

**BOQ FOR PROPOSED CONSTRUCTION OF ARANYA BHAWAN ANNEX
AT PANJABARI, GUWAHATI - 781 037.**

SECURITY BARRACK (Electrification)

SI No	Description	Units	Qty	Rate	Amount
	INTERNAL ELECTRICAL WORKS				
	Wiring in surface/ recessed PVC conduit FR (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) cable				
1.	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.) in surface/ recessed conduit wiring system with 20mm dia 2mm thick / heavy rigid PVC IS: 9537 Part - III conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) 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) with phenolic laminated sheet cover ,ceiling rose (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.) etc. complete				
	Short point up to 3.00 metre. length.	Each	55		
	Medium point up to 6.00 metre. Length.	Each	72		
	Long point up to 10.00 metre. Length.	Each	55		

SI No	Description	Units	Qty	Rate	Amount
2.	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.) in surface/ recessed 2 mm thick/ heavy rigid ISI marked IS: 9537 PART - III rigid PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) wiring 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. mark 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.				
	Medium point up to 6.00 metre. Length.	Each	4		
	Long point up to 10.00 metre. Length.	Each	4		
3.	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.) in surface/ recessed conduit wiring system including 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./ Havells make), GI/ MS switch board (I.S.I. mark with phenolic laminated sheet cover earth continuity with 2.5 sq. mm cable to the 3rd pin of the socket as required complete with 20 mm. dia. 2mm thick/ heavy rigid ISI marked IS: 9537 PART - III rigid PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.)				
	Extra long point up to 15.00 metre. length.	Each	5		

SI No	Description	Units	Qty	Rate	Amount
	Extra long point up to 20.00 metre. Length.	Each	2		
4.	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.) PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) including earth continuity in surface/ recessed 20 mm. dia. 2mm thick/ heavy ISI marked IS: 9537 PART - III rigid PVC conduit wiring system.				
	With 2 x 2.5 sq. mm. + earth continuity with 1x1.5 sq. mm. in 20 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	Metre.	1000.00		
	With 2 x 4 sq. mm. + earth continuity with 1x2.5 sq. mm. cable in 20 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	Metre.	100.00		
	With 2 x 6 sq. mm. + earth continuity with 1x 4 sq. mm. cable in 25 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	Metre.	25.00		
	With 2 x 10 sq. mm. + earth continuity with 1x 6 sq. mm. cable in 25 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	Metre.	250.00		

SI No	Description	Units	Qty	Rate	Amount
5.	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/ recessed PVC 20 mm. dia. 2mm thick/ heavy ISI marked IS: 9537 PART - III rigid PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) wiring system.				
	With 4 x 10 sq. mm. + earth continuity with 2x6 sq. mm. cable in 40 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	Metre.	40.00		
6.	Wiring for 5 pin 6 amp plug 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.) including 5 pin 6 amp socket outlet (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.)make) and 6 amp flush type switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.)make) earthing the 3rd pin of the socket as required on the switch board in surface/ recessed P.V.C. conduit wiring system. When fitted on same board of light and fan.	Each	50		
	SUPPLY AND FIXING OF RIGID PVC CONDUIT (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) IN SURFACE AND RECESS WIRING SYSTEM				
7.	Supply and fixing 19 mm dia 2.00mm average wall thickness heavy rigid PVC IS: 9537 Part - III conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in recessed system including cutting the wall and making good the same as required:	Metre	100.00		

SI No	Description	Units	Qty	Rate	Amount
	Wiring with P.V.C. insulated unsheathed 1.1 K.V. grade single core copper conductor FR cable in existing surface/ recessed conduit wiring system				
8.	Wiring for Co - axial Jelly Flooded (Unarmoured) (FINOLEX /RR KABEL /NICCO / ANCHOR make) cable in existing surface conduit wiring system including connection etc as required.	Metre	120.00		
	Co - axial Jelly Flooded (Unarmoured) RG 6 (Copper)				
	EPABX				
9.	Supplying ,installation, testing & commissioning of Distribution Box 20 pairs with Kronos (SIEMENS or equivalent as approved by the Deptt.)	Each	1		
10.	Supplying ,installation, testing & commissioning of 2 pair Unarmoured Telephone Cable through existing conduit in surface/ recess system.	Metre.	250.00		
	FITTINGS AND ACCESSORIES (ALL PRODUCTS SHOULD BE ENERGY EFFICIENT AND ENVIRONMENT FRIENDLY)				
11.	Supplying and fixing of Fan box (AKG or equivalent as approved by the Deptt.)with inbuild rod as required.	Each	37		
12.	Supplying and fixing of polished Brass Bracket of 18 S.W.G, 25 cm long cast back plate and brass lamp holder complete including connection as approved by the Deptt.)as required Without Lamp/ [BK]	Each	36		

