

**ASSAM PROJECT  
ON  
FOREST AND BIO-DIVERSITY CONSERVATION**

**CONSTRUCTION OF NEW RESIDENTIAL COMPLEX  
– AT REHABARI, GUWAHATI - 781 008.**

**BILL OF QUANTITIES OF CIVIL WORKS  
FOR ELECTRICAL ROOM**

Sl.No	Specification of item of works	Unit	Quantities	Rate in Rs.		Amount (in Rs.)
				(in Figures)	(in Words)	
1	<p><b>EARTHWORK IN EXCAVATION</b></p> <p>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.</p> <p>(A) Up to a depth of 2.00m below the existing ground level.</p> <p>(a) In ordinary soil</p>	Cu.M.	66.00			
2	<p>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.</p> <p>(c) With river sand or silt (predominantly non plastic) by truck carriage including loading and unloading.</p>	Cu.M.	19.80			

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3	<p><b>PLAIN CEMENT CONCRETE WORKS</b></p> <p>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).</p> <p>(a) In prop. 1 cement:3 sand : 6 coarse aggregate by volume</p>	Cu.M.	2.68			
4	<p>Plain cement concrete floor base in prop1:3:6 laid in alternate bays as specified with coarse agg. of size 13mm to 32mm including dewatering if necessary, and curing etc. complete.</p> <p>(a). 100 mm thick in prop 1:3:6</p>	Sq.M.	4.16			
5	<p>Providing and laying 25mm thick damp proof course with cement concrete in prop 1:1.5:3 with graded stone agg. of 10mm down nominal size including providing approved damp proof admixture in proportion as recommended by the manufacturer including curing etc. complete as directed.</p>	Sq.M.	6.45			

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6	<p><b>REINFORCED CEMENT CONCRETE WORKS</b></p> <p>Providing and laying plain/reinforced cement concrete works cement , coarse sand &amp; 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)</p> <p>(I) Using mixture machine</p> <p><b>(A) In sub - structure up to plinth level</b> 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.</p> <p>l) Without using admixture, plasticiser a) M20 grade concrete or Prop. 1:1.5:3</p>	Cu.M.	5.71			
	<p><b>(B) In super-structure from plinth level upto 1st floor level.</b></p> <p>(i) Columns, pillars, posts, struts, suspended floor, roof, landing, shelf and support, balcony, lintel, sill band, beam, girder, bressumer, cantilever, staircase (except spiral staircase and landing ) including preparing the top surface and finishing of nosing.</p> <p>l) Without using admixture, plasticiser a) M20 grade concrete or Prop. 1:1.5:3</p>					

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7	<b>TIMBER SHUTTERING (FORMWORK)</b> 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:	Sq.M.	1.83			
(i)	Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc. (a) Using 25mm thick plank					
(ii)	Sides of tie beams, grade beams etc. at or below ground level. (a) Using 25mm thick plank	Sq.M.	18.06			
(iii)	Columns, Pillars, Posts & Strut (a) Square, Rectangular, polygonal in plan or any shape like Tee/L etc. having plane vertical face (i) Using 38mm thick plank	Sq.M.	25.00			
	Sides and Soffits of Beams, beam haunchings, cantilever girders, bressumers, lintels and horizontal ties. (a) For depth not exceeding 1.0M. (i) Using 38mm thick plank	Sq.M.	31.00			
	Flat Surfaces such as soffits of suspended floors, roofs, landings, cantelever slabs, chajjas, balconies and the like. (a) Floors etc. upto 200mm in thickness. (i) Using 38mm thick plank	Sq.M.	23.97			

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8	<p><b>MASONRY WORKS</b></p> <p>Providing <b>soling</b> in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (a).Brick on flat soling.</p>	Sq.M.	71.86			
9	<p><b>IN SUB-STRUCTURE.</b></p> <p>Brick work in cement mortar with 1st class brick including racking out joints and curing complete as directed. (l) In Sub-structure upto plinth level including dewatering if necessary (a). In proportion 1:4.</p>	Cu.M.	5.67			
10	<p><b>IN SUPERSTRUCTURE.</b></p> <p>1st class brick nogged wall in cement mortar including racking out joints and curing complete as directed in super structure above plinth up to 1st floor level (protruding M.S rod/Tor steel of column to be embeded in cement mortar and will be measured and paid separately) (A) 112mm thick brick wall (a) In cement mortar in proportion 1:4. (1 cement:4 sand) Upto 1st Floor level</p>	Sq.M.	83.00			

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11	<p><b>CEMENT CONCRETE FLOORING</b></p> <p>40 mm thick cement concrete floor consisting of 25 mm under layer of cement concrete in prop. 1:3:6 (1cement : 3 coarse sand : 6 coarse aggregate of 12.5 mm and down) and 15 mm thick wearing layer in cement concrete in prop. 1:1:2 (1cement :1 coarse sand : 2 coarse aggregate of size 10mm down) finished with a floating coat of neat cement finish using cement slurry for bond @ 2.75 kg. per square metre of floor area , wearing layer is to be laid in panels including curing etc. complete as directed</p>	Sq.M.	30.00			
12	<p>Cement plaster skirting with cement mortar in prop. 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement including rounding of junctions with floor. (a) 15 mm thick</p>	Sq.M.	15.00			
13	<p><b>CEMENT PLASTERING</b></p> <p><b>15 mm thick Cement plaster in single coat on rough side of 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.</b></p> <p><b>A) On rough side</b> (a). In cement mortar 1:4</p>	Sq.M.	162.97			

