## BOQ / Price Bid

*<u>Name of work</u>*: Repairing, renovation and Modification of existing staff quarter to staff hostel at 132kV Depota GSS, AEGCL.

## NIT no: AEGCL/DGM/TTC/TEZ/T-20/2022/180 Dated: 19-08-2022

	(PART A)				
Sl no	Description of Item	Qty	unit	Rate	Amount
1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	210.00	sqm		
2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.(15.2.2 )Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)				
		1.56	cum		
3	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge				
		12.10	cum		
4	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	338.49	sqm		
5	Dismantling doors, windows and clerestory windows (steel or wood) shutter includingchowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : (15.12.1)Of area 3 sq. metres and below	10.00	Each		
6	Dismantling wood work in frames, trusses, purlins and rafters up to 10 metres span and metres height including stacking the material within 50 metres lead : (15.14.1 )Of sectional area 40 square centimetres and above	0.11	cum		

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7	Dismantling roofing including ridges, hips,			
	valleys and gutters etc., and stacking the		ĺ	
	material within 50 metres lead of:		ĺ	
	(15.28.1) G.S. Sheet			
		24.00	sqm	
8	Dismantling cement asbestos or other hard			
	board ceiling or partition walls including		ĺ	
	stacking of serviceable materials and			
	disposal of unserviceable materials within			
	50 metres lead.	31.02	sqm	
9	Earth work in excavation by mechanical			
	means (Hydraulic excavator) / manual			
	means in foundation trenches or drains			
	(not exceeding 1.5 m in width or 10 sqm		ĺ	
	on plan), including dressing of sides and			
	ramming of bottoms, lift upto 1.5 m,		ĺ	
	including getting out the excavated soil		ĺ	
	and disposal of surplus excavated soil as			
	directed, within a lead of 50 m.			
		3.24	cum	
10	Providing and laying in position cement			
	concrete of specified grade excluding the			
	cost of centering and shuttering - All work			
	up to plinth level :	11.07	cum	
11	Steel reinforcement for R.C.C. work			
	including straightening, cutting, bending,			
	placing in position and binding all			
	complete above plinth level.			
	<b>5.22.6</b> Thermo-Mechanically Treated bars			
	of grade Fe-500D or more.	355.93	kg	
12	Centering and shuttering including			
	strutting, propping etc. and removal of			
	form for Foundations, footings, bases of			
	columns, etc. for mass concrete .	45.93	sqm	
13	Providing and laying in position specified			
	grade of reinforced cement concrete,			
	excluding the cost of centering, shuttering,		ĺ	
	finishing and reinforcement - All work up			
	to plinth level :			
		3.00	cum	
	1:2:4 (1 cement : 2 coarse sand (zone-III)			
	derived from natural sources : 4 graded			
	stone aggregate 20 mm nominal size de		ĺ	
	rived from natural sources)			

1.4	Uslf height masses with some on human			
14	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.	132.81	sqm	
15	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.			
	1 1	9.79	oum	
16	62 mm thisk soment sonerste flearing with		cum	
10	62 mm thick cement concrete flooring with			
	concrete hardener topping, under layer 50			
	mm thick cement concrete 1:2:4 (1 cement			
	: 2 coarse sand : 4 graded stone aggregate			
	20mm nominal size) and top layer 12mm			
	thick cement hardener consisting of mix			
	1:2 (1 cement hardener mix : 2 graded			
	stone aggregate, 6mm nominal size) by			
	volume, hardening compound mixed @ 2			
	litre per 50 kg of cement or as per			
	manufacture's specifications. This			
	includes cost of cement slurry, but			
	excluding the cost of nosing of steps etc.			
	complete.			
		(( 00		
15		66.00	sqm	
17	CEMENT PLASTER WITH A FLOATING			
	COAT OF NEAT CEMENT 12 mm cement			
	plaster finished with a floating coat of neat			
	cement of mix :1:4 (1 cement: 4 fine sand)			
		633.72	sqm	
18	Removing dry or oil bound distemper,			
1	water proofing cement paint and the like			
1	by scrapping, sand papering and preparing			
1	the surface smooth including necessary			
	repairs to scratches etc. complete.			
		642.90	sqm	
19	Providing and applying white cement		1 -	
	based putty of average thickness 1 mm, of			
	approved brand and manufacturer, over the			
1	plastered wall surface to prepare the			
1	surface even and smooth complete.			
1	surface even and smooth complete.	265 62		
		265.62	sqm	

