	Construction of Vertical Extension of Kandrapara Description of works SUBHEAD - I REPAIRS TO BUILDING	Unit		1 1	
1		June	Qty	Rate in Figures	Total Amount
•			Qty	itate in rigures	
	Drilling Upto and including 12mm dia holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100mm upto 200mm in RCC beams, lintels, columns and slabs to introduce steel bars for sunshades/balconies including fixing the steel bars in position using epoxy resin anchor grout of approved make but excluding the cost of reinforcement, all complete as per direction of Engineer-In-Charge	each	12.00		
	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect. Epoxy bonding adhesive having coverage 2.20 sqm/kg of approved make	sqft	6.00		
4	SUBHEAD - II EARTH WORK AND EXCAVATION				
5	UNDERGROUND RAIN WATER HARVESTING TANK				
	Earth work in <b>All kinds of soil</b> excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge	cum	36.72		
7	Earth work <b>if found ordinary rock to be removed</b> in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge	cum	12.24		
8	SUBHEAD- III PLAIN AND REINFORCED CEMENT CONCRETE WORK.	$\mid$		<u>_</u>	
9	1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	CUM	2.00		
10	Providing and laying in <b>position ready mixed or site batched design mix cement concrete for reinforced</b> <b>cement concrete work</b> ; 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 including the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. 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.: <b>Make - Sail, Tata steel, Vizag steel.</b>				
	All works upto plinth level				
12	M25 Design mix Concrete of M25 grade with minimum cement content of 330 kg /cum				
13	Concrete of M25 grade with minimum cement content of 330 kg /cum	CUM	3.00		
14	All works above plinth level upto floor v level				
15	Concrete of M25 grade with minimum cement content of 330 kg /cum	cum	15.00		
16	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete for all RCC Work <b>Below &amp; Above Plinth Level.</b> Thermo-Mechanically Treated bars of grade Fe-500D or more. <b>Make - Sail, Tata steel, Vizag steel.</b>	Kg	2,130.00		
17	SUBHEAD - IV BRICK MASONRY WORK .				
	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)	СЛМ	10.00		
20	Providing brick work with non modular fly ash bricks conforming to IS:12894,class designation 10 average compressive strength in super structure above plinth level upto floor V level in: Cement Mortar 1:6 ( 1 cement : 6 coarse sand )	Cum	20.00		
21	SUBHEAD - V : PLASTERING AND SURFACE TREATMENT				
22	Providing of 6mm cement plaster of mix in all surface with <b>cement mortar 1:3</b> (1 cement : 3 fine sand / M-Sand ) at all levels. <b>Make -: Ultra tech</b> <b>Cement, ambuja, Dalmia Cements, ACC Cement</b>	Sqm	68.00		
23	Providing of 12 mm cement plaster of mix in all surface with cement mortar 1:6 (1 cement : 6 fine sand / M-Sand ) at all levels. Dalmia Cements, ACC Cement. Make - Ultra tech Cement, ambuja,	Sqm	139.00		
24	15 mm cement plaster on the rough side of single or half brick wall.1:6(1 cement:6 coarse sand) Make - Ultra tech Cement, ambuja, Dalmia Cements, ACC Cement.	Sqm	60.00		

SI. No.	Description of works	Unit	Qty	Rate in Figures	Total Amount
25	12 mm cement plaster finished with a floating coat of neat cement of mix : 1:4 (1 cement: 4 fine sand)	Sqm	63.00		
26	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	SQM	735.00		
	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete. Make : - Asian Paints, Biral.	SQM	218.00		
28	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.13.85.3 With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	SQM	218.00		
29	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.Two coats	SQM	218.00		
	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) Make : - Asian Paints, Berger paints, nerolac paints	SQM	835.00		
32	SUBHEAD - VI : FLOORING Providing and laying Vitrified tiles in floor in size of Tile 600X600 mm (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. Double charge vitrified tile polished . make - kajaria , rak ceramics,Johnson , NITCO, SOMANY	Sqm	70.00		
	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. Double charge vitrified tile polished finish of any size. make - kajaria , rak ceramicsJohnson , NITCO, SOMANY	Sqm	8.00		
	SUBHEAD -VII : DOOR WINDOW & WOOD WORK				
35	Providing and fixing factory made uPVC glazed/wire mesh windows/doors comprising of lead free uPVC multi- chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for series R3 and R4 profiles conforming to EN: 12608 in any space, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWDspecification, uPVC exturded glazing beads, interlocks and Inline sash adaptor (there ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade sleeve for fixing frame to finished wall as per IS 1367 : part 1 to 14, plastic packers, plastic caps and necessary stainless steel screws etc. profile of frame, sash & mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. after fixing frame the gap between frame and adjacengt finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in Charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer - in -Charge. The Price is including toughen glass panels of 5.5 mm thickness .Note:- Structural design proof checked from a Government Engineering Institute, to provided by the manufacturer for (i) Sites with basic wind speed >45 m/sec as per IS 875 - Part 3(ii)Sites with structure height more than 20m for all wind speeds. Two track two panels sliding window with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body. Using R2 series with frame (40 mm & above) x (40 mm & above) & sash (25 mm & above) x (50 mm & above) with zinc alloy (zamak) powder coated touch locks with hoo	sqm	7.00		
36	Providing and fixing panelling or paneling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows ( area of opening for panel inserts excluding portion inside grooves or rebated to be measured). Panelling for panelled and glazed shutters 25mm to 40mm thick: Pre-laminated with decorative lamination on both side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587	SQM	3.00		
37	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	Each	1.00		

