

SCHEDULE "B"

Name of Work: Up-Grading of fire station for four fire tenders along with control room, conference room & dormitory for fire and disaster team at GIDC Umargam.

SCHEDULE "B"

Sr.No.	Item No.	Item Description	Qty.	Unit	Rate	Amount
1.	1.	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (C) By mechanical means in area of light jungle	0.20	Hect.	28393.04	5678.61
2.	2.	Excavation for foundation in Loose or soft soil up to 1.5 m. depth including sorting out and stacking of useful materials and disposing of the excavated stuff within GIDC Estate as directed by engineer in charge.	1381.00	Cu.Mt	117.08	161687.48
3.	3.	Excavation for foundation in Loose or soft soil 1.5 m. to 3.0 m depth including sorting out and stacking of useful materials and disposing of the excavated stuff within GIDC Estate as directed by engineer in charge.	693.00	Cu.Mt	129.81	89958.33
4.	4.	Excavation for foundation in Dense or Hard soil 3.0 m. to 5.0 m depth including sorting out and stacking of useful materials and disposing of the excavated stuff within GIDC Estate as directed by engineer in charge.	72.00	Cu.Mt	175.97	12669.84
5.	5.	Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidating each deposited layer by ramming and watering.	1841.00	Cu.Mt.	130.39	240047.99
6.	6.	Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete. (upto 10 ton)	842.00	Cu.Mt	289.06	243388.52
7.	7.	Applying general insecticide pest control treatment to floors, cupboards etc. including labour, material etc. complete. Using Hepta chloride 20 EC. As per 6113 pests' concentration weight 0.50 % is recommended one-liter chemical emulsion dilute with 39 liters of water will give. Total dilute concertation will be 40 liter inclusive of	644.00	Sq.Mtr	89.28	57496.32

		one-liter chemical emulsion application 0.5 Liter chemical / Sqm of surface is recommended as per I.S.				
8.	8.	Filling in plinth with sand under floors including watering ramming, consolidating and dressing complete (upto 10 ton)	167.00	Cu.Mt	460.19	76851.73
9.	9.	Providing and filling rubbles including hand packing and filling interstices with quarry spalls behind abutments and between returns as directed. (upto 10 ton)	250.00	Cu.Mt	1473.22	368305.00
10.	10.	P/L PCC 1:3:6 (1-cement: 3 coarse sands: 6 M/c stone aggregate 20 / 40mm nominal size) in foundation concrete / floor concrete incl. machine mixing, ramming, consolidation & curing etc. incl. cost of form work if required etc. complete at all levels. (In Foundation & plinth)	286.00	Cu.Mt	3172.71	907395.06
11.	11.	Providing and laying controlled cement concrete M-250 for RCC work as per detailed drawings including centering, shuttering (Only Fresh Ply), machine mixing, vibrating, scaffolding, curing, centering having double or more height wherever required & finishing etc. but excluding cost of reinforcement etc. complete at all levels for RCC FOOTING	242.00	Cu.Mt	4537.98	1098191.16
12.	12.A.	Providing and laying controlled cement concrete M-250 for RCC work as per detailed drawings including centering, shuttering (Only Fresh Ply), machine mixing, vibrating, scaffolding, curing, centering having double or more height wherever required & finishing etc. but excluding cost of reinforcement etc. complete at all levels A) RCC COLUMN UPTO PLINTH	48.00	Cu.Mt	6748.24	323915.52
13.	12.B.	B) RCC PLINTH BEAM	87.00	Cu.Mt	5810.72	505532.64
14.	12.C.	C) RCC Grad Slab	127.00	Cu.Mt	7291.87	926067.49
15.	12.D.	D) RCC WALL	21.00	Cu.Mt	6599.45	138588.45
16.	13.	Providing Epoxy coated TMT Bar FE-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level	74090.00	Kg.	76.21	5646398.90
17.	14.	Brickwork using common burnt clay building bricks having crushing strength	127.00	Cu.Mt	4021.02	510669.54

		not less than 35 Kg. /Sq.Cm. in foundation and plinth in cement Mortar 1:6 (1-Cement :6-finesand) (B)Conventional				
18.	15.	Half brick thick honey- comb brick work with common burnt clay building bricks having crushing strength not less than 35Kg/Sq.Cm. (i) In Cement Mortar 1:4 (1- Cement : 4 - coarse sand)	5.00	Sq.Mtr	307.58	1537.90
19.	16.	Providing & laying 15 mm thick cement plaster in single coat in CM 1:3 (1-cement : 3-sand) on rough & fair side of RCC / brick masonry, ceiling, any other surface for interior & exterior plastering as per architectural design / drawings incl. making 10 x 10 mm or as specified grooves as per pattern given in the architectural drawings incl. drip moulding & finished even and smooth with neat cement slurry incl. racking out joints, cleaning, curing, scaffolding, etc. complete at all floor levels	262.00	Sq.Mtr	171.80	45011.60
20.	17.	P/L 20 mm thick sand faced plaster on wall up to any height consisting of 12mm thick backing coat of cement mortar 1:3 (1-cement : 3 sand) & 8mm thick finishing coat of cement mortar 1:1 (1-cement : 1-sand) as per architectural design / drawings incl. making 10 x 10 mm or as specified grooves as per pattern given in the architectural drawings incl. racking out joints, cleaning, drip mounding, curing, scaffolding, etc. complete at all floor levels. used wooden godka	825.00	Sq.Mtr	300.66	248044.50
21.	18.	Filling in foundation and plinth with brick Bats Chhara in layers of 20cm. thickness including watering, ramming and consolidating etc. complete.	3.00	Cu.Mt	600.56	1801.68
22.	19.	Carrying out plinth treatment to post construction / existing structure by spraying chemical solution for TERMITE CONTROL TREATMENT including labour and material consistent with I.S.I. specification. Using Chlordane and Chiorpurfiles 20 EC. As per 6131_paret-II Concentration weight one percent is recommended i.e. one liter 20 EC chemical emulsion with 19 liter give 1% concentration inclusive of one-liter chemical emulsion application at the	538.00	Sq.Mtr	124.28	66862.64

		rate of 5 Liter / Sq.m of surface is recommended as per I.S. Etc. complete as directed by EIC.				
23.	20.A.	Providing and laying controlled cement concrete M-250 for RCC work as per detailed drawings including centering, shuttering (Only Fresh Ply), machine mixing, vibrating, scaffolding, curing, centering having double or more height wherever required & finishing etc. but excluding cost of reinforcement etc. complete at double height Level. A) RCC COLUMN AT DOUBLE HEIGHT	38.00	Cu.Mt	10836.57	411789.66
24.	20.B.	B) RCC BEAM AT DOUBLE HEIGHT	44.00	Cu.Mt	10980.40	483137.60
25.	20.C.	C) RCC SLAB AT DOUBLE HEIGHT	49.00	Cu.Mt	13661.23	669400.27
26.	21.A.1	Providing and laying controlled cement concrete M-250 for RCC work as per detailed drawings including centering, shuttering (Only Fresh Ply), machine mixing, vibrating, scaffolding, curing, centering having double or more height wherever required & finishing etc. but excluding cost of reinforcement etc. (A) RCC COLUMN I) RCC COLUMN AT GF & FF LEVEL	41.00	Cu.Mt	6748.24	276677.84
27.	21.A.2	(A) RCC COLUMN II) RCC COLUMN AT Terrace LEVEL	48.00	Cu.Mt	6788.34	325840.32
28.	21.B.1	(B) RCC BEAM I) RCC BEAM AT GF & FF LEVEL	57.00	Cu.Mt	6178.57	352178.49
29.	21.B.2	(B) RCC BEAM II) RCC BEAM AT Terrace LEVEL	52.00	Cu.Mt	6218.67	323370.84
30.	21.C.1	(C) RCC SLAB I) RCC SLAB AT GF & FF LEVEL	37.00	Cu.Mt	7291.87	269799.19
31.	21.C.2	(C) RCC SLAB II) RCC SLAB AT Terrace LEVEL	72.00	Cu.Mt	7331.96	527901.12
32.	21.D.1	(D) RCC LINTEL & COPING I) RCC LINTEL & COPING AT GF & FF LEVEL	56.28	Cu.Mt	6483.82	364909.39
33.	21.D.2	(D) RCC LINTEL & COPING II) RCC LINTEL & COPING AT Terrace LEVEL	76.00	Cu.Mt	6523.91	495817.16
34.	21.E.1	(E) RCC CHHAJJA I) RCC CHHAJJA AT GF & FF LEVEL	10.00	Cu.Mt	5971.78	59717.80
35.	21.E.2	(E) RCC CHHAJJA II) RCC CHHAJJA AT Terrace LEVEL	3.00	Cu.Mt	6011.87	18035.61
36.	21.F	(F) RCC STAIRCASE I) RCC STAIRCASE AT GF & FF LEVEL	18.00	Cu.Mt	7029.32	126527.76
37.	22.	Trimix: Constructing the plinth slab/rcc road with Ordinary cement concrete M-	1977.00	Sq.Mtr	373.70	738804.90

