so level to prevent entry of out side water from ground or floor.
- Water should not be allowed to stands around the tank.
- Tank should be so constructed that to provide cleaning of the tank when required.

- f. For cleaning purpose the floor of the tank laid with slope on one corner where water can be pumped out for cleaning the tank.
- g. The tank should be perfectly water tight.
- h. The inner and outer surface of the tank should be rendered smooth.
- i. All the fittings such as supply pipes, distribution pipes, over flow pipes, and air vent pipes should be fixed during the construction of the water tank wall.
- j. No any hole should be drilled after the completion of the construction, if done then leakage problems may occur.
- k. Provision of excavation of the ground for the tank should be such that outer face plaster can be done to prevent any leakage.

7. Thank You!