SI No	Description	Units	Qty	Rate	Amount
13.	Supplying and fixing of bulk head fitting suitable for CFL lamp complete with all accessories including 20 watts CFL lamp and connection as approved by the Deptt.) as required. [BH]	Each	1		
14.	Supplying and fitting of 18/20 Watt CFL lamp in the existing batten holder/angle holder/decorative bracket/bulk head fitting/ pendent holder etc. as specified and directed by the deptt.	Each	36		
15.	Supplying and fixing of Frosted glass shade of 100 mm dia (Nominal Size as required.	Each	36		
	SWITCH GEAR & PROTECTION				
	INDUSTRIAL SOCKETS, DB WITHOUT MCB & MCCB , MCB, RCCB, RCBO, SFU, CHANGE OVER ETC. (C&S, Havells, INDOASIAN, HPL OR EQUIVALENT as approved by the Deptt.)MAKE)				
16.	Supplying with fitting and fixing sheet steel, phosphatised, powder painted Single door surface mounting MCB enclosure incorporated with bus-bar, Neutral link, Earth bar and din rail etc fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt.				
	Schneider neo break, C&S, Havells, INDOASIAN, HPL or equivalent as approved by the Deptt.)make)	Each	1		
	4 way single door				

SI No	Description	Units	Qty	Rate	Amount
	MCB DB (ABB, SCHNEIDER MG, LEGRAND, HAGER MAKE) & (SCHNEIDER NEO BREAK, C&S, Havells, INDOASIAN, HPL OR EQUIVALENT MAKE AS PPROVED BY THE DEPTT.)				
	MCB IN-comer SPN DB				
17.	Supplying with fitting and fixing sheet steel, phosphatised, powder painted dust & vermin proof Double door IP-43 surface mounting SPN MCB DB incorporated with bas-bar, Neutral link, Earth bar and din rail etc fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt.				
	ABB, Schneider MG, legrand, Hager make)				
	4 way SPN double door	Each	1		
	12 way SPN Double Door	Each	7		
	MCB, MCCB, RCCB, RCBO (ABB, SCHNEIDER MG, LEGRAND, AND HAGER MAKE) & (SCHNEIDER NEO BREAK, C&S, Havells, INDO ASIAN, HPL OR EQUIVALENT MAKE AS PPROVED BY THE DEPTT.) MCB (Conform to IS / IEC 60898-1:200/ MCCB (Conform to IS/IEC 60947- RCCB (Conform to IS/IEC 12640 / 61008)				
18.	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.				
	C Series (Schneider MG, legrand, Hager make)				
	6 to 32A	Each	58		

SI No	Description	Units	Qty	Rate	Amount
19.	Supplying with fitting and fixing DP 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	C Series (ABB, Schneider MG, legrand, Hager make)				
	6 to 32A	Each	1		
	40A	Each	7		
20.	Supplying with fitting and fixing 4P 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	C Series (ABB, Schneider MG, legrand, Hager make)	Each	1		
	40A				
21.	Supplying with fitting and fixing 30/100/300mA sensitivity 240/415V 50Hz DP RCCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	100/300mA sensitivity DP RCCB (ABB, Schneider MG, legrand, Hager make)	Each	7		
	40A				
	EARTHING				
22.	Supply, installation & testing of G.I. earth station with perforated 40 mm dia and 4.50 Metre long heavy duty G.I. pipe with necessary 40 mm dia. G.I. Fittings such as Socket, Tee, elbow, nipple and 50 mmx40 mm G.I. reducing socket for funnel including locking arrangement 300 mmx300 mmx6 mm hinged cover C.I. earth plate complete with digging of earth pit, construction of brick chamber and plastering of both inner & outer surface of wall as specified and directed by the deptt .	Each	4		

SI No	Description	Units	Qty	Rate	Amount
23.	Supply, installation & testing of Copper Plate earth station with 600 mmx600 mmx3 mm copper earth plate with necessary 40 mm dia. G.I. medium duty watering pipe with G.I. Fittings such as Socket, Tee, elbow, nipple and 50 mmx40 mm G.I. reducing socket for funnel including locking arrangement with 300 mmx300 mmx6 mm C.I. hinged cover plate complete with digging of earth pit, construction of brick chamber and plastering of both inner & outer surface of wall as specified and directed by the deptt .	Each	2		
24.	Extra for using salt (5 K and Charcoal (64 K in pipe Earth Station pit to provide low impedance ground in location of high soil resistivity as and when required and specified by the Deptt.	Each	4		
25.	Extra for using salt (5 K and Charcoal (96 K in G.I./Copper plate Earth Station pit to provide low impedance ground in location of high soil resistivity as and when required and specified by the deptt .	Each	2		
26.	Supplying & laying of 6 SWG G.I. earth from Earth Electrode (below G.L.) to electrical switch gears or electrical machineries including making necessary connection as approved, specified and directed by the deptt.	Metre.	100.00		
27.	Supplying & laying of following size 25mmX5mm G.I. strips drawn on surface from earth electrode to Electrical switch gears, machineries etc complete with supply of G.I. nuts & bolts, screws etc including riveting, soldering & making necessary connection as approved, specified and directed by the deptt.	R.M.	80.00		