		250 Grade (excluding the cost of concrete & reinforcement) mixed with polyester fiber (12mm) @ rate of 125 gms. per 50 Kg. of cement with Trimix Vacuum dewatering system with power troweling sheet form work with M.S. channels, shrinking of fair hardness, non-oxidizing, Nonmetallic, heavy duty floor hardener of FOSROC or equivalent at the rate of 4.00 Kg. /Sq.M. with 10 mm x 10 mm size groove cutting in concrete as construction joint and 12 mm thick premix expansion joint at every 20 Meter length. Providing and pouring sealant of FOSROC or equivalent with necessary equipment, labors etc. Complete.				
38.	23.I	Providing Epoxy coated TMT Bar FE-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level I) UP TO GF & FF LEVEL	67652.00	Kg.	76.21	5155758.92
39.	23.II	II) ABOVE AT Terrace LEVEL	45550.00	Kg.	77.21	3516915.50
40.	24.I	Brickwork using common burnt clay building bricks having crushing strength not less than 35 Kg./Sq.Cm. cement Mortar 1:6 (1-Cement :6-fine sand) (B) Conventional I) UP TO GF & FF LEVEL	330.00	Cu.Mt	4295.99	1417676.70
41.	24.II	II) ABOVE AT Terrace LEVEL	65.00	Cu.Mt	4336.18	281851.70
42.	25	Half brick masonry in common brunt clay building bricks having crushing strength not less than 35Kg/Sq.Cm. in Cement mortar 1:3 (1-Cement:3-coarsesand) with 2 Nos of 6mm Mild stee round bars after every three-course embedded in Cement Mortar in foundation and plinth I) UP TO GF & FF LEVEL	271.00	Sq.Mtr	716.37	194136.27
43.	26.I	Providing 10mm thick cement plaster in single coat on brick/concrete walls/ceiling for interior plastering upto two floor level and finished even and smooth in (ii) Cement mortar 1:4 (1 cement : 4 Sand)& finishing with a floating coat of neat cement slurry. at GF I) UP TO GF LEVEL	642.00	Sq.Mtr	189.15	121434.30
44.	26.II	II) FIRST FLOOR & ABOVE AT Terrace LEVEL	852.00	Sq.Mtr	210.47	179320.44
45.	27.I	Providing 15mm thick Cement Plaster in single coat on brick/concrete wall for interior plastering upto floor two level finished even and smooth in Cement	2771.00	Sq.Mtr	153.20	424517.20

		mortar 1:4 (1-cement :4-sand) at GF I) UP TO GF & FF LEVEL				
46.	27.II	II) ABOVE AT Terrace LEVEL	102.00	Sq.Mtr	176.59	18012.18
47.	28.I	Providing 20 mm thick double sand faced cement plaster on walls up to height 10 meters above ground level consisting of 12mm thick backing coat of CM 1:3 and 8mm thick finishing coat of CM 1:1 (1cement: 1 sand) etc. complete.at GF I) UP TO GF & FF LEVEL	1526.00	Sq.Mtr	300.66	458807.16
48.	28.II	II) ABOVE AT Terrace LEVEL	295.00	Sq.Mtr	307.19	90621.05
49.	29	Rustic Scratch wall texture created by applying Rustic Scratch material with the thickness of 2mm to 3mm over 20 mm outer plaster.	1821.00	Sq.Mtr	353.50	643723.50
50.	30.	Providing throating or plaster drip and mounding to R.C.C. Chhajja or protection.	45.00	Rmt.	42.17	1897.65
51.	31.	Providing Cement Vata (10cm x 10 cm) size quarter round in cement mortar 1: 1 including neat cement finishing, watering etc. Complete.	52.00	Rmt.	23.68	1231.36
52.	32.	Providing and fixing chicken mesh 30 cm wide double folded fixed firmly to wall with nails on vertical or horizontal junction of RCC and brick wall before plastering including scaffolding and all lead & lift etc complete any floor	323.00	Sq.Mtr	454.50	146803.50
53.	33.	Providing 20 mm thick Water Proof cement plaster for sunk in single coat on brick / concrete wall for interior plastering up to floor two level finished even and smooth (ii) Cement mortar 1:3 (1-cement ,3- sand) and mixing waterproofing materials of approved brand and manufacture in cement mortar in proportion recommended by the manufacturer for All Floor.	105.00	Sq.Mtr	277.47	29134.35
54.	34.	Providing and laying cement concrete 1:5:10 (1-Cement:5-finesand:10-graded brickbat aggregates 40mmnominal size) and curing complete including waterproofing material excluding cost of form work - for toilet floor at all levels	105.00	Sq.Mtr	130.48	13700.40
55.	35.	Providing & Laying CINDER FILLING in architectural gap and sunk slab including compacting manually with rammer and finishing true line & level at all floor level etc. complete as directed by E.I.C.	12.00	Sq.Mtr	1054.44	12653.28
56.	36.	Providing and laying integrated cement based water proofing treatment of	898.00	Sq.Mtr	956.16	858631.68

		<p>required thickness over the roof, chaina mosaic fitting and finally finishing the surface with white cement slurry and slopping out terrace slabs with following specification laid to required slope not flatter than 1:8 (the thickness of water proofing treatment near rainwater outlet or the lowest point of the finished slope shall not be less than 45mm, including treating the vertical surface of the parapet wall up to 20cms . height above finished level of terracing including finishing the top with joint less water proofing plaster, curing, testing etc. complete. (No extra shall be paid for increase in thickness for proper slope). (A) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with properly water proofing compound conforming to IS - 2645 incl. cleaning the surface before treatment (B) Providing and laying 80 mm thick cement concrete 1:5:10 (1-Cement:5-finesand:10-graded brickbat aggregates 40mm nominal size) and curing complete excluding cost of form working (C) After Two Days of proper curing applying a second floor of cement slurry. (D) Finishing the surface with china mosaic pieces laid on 10mm thick joint less cement plaster of mix 1:3(1 cement :3 coarse sand) admixed with proprietary water proofing compound conforming to IS :2645 and finally finishing the surface with trowel with neat cement slurry (E) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing for final taste. All above operation to be done in order and as directed and specified by the Engineer In Charge. (The plan area shall be measured and paid, vatta shall not be paid separately)</p>				
57.	37.	<p>Providing & laying GVT Vitrified tiles flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material and jointed with color cement slurry including Making 3mm spacer at joint of tiles and fill the spacer with epoxy jointing material ,finished with flush pointing & cleaning the surface etc</p>	843.00	Sq.Mtr	1767.50	1490002.50

