



इंजीनियरिंग प्रोजेक्ट्स (इंडिया) लि.
(भारत सरकार का उद्यम)
ENGINEERING PROJECTS (INDIA) LTD.
(A Government of India Enterprise)

AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

NIT No: SRO/CON/ETS/266 dated 29.11.2024

FOR

Tender for Renovation of Hotel Block, Dormitory, Kitchen and Dining and Providing Flush doors including Civil and Electrical Works for the establishment of ZTI, Anna Nagar & EPFO Nungampakkam in Chennai Region

VOLUME – III

Abstract with BOQ

ENGINEERING PROJECTS (INDIA) LIMITED
(A GOVT.OF INDIA ENTERPRISE)
Southern Regional Office, Chennai

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Percentage BoQ

Tender Inviting Authority: ENGINEERING PROJECTS (INDIA) LIMITED

Name of Work: Tender for Renovation of Hotel Block, Dormitory, Kitchen and Dining and Providing Flush doors including Civil and Electrical Works for the establishment of ZTI, Anna Nagar & EPFO Nungambakkam in Chennai Region

Contract No: SRO/CON/ETS/266 dtd 29.11.2024

Name of the Bidder/ Bidding Firm / Company :

PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

Sl. No.	Item Description	Quantity	Units	Estimated Rate Excluding GST in Rs. P	TOTAL AMOUNT Excluding GST in Rs. P	TOTAL AMOUNT In Words
1	Providing & fixing PVC Flush Door , Insect Mesh doors & windows @ ,E.P.F Quarters Nungambakkam, Chennai - 6000 34	1.00	Nos	15,56,190.00	1556190.00	INR Fifteen Lakh Fifty Six Thousand One Hundred Ninety & Paise Zero Only
2	HOSTEL BLOCK KITCHEN & DINING	1.00	Nos	7,65,849.00	765849.00	INR Seven Lakh Sixty Five Thousand Eight Hundred Forty Nine & Paise Zero Only
3	Modular Kitchen works @ TYPE - V Qtr # 2 & 3 , E.P.F Quarters Nungambakkam, Chennai - 6000 34	1.00	Nos	6,33,942.00	633942.00	INR Six Lakh Thirty Three Thousand Nine Hundred Forty Two & Paise Zero Only
4	HOSTEL TOILET BLCOK	1.00	Nos	16,36,070.00	1636070.00	INR Sixteen Lakh Thirty Six Thousand Seventy & Paise Zero Only
5	DORMITORY	1.00	Nos	26,21,510.00	2621510.00	INR Twenty Six Lakh Twenty One Thousand Five Hundred Ten & Paise Zero Only
Total in Figures					7213561.00	INR Seventy Two Lakh Thirteen Thousand Five Hundred Sixty One & Paise Zero Only
Quoted Rate in Figures			Select		0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				

Engineering Projects (India) Limited
(A GOVT. OF INDIA ENTERPRISE)

Nature of Work: Tender for Renovation of Hotel Block, Dormitory, Kitchen and Dining and Providing Flush doors including Civil and Electrical Works for the establishment of ZTI, Anna Nagar & EPFO Nungampakkam in Chennai Region

NIT No: SRO/CON/ETS/266

Establishment/ Work Head : Providing & fixing PVC Flush Door , Insect Mesh doors & windows @ ,E.P.F Quarters Nungambakkam, Chennai - 6000 34