SI. No.	Description of works	Unit	Qty	Rate in Figures	Total Amount
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):With float glass panels of 5.0 mm thickness.	SQM	7.00		
39	SUBHEAD -VIII : STEEL WORK				
40	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to openings /wooden frames with rawl plugs screws etc.	Kg	93.00		
41	SUBHEAD - IX : ROOFING & WATER PROOFING				
42	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. a) 110 mm diameter	Metre	12.00		
43	Demolishing cement concrete nominal concrete 1:3:6 or richer mix (i/c equivalent design mix) manually/ by mechanical means including cleaning the surface after dismantaling & disposal of garbage material at suitable place as within the site per direction of Engineer - in - charge.	СЛМ	20.92		
44	Grading roof for water proofing treatment with Cement Concrete 1:2:4 (1 Cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	СЛМ	24.17		
45	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer- in-Charge	Sqm	696.90		
46	SUBHEAD - X : INTERNAL ELECTRIFICATION				
47	<b>LIGHT POINTS</b> Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
48	Group - C	Point	8		
49	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point ( without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
50	Group - C	Point	2		
51	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		2		
52	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	Each.	2		
53	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).		2		
54	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	2		
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
56	20 mm 25 mm	Metre	50		
57 58	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)	Metre	20		
59	4 way (4 + 12), Double door	Each	3		
60	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
61	40 A Page 23 or 5	Each	1		

SI. No.	Description of works	Unit	Qty	Rate in Figures	Total Amount
62	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
63	Single pole	Each	2		
64	Supply of the following Light Fixture with lamp, Control Gear & All necessary accessories. Luminaries with all electrical accessories & it should be energy efficient, low loss, ortho cyclically wound open construction copper ballast, ignitor & power factor improvement capacitor or Electronics Ballast etc are prewired to the terminal block & mounted on are movable control gear module for ease of maintenance. All electrical connections of the control gear module with the rest of the luminaries should be click fix & require use of no tools. Mounting options should be for both lateral as well as pole top mounting. with Lamp Control Gear & Fixing Accessories.				
65	LED Batten Surface Type Light Fixture (Make: Philips Cat No. BN 021 LED40S- 6500 PSU GR (4 ft) Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types,	Each	8		
66	complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each.	8		
67	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS : 374- 2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.	Each.	6		
68	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each.	6		
69	CHAPTER -2 : TELEPHONE / TV / LAN CONDUITING				
70	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. (for Telephones, TV and Data)				
71	25 mm	Metre	10		
72	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
73	1 or 2 Module (75 mmX75 mm)	Each	1		
74	Supply and installation of following size Krone connectors in MS box complete as required.				
75	10 Pair	Each	1		
76	CHAPTER -3: UPS				
77	<b>MV PANEL</b> Supply, installation, Testing and Commissioning of 3 phase and Neutral 415V 4 wire IP-54 Free Standing Floor mounted front operated MV panel made out of 2mm thick CRCA sheet for main frame and 1.6mm thick for partitions after seven tank process and painting with Epoxy powder coating over two coats of Red Oxide Colour of the panel should be Siemens gray (RAL 7032). The panel shall consist of suitable rating TPN Aluminium busbar (at the rating of 0.8A/Sq.mm) supported with DMC/ SMC barriers and color coded with Heat shrinkable sleeves. The Metering shall be provided as specified. The panel shall have Short circuit withstanding capacity of minimum 50KA and consist of the switchgear as mentioned below. The panel shall be got fabricated from manufacturers with CPRI Test certificate only & should be ordered after approval of GA Drawing from the Department. The PCC shall have atleast two spare cubicles to suit the highest rating outgoing MCCB. The size of all Panel Mounting Meters shall be 96X96mm. The Panels shall be mounted on U channels including supply and fixing of the same. wherever Electrical Interlocking is specified. For all Electrically operated Breakers. All MCCBs below 160A shall be with Adjustable 40-100% Thermal Magnetic based releases. All ACBs/MCCBs shall be Icu=Ics=100%. All MCCBs shall be provided with spreader links and Rotary handles				
78	UPS Panel-1				
79	INCOMINGS 63 Amp, 25KA, 4P MCCB - 1 Nos.				
80	METERING : LED Phase indication lamps with individuals MCBs and control with toggle swithes - 1 Set				
81	BUSBAR 100Amp TPN Al Busbar				
82	OUTGOING 40 Amp, 10KA, DP MCB - 5Nos.	Set	1		

SI. No.	Description of works	Unit	Qty	Rate in Figures	Total Amount
	Total Cost excluding GST				
	Note: Only standard materials as approved by Architect/ Engineer in charge will be used for work. Electrical work shall be executed by enlisted electrical vendor only.				