		complete selection as directed by Architect/E.IC (Min. Size -1.20Mt. X 0.60 Mt. or Bigger 8' x 4' as selected by EIC) Make: AGL, Nitco, Kajariya or as selected by authority.				
58.	38.	Providing and laying polished Kota stone slab flooring over 20mm (Average) thick base of cement mortar 1:6 (1-cement : 6-coarse sand) or L.M. 1.1.5 (1-Lime putty :1.5 - coarse sand) laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. (A) 25mm thick (upto 10 ton). Material should be as per brand list as selected by authority.	71.00	Sq.Mtr	965.59	68556.89
59.	39.	Providing and laying polished kota stone slab 25mm thick in risers of steps, skirting Dedo and pillars laid on 10mm thick cement mortar 1:3 (1-Cement: 3 coarse sand) and jointed with gray cement slury mixed with pigment to match the shade of slab including rubbing and polishing etc. complete. Material should be as per brand list as selected by authority.	30.00	Sq.Mtr	1089.67	32690.10
60.	40.	Providing and laying Vitrified tiles (GVT)8 to 10 mm thick , Min. 24" x 24" or bigger (i.e. 2' x 4' or 8' x 4') as selected by EIC in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement. etc complete selection as directed by Architect/E.I.C. Make: AGL, Nitco, Kajariya or as selected by authority.	88.00	Sq.Mtr	1073.13	94435.44
61.	41.	Providing & laying GVT Vitrified tiles in Toilet flooring, side wall skirting, risers of steps and DADO on 10mm thick cement plaster 1: 3 (1 cement: 3 coarse sands) & jointed with white cement slurry. and jointed with color cement slurry including Making 3mm spacer at joint of tiles and fill the spacer with epoxy jointing material or spacer Baar, finished with flush pointing & cleaning the surface etc complete selection as directed by Architect/E.IC IC (Min. Size - 1.20Mt. X 0.60 Mt. or Bigger 8' x 4' as selected by EIC) Make: AGL, Nitco, Kajariya or as selected by authority.	256.00	Sq.Mtr	1616.00	413696.00
62.	42.	Providing & fixing 18 mm thick first quality Black Polished Granite stone	174.00	Sq.Mtr	1954.25	340039.50

		approved by Client/Architect for Doors - windows Frame, Lintel, jambs & sill in cement mortar (1:4) including cutting, fixing in cement paste with hairline joint, filling the joints with white cement / pigments / joint filler, rounding of edges, edge polishing & finishing as directed by the Engineer. (fixing the granite in one piece). Material should be as per brand list as selected by authority.				
63.	43.	P/F 18 mm avg. thick double polished (both side) jet black granite slab for urinal partition incl. making groove in wall and fixing properly in line & level incl. all cost of materials & labours etc. complete at all levels.	4.00	Sq.Mtr	2157.74	8630.96
64.	44.	Providing and fixing 35 mm thick Flush door shutters excl. door frame (fitted on granite frame) , including fixing 1 mm thick exterior lamination over it on both sides, peripheral 2 x 3 cm mounding patti with colour, with Stainless Steel hinges size - 6" x 1.25", dead lock with 4 key , SS handle size 30 cm Long, SS Tower Bolt (Stoper) size 20cm long, as per detail including one coat of primer and two coats of oil painting as and where required, pattern and design is to be approved by the Architect/EIC.	9.00	Sq.Mtr	3019.90	27179.10
65.	45.	PARTLY GLAZED DOUBLE LEAF DOOR (LAMINATE FINISH):- Providing & Fixing Partly Glazed Double leaf Door, of size as per detail drawing (for each door.) considering block board flush door sheet of 35 mm thickness covered both side by 9 mm ply & finished with 1 mm thick laminate on both sides of shutters and having 12 mm clear toughen glass slits as per given pattern & size with crystal edges in both shutters, fixed with Burma border Patti at joints, Finishing with all necessary S.S hardwires like DOOR S.S Handles 5PHO 2218SS -FPHO 2218, conceal Door lock Mortise Body 85x60M S.S , DOOR UK key CYLI,60MM 1CK S.S 5 KEY M/HL 125 ROSE SS, cylinders, stoppers, tower bolt, MS nails, SS-304 screws, miscellaneous hardware items etc. As per details given in drawing and as per instructions of Architect/ consultant/ Engineer In charge.	60.00	Sq.Mtr	7373.00	442380.00

66.	46.	Providing and fixing standard extruded of aluminum section of size 63.50 x 38.10 x 1.95 mm (of Jindal Section no:4605, @ Wt 1.094Kg / Rmt with colour anodized aluminum frame with 5 mm thick transparent bronze colour tinted float glass with colour anodized aluminum frame for ventilation with 5 mm thick frosted glass as details etc complete (work for all the floors). As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	8.00	Sq.Mtr	1525.00	12200.00
67.	47.	Providing and fixing extruded aluminum window having extruded aluminum Colour Powder Coated section frame main outer size 127mm x 38.10mm x 1.35mm ,@ Wt.1.384 Kg/mt, horizontal Four track member size 122.20mm x 31.75mm x 1.10mm @ Wt. 1.205 Kg/mt, vertical member of size 122.20mm x 31.75mm x 1.50mm ,@ Wt. 1.398 Kg/mt with sliding shutters of horizontal member size 40mm x 18mm x 1.29mm @ wt. of 0.456Kg/mt, vertical member of size 40mm x 18mm x 1.29mm @ wt. of 0.456Kg/mt,@ with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc complete for window. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	10.00	Sq.Mtr	2140.33	21403.30
68.	48.	Providing and fixing window having extruded aluminum Colour Powder Coated section frame main outer size 95mm x 24mm x 1.17mm @ wt.of 0.738 Kg/mt, horizontal Three track member size 92mm x 31.75mm x 1.30mm @ Wt.1.07 Kg/mt, vertical member of size 92mm x 31.75mm x 1.50mm ,@ Wt. 1.06 Kg/mt with sliding shutters of horizontal member size 40 mmx18mm x1.29mm @ wt.of 0.456 Kg/mt, vertical member of size 40mm x 18mm x 1.29 mm @ wt.of 0.456Kg/mt with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc. . As per details given in drawing and as per	88.00	Sq.Mtr	1591.87	140084.56

		instructions of Architect /consultant/ Engineer In charge.				
69.	49.	Providing and fixing window having extruded aluminum Colour Powder Coated section frame including mosquito net wire mesh shutter with powder coated aluminum fittings size as per architectural drawings etc complete as directed by architect /EIC.	23.00	Sq.Mtr	2020.00	46460.00
70.	50.	Providing & fixing 35 MM thick door shutter excl. door frame (fitted on granite frame) consisting of solid core single or double leaf flush door shutter of 30 MM thickness, lipped with 15 mm (5MM x 3) thick x 30 mm width on stiles & top rails and 10 mm (5 mm x2) other stiles and bottom rails. The inner panel laminated with 2 mm thick termite proof, water proof & fire resistant moulded PVC sheet with 2,4,6 raised panel design in different plain and/ or pre laminated colour on one side after routing the moulded design on flush door & 2 MM plain and/ or pre laminated PVC sheet on other side using rubber adhesive on flush door and solvent cement adhesive on the PVC lapping incl. prov. & fixing stainless steel matt fixtures, fasteners and lock as per the detailed drawing etc. complete at all level (Excl. cost of granite frame). As per architectural drawings etc complete as directed by architect /EIC	26.00	Sq.Mtr	2152.31	55960.06
71.	51.	Providing & Fixing 100 mm vertical/Horizontal blind of NL or vyoma or equitant make of choice shade & pattern rate shall be including necessary NOTCH guard treatment on both sides, the overlaps shall be uniform & adequate. As per architectural drawings etc complete as directed by architect /EIC	107.00	Sq.Mtr	1111.00	118877.00
72.	52.	Providing and fixing eco-friendly light weight calcium silicate false ceiling tiles having Tegular edge & 15 mm Thick Densified edges on the Tile Periphery for Extra Strength the Light weight calcium silicate ceiling tiles shall have, light reflection 85% non-combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity 0.043° w/m KC. for the best thermal Insulation. The Light weight calcium Silicate tile shall be of approved	61.00	Sq.Mtr	1648.96	100586.56