Volume III - Bill of Quantity

Sl.no	Description	Unit	Total Qty	Rate in INR	Total in INR
DSR ITEMS					
PVC FLUSH DOORS - 32 Nos					
1	Providing & Fixing to existing door frames 30 mm thick factory made PVC door shutters made of styles and rails of a upvc hollow section of size 59 x 24mm and wall thickness 2 mmwith inbuilt edging on both sides . The styles and rails mitred and joint at all the corners by means of M.S galvanised / Plastic brackets of mszie 75x 220 mm having wall thickness 1.0 mm and stainless steell screws. The styles of shutter reinforced by inserting galvanised M.S tube of size 20 x 20 mm and 1 mm wall thickness . The loack rail made of H section , a UPVC hollow ssection of size 100*24 mm and 2 mm wall thickess , fixed to shutter stykes by means of plastic / galvanised M.S U sheets . The shutter frame filled with a UPVC multichannel single panel of size not less than 620 mm , having allover thickness oof 20 mm and 1 mm wall thickness . The panels filled vertically and the bar at the two places by inserting horizonatly 6 mm galvansied M.S Rod and fastened with nuts and washers , complete as per manufactures specification and direction of Engineer - in charge .	Sqm	54.40	3,253.80	1,77,006.72
2	Providing & fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete 100x58x1.9 mm	Each	96.00	107.10	10,281.60
3	Providing & Fixing aluminium Tower bolts , ISI marked , anadoised (anadonic coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour or shade , with necesaary screws etc .. Complete 100x 10 mm	Each	64.00	64.70	4,140.80
4	Providing & Fixing aluminium handles , ISI marked , anadoised (anadonic coating not less than grade AC 10 as per IS :1868) transparent or dyed to required colour or shade , with necesaary screws etc .. Complete 100x 10 mm	Each	64.00	66.25	4,240.00
5	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead : Of area 3 sq. metres and below	Each	32.00	143.50	4,592.00
SUB-TOTAL - A					2,00,261
NON DSR ITEMS					
INSECT MESH FOR WINDOWS/ DOORS/SITOUT AREA					
WINDOWS					
6	Providing, fixing in position powder coated Aluminium Section 20 mm (Z, angles, tees, flats,etc.) Window Shutter with frame and aluminium beading complete with all necessary fittings and hardware, hinges, complete including fixing Netlon/SS 304 Grade Mosquito Net fixed to existing windows using suitable framing as directed at site including making suitable cutouts for operation and locking of window pans. as per sample approved and as directed at site.	Sqm	480.27	2,177.00	10,45,547.79
MAIN DOOR					
7	Providing, fixing in position powder coated Aluminium Section 40 mm (Z, angles, tees, flats,etc.) Door Shutter with frame and aluminium beading complete with all necessary fittings and hardware, hinges, complete including fixing Netlon/SS 304 Grade Mosquito Net fixed to existing Door using suitable framing as directed at site including making suitable cutouts for operation and locking of Door pans. as per sample approved and as directed at site.	Sqm	86.82	3,175.00	2,75,653.50
BALCONY AREA/ SITOUT AREA					
8	Providing, fixing in position powder coated Aluminium Section 40 mm (Z, angles, tees, flats,etc.) Fixed frame and aluminium beading complete with all necessary fittings and hardware, hinges, complete including fixing Netlon/SS 304 Grade Mosquito Net fixed to existing balcony opening using suitable framing including making suitable cutouts as directed at site as per sample approved and as directed at site.	Sqm	8.80	3,175.00	27,940.00

	SUB-TOTAL - B				13,49,141
	DSR SUB TOTAL - A				2,00,261
	NON - DSR SUB TOTAL - B				13,49,141
	Add Cost Index @ 22% on A				44,057
	Add GST @ 18% on B				2,42,845
	TOTAL C				18,36,304
	Total csot exlcuding GST				15,56,190.00

**Engineering Projects (India) Limited
(A GOVT. OF INDIA ENTERPRISE)**

Nature of Work: Tender for Renovation of Hotel Block, Dormitory, Kitchen and Dining and Providing Flush doors including Civil and Electrical Works for the establishment of ZTI, Anna Nagar & EPFO Nungampakkam in Chennai Region

NIT No: SRO/CON/ETS/266

Establishment/ Work Head : RENOVATION OF EPFO OFFICE ANNA NAGAR @ CHENNAI, HOSTEL BLOCK KITCHEN & DINING

Volume III - Bill of Quantity

S.No	Code No	Description	Quantity	Unit	Rate	Amount
		CLADDING WORK				
1	8.2.2.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite stone slab colour black, Cherry/Ruby red. Area of slab upto 0.50 sqm	12.000	Sq.m	4679.35	56,153.00
2	8.31	Providing and fixing 1st 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.	74.000	Sq.m	1063.45	78,696.00
		Total for Cladding Work				1,34,849.00
		FLOORING				
3	11.38	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m including pointing the joints with white cement and matching pigments etc. complete.	10.000	Sq.m	1311.05	13,111.00
4	11.41.2	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. Size of Tile 600x600 mm	175.000	Sq.m	1107.05	1,93,734.00
5	11.46.2	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	4.000	Sq.m	1466.50	5,866.00
		Total for Flooing Work				2,12,711.00
		FINISHING				
6	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	188.000	Sqm	214.30	40,289.00
7	13.43.1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	190.000	Sqm	64.65	12,284.00

