BOQ

Name of Work:- Repairing and renovation of Assam Type-II/01 at AEGCL, Kahilipara, colony.

Name & Address of bidder:

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
1	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing: 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	4.49	cum		
2	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	575.77	sqm		
3	Distempering with 1st quality acrylic distemper (ready mix) having VOC content less than 50 gm per ltr. of approved brand and manufacture to give an even shade Old work(one or more coats)	575.770	Sqm		
4	Painting with oil type wood preservative of approved brand and manufacture: Old work (one or more coats)	118.32	sqm		
5	Finishing walls with Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	260.00	sqm		
6	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately). Second class teak wood	0.50	cum		
7	Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS : 14616 and TADS 15:2001 (Part B), fixing with butt hinges of required size with necessary screws, all complete as per directions of Engineer-in-charge and panelling with panels of : (Note:- Butt hinges and necessary screws shall be paid separately) 12 mm thick plain grade -1, medium density flat pressed three layer particle board FPT - I or graded wood particle board FPT- I, IS : 3087 marked, bonded	3.99	sqm		
8	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty: Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	1.80	sqm		
9	Providing and fixing factory made P.V.C. door frame of size 50x47 mmwith awall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineerin-Charge.	20.40	RM		

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
10	25 mm thick PVC flush door shutters made out of a one piece Multi chamber extruded PVC section of the size of 762 mm X 25 mm or less as per requirement with an average wall thickness of 1 mm (± 0.3 mm). PVC foam end cap of size 23x10 mm are provided on both vertical edges to ensure the overall thickness of 25 mm. M.S. tube having dimensions 19 mm x 19 mm and 1.0 mm (± 0.1 mm) is inserted along the hinge side of the door. Core of the door shutter should be filled with High Density Polyurethane foam. The Top & Bottom edges of the shutter are covered with an end-cap of the size 25 mm X 11 mm. Door shutter shall be reinforced with special polymeric reinforcements as per manufacturer's specification and direction of Engineer-in-charge to take up necessary hardware and fixtures. Stickers indicating the locations of hardware will be pasted at appropriate places	6.72	sqm		
11	Providing and fixing insulating board ceiling of approved quality with necessary nails etc. complete (frame work to be paid separately) : Flame retardant face insulating board. 12 mm thick	48.65	sqm		
12	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. All kinds of soil	4.08	cum		
13	Filling available excavated earth (excluding rock) in trenches, plinth,sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	13.36	cum		
14	Centering and shuttering including strutting, propping etc. and removal of form for Shelves (Cast in situ)	34.84	sqm		
15	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Cold twisted bars	320.96	kg		
16	Reinforced cement concrete Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	2.21	cum		
17	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	4.58	cum		
18	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level Cement mortar 1:4 (1 cement :4 coarse sand)	4.08	sqm		
19	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:4 (1 cement: 4 fine sand)	56.94	sqm		
20	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement. 20 mm cement plaster	113.19	sqm		

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
21	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	8.10	sqm		
22	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	49.50	sqm		
23	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. (a) Normal range (Somany/Orient/Nitco/Asian make) (ii) Sizes 200 mm x 300mm and above	83.39	sqm		
24	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily. Glazed Vitrified tiles Matt/Antiskid finish of size Size of Tile 600 x 600 mm	137.86	sqm		
25	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete : a) Sliding door bolts i) 300mm x 16mm	5	each		
26	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete : 250x10 mm	20	each		
27	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete	20	each		
28	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid	4	Each		
29	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	2	Each		

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
30	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Oval shape 450x350 mm (outer dimensions)	1	Each		
31	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet : 150 mm diameter	4	Each		
32	Providing and fixing brass bib cock of approved quality : 20 mm nominal bore	12	Each		
33	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	5	Each		
34	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour. 450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms	5	Each		
35	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore	10	Each		
36	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 20 mm nominal bore	4	Each		
37	Providing and fixing PTMT grating of approved quality and colour. Rectangular type with openable circular lid 150 mm nominal size square 100 mm diameter of the inner hinged round grating	5	Each		
38	CPVC PIPES Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall 25 mm nominal dia Pipes	25.00	Rm.		
	20 mm nominal dia Pipes	25.00	Rm.		
39	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded type tubes	156.02	Kg		