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14	<p><b>ROOFING</b></p> <p>Providing Pre Painted Galvanized Iron Sheet Roofing (PPGI) at all levels including fitting and fixing with self drilling, self tapping screws complete. (Roof trusses, purlins etc. to be measured and paid separately.) TATA Blue scope/ Dyna roof / Durakolor /Wonder Roof or equivalent as directed by the Departement</p> <p>(i) 0.50 mm thick</p>	Sq.M.	70.00			
15	<p><b>GRILLS</b></p> <p>Providing, fitting and fixing M.S. grill / grill gate of required pattern for windows/ clerestory windows/ openingwith M.S. flats at required spacing in frame all round, squre or round M.S. bars with round headed bolts and nuts or screws.</p> <p><b>I. Plain grill</b></p> <p>(a). Fixed to Brickwork/P.C.C/R.C.C.</p>	Kg.	667.13			
16	<p><b>CEMENT PAINT &amp; PRIMER</b></p> <p>a) Applying one coat of cement primer of approved brand and manufacture on new wall surface after throughly brooming the surfaces free from mortar droppings and other foreign matter and including preparing the surface even and sand papered smooth.</p>	Sq.M.	162.97			

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17	b) Finishing wall with water proofing cement paint of approved brand and manufacture and of required shade on new wall surface ( two coats) to give an even shade throughly brooming the surface to remove all dirt and remains of loose powdered materials.	Sq.M.	162.97			
18	<b>PAINTING ON STEEL AND OTHER METAL SURFACE</b> Applying primary coat over new steel and other metal surface over 100m in width or girth after preparing the surface by throughly cleaning oil,grease, dirt and other foreign matter and scoured with wire brushes, fine steels, wood scrapers and sand paper.  a). With ready mixed "red-lead/ red oxide" primer.	Sq.M.	53.36			
19	Painting two coats (excluding priming coat) on new steel and other metal surface with enamel paint of approved brand and manufacture(Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter. (i).Surfaces over 100mm in width or girth. b). High gloss (Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac)	Sq.M.	53.36			

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20	<p><b>GLASS FITTING</b></p> <p>Providing and fixing clear sheet glass bedded in putty and fixed with/without wooden bidding including necessary cutting and glass to be required sized(payment for wooden bead shall be made separately)</p> <p>(3). Area of glass panes exceeding 0.52m2.</p> <p>(a). 5.00mm thick.</p>	Sq.M.	3.00			
21	<p><b>STEEL &amp; IRON WORKS REINFORCEMENT</b></p> <p>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.</p> <p>(No extra measurement for lap, hook, chair, anchor etc. will be entertained in the measurement as they are included in the rate) (Upto 1st floor level)</p> <p>a) From Primary Producer: TATA/SAIL/Esser Steel/ Jindal steel/Shyam steel/RINL</p> <p>(i)Super Ductile (SD) TMT reinforcement</p>	Qtl.	20.00			

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22	<p><b>ROOF TRUSS</b></p> <p>Providing, fitting, hoisting and fixing of roof trusses fabricated out of combination of any two or all of the following sections (i) Square section (ii) Rectangular Hollow section of specification RSH/SHS and (iii) M.S. circular hollow section of Grade 210 including purlins, bottom runners and providing M.S. cleat, M.S. angle base plank, bolts and nuts with red oxide primer including fitting bottom runner and cleat etc. for fixing ceiling joist as per design complete as directed as per specifications.</p> <p>a) Using TATA make RHS/SHS of Grade 310 conforming to relevant I.S. code 4923 : 1997</p>	Qtl.	8.80			
23	<p><b>COLLAPSIBLE / ROLLING SHUTTERS</b></p> <p>Providing and fixing in position collapsible M.S. shutters with vertical channels 20mmx10mmx2mm braced with flat iron diagonals 20mmx5mm size with top and bottom rails of T-iron 40mmx40mmx6mm with 38mm dia steel pulleys complete with bolts and nuts, locking arrangements, stoppers, handles including applying a priming coat of red lead paint.</p>	Sq.M.	5.00			

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24	<b>WINDOWS / VENTILATORS</b> Providing, fitting and fixing steel windows of standard rolled steel sections as per relevant I.S. Code, joints mitred and welded with 15mm x 13mm x 100mm lugs embedded in cement concrete block of M-10 grade including providing and fixing of projecting hinges (not more than 65mm and not less than 15mm wide) bolting device, steel handles, pegs, stays of 300mm long etc. complete including providing 12mmx12mm sq. bars duly welded to steel frame at not more than 12cm c/c applying a priming coat of red-lead paint etc. complete as per drawing. a) Openable	Sq.M.	4.13			
						=Rs.

(Rupees

Signature of the Contractor:

Date & Seal :