8	13.60.1	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade : Two or more coats on new work	664.000	Sqm	137.85	91,533.00
		Total for Finishing Work				1,44,106.00
		DISMANTLING				
9	15.7.4	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. In cement mortar	5.000	Cum	1698.45	8,493.00
10	15.23.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	184.000	Sqm	60.50	11,132.00
	15.6	Disposal of Building Rubbish	32.000	Cum	219.35	7,020.00
		Total for Dismantling Work				26,645.00
		Sanitary Installations				
11	17.3	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 :				
	17.3.1	W.C. pan with ISI marked white solid plastic seat and lid	1.000	Nos	6941.30	6,942.00
12	17.7	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:				
13	17.7.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	4.000	Each	3392.85	13,572.00
14	17.10	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 :				
	17.10.1.2	510x1040 mm bowl depth 225 mm.	2.000	Each	6677.40	13,355.00
15	17.32	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 :				
	17.32.1	Circular shape 450 mm dia.	1.000	Each	1248.60	1,249.00
16	17.34	Providing and fixing toilet paper holder :				
	17.34.1	C.P. brass	1.000	Each	680.80	681.00
17	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms	1.000	Each	146.30	147.00
18	17.73	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.				
	17.73.2	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	1.000	Each	600.35	601.00
		Total for Sanitary Installations				36,547.00

		Water Supply				
19	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. .Concealed work, including cutting chases and making good the walls etc.				
	18.8.2	20 mm nominal outer dia .Pipes.	25.000	meter	513.75	12,844.00
20	18.9	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 joints complete as per direction of Engineer in Charge : External work				
	18.9.4	32 mm nominal outer dia. Pipes.	30.000	meter	435.05	13,052.00
21	18.15	Providing and fixing brass bib cock of approved quality :				
	18.15.2	20 mm nominal bore	5.000	No.	327.95	1,640.00
22	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	18.17.2	32 mm nominal bore.	1.000	Each	589.90	590.00
23	18.58	Providing and fixing PTMT grating of approved quality and colour.				
	18.58.1	Circular type.				
	18.58.1.1	100 mm nominal dia.	5.00	Each	33.20	166.00
		Total for Water Supply Works				28,292.00
		Drainage				
24	19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
	19.4.1	100x100 mm size P type				
	19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	Each	2453.55	2,454.00
25	19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.00	No.	11687.10	23,375.00
		Total for Drainage				25,829.00
		New Technologies and Materials				
26	26.86	Providing and fixing factory made single extruded WPC (Wood (M.S hold fast/ lugs or SS dash fasteners shall be paid for				
	26.86.5	Frame size 65 x 100 mm	66.00	Metre	1000.15	66,010.00
27	26.88	Providing and fixing factory made single extruded WPC (Wood				
	26.88.2	35 mm thick	20.00	Sqm	4929.80	98,596.00
		Total For New technologies and Materials				164606.00
		Total				7,73,585.00
		Add cost Index (125 - 107)/107x100 on DSR items. =16.82%				1,30,117.00
		Grand total				9,03,702.00
		Total csot exlcuding GST				7,65,849.00