20	Finishing walls with water proofing cement paint of required shade :Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litrs/10 sqm complete including cost of Priming coat.	806.80	sqm	
21	Providing and fixing ISI marked oxidised		1	
	M.S. pressed butt hinges with necessary			
	screws etc. complete	30.00	each	
22	Painting on G.S. sheet with synthetic			
	enamel paint of approved brand and			
	manufacture of required colour to give an			
	even shade :			
	Old work (two coats)	224.08	sqm	
23	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to 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. <b>0.63 mm thick</b> with zinc coating not less than 275 gm/ m <sup>2</sup>			
		78.50	sqm	
24	Providing ridges or hips of width 60 cm overall width plain G.S. sheet fixed with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete. 12.4.2 0.63 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	25.00		

25	Providing and fixing false ceiling at all			
	height including providing and fixing of			
	frame work made of special sections,			
	power pressed from M.S. sheets and			
	galvanized with zinc coating of 120			
	gms/sqm (both side inclusive) as per IS :			
	277 and consisting of angle cleats of size			
	25 mm wide x 1.6 mm thick with flanges			
	of 27 mm and 37mm, at 1200 mm centre			
	to centre, one flange fixed to the ceiling			
	with dash fastener 12.5 mm dia x 50mm			
	long with 6mm dia bolts, other flange of			
	cleat fixed to the angle hangers of			
	25x10x0.50 mm of required length with			
	nuts & bolts of required size and other end			
	of angle hanger fixed with intermediate			
	G.I. channels 45x15x0.9 mm running at			
	the spacing of 1200 mm centre to centre,			
	to which the ceiling section 0.5 mm thick			
	bottom wedge of 80 mm with tapered			
	flanges of 26 mm each having lips of 10.5			
	mm, at 450 mm centre to centre, shall be			
	fixed in a direction perpendicular to G.I.			
	intermediate channel with connecting clips			
	made out of 2.64 mm dia x 230 mm long			
	G.I. wire at every junction, including			
	fixing perimeter channels 0.5 mm thick 27			
	mm high having flanges of 20 mm and 30	49.22	sqm	
26	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).			
	9.1.3 Kiln seasoned and chemically treated			
	hollock wood	0.27	cum	
27	Providing and fixing panelled or panelled	0.27	cum	
21	and glazed shutters for doors, windows			
	and clerestory windows, fixing with butt			
	hinges of required size with necessary			
	screws, excluding panelling which will be			
	paid for separately, all complete as per			
	direction of Engineer-incharge.			
	Second class teak wood			
	30 mm thick shutters			
		15 50		
		15.50	sqm	

28	Providing and fixing factory made panel				
	PVC door shutter consisting of frame				
	made out of M.S. tubes of 19 gauge				
	thickness and size of 19 mm x 19 mm for				
	styles and 15x15 mm for top & bottom				
	rails. M.S. frame shall have a coat of steel				
	primers of approved make and				
	manufacture. M.S. frame covered with 5				
	mm thick heat moulded PVC 'C' channel				
	of size 30 mm thickness, 70 mm width out				
	of which 50 mm shall be flat and 20 mm				
	shall be tapered in 45 degree angle on both				
	side forming styles and 5 mm thick, 95				
	mm wide PVC sheet out of which 75mm				
	shall be flat and 20 mm shall be tapered in				
	45 degree on the inner side to form top and				
	bottom rail and 115 mm wide PVC sheet				
	out of which 75 mm shall be flat and 20				
	mm shall be tapered on both sides to form				
	lock rail. Top, bottom and lock rails shall				
	be provided both side of the panel. 10 mm				
	(5 mm x 2) thick, 20 mm wide cross PVC				
	sheet be provided as gap insert for top rail				
	& bottom rail, paneling of 5 mm thick both				
	side PVC sheet to be fitted in the M.S.				
	frame welded/ sealed to the styles & rails				
	with 7 mm (5 mm+2 mm) thick x 15 mm				
	wide PVC sheet beading on inner side, and	20.16			
20		20.16	sqm		
29	Providing and laying vitrified floor tiles in				
	different sizes (thickness to be specified by				
	the manufacturer) with water absorption				
	less than 0.08% and conforming to				
	IS:15622, of approved make, in all colours				
	and shades, laid on 20mm 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., complete.				
	11.41A.3 Glazed Vitrified tiles				
	Matt/Antiskid finish of size				
		27.03	sqm		
	-			-	