		texture Fine fissured/Spin tone/Cosmos having NRC value of 0.5 & Globe having NRC value of 0.75 NRC or equivalent of size 595 X 595 mm to be laid on true horizontal level suspended inter locking metal grid of hot dipped galvanized steel sections (galvanizing @120 grams per sqm including both side). consisting of main 'T' runner suitably spaced at joints to get required length and size of 24X38mm made from 0.30 mm thick (minimum) sheet, 1200mm center to center, and cross 'T' of size 24X28mm made out of 0.33mm (Minimum) sheet spaced 1200mm along spaced between main 'T' at 600mm center to center to form a grid of 1200X600mm and secondary cross 'T' of length 600mm and size 24x28mm made of 0.30 mm thick (Minimum) sheet to be interlocked at middle of the 1200X600mm panel to form grid of size 600X600mm resting on periphery walls/partitions on a perimeter wall angle precoated steel of size (24X24X3000mm made of 0.40mm thick (minimum) sheet with the help of raw plugs at 450mm center to center with 25mm long dry wall screws @ 230mm interval and laying 15mm thick Densified edges light weight calcium silicate ceiling tiles of approved texture (Fine Fissured/Cosmos/Spintone) in the grid including, cutting /making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.				
73.	53.	Providing and fixing single layer waterproof Gypsum board moisture resistant 12.5 mm thick of the make Newgood Group Co. Ltd. or equivalent & Newgood Group Co. Ltd. company sections using waterproof board of size 1220 mm x 1830 mm x 12.5 mm suspended by G.I suspender of size 25 mm x 3 mm with intermediate channel of size 18 mm x 40 mm x 12.5 mm at 1220 mm center to center ceiling section of size 40 mm x 35 mm x 0.55 mm at 457 mm center to center and	437.00	Sq.Mtr	606.95	265237.15

		perimeter channel A of size 20 mm x 27 mm x 30 mm x 0.50 mm at edges & drops including paper tap sand soffit cleat, anchor fastener, scotch bolt connecting cleat joining compound top coat on ceiling including making necessary opening for light fitting, diffuser etc. Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.				
74.	54.	External wall painting (two coats pf priming coat + two coats of paint) with APEX exterior paint of Asian paints or equivalent of required shade or equivalent including a priming coat of primer of approved brand and manufacture on wall & any other surfaces to give an even shade after thoroughly brushing the surface & making the surface free from mortar droppings and other foreign matter and sand papered smooth incl. filling the all small holes, cracks, open joints, undulations and similar other minor defects of every kind with ready-made putty of approved brand and manufacture and rubbed smooth with sand paper incl. nece. scaffoldings etc. complete at all floor levels. Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	2646.00	Sq.Mtr	134.84	356786.64
75.	55.	Wall painting with (two coat) plastic emulsion paint of approved brand and manufacture on undecorated wall / Ceiling surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth including two coat birla putty & two coat Primer of approved brand. (work for all the floors). Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	4629.00	Sq.Mtr	120.94	559831.26
76.	56.	Applying priming coat over new steel and other metal surface after and including preparing the surface by	127.00	Sq.Mtr	122.49	15556.23

		thoroughly cleaning, oil, grease, dirt and other foreign matter and scoured with brushes fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead. Painting two coats (including 1 Priming coat) on new steel and other metal surface with enamel paints brushing, interior to give an even shade incl. cleaning the surface of all dirt, dust and other foreign matter. (work for all the floors)				
77.	57.	Providing and fixing S.S. (8% nickel, SS304) PIPE RELLING of 0.90m height as pattern shown in drawings at STAIRCASE with anchoring 0.075m in RCC or masonry including 50mm dia. SS pipe 18 gauge @ 1.40 kg./m as hand rail, 40x40mm SS pipe 18 gauge @ 1.40 kg./m as vertical support and 16mm dia. SS pipe 18 gauge @ 0.45 kg./m as intermediate horizontal member including welding, grinding, fixing in position with necessary fixtures and fastenings (25mm bracket, base SS cap 50mm dia. hole, base SS cap 40x40mm hole, SS pipe cap 16mm hole & 16mm long) and polishing etc. completed. Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	33.00	Rmt	2901.11	95736.63
78.	58.	Providing and fixing M.S. grills of required pattern to wooden frames of windows etc. with M.S. flats at required spacings and frame alround, square or round bars with round headed bolts and nuts or by screws (A) Plain Grill	2586.00	Kg.	104.04	269047.44
79.	59.	Providing and fixing in position collapsible steel shutters with vertical channels 20mm x 10mm x 2mm braced with flat iron diagonals 20mm x 5mm size with top & bottom rail soft iron 40 mm x 40mm x 6mm with 38mm diameter steel pulleys complete with bolts, nuts, locking arrangements, stopper handles including applying a priming coat of red lead paint. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	38.00	Quinta l	5785.56	219851.28
80.	60.	LOUVERS: Supplying and Installation of Aluminum powder coated louvers etc complete as per drawing& selection as	139.00	Sq.Mtr	4545.00	631755.00

		directed by Architect/Engineer in charge.				
81.	61.	Providing a I.S.I mark 7 levers three keys brass pad lock of NAVTAL (Goderej) make 75mm dia on completion of project.	2.00	Each	213.98	427.96
82.	62.	Constructing of Cooking platform (sandwich type) 80cm high resting on thick sandwiched polish kota stone in C.M 1:3 with providing and fixing 25 mm thick rough kota stone at bottom and 25mm thick Polish kota stone/ Granite stone (single piece) top and polished kota stone/ granite stone (single piece) 25mm thick on top with 15mm high machine cut polished kota stone /granite round moulded facia patty including polishing etc . complete as per drawing and specification without stainless steel sink including necessary cutting for sink & making hole for gas pipe and fixing P.V.C bend of 25mm dia.	14.00	Sq.Mtr	2954.56	41363.84
83.	63.	Providing and fixing 5 mm thick PVC sheets as signage and display of health signs/information of required size having retro reflective letters/design as per requirement, fixing the same through approved adhesive etc. complete work shall be carried out as per instruction of Engineer-in-charge (Approved make PVC foamed sheet only) (25 x 6 cms.)	20.00	Nos.	505.00	10100.00
84.	64.	Providing & Fixing Engraved letters, figures, logo etc. on 1 mm thick S. S. 304 grade plate (inching plate) and fix on any surface, wall and at any height. Plates will be fix with Brass Pins and nuts in proper line & level. (stops, comas, hyphens and the like not to be measured and not paid for separately (ii) Indian letters-	1.00	Sq.Mtr	20200.00	20200.00
85.	65.	Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC : SP 63-2018 etc. Complete. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.	318.00	Sq.Mtr	686.90	218434.20

86.	66.	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length,30cm height and 15cm thick of M250 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1cement:3fine sand) etc complete.	155.00	Rmt	361.84	56054.20
87.	67.	Providing and fixing in expansion joint 100 mm thick expansion joint board of best quality and approved make including cutting to required size and shape at all levels etc. complete as directed.	2.00	Sq.Mtr	2982.06	5964.12
88.	68.	Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and depositing on the road side slope as directed up to 50Mt.lead.	144.00	Cu.Mt	104.04	14981.76
89.	69.	Construction of granular sub-base by providing & laying of compacted thickness of 200 mm Grading 5th Granular sub base (GSB) in layers of (150 mm with geocell + 50 mm) of graded granular material consisting of machine cut black trap stone aggregate as per grading - V given in table 400-1 of the specification MORT&H and compactor to the required density with vibratory roller in all seasons as per MORT&H , maintaining the required slope & grade during the operation as approved by the engineer in charge & watering to the proper moisture content and sprinkled with the help of truck mounted water tank fitted with suitable arrangement. (fully saturated having CBR value minimum 30)	216.00	Cu.Mt	1888.52	407920.32
90.	70.	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the materials with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers (Layer should not be more than 200 mm)with paver in sub base/base course on well-prepared surface and camber with Sensor paver consolidation by vibratory road roller to achieve the desired density by using machine crushed chips as per required gradation mixing with required optimum quantity of water	144.00	Cu.Mt	2174.33	313103.52