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
40	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	46.24	sqm		
41	Supplying fitting and fixing industrial Plug & Socket in surface mounting TPN sheet steel powder painted MCB DB incorporated with MCB DIN rail, neutral link Earth bar of the following rating of 4P MCB complete with making necessary connection etc. as specified and directed by the Deptt. 30/32A Capacity.	1	Each		
42	Supplying with fitting and fixing single Pole 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt. B Series (Schneider MG, legrand, Hager make) 6 to 32A	12	Each		
43	Wiring for light/ fan/ call bell point with 2x1.5 sq mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) with flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in surface system, including 6 Amp flush type switch/ bell push (Anchor Penta/Gold medal /Kolor kany.Kom/ Havells or equivalent make as approved by the Deptt.) GI/ MS switch board (ISI marked) half conceal on wall with phenolic laminated sheet cover ,ceiling rose (Anchor/Gold medal /Kolor kany.Kom / Havells or equivalent make as approved by the Deptt.) etc. complete as directed and specified by the Deptt. Short point up to 3.00 metre. length.	15	Each		
	Medium point up to 6.00 metre. Length.	22	Each		
44	Wiring to 5 a pin 6 Amps plug point with 1.5 sq. mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) with flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in surface system, including 5 pin 6 Amps flush type plug socket and 6 Amps F/T switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.), GI/ MS switch board (I.S.I. marked) with phenolic laminated sheet cover including earth continuity with 1.5 sq. mm. cable to third pin of the plug socket etc. as required complete, when placed elsewhere. Short point up to 3.00 metre. length.	16	Each		
45	Wiring for 5/6 pin 16 Amps power plug point with 4 sq. mm. P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) with flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in surface system, including providing and fixing 5/6 pin 16 Amps flush type socket outlets and 16 Amps flush type switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.),GI/ MS switch board (I.S.I. marked) with phenolic laminated sheet cover earth continuity with 2.5 sq. mm cable to the 3rd pin of the socket as required complete. Short point up to 3.00 metre. length.	8	Each		

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
46	Wiring for drawing sub-main line with 2x1.5 sq mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) system, including connection as required complete as directed and specified by the Deptt. With 2 x 1.5 sq. mm. cable in flat 19 mm ISI marked casing 'n' capping system,	160	Rm.		
47	Wiring for drawing sub-main line with P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface flat ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) system including earth continuity. With 2 x 2.5 sq. mm. + earth continuity with 1x1.5 sq. mm. in flat 19 mm ISI marked casing 'n' capping system.	50	Rm.		
48	Wiring for drawing sub-main line with P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface flat ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) system including earth continuity. With 2 x 4 sq. mm. + earth continuity with 1x2.5 sq. mm. cable in flat 19 mm ISI marked casing 'n' capping system.	50	Rm.		
49	Wiring for drawing sub-main line with P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface flat ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) system including earth continuity. With 2 x 6 sq. mm. + earth continuity with 1x 4 sq. mm. cable in flat 25mm ISI marked casing 'n' capping system.	15	Rm.		
50	Supplying including fitting fixing of following A.C. Ceiling fan complete with all accessories like down rod, canopy etc. of following sweeps with making necessary connection as approved by the Deptt.)as required complete and as directed by the Department [Without regulator]. Premium model 1400 mm Sweep. (ORIENT PSPO make) /Premium model 1400 mm Sweep SS-390 Deco. Havells make	5	Each.		
51	Installation, testing and commissioning of ceiling fan including the regulator /down rod of standard size (Up to 300 mm) length including connection as approved by the Deptt.)as required.	5	Each.		
52	Supplying including fitting fixing of following A.C. Exhaust fan in the existing hole on the wall of following sweeps with making necessary connection as approved by the Deptt.)as required complete and as directed by the Department. Power Flow 225 mm sweep (ORIENT make)	3	Each.		
53	Providing, fitting and fixing anodised aluminium sliding windows and ventilators of standard sections without horizontal glazing bars, joints mitred and welded (manufactured to relevant IS specifications) and providing and fixing handles, angle cleat, rubber gasket, roller, bolting device, locking arrangements, screws etc as required complete as specified and directed for all levels. (a)2 Track sliding window (iv) 5 mm clear glass	12.51	sqm		

Sl. No.	Description of Item	Qnty	Unit	Rate(in Rs.)	Amount(in Rs.)
54	Providing, fitting and fixing anodised aluminuim framed glazed doors with anodised aluminium frame made of 100mm x 45mm x 2.5mm section with door style of size 88mm x 45mm x 2.5mm, top rails 50mm x 45mm x 2mm lock rails 100mm x 45mm x 2mm and bottom rails 100mm x 45mm x 2.5mm fitted with glazing clip, special type rubber gasket complete including hydraulic floor spring, pivot, tower bolt in each leaf, aluminium door handle, lock, angles, cleat etc complete as specified and directed by the department at all levels. (i) 6mm clear glass	2.10	Sqm		
55	Providing, fitting and fixing M.S. grill 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.I . Plain grill (c) Fixed to Brickwork/P.C.C/R.C.C.	99.00	Kg		
56	Providing brick soling 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.	97.02	sqm		
57	Labour for jungle clearance,hacking concrete floor for tiles work, dismantling damaged doors and windows along with damaged tiles from floor and walls of bathrooms, dismantling damaged sanitary fittings and electrical wirings and dispossing off the same to designated area as specified by officer in charge No of bandhani required for 10 days	40	Days		
58	Galvanised wire mesh of average width of aperture 1.4 mm and nominal dia of wire 0.63 mm	10.20	sqm		
				Total=	
				Adding 18% GST=	
				Grand Total=	
				Say=	