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Nature of Work: Tender for Renovation of Hotel Block, Dormitory, Kitchen and Dining and Providing Flush doors including Civil and Electrical Works for the establishment of ZTI, Anna Nagar & EPFO Nungampakkam in Chennai Region						
NIT No: SRO/CON/ETS/266						
Establishment/ Work Head : Modular Kitchen works @ TYPE - V Qtr # 2 & 3 , E.P.F Quarters Nungambakkam, Chennai - 6000 34						
Volume III - Bill of Quantity						
Sl.no	DSR 2023 Item No	Description	Unit	Qty	Rate in INR	Amount in INR
DSR ITEMS						
Side Panelling & frame work						
1	9.169	Providing and fixing 19mm thick both side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brand boxes,shelves,racks,almirah,cupboard and drawer etc. including necessary nails,screws etc. complete as per direction of Engineer-in charge	Sqm	113.00	2,593.15	2,93,025.95
Cupboard Shutter						
2	9.168	Providing and fixing cupboard shutter with 19mm thick one side decorative and other side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brand including 2mm thick PVC edge banding tape with hot glue by edge bending machine etc. with auto closing spring loaded hinges (hydraulic type) etc. complete as per direction of Engineer-in- charge.(Payment of providing and fixing auto closing hinges shall be paid separately)	Sqm	28.30	2,829.25	80,067.78
Edge Binding						
3	9.174	Providing and fixing 2mm thick 16 to 19mm wide PVC edge binding tape of approved quality for cupboard/wardrobe shutters including necessary synthetic resin hot pressed to edges on binding machine etc. complete as per directions of Engineer- in-charge.	Meter	596.00	38.45	22,916.20
4	0384	Brass butt hinges (heavy type) :75x65x4.0 mm (weighing not less than 0.20 kg)	10 Nos	2.00	838.00	1,676.00
5	9.172	Providing and fixing stainless steel soft closing heavy type telescopic drawer channels of approved make 500 mm long with screws etc. complete as per directions of Engineer- in-charge.	One Set	14.00	749.70	10,495.80
6	9.171	Providing and fixing stainless steel soft closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge	Each	140.00	226.75	31,745.00
7	9.114	Providing and fixing magnetic catcher of approved quality in cupboard / wardrobe shutters, including fixing with necessary screws etc. complete.				
	9.114.2	Double strip vertical type	Each	8.00	34.15	273.20
8	9.81	Providing and fixing bright finished brass handles with screws etc. complete:				
	9.81.2	125 mm	Each	30.00	205.10	6,153.00
9	8.31	Providing and fixing 1st 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 coares sand) and jointing with grey cements slurry @3.3kg per sqm , including pointing in white cement mixed pigment of matching shade complete.	Sqm	3.75	1,267.95	4,754.81
10	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. complete as per the direction of Engineer- in Charge				
	8.2.2	Granite stone slab colour black, Cherry/Ruby red				
	8.2.2.2	Area of slab over 0.5 sqm	Sqm	4.50	4,425.35	19,914.08
11	11.24	Extra for pre finished nosing to treads of steps of marble stone	rmt	6.50	593.50	3,857.75
DISMANTLING						
12	15.12	Dismantling doors , windows and clerestory windows (Steel or wood) shutter including Chowkaths , architrave, hold fasts etc complete and stacking with 50 meters lead				
	15.12.1	of Area 3 sqm and below	each	5.00	367.20	1,836.00
13	15.3	Demolishing RCC Work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meters lead as per direction of engineer in charge	Cum		3,551.25	-
14	15.4	Dismantling precast concrete or stone slabs in walls, partition walls etc including stacking within 50 meters lead complete as per Engineer- in Charge				
	15.40.1	Thickness upto 40 mm	sqm	4.50	289.30	1,301.85
15	15.39	Dismantling wooden boarding in linen of walls and partitions excluding support members but including stacking within 50 meters lead	sqm	21.00	61.00	1,281.00
16	13.3	Repair to plaster of thickness 20mm in patches of area 2.5 sqm and under , including cutting the patch in proper shape , raking out joints and preparing plastering the wall surface with white cement ,including disposal of rubbish, all complete as per the direction of Engineer-in -Charge.	Sqm	7.93	471.35	3,737.81
SUB-TOTAL - A						4,83,036.23
NON DSR ITEMS						
17	MR	Providing and fixing stainless steel soft closing spring hinges at 180 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per	Nos	12.00	963.00	11,556.00

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NIT No: SRO/CON/ETS/266

Establishment/ Work Head : HOSTEL TOILET BLCOK- RENOVATION OF EPFO OFFICE ANNA NAGAR @ CHENNAI

Volume III - Bill of Quantity

S.No	Code No	Description	Quantity	Unit	Rate	Amount
		EARTH WORK				
1	2.8.1	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 on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil	86.000	Cum	286.85	24,670.00
2	2.25	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.	62.000	Cum	253.95	15,745.00
3	2.10.1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	25.000	Metre	417.35	10,434.00
		Total for Earth Work				50,849.00
		CEMENT CONCRETE WORK				
4	4.1.8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	5.000	Cum	6326.05	31,631.00
		Total for Cement concrete Work				31,631.00
		REINFORCED CEMENT CONCRETE WORK				
5	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for. Foundations, footings, bases of columns, etc. for mass concrete	20.000	Sqm	307.95	6,159.00
6	5.9.3	Centering and shuttering including strutting, propping etc. and removal of form for. Suspended floors, roofs, landings, balconies and access platform	22.000	Sqm	766.55	16,865.00
7	5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for Lintels, beams, plinth beams, girders, bressumers and cantilevers	52.000	Sqm	608.35	31,635.00
8	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for Columns, Pillars, Piers, Abutments, Posts and Struts	38.000	Sqm	804.25	30,562.00
9	5.22A.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	4000.000	Kg	89.65	3,58,600.00

10	5.33.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.	15.000	Cum	7997.30	1,19,960.00
		Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement. All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum				
11	5.33.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.	8.000	Cum	10080.15	80,642.00
		Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement				
		All works above plinth level upto floor V level. Concrete of M25 grade with minimum cement content of 330 kg /cum				
		Total for Reinforcement Cement concrete Work				6,44,423.00
		MASONRY WORK				
12	6.1.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	2.000	Cum	6658.25	13,317.00
13	6.4.2	Brick work 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 in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	6.000	Cum	8288.35	49,731.00
14	6.13.2	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)	24.000	Sq.m	1018.05	24,434.00
15	6.15	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	24.000	Sq.m	86.45	2,075.00
		Total for Masonry Work				89,557.00
		CLADDING WORK				
16	8.2.2.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite stone slab colour black, Cherry/Ruby red. Area of slab upto 0.50 sqm	1.000	Sq.m	4679.35	4,680.00
17	8.31	Providing and fixing 1st 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.	78.000	Sq.m	1063.45	82,950.00
		Total for Cladding Work				87,630.00
		WOOD AND P.V.C. WORK				
18	9.63.2	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete : 200x10 mm	12.000	Each	61.05	733.00