		incl material, labour, plant and machinery and equipment etc. complete by plant mix method. (Using mechanical paver).				
91.	71.	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing.	144.00	Cu.Mt	3476.64	500636.16
92.	72.	Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with approve grade cement @ 400 kg per cum, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing.	287.00	Cu.Mt	8055.61	2311960.07
93.	73.	LAMINATE FINISH TABLE: Providing & fixing laminate finish table having given size with height of 750 mm (as per attached detail drawing) Table having 40 mm Thick .at top made by 19 mm thick sandwich ply. Top is cantilever then its base supports. Base supports made by 19 mm thick sandwich ply. A Table having drawers and a shutter in a pedestal and a key board tray at single end. Drawers & Keyboard tray rest on telescopic channels. Shutters & drawers having thickness of 25 mm which are made by 19 mm + 6 mm ply to create	4.00	Sq.Mtr	17170.00	68680.00

		conceal grooves as handle. Drawers & keyboard, sides, Bottom is covered with 19 mm ply & back of pedestal are made up of 12 mm thick Marin Ply Wood. Having 3" high Footrest of 19 mm ply. At Front facade (covered with grooves as per given patterns. All internal and external surfaces covered by 1mm thick laminate. all complete with given nos of key board tray, drawers on telescopic channels, locks, stoppers, SS Screws, MS nails, Auto hinges, Cable Manager etc as per shown in detail drawings & as per instructions of architect/consultant / in charge engineer. Contractor has to provide all necessary cut outs for Electrical works & no extra payment shall be made for it. Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of Architect /consultant/ Engineer In charge.				
94.	74.	CORIAN TOP VINEER FINISH CONFERENCE TABLE : Providing & fixing corian top veneer finish conference table 750 mm height , see size as per detail drawing ,Corean Top based on 19 mm thick Marin plywood finished by rubbing ,buffing & pasting (Core an top covers 300 mm bottom of table at longitunal side & 300 mm bottom of table at shorter side including edges) table have base of 19 mm thick plywood for footrest & supporting vertical supports made by of 12mm+9 mm thick sandwiched Ply for grooving as indicated in drawing. (as per details given in sectional drawing) Base of the table covered by Burma teak bidding Patti finished with veneer. All external & internal surfaces covered by 4mm thick veneer, complete with PU spray polish All complete as per shown in detail drawings & as per instructions of architect / in charge engineer. Contractor has to provide all necessary cut outs for Electrical works & no extra payment shall be made for it. Material should be as per brand list as selected by authority. As per details given in drawing and as per instructions of	8.00	Sq.Mtr	20200.00	161600.00

		Architect /consultant/ Engineer In charge.				
95.	75.	DINNING TABLE: - Providing & fixing DINNING TABLE, having size as per detail drawing, granite top surface with proper finished, polished all side moulding, chamfering & teakwood frame, support with 12mm ply inside with polishing, necessary hardware etc All complete as per shown in detail drawings, photos or selected by authority. & Material should be as per brand list as selected by authority.	4.00	Sq.Mtr	20200.00	80800.00
96.	76.	Providing & fixing plywood frame of 150mm x 38mm thick, fitting & fixing as per drawing 1.0 mm laminate of approved colour & shade as approved by EIC.	30.00	Sq.Mtr	1668.91	50067.30
97.	77.	Providing & fitting toughed 12 mm clear float glass of modi or equivalent makes as per approved design shall be provide from f.f. up to 2.4 mt height fixed with wooden molding on both sides finished with melamine polish/glass film as approved by EIC.	14.00	Sq.Mtr	1086.18	15206.52
98.	78.	Providing & fitting toughed 12 mm clear float fully glass Door of modi or equivalent makes with floor spring heavy duty, 30 cm long handle both side, locks and other necessary fittings as per approved design shall be provide from f.f. up to 2.4 mt height fixed with wooden molding on both sides finished with melamine polish/glass film as approved by EIC.	7.00	Sq.Mtr	2780.71	19464.97
99.	79.	FABRIC FINISH VISITOR CHAIR - Providing & Supplying of Fabric finish visitor Chairs, having single touch adjustable seat of appropriate size, Frame construction should be of nylon & black in color having dimension of 1200mm Ht., 475mm width & 431 mm Depth & Back cushion Ht. should be 535 mm. It should have Nylon base Arms; Armrest is T fixed. having ht. of 260mm, It should have minimum 5 years warranty. Complete as per instructions given by the Architect & Engineer In charge & as per shown in the View. Samples should be approved by the Architect & Engineer In charge. Please see the Attached Make List for Approved Makes Make: Hoff - Model No. Eone, or wipro, Godrej. MEDIUM BACK WITH	14.00	Nos.	7575.00	106050.00

		FABRIC FINISH VISITOR CHAIR WITH FIBER LEG REVOLVING.				
100.	80.	HIGH BACK WITH COMPOSITE LATHER CHAIR - Providing & Supplying of High Back Chairs, having single touch adjustable seat of size 525mm x 500mm, having adjustable tilt angle & tension with lock to find optional position, water fall seat cushion slopes slightly downward to help reduce stress on your legs. Frame construction should be of aluminum & black in color having dimension of 1200mm Ht., 700mm width & 750 mm Depth & Back cushion Ht. should be 719 mm. It should have Nylon base Arms, Armrest is 2D. it should have provision of Gas Lift system, WITH CROME LEG AND FANCY ARM REST WARRANTY 1 YEAR Complete as per instructions given by the Architect & Engineer In charge & as per shown in the View. Shape, design, material, colour, etc. will be selected by Architect/Engineer In charge. Make: Hoff - Model No. Spon (H), or Wipro, Godrej. WITH CROME LEG AND FANCY ARM REST WARRANTY 1 YEAR	2.00	Nos.	15150.00	30300.00
101	81.	WOODEN DINNING CHAIR: - Providing & supplying Wooden chair, having solid teak wood chair etc All complete as per shown in drawings, photos & as per instructions of architect / engineer in charge.	10.00	Nos.	7070.00	70700.00
102	82.	2-SEATER SOFA: The Inside frame shall be made of seasoned wood with proper anti-termite treatment. The seat and back shall be made of foam and finished in leatherite upholstery. leatherite colour and type shall be as per approval. The seat and back shall be made of PU foam of density 45 ± 2 Kg/m ³ . hardness - 20 ± 2 on Hampden machine at 25% compression with wood inserts for ensuring long life and optimum comfort to the users. The complete seat and back cushion shall be upholstered with satin repellant "Velveteen fabric". Under structure proved S.S. frames made from 50mm x 25mm S.S. with stander Buffing. All complete as per shown in drawings, photos & as per instructions of architect / engineer in charge.	4.00	Nos.	25250.00	101000.00
103	83.	LAMINATE FINISH SIDE CREDENZA UP to 0.75MT HT: Providing & fixing	5.00	Sq.Mtr	16160.00	80800.00

		Laminate Finish Low ht back credenza having Ht of 750mm. having 18 mm quartz stone top with ply. base, based on vertical supports made by 19mm Thick. comm Ply Wood with all shutters & horizontal single self (made by 19 mm thick Marin ply) as per given in detail drawings. Backside of low ht storage is covered with 12 mm thick plywood. Shutters made with 19mm ply with wooden handles. Credenza have suggested nos of drawers of suggested ht and suggested self & shutters. All exposed and internal Joints complete with teak wood bidding patti finished with melamine polish. All exposed and internal surfaces covered with 1 mm thick approved shade laminates as instructed by Architect/ consultant/ Engineer in charge. Sizes and patterns may be varies as suggested by architect. All fixtures and fastening must be approved by architect/EOI as per given standard make. Complete with all all-necessary mouldings, hardware like MS nails, ss-304 screws, magnet, Stoppers, L - hinges, 19 mm multilocks, table chain, conceal handles etc.				
104	84.	Providing and fixing in position cowl went to pipes. 75mm dia.	2.00	Nos.	389.74	779.48
105	85.	Providing and fixing in position cowl went to pipes. 100mm dia	12.00	Nos.	501.87	6022.44
106	86.	Providing and fixing Gun metal check or non-return fullway wheel valve. (A) 15mm dia.	2.00	Nos.	186.83	373.66
107	87.	Providing and fixing Gun metal check or non-return fullway wheel valve. (C) 25mm dia.	3.00	Nos.	420.63	1261.90
108	88.	Providing and fixing Gun metal check or non-return fullway wheel valve. (D) 32mm dia.	5.00	Nos.	314.73	1573.65
109	89.	Providing and fixing Gun metal check or non-return fullway wheel valve. (E) 40mm dia.	3.00	Nos.	663.43	1990.29
110	90.	Providing and fixing ball cock of approved. quality as directed. (B) Abonite (ii) 50mm dia.	1.00	Nos.	137.89	137.89
111	91.	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer in Charge. Pipe shall be fixed on the wall with the help of clamp at every two-meter C/C or shall be concealed as directed including	245.00	Rmt	72.65	17799.25

		necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. Material should be as per brand list as selected by authority.				
112	92.	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer in Charge. Pipe shall be fixed on the wall with the help of clamp at every two-meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. Material should be as per brand list as selected by authority.	120.00	Rmt	91.84	11020.80
113	93.	Providing laying and jointing in true line and level 32mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer in Charge. Pipe shall be fixed on the wall with the help of clamp at every two-meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. Material should be as per brand list as selected by authority.	150.00	Rmt	119.15	17872.50
114	94.	Providing laying and jointing in true line and level 40mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two-meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. Material should be as per brand list as selected by authority.	100.00	Rmt	148.12	14812.00
115	95.	Providing laying and jointing in true line and level 50mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer in Charge. Pipe shall be fixed on the wall with the help of clamp at every two-meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. Material should be as per brand list as selected by authority.	140.00	Rmt	195.67	27393.80

116	96.	Providing, laying and jointing in true line and level 110 diameter U.P.V.C (Type B) conforming to IS 13592-1992 with one end plain and other end socketed with rubber ring, & fittings conforming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110 mm diameter x 149 mm length x 145 mm height at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials. Material should be as per brand list as selected by authority.	275.00	Rmt	836.73	230100.75
117	97.	Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 100 mm diameter with jali of the following nominal diameter of self-cleansing design with C.I. screed down or hinged grating including the cost of cutting and making good the walls.	3.00	Nos.	571.08	1713.24
118	98.	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace. Material should be as per brand list as selected by authority.	5000.00	Liter	3.95	19750.00
119	99.	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [A] 15 mm. Material should be as per brand list as selected by authority.	35.00	Rmt	166.86	5840.10
120	100.	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight. (i) Square mouth traps. (A) 100mm x 100mm size P type.	5.00	Nos.	1292.19	6460.95
121	101.	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints	210.00	Rmt	248.67	52220.70

		including testing of joints complete. 150mm				
122	102.	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.250mm	10.00	Rmt	348.04	3480.40
123	103.	Constructing Manhole with R.C.C. top slab in 1:2:4 mix (1-cement :2-coarse sand : 4-graded stone aggregate 20mm nominal size) foundation concrete 1:3:6 mix (1-cement : 3- coarse sand :6-Brick bats 40 + 50mm size) inside plastering 15mm thick with Cement Mortar 1:3 (1-Cement : 3-coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1-Cement :2-Coarse sand :4-stone aggregate 20mm nominal size) finished smooth complete including curing and festing (i) Inside size 900mm x 1200mm and 1.5M. deep including C.I. cover with frame size 560mm diameter total weight of cover and frame to be not less than 128 kgs. (Wt. of cover 64 Kg. and Wt. of frame 64 Kg.)(A) With 230mm thick walls of brick masonry using brick having crushing strength not less than 35Kg. / Sq.cm. in Cement Mortar 1:5 (1-Cement: 5-Coarse sand) (2) B type depth 1.50 Meter for 150mm diameter sewer.	2.00	Nos.	19330.46	38660.92
124	104.	(II) Extra rate for constructing B.B. masonry for every additional depth of 0.1M. GR Part thereof over item No.24.27 (I) for depth from 1.50M. to 2.25M.	1.00	Nos.	397.19	397.19
125	105.	Providing and fixing cast iron steps of size 500mm x 150mm x 22.5mm and painting with two coats of Anti-corrosive paint etc. complete.	35.00	Nos.	203.76	7131.60
126	106.	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation	5.00	Nos.	2932.93	14664.65

		concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete. (i) Inside dimensions 455mmx 610mm and 450mm deep for single pipe line.				
127	107.	Extra over items 24.44 for every additional depth of 0.1M. of part thereof beyond 450mm depth for Brick masonry chamber. (i) for 455mm x 610mm size.	2.00	Nos.	242.39	484.78
128	108.	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete. (ii) Inside dimensions 500mm x 700 mm and 450mm deep for pipe line with one or two inlets.	9.00	Nos.	3660.76	32946.84
129	109.	Extra over items 24.44 for every additional depth of 0.1M. of part thereof beyond 450mm depth for Brick masonry chamber. (ii) for 500mm x 700mm size.	6.00	Nos.	264.86	1589.16
130	110.	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm ² in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete. (iii) Inside dimensions	6.00	Nos.	7180.44	43082.64

		600mm x 850 mm and 450mm deep for pipe lines with three or more inlets.				
131	111.	Extra over items 24.44 for every additional depth of 0.1M. of part thereof beyond 450mm depth for Brick masonry chamber. (iii) for 600mm x 850mm size.	4.00	Nos.	325.59	1302.36
132	112.	Providing laying and jointing U PVC SCH40 for cold water 20 mm dia (3/4)" including its accessories.	35.00	Rmt	89.89	3146.15
133	113.	Providing laying and jointing PVC SWR pipes IS 13592 for Drain - 75 mm dia it's accessories.	5.00	Rmt	386.83	1934.15
134	114.	Providing and fixing PVC SWR P- Trap IS 14735 for Drain -110x110 it's accessories.	25.00	Nos.	357.54	8938.50
135	115.	Providing and fixing Gun metal check or non-return full way wheel valve. (A) 50mm dia.	8.00	Nos.	871.63	6973.04
136	116.	Providing laying and jointing PVC SWR pipes IS 13592 for Drain - 50 mm dia it's accessories.	65.00	Rmt	337.34	21927.10
137	117.	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	6.00	Nos.	520.15	3120.90
138	118.	Providing and fixing wash down water closet European type WC pan (Wall Hung) of Jaquar or Kohler or American standard like JAQUAR CNS-WHT-961SPP- SIZE 365x545x360MM and P trap distance 23.5 cms with integral P trap including jointing the trap with soil pipe in cement mortar 1:1 (1 cement: 1 find sand) etc, complete. Make: Jaquar, Kohler or American standards only as selected by authority.	7.00	Nos.	8888.00	62216.00
139	119.	Providing and fixing Health Faucet hand shower of Jaquar or Kohler or American standard heavy duty with SS braided hose 1.2 MT long pipe to water closet like JAQUAR ALD-CHR-573. Make: Jaquar, Kohler or American standards only as selected by authority.	7.00	Nos.	1919.00	13433.00
140	120.	Providing and fixing Metropole Flush Valve of Jaquar or Kohler or American standard Regular 32mm Size (Concealed Body) with Exposed Shut Off Provision & Round Flange like FLV-CHR-1095N. Make: Jaquar, Kohler or American standards only as selected by authority.	7.00	Nos.	4040.00	28280.00