SI No	Description	Units	Qty	Rate	Amount
28.	Supplying & laying of following 25mmX5mm size Copper strips drawn on surface from earth electrode to Electrical switch gears, machineries etc complete with supply of Brass nuts & bolts, screws etc including riveting, soldering & making necessary connection as approved, specified and directed by the deptt.	Metre.	40.00		
29.	Supply, fitting & fixing of Lighting Finial Arrestor made of 25 mm dia 300 mm long solid G.I. tube having 85 mm dia. single prong at top and 3 mm base plate at bottom complete with fitting & fixing with G.I. nuts & bolts on roof, RCC slab, top of column etc. as specified and directed by the deptt.	Each	2		
30.	Supply, fitting & fixing 20 mmx5 mm G.I. strips drawn on vertically or horizontally on building wall/parapet wall in surface system complete with supply of G.I. Nuts & Bolts, Screws etc including riveting, soldering and making connection as approved by the Deptt.)with earth electrode G.I. strips and Lightning Arrestor etc. as specified and directed by the deptt.	Per metre	150		
	LUMINAIRES				
31.	Supplying with fitting fixing of CFL/Fluorescent luminaires complete with all accessories such as ballast, starter etc. directly on wall / ceiling including connection as approved by the Deptt.)with 1.5 sq mm P.V.C. insulated S.C. copper conductor as required and as directed by the department.				
	Striplite luminaires complete with VPIT copper ballast/ Electronic ballast and decorative end cap and 1 X 36 / 40 watt Fluorescent tube.(Crompton Greaves make) Model- DSG1114LDB CROMGOLD / DSG1114LDBN CROM GOLD NEW / DSG1314EB CG GOLD / DSG 1414EB PLANET GOLD with Super Saver / Super Brite Lamp. Or equivalent (Equivalent will be selected by the deptt considering the mother items rate) PHILIPS/ WIPRO/ BAJAJ/ Havells/ HPL/ SOLAR/ JAQUAR make. [FL]	Each	46.00		

SI No	Description	Units	Qty	Rate	Amount
32.	Supplying with fitting fixing of CFL/Fluorescent luminaries complete with all accessories such as ballast, starter etc. directly on wall / ceiling including connection as approved by the Deptt.)with 1.5 sq mm P.V.C. insulated S.C. copper conductor as required and as directed by the department.				
	Sleek Box type luminaries complete with Electronic ballast and plastic holder brackets with 1 X 36 / 40 watt Fluorescent tube.(Crompton Greaves make) Model- DJB 1314LDB50 / DJBN1314EB CROMTEK with Super Saver / Super Brite Lamp or equivalent (Equivalent will be selected by the deptt considering the mother items rate) PHILIPS/ WIPRO/ BAJAJ/ Havells/ HPL/ SOLAR/ JAQUAR make. [TL]	Each	49		
	CEILING FAN, EXHAUST FAN AND AIR CURTAIN				
33.	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 1200 mm Sweep (ORIENT PSPO make) / Premium model 1050 / 1200 mm Sweep SS-390 Deco Havells make) [F]	Each	37		
34.	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.				
	Domestic				
	Ventil Air DB 300 mm sweep (Havells make) [EF]	Each	13		
35.	Supplying fitting and fixing of ceiling fan Regulator including complete connections etc. complete as required and as directed by the department.	Each	37		
	Electronic Regrassance Type				
36.	MAIN LT PANEL-SECURITY BARRACK				

SI No	Description	Units	Qty	Rate	Amount
	Supplying and installation of metal enclosed floor mounted front operated cubical type switch gear panel suitable for indoor installation conforming to IS: 8623 (Part I & II). Panel should be made of sheet steel and thickness not less than 2mm and structural steel having light section. The panel shall be completely dust tight and vermin proof and shall be painted with anti corrosive and anti condensation type two coats of primer and two coats of paint. All wiring shall be PVC insulated and PVC sheathed of 1100 volt grade of required size. The panel should have provision of entry of cable at the bottom and also provision of out going feeders from the bottom of the panel. The panel shall incorporated busbar system of high quality electrolytic copper with uniform cross section. The panel shall consist of the following items (viz. multi function digital voltmeter, ammeter, CT, indicating lamps, selector switch etc.) connected as per drawing and shall be flush mounted on the front of the panel.	Set	1		
	Incomer				
	100A 4P MCCB, 25 KA – 1 No.				
	Bus-Bars: 220 Amps TPN electrolytic copper bus bar of uniform cross-section – 1 set (25mmx5mm)				
	Outgoing				
	40A 4P MCB – 1 nos.				
	40A DP MCB – 9 nos.				
	32A DP MCB – 3 Nos.				
	Selector Switch –2 Nos.				
	Digital Multi Function Meter , Ammeter, Voltmeter, PF meter – 4 Nos.				
	CT100A/5A - 1 Sets.				
	Switch Fuse Unit – 3 Nos.				
	LED Indicating Lamp Unit –3 Nos.				
37.	Supply, Installation antistatic rubber mat suitable for 1.1 KV Voltage grade	Sq.M	2.00		
38.	Supply, Fitting Fixing of Shock Treatment Chart	Each	4		
	GRAND TOTAL				