19	9.66.1	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete : 125 mm	12.000	Each	35.20	423.00
20	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	2.000	Each	1025.65	2,052.00
21	9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	2.000	Each	817.50	1,635.00
Total for Wood & PVC Work						4,843.00
FLOORING						
22	11.38	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	20.000	Sq.m	1311.05	26,221.00
Total for Flooring Work						26,221.00
ROOFING						
23	12.2	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	24.000	Sq.m	620.00	14,880.00
24	12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	2.000	Each	266.60	534.00
25	12.41.2	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter	15.000	Metre	319.75	4,797.00
Total for Roofing Work						20,211.00
FINISHING						
26	13.1.2	12 mm cement plaster of mix : 6 (1 cement: 6 fine sand)	104.000	Sqm	282.00	29,328.00
27	13.3.2	20 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	50.000	Sqm	382.10	19,105.00
28	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to <u>prepare the surface even and smooth complete.</u>	104.000	Sqm	214.30	22,288.00
29	13.43.1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	104.000	Sqm	64.65	6,724.00
30	13.60.1	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade : Two or more coats on new work	104.000	Sqm	137.85	14,337.00
31	13.46.1	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)	50.000	Sqm	166.85	8,343.00
Total for Finishing Work						1,00,125.00
DISMANTLING						

32	15.7.4	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. In cement mortar	5.000	Cum	1698.45	8,493.00
33	15.12.2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area beyond 3 sq. metres	2.000	Each	414.55	830.00
34	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	2.000	Cum	2928.10	5,857.00
35	15.3	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	22.000	Sqm	60.50	1,331.00
36	15.48	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge	4.000	Each	576.25	2,305.00
37	15.6	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	10.000	Cum	2928.10	29,281.00
38	Non.DSR	Dismantling of Rain water chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead including refilling the excavated gap.	1.000	Each	1750.00	1,750.00
		Total for Dismantling Work				49,847.00
		NEW TECHNOLOGIES AND MATERIALS				
39	26.86.5	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid door/window/Ceostory windows & other Frames/Chowkhat comprising of virgin PVC polymer of K value 58- 60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 750 kg/ cum, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm ² , modulus of elasticity 900 N/mm ² and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixed in position with M.S hold fast/lugs/SS dash fasteners of required dia and length complete as per direction of Engineer-In- Charge. (M.S hold fast/lugs or SS dash fasteners shall be paid for separately).	32.000	metre	1000.15	32,005.00
		Note: For WPC solid door/window frames, minus 5mm tolerance in dimensions i.e depth and width of profile shall be acceptable. Variation in profile dimensions on plus side shall be acceptable but no extra payment on this account shall be made. Frame size 65 x 100 mm				
40	26.88.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid decorative type flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/ cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm ² , modulus of elasticity 850 N/mm ² and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant. WPC to be laminated with PVC foil of minimum 14 microns thick of approved design pasted with hot melt adhesive on both faces of shutter and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-In- Charge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately) 35 mm thick	12.000	Sq.m	4929.80	59,158.00
41	Non.DSR	-do - Same as above Window / Ventilator shutter - 30mm thickness	5.000	Sq.m	4350.00	21,750.00
		Total for New Technologies and Material Work				1,12,913.00
		SANITARY INSTALLATIONS				

42	17.1.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 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.	1.000	Each	5781.35	5,782.00
43	17.3.1	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	3.000	Each	6941.30	20,824.00
44	17.7.1	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	4.000	Each	3392.85	13,572.00
45	17.32.1	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 : Circular shape 450 mm dia	4.000	Each	1248.60	4,995.00
46	17.34.1	Providing and fixing toilet paper holder : C.P. brass	4.000	Each	680.80	2,724.00
47	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	4.000	Each	146.30	586.00
48	17.73.2	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. 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm. weighing not less than 190 gms.	4.000	Each	600.35	2,402.00
49	17.28.1.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Semi rigid pipe 40 mm dia	25.000	metre	101.65	2,542.00
50	Non.DSR	Providing and fixing soil, waste and vent pipes of unplasticised Rigid PVC Single socketed pipes & required fittings and specials conforming to IS : 13592 Type B including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion complete as per direction of Engineer -in-Charge. (Note: 1. All the joints shall be leak proof .2. The centre line length of pipes shall be measured for the purpose of payment. 3.Floor trap and terminal guard only shall be measured separately for payment)				
50.1	Non.DSR	75 mm diameter - Vent Pipes	8.000	Metre	450.00	3,600.00
50.2	Non.DSR	110 mm diameter - Soil waste Pipes	15.000	Metre	650.00	9,750.00
51	Non.DSR	Providing and fixing unplasticised Rigid PVC floor trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
51.1	Non.DSR	100 mm dia	6.000	Each	1150.00	6,900.00
52	Non.DSR	Supplying and fixing of CP Health Faucet and necessary wall hook including all accessories etc. complete.	4.000	Each	4650.00	18,600.00
		Total for Sanitary Installation Work				92,277.00
		WATER SUPPLY				
53	18.8.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the= walls etc. 20 mm nominal dia Pipes	25.000	metre	513.75	12,844.00
54	18.9.4	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 joints complete as per direction of Engineer in Charge. 32 mm nominal dia Pipes	25.000	metre	435.05	10,877.00