141	121.	Providing and fixing Toilet roll holder - like Jaquar -ACN -1151N etc, complete. Make: Jaquar, Kohler or American standards only as selected by authority.	7.00	Nos.	909.00	6363.00
142	122.	Providing and fixing Urinal of Jaquar or Kohler or American standard approved quality including connection with trap and with integral longitudinal flush pipe. (A) Squatting plate pattern white earthenware size of urinal 385x325x635 mm like jaquar make code no URS-WHT-13253N including (1) Providing and fixing SS finish waste coupling of 32 mm dia size half thread with 80mm height like jauar -ALD - 709 for wash basin with rubber plug etc completed. Make: Jaquar, Kohler or American standards only as selected by authority.	6.00	Nos.	7878.00	47268.00
143	123.	Providing and fixing of Jaquar or Kohler or American standard SS finish flush valve of auto closing system like jaquar PRS-073 of approved quality and connection with waste pipe trap etc. completed. Make: Jaquar, Kohler or American standards only as selected by authority.	6.00	Nos.	3383.50	20301.00
144	124.	Providing and fixing of Jaquar or Kohler or American standard SS finish bottle trap with internal partition of 32mm size with 250mm &190mm long wall flange connection pipes and wall flange like jaquar ALD-769 of approved quality with necessary fitting for wash basin etc. completed. Make: Jaquar, Kohler or American standards only as selected by authority.	18.00	Nos.	2415.92	43486.56
145	125.	Providing and fixing of Jaquar or Kohler or American standard Wash Basin vitreous China table top wash basin size 560mm x 450 mm in white colour. Like JAQUAR CNS-WHT-903 SIZE OF 425x340x175MM with single hole for pillar tape with CP or MS brackets painted white including cutting holes and making good the same including (1) Providing and fixing of Jaquar or Kohler or American standard SS waste coupling of 32 mm dia size half thread with 80mm height like jaquar -ALD - CHR-705 for wash basin with rubber plug etc. completed. Make: Jaquar, Kohler or	12.00	Nos.	3989.50	47874.00

		American standards only as selected by authority.				
146	126.	Providing and fixing on platform stainless steel Sink glossy ASIS 304 grade x 1mm thick with overall size 610x460mm & bowl size 560x410x200mm including fixing the sink in platform & making good the same including the cost of PVC waste pipe of 32mm dia. and PVC waste coupling etc complete as directed by EIC	1.00	Nos.	6110.50	6110.50
147	127.	Providing and fixing of Jaquar or Kohler or American standard SS Pillar cock with extension body like JAQUAR FUS-CHR-29021N etc complete as directed by EIC. Make: Jaquar, Kohler or American standards only as selected by authority.	13.00	Nos.	3030.00	39390.00
148	128.	Providing and fixing of Jaquar or Kohler or American standard Two-way BIB cock with wall flange of genuine company brand, in with model no like FUS-CHR29041, water tap brand or approved ISI brand quality, fixing in pipeline and testing the same... etc., complete., as directed by EIC. Make: Jaquar, Kohler or American standards only as selected by authority.	7.00	Nos.	2727.00	19089.00
149	129.	Providing and fixing of Jaquar or Kohler or American standard SS finish Angular Stop cock for wash basin like Jaquar FUS-29053. Make: Jaquar, Kohler or American standards only as selected by authority.	8.00	Nos.	1515.00	12120.00
150	130.	Providing and fixing of Jaquar or Kohler or American standard SS finish bib tap like Jaquar Florentine Bib Cock (Silver) FUS-CHR-29037. Make: Jaquar, Kohler or American standards only as selected by authority.	4.00	Nos.	2121.00	8484.00
151	131.	Providing and fixing of Jaquar or Kohler or American standard Overhead Shower ø105mm Round Shape Single Flow with Air Effect (ABS Body & Face Plate Chrome Plated) with Rubit Cleaning System like JAQUAR OHS-1709 & Shower Arm Casted 160mm Long Light Body Round Shape for Wall Mounted Showers with Flange like JAQUAR SHA-477 & Wall Mixer 3-in-1 System with Provision for both Hand Shower and Overhead Shower Complete with 115mm Long Bend Pipe, Connecting	5.00	Nos.	17170.00	85850.00

		Legs & Wall Flange (without Hand & Overhead Shower) like JAQUAR QQP-7281PM, Towel Rack 600mm Long without Hangers, Stainless Steel like JAQUAR ACN-1181FS approved ISI brand quality, fixing in pipeline and testing the same etc., complete., as directed by EIC. Make: Jaquar, Kohler or American standards only as selected by authority.				
152	132.	Providing, supplying and fixing Waste Pipe	6.00	Nos.	303.00	1818.00
153	133.	Providing, supplying and fixing cement Bluster as approved by EIC.	590.00	Nos.	126.25	74487.50
154	134.	Providing, supplying and fixing GRC Material.	43.00	Sq.Mtr	3131.00	134633.00
CIVIL WORK: TOTAL PART-A						42457741.86
ELECTRICAL PART						
155	135.	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete cat III	125	Pt.	449.45	56181.25
156	136.	Point wiring for Tissino / Modular secondary light point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires, in below type of pipe to be erected complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC / wooden box covered with 3 mm thick PC(Polycarbonate) / Acrylic sheet for open /concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed. Note:- Maximum up to 6 mtrs length,	92	Pt.	151.50	13938.00

		excess will be considered as Mains for Secondary Point. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete cat III				
157	137.	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected with 6A Modular type switch and hum free EME step type electronic fan regulator mounted and accessories with earth continuity of following type erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete cat III	31	Pt.	629.23	19506.13
158	138.	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories [II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete cat III	7	Pt.	697.91	4885.37
159	139.	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a	36	Pt.	473.69	17052.84

		switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete				
160	140.	Point wiring for on board Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate modules erected on / in wall / ceiling with following type accessories Cat. III	48	Pt.	241.39	11586.72
161	141.	Providing & erecting Switch board for Computer or electric apparatus consisting of following modular type accessories mounted with PVC / Metallic concealed/open box with single mounting base frame covered with textured/metallic /white front plate, modules erected with necessary connections as directed1 no. 6A/16A universal plug-switch combined. 3 nos. 6A Switch3 nos. 6A 5 pin Plug For Modular Type Accessories Cat. III	3	Ea	1081.71	3245.13
162	142.	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate, modules erected with necessary connections as per site situation directed by Engineer In charge. (8) Computer RJ-45 socket Cat.III	3	Ea	153.52	460.56
163	143.	Supplying & erecting approved make LAN cable of following size in existing pipe as per direction [C] CAT - 6	250	Mtr.	45.45	11362.50
164	144.	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate, modules erected with necessary connections as per site situation directed by Engineer In charge. (3) Two Pin/RJ-11 Telephone Socket [A] For One Gang Cat.III	4	Ea	153.52	614.08
165	145.	Supplying & erecting approved make Telephone Cable electrolytic copper conductor PE insulation twisted in two pairs, & wrapped with FRLS PVC tape & sheathed with FRLS PVC or HFFR outer Jacket suitable for telephone wiring & confirming to C-DOT erected in	300	Mtr.	19.19	5757.00

		existing pipe. of following size of conductors & nos.of pairs. With necessary connections. [A] Conductor Size 0.5 mm (a) Unarmoured (2) Two Pairs				
166	146.	Providing & erecting main Distribution (MDF) indoor type, back mounted frame as per DoT standard approved with krone strips (a) Suitable for 10 pair	1	Ea.	949.40	949.40
167	147.	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate, modules erected with necessary connections as per site situation directed by Engineer In charge. (4) TV Co-axial Socket outlet Cat.III	1	Ea	153.52	153.52
168	148.	Providing & Erecting approved make following size of TV Co-axial flexible cable comprising inner conductor of solid bare copper insulated with Foam PE & Secondary conductor made of poly - Aluminum film bonded Al. Braids @ suitable coverage overall sheathed with black PVC insulation. (b) RG-6	150	Mtr.	37.37	5605.50
169	149.	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. (f) One wire 10.00 sq. mm	10	Mtr.	87.87	878.70
170	150.	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. (g) One wire 16.00 sq. mm	10	Mtr.	135.34	1353.40

