	BOQ for Rain water Harvesting at Officer and Staff C	Quarte	ers at Bado	arghat	
SI No	Description	Unit	Rate	Qty	Amount
1	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified.				
	(A) Up to a depth of 2.00m below the existing ground level.				
	(c) In soft or laminated rock or medium shale	Cum		31.00	
	(B) Extra over item no.1.1(A) above for each 1m depth or part thereof beyond the initial depth of 2m	Cum		5.00	
2	Earth/ sand filling in plinth in layers not more than 150mm thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forest royalty, sales tax and other duties and taxes as may be necessary.				
	(a) With earth or silt or sand obtained by head load with lead upto 90m and lift upto 2m	Cum		6.00	
3	Supplying and filling sand gravel in foundation trenches of column footings over slushy soil including local carriage of materials within 8 km pumping out of water, ramming etc. complete for strengthening the bearing capacity of the soil as directed and specified including payment of Forest Royalty and Sales Tax and other duties and taxes as may be necessary.			7.00	
4	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately).				
	(a) In prop 1 cement: 3 sand :6 coarse aggregate by volume	cum		2.00	
5	Providing and laying plain/reinforced cement croncrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately)			15.00	
0	(I) Using Mixer Machine	00111		10.00	
	(A) In substructure up to plinth level Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level.				
	b) M20 grade concrete or Prop. 1:1.5:3				
6	Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc., height of propping and centering below supporting floor to ceiling not exceeding 4.0M and removal of the same for in-situ reinforced concrete and plain concrete work in:				
	Foundation, footings, bases of columns, pile cap, raft and mass concrete				
7	works etc.				

8	Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete. (No extra measurement for Iap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate) (Upto 1st floor level) a) From Primary Producer: TATA/SAIL/Esser Steel/ Jindal steel/Shyam steel/RINL (i) TMT Corrosion resistant steel (CRS) reinforcement bar 230mm thick brick wall in cement morter with 1st class brick including racking out	QtI	16.65	
	joints and curing complete as directed in structure (I) In Sub-structure upto plinth level including dewatering if necessary	сим	6.00	
	(a). In proportion 1:3.			
1	15 mm thick Cement plaster in single coat on single or half brick wall for interior plastering up to 1st floor level including arises, internal rounded angles, not exceeding 80mm girth and finished even and smooth including curing complete as directed. A) On both side			
	a) In cement mortar 1:3	Sqm	20.00	
11	Supplying, fitting and fixing PVC pipes of 6kg/cm2 (Supreme/Prince) or other ISI approved including joining, fitting and fixing with clamps etc as necessary complete at all levels including below G.L as directed as specified a) In exposed surfaces or trenches 110 mm dia	rm	190.00	
12	Supplying fitting and fixing approved uPVC pipes of different sizes, with all necessary"R" brand or similar aproved uPVC fittings such as bend, tee, elbow, reducer, nipple, plug, long screw fitting, clamps etc. complete at all levels including below G.L as directed and specified a) Exposed or in trenches SUPREME/PRINCE brand or other equivalent approved brand (High pressure pipe SCH-40 of 50 mm	rm	55.00	
	25 mm dia	rm	25.00	
13 I	Supplying and placing plastic cylindrical vertical claused top(CPVC) tank sintex/polycon/patton make over the surface with manhole cover with locking and cleaning arrangement including providing pipe for inlet and outlet pipes complete as directed.	nos	2.00	
	2000 litres capacity(3 layer)			
14	5HP three phase Centrifugal monoblock pump set(Crompton Greaves/Aquatic/CRI/V-guard/Calma make 2900 rpm A class insulation with DOL starter(Crompton Greaves/Aquatic/CRI/V-guard/Calma make) .The rate also includes necessary supply and installation of wires from main source complete in all respect.	nos	1.00	
	Filling of recharge tank(Filter) (size 1m x 4m x 1.5m)			
15	With coarse sand of size 1.5mm - 2mm upto depth 200 mm	cum	3.00	
,	With gravel of size 100mm - 200mm upto depth 200 mm along with wood charcoal of 200 mm depth	cum	3.00	
	PVC net for filter purpose	sqm	25.00	

Installation of Boring/Drilling borewell of required 6"dia for percolation of rain water through perforated pipes by suitable method ,including hire & running charges of all equipment ,tools plants & machinaries required for the job,all complete as per direction of engineer-in charge ,upto required height below ground level. All types of soil including rocky strata including boulders at different level.(200 mm diametre).			30.00			
TOTAL AMOUNT						