55	18.15.2	Providing and fixing brass bib cock of approved quality : 20 mm nominal bore	8.000	Each	327.95	2,624.00
56	18.16.2	Providing and fixing brass stop cock of approved quality : 20 mm nominal bore	8.000	Each	327.95	2,624.00
57	18.17.2	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 32 mm nominal bore.	2.000	Each	589.90	1,180.00
58	18.53.1	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15mm nominal bore	4.000	Each	500.35	2,002.00
59	18.58.1.1	Providing and fixing PTMT grating of approved quality and colour. Circular type 100 mm nominal dia	8.000	Each	33.20	266.00
		Total for Water supply Work				32,417.00
		DRAINAGE				
60	19.1.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 100 mm diameter	20.000	metre	375.75	7,515.00
61	19.4.1.1	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.000	Each	2453.55	4,908.00
62	19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.000	Each	11687.10	11,688.00
63	19.21.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete : For pipes 100 to 250 mm diameter	2.000	Each	683.70	1,368.00
		Total for Drianage Work				25,479.00
		PILE WORK				
63	20.3.2	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) : 400 mm dia piles	45.000	metre	3178.00	1,43,010.00
64	20.4.2	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter(only the nos. of extra bulbs are to be paid) 400 mm dia piles	24.000	Each	2433.80	58,412.00
		Total for Pile Work				2,01,422.00
		WATER PROOFING				
65	22.7.1	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.	24.000	Sqm	1522.95	36,551.00

		b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
		c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.				
		d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
		e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test."All above operations to be done in order and as directed and specified by the Engineer-in-Charge : With average thickness of 120 mm and minimum thickness at khurra as 65 mm.				
		Total for Waterproofing Work				36,551.00
		ELECTRICAL - SUPPLYING DND INSTALLATION WORK				
66	Non.DSR	Coniser General lighting arrangement, wall chasing, Internal wiring Including Light fittings and fan etc,	22.000	Sqm	2100.00	46,200.00
		Total for Electrical installation Work				46,200.00
		Sub total				16,52,596.00
		Add cost Index (125 - 107)/107x100 on DSR items. =16.82%				2,77,967.00
		Grand total				19,30,563.00
		Grand total excluding GST				16,36,070.00

**Engineering Projects (India) Limited
(A GOVT. OF INDIA ENTERPRISE)**

Nature of Work: Tender for Renovation of Hotel Block, Dormitory, Kitchen and Dining and Providing Flush doors including Civil and Electrical Works for the establishment of ZTI, Anna Nagar & EPFO Nungampakkam in Chennai Region

NIT No: SRO/CON/ETS/266

Establishment/ Work Head : DORMITORY- RENOVATION OF EPFO OFFICE ANNA NAGAR @ CHENNAI

Volume III - Bill of Quantity

S.No	Code No	Description	Quantity	Unit	Rate	Amount
		EARTH WORK				
1	2.8.1	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 on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil	108.000	Cum	286.85	30,980.00
2	2.25	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.	85.000	Cum	253.95	21,586.00
3	2.10.1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	25.000	Metre	417.35	10,434.00
		Total for Earth Work				63,000.00
		CEMRNT CONCRETE WORK				
4	4.1.8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	6.000	Cum	6326.05	37,957.00
		Total for Cement concrete Work				37,957.00
		REINFORCED CEMENT CONCRETE WORK				
5	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for. Foundations, footings, bases of columns, etc. for mass concrete	22.000	Sqm	307.95	6,775.00
6	5.9.3	Centering and shuttering including strutting, propping etc. and removal of form for. Suspended floors, roofs, landings, balconies and access platform	25.000	Sqm	766.55	19,164.00
7	5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for Lintels, beams, plinth beams, girders, bressumers and cantilevers	56.000	Sqm	608.35	34,068.00
8	5.22A.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	4100.000	Kg	89.65	3,67,565.00