30	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 : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	101.72	sam	
21	Providing and laving flowed finish Creation	101.72	sqm	 
31	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge : <b>11.55.1</b> Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.			
		6.09	sqm	
32	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : (two coats)	104.16	sqm	 
33	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : Kitchen sink with drain board <b>470x420 mm bowl depth 178 mm</b>	7	each	

34	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.				
		110.00	metre		
35	Providing and fixing Chlorinated				
	Polyvinyl Chloride (CPVC) pipes, having				
	thermal stability for hot & cold water				
	supply including all CPVC plain & brass				
	threaded fittings This includes jointing of				
	pipes & fittings with one step CPVC				
	solvent cement, trenching, refilling &				
	testing of jointscomplete as per direction of Engineer in Charge.				
	External work 100 mm nominal dia Pipes				
	<b>18.9.9</b>				
		30.00	metre		
	50 mm nominal dia Pipes	50.00	metre		
36	18.15 Providing and fixing brass bib cock				
	of approved quality :				
	<b>18.15.1</b> 15 mm nominal bore	25.00	each		
37	Providing and fixing C.P. brass shower rose	7	each		
38	Providing and fixing white vitreous china				
	pedestal type water closet (European type				
	W.C. pan) with seat and lid, 10 litre low				
	level white P.V.C. flushing cistern,				
	including flush pipe, with manually				
	controlled device (handle lever),				
	conforming to IS : 7231, with all fittings and fixtures complete, including cutting				
	and making good the walls and floors				
	wherever required				
		7	each		
				Total Part A=	

			l items for 2kV Depote	a GSS, AEGCL.	
Sl. No.	Description of Item	Qty	Unit	Rate	Amount
1	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.				
		7	each		
2	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.	1	each		
3	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. 63A	1	each		
4	Supplying with fitting and fixing sheet steel, phosphatised, powder painted Single door surface mounting 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.				
		1	each		
5	Supplying with fitting and fixing of electronic modular fan speed controller 2 - module type MODEL RANGE LEGRAND (MYRIUS), ANCHOR (VIOLA), MK (WRAPAROUND/ PLUS), ABB (CHEIRON), KOLORS (KREST), SCHNEIDER (VIVACE), CRABTREE including making necessary connection as per direction of department.				
		8	each		

Supply, installation & testing of G.I. earth station with perforated 50 mm dia and 3.00 Metre long heady duty G.I. pipe with necessary 50 mm dia. G.I. Fittings such as Socket, Tee, elbow, nipple and 65 mmx50 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	2	each	
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.			
	40	each	
Medium point up to 6.00 metre. Length.	22	each	

8	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.			
		14	each	
	Medium point up to 6.00 metre. Length.	8	each	
9	Wiring circuit wiring with 2x1.5 sq mm			
	P.V.C. insulated single core unsheathed			
	industrial (Multistrand) cable HFFR/ZHFR			
	conforming to IS-694: 1990 with flexible			
	bright annealed electrolytic copper			
	conductor for voltage grade up to 1100			
	volts (Finolex /RR Kabel /Nicco 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.			
		50		
		50	mtr	

SOLAR/ JAQUAR make. 10 each   11 Supplying including fitting fixing of following A.C. Ceiling fan complete with all accessories like down rod, canopy etc. I	
of following sweeps with making necessary connection as approved by the Deptt.)as required complete and as directed by the Department [Without regulator]. Standard model 900 mm Sweep Usha make	
7 each	
Total Part B=	
Total Part A + Part B=	