9	5.33.1.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.	18.000	Cum	7997.30	1,43,952.00
		Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement				
		All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum				
10	5.33.2.1	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete.	10.000	Cum	10080.15	1,00,802.00
		Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 110% of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement				
		All works above plinth level upto floor V level. Concrete of M25 grade with minimum cement content of 330 kg /cum				
		Total for Reinforcement Cement concrete Work				6,72,326.00
		MASONRY WORK				
11	6.1.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	5.000	Cum	6658.25	33,292.00
12	6.4.2	Brick work 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 in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	15.000	Cum	8288.35	1,24,326.00
		Total for Masonry Work				1,57,618.00
		CLADDING WORK				
13	8.31	Providing and fixing 1st 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.	62.000	Sq.m	1063.45	65,934.00
		Total for Cladding Work				65,934.00
		WOOD AND P.V.C. WORK				
14	9.63.2	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete : 200x10 mm	42.000	Each	61.05	2,565.00
15	9.66.1	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete : 125 mm	42.000	Each	35.20	1,479.00

16	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	10.000	Each	1025.65	10,257.00
17	9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	9.000	Each	817.50	7,358.00
18	9.147B.1	Providing and fixing factory made uPVC white colour fixed glazed windows/ventilators comprising of uPVC multi-chambered frame and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately). Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.	4.000	Sqm	7249.90	29,000.00
		Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Fixed window / ventilator made of (small series) frame 47 x 50 mm & mullion 47 x 68 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area upto 0.75 sqm.)				
		Total for Wood & PVC Work				50,659.00
		FLOORING				
19	11.38	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	16.000	Sq.m	1311.05	20,977.00
20	11.41.2	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. Size of Tile 600x600 mm	95.000	Sq.m	1107.05	1,05,170.00
21	11.46.2	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps , over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	10.000	Sq.m	1466.50	14,665.00
		Total for Flooring Work				1,40,812.00
		ROOFING				

22	12.2	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	115.000	Sq.m	620.00	71,300.00
23	12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	2.000	Each	266.60	534.00
24	12.41.2	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 mm diameter	15.000	Metre	319.75	4,797.00
		Total for Roofing Work				76,631.00
		FINISHING				
25	13.1.2	12 mm cement plaster of mix : 6 (1 cement: 6 fine sand)	50.000	Sqm	282.00	14,100.00
26	13.3.2	20 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	72.000	Sqm	382.10	27,512.00
27	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	50.000	Sqm	214.30	10,715.00
28	13.43.1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	50.000	Sqm	64.65	3,233.00
29	13.60.1	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade : Two or more coats on new work	50.000	Sqm	137.85	6,893.00
30	13.46.1	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)	72.000	Sqm	166.85	12,014.00
		Total for Finishing Work				74,467.00
		DISMANTLING				
31	15.7.4	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. In cement mortar	5.000	Cum	1698.45	8,493.00
32	15.12.2	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area beyond 3 sq. metres	42.000	Sqm	414.55	17,412.00
33	15.23.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	95.000	Sqm	60.50	5,748.00
34	15.6	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved	25.000	Cum	219.35	5,484.00
		Total for Dismantling Work				37,137.00

SANITARY INSTALLATIONS						
35	17.3.1	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	4.000	Each	6941.30	27,766.00
36	17.7.1	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	4.000	Each	3392.85	13,572.00
37	17.22.B	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge. 15 mm nominal dia	4.000	Each	6119.15	24,477.00
38	17.32.1	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 : Circular shape 450 mm dia	4.000	Each	1248.60	4,995.00
39	17.34.1	Providing and fixing toilet paper holder : C.P. brass	4.000	Each	680.80	2,724.00
40	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.				
41	17.73.2	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. 600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	4.000	Each	600.35	2,402.00
42	Non.DSR	Providing and fixing soil, waste and vent pipes of unplasticised Rigid PVC Single socketed pipes & required fittings and specials conforming to IS : 13592 Type B including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion complete as per direction of Engineer -in-Charge. (Note: 1. All the joints shall be leak proof .2. The centre line length of pipes shall be measured for the purpose of payment. 3.Floor trap and terminal guard only shall be measured separately for payment)				
42.1	Non.DSR	75 mm diameter - Vent Pipes	10.000	Metre	450.00	4,500.00
42.2	Non.DSR	110 mm diameter - Soil waste Pipes	20.000	Metre	650.00	13,000.00
43	Non.DSR	Providing and fixing unplasticised Rigid PVC floor trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
43.1	Non.DSR	100 mm dia	4.000	Each	1150.00	4,600.00
44	Non.DSR	Supplying and fixing of CP Health Faucet and necessary wall hook including all accessoriseetc.complete.	4.000	Each	4650.00	18,600.00
Total for Sanitary Installation Work						1,16,636.00
WATER SUPPLY						
45	18.8.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the= walls etc. 20 mm nominal dia Pipes	50.000	metre	513.75	25,688.00

46	18.9.4	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 joints complete as per direction of Engineer in Charge. 32 mm nominal dia Pipes	60.000	metre	435.05	26,103.00
47	18.15.2	Providing and fixing brass bib cock of approved quality : 20 mm nominal bore	8.000	Each	327.95	2,624.00
48	18.16.2	Providing and fixing brass stop cock of approved quality : 20 mm nominal bore	8.000	Each	327.95	2,624.00
49	18.17.2	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 32 mm nominal bore.	2.000	Each	589.90	1,180.00
50	18.22.2	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet : 150 mm diameter	4.000	Each	190.10	761.00
51	18.53.1	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15mm nominal bore	16.000	Each	500.35	8,006.00
51	18.58.1.1	Providing and fixing PTMT grating of approved quality and colour. Circular type 100 mm nominal dia	4.000	Each	33.20	133.00
Total for Water supply Work						67,119.00
DRAINAGE						
52	19.1.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 100 mm diameter	15.000	Metre	375.75	5,637.00
53	19.4.1.1	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.000	Each	2453.55	4,908.00
54	19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2.000	Each	11687.10	23,375.00
Total for Drianage Work						33,920.00
PILE WORK						
55	20.3.2	Boring with hydraulic piling rigs with power units, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in M-25 cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) : 400 mm dia piles	45.000	metre	3178.00	1,43,010.00
56	20.4.2	Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter(only the nos. of extra bulbs are to be paid) 400 mm dia piles	24.000	Each	2433.80	58,412.00
Total for Pile Work						2,01,422.00

		WATER PROOFING				
57	22.7.1	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:	24.000	Sqm	1522.95	36,551.00
		a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
		b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
		c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.				
		d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
		e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test."All above operations to be done in order and as directed and specified by the Engineer-in-Charge : With average thickness of 120 mm and minimum thickness at khurra as 65 mm.				
		Total for Waterproofing Work				36,551.00
		NEW TECHNOLOGIES AND MATERIALS				
58	26.86.5	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid door/window/Ceosetory windows & other Frames/Chowkhat comprising of virgin PVC polymer of K value 58- 60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 750 kg/ cum, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm ² , modulus of elasticity 900 N/mm ² and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixed in position with M.S hold fast/lugs/SS dash fasteners of required dia and length complete as per direction of	48.000	metre	1000.15	48,008.00
		Note: For WPC solid door/window frames, minus 5mm tolerance in dimensions i.e depth and width of profile shall be acceptable. Variation in profile dimensions on plus side shall be acceptable but no extra payment on this account shall be made. Frame size 65 x 100 mm				
59	26.88.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid decorative type flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/ cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm ² , modulus of elasticity 850 N/mm ² and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant. WPC to be laminated with PVC foil of minimum 14 microns thick of approved design pasted with hot melt adhesive on both faces of shutter and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-In- Charge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately) 35 mm thick	20.000	Sq.m	4929.80	98,596.00

60	Non.DSR	-do - Same as above Window / Ventilator shutter - 30mm thickness	32.000	Sq.m	4350.00	1,39,200.00
		Total for New Technologies and Material Work				2,85,804.00
		FURNITURE				
61	Non.DSR	Storage: Supplying and fixing storage made of 19mm thick MR Ply with laminate box and edges to be finished with edge banding tape, shutters made of 19mm thick ply with 1mm thick laminate finish, shutters edges to be finished with PVC edgeband etc. done as per drawing , all necessary hardware, handle, etc included in this cost. Storage top to be finished laminate - Tall Storage Unit	20.000	Sqm	13336.00	2,66,720.00
		Total for Furniture Work				2,66,720.00
		ELECTRICAL - SUPPLYING DND INSTALLATION WORK				
62	Non.DSR	Coniser General lighting arrangement, wall chasing, Internal wiring Including Light fittings and fan etc.	125.370	Sqm	2100.00	2,63,277.00
		Total for Electrical installation Work				2,63,277.00
		Sub total				26,47,990.00
		Add cost Index (125 - 107)/107x100 on DSR items. =16.82%				4,45,392.00
		Grand total				30,93,382.00
		Grand total Exlcuding GST				26,21,510.00