171	151.	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required.(h) One wire 25.00 sq. mm	10	Mtr.	225.23	2252.30
172	152.	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. (i) One wire 35.00 sq. mm	10	Mtr.	286.84	2868.40
173	153.	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size. (A) With medium class Rigid PVC pipe and accessories (a) 2 wire 1.5 sq. mm	610	Mtr.	59.59	36349.90
174	154.	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size. (A) With medium class Rigid PVC pipe and accessories (b) 2 wire 2.5 sq. mm	750	Mtr.	78.78	59085.00
175	155.	providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity	430	Mtr.	405.01	174154.30

		of following size (A) with medium class Rigid PVC pipe and accessories (i) 4 wire 10 sq. mm (use earth wire of 4 sq.mm)				
176	156.	Providing and erecting ISI mark medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (b) 25 mm	350	Mtr.	32.32	11312.00
177	157.	Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes. (2) 25 mm	50	Mtr.	20.20	1010.00
178	158.	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (ii)6 way	1	Ea	2913.85	2913.85
179	159.	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (iii)8 way	1	Ea	3412.79	3412.79
180	160.	providing and erecting Miniature circuit breaker single pole 6A to 25A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	30	Ea	112.11	3363.30

181	161.	Providing & erecting 240 V MCB double pole switch for lighting Load (B Curve) having 10 KA breaking capacity & confirms to IS: 8828 in existing box having following capacity (A) 6 to 32 Amp. Cat-III	3	Ea.	278.76	836.28
182	162.	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat.III	2	Ea.	668.62	1337.24
183	163.	providing and erecting Approved make RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (ii) 40Amps. DP Cat. III	6	Ea	2235.13	13410.78
184	164.	Supplying & erecting approved make Four Pole 415V change over switch interior for panel mounting with operating mechanism A.C.23 duty confirming to IS for (B)63 A	1	Ea	4785.38	4785.38
185	165.	Supplying and erecting triple pole & neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar,erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	2	Rn.Mt r	1961.42	3922.84
186	166.	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V,having normal current rating up to 25 A to 100A. with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing.	5	Ea	6172.11	30860.55

187	167.	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board necessary IP- 42 and above protection as per approval from engineer incharge made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S. sheet for internal partitions with necessary accessories , supporting angles/ flats channel including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in- charge with erection of supplied switch gears, BUSBARS, suitable size of inter connecting PVC copper wire / copper-aluminum strips, rubber grommets, rib, Bakelite control fuses/MCB for measuring instruments, earth bus & earth bolts, foundation flange - bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket, heavy duty end terminal connection, danger notice board, necessary ventilation, earthing strip complete. The Panel shall be painted with epoxy powder coating (The rates exclude the cost of switchgears, bus bars, inter connecting mains & Copper Aluminum strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size. (B) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory. (i) with 350mm depth board	3	Sq.Mtr	14902.55	44707.65
188	168.	Providing , erecting , fabricating the M.S. structure as per requirement on site incorporating proper size of M.S. angles, square, round, flats, bars, channels, sections complete with cutting, welding, grinding & finishing duly painted with one coat of red oxide with erection on site as per direction of engineer in charge with necessary grouting, cementing, plastering & finishing complete.	20	Kg.	77.77	1555.40
189	169.	Providing and erecting multifunctional meter suitable for application of Power	1	Ea	14123.84	14123.84

		monitoring and showing measurement of following Voltage, Frequency, Apparent energy, Apparent power, Active and reactive energy, Active and reactive power, Average voltage Vavg, Peak demand power PM, QM, SM, Demand power P, Q, S, Apparent power S, S1, S2, S3, Unbalance current, Power factor and displacement PF (signed, four quadrant), Calculated neutral current, Active, reactive, apparent energy (signed, four quadrant), Active power P, P1, P2, P3, Voltage U21, U32, U13, V1, V2, V3, Phase currents, Average current lag, Peak demand currents, Reactive power Q, Q1, Q2, Q3, Demand current I1, I2, I3, [Us] rated supply voltage 40...300 V AC 45...65 Hz, 40...300 V DC, Network frequency 50 Hz, Type of network 3P, Display type 7 segments LED, Display colour Red, Messages display capacity 3 fields of 4 characters, Display digits 12 digit(s) - 14.2 mm in height				
190	170.	Supplying and erecting approved make suitable panel indicator LED type lamp, lens cover, complete erected with necessary connections.	6	Ea	43.43	260.58
191	171.	Providing & erecting L.T. Current Transformer with bar primary 50/5 to 1000/5 ratio 15 VA burden erected in existing CRCA box duly secured with insulating materials connected to the meter.	1	Ea	274.72	274.72
192	172.	Supplying and erecting, commissioning and testing of Diesel Generating set confirming to IS: 4722:1968 & BS:5514 having continuous rating, 3 phase, 415 volts, 50 cycles A.C. supply comprising of a totally enclosed air/water cooled diesel engine with multi-cylinders developing suitable BHP not less than following capacity at 1500 RPM with 10% overload for one hour in 24 hours with standard accessories like fly wheel, lubricating oil cooler, "A" class governor, heavy duty fuel wheel and lubricating oil filter, oil bath air filler, lubricating oil pressure gauge, end exhaust manifold, standard set of tools with adjustable spanners, screw drivers, cylinder head to cover, joint cylinder head to exhaust, element lube oil filter, 12 / 24 volts electric starting equipment complete with standard heavy duty battery,	1	Ea	410678.12	410678.12

		<p>dynamo, cut-outs, ammeter, necessary wiring, pressure gauge, starter etc and heavy duty Residential type exhaust silencer and vertical hot air duct logged with asbestos rope, save oil trays, exhaust piping of required length, standard wall/floor mounted fuel with level indicator and piping and drip proof alternator, self-excited, self-regulated, screen protected, with excitation system, capable of delivering the rated system output at 415 volts, 3 phase, 0.8 PF, 50 Hz, 4 wire, running at 1500 RPM, conforming to IS-4722- 1968 with voltage regulation +/- 5% of rated voltage from no load to full load. Both the engine and alternator fitted on a common fabricated steel base plate with antivibration mounting engine and alternator both connected to each other by flexible flange coupling and with floor/wall mounted control panel box comprising of voltmeter ammeter, selector switches, ACB / MCCB / MCB of adequate capacity, indicator lamps duly wired with HRC fuses. The alternator & control panel shall be connected with provided suitable capacity armoured cable and complete with Acoustic enclosure (canopy) made out of 16 SWG CRCA Sheet, sound absorbing material Rockwool of 64 density & 100 mm thick conforming to IS:8183 / PU Foam of 40 Density - at least 40 mm. The resin bonded rockwool covered from inside the canopy by perforated sheet with 3/4 mm holes, sound level not more than 75 dB at a distance of 1 mtr, as per PVCT norms. Erection, commissioning and satisfactory testing as per requirement with first filling of fuel, oil, etc. with guarantee / Warrantee of complete system for Two years. & with obtaining all necessary certificate from Electrical Inspector. The Capacity and Ratings of DG sets are as below.</p> <p>(A) Continuous Rating of 40 KVA, BHP not less than 52 BHP</p>				
193	173.	<p>Providing & erecting approved make AMF control panel suitable for following size of 3 phase, 415 V., 50 cycles, A.C. diesel generating set complete of scope as detailed below:</p>	1	Ea	97320.57	97320.57

		<p>1) Power module: A pair of electromechanically interlocked contactors (for mains & generator) Overload relay for generator contactor Neutral contactor for mains and generator Power socket for connections.</p> <p>2) Control and metering module: Line voltage monitor. Generator voltage monitor Ammeter 3 items attempt start facility. Air circuit breakers/MCB/MCCB of suitable rating for auto/manual operation. Auto/manual switch. Emergency stop pushes buttons. Manual start push button. frequency meter. Engine hour meter. Two earthing studs.</p> <p>3) Protection module: The engine shutdown in the unlikely event of Low lube oil pressure High cylinder head temperature. V belt failure.</p> <p>4) Indicators with alarm Load on generator.</p> <p>5) Indicators Load on mains Engine fails to start. Emergency stop battery charger.</p> <p>The AMF Panel of following capacity (A) AMF Control Panel for 50/62.5 KVA 3 phase DG Set</p>				
194	174.	Providing and erecting Approved make Earth fault Relay suitable to mount with inter connection suitable to following size of moulded case circuit breaker having CT ratio & MCCB rating as following along with shunt trip 220V AC. with all internal connections & complete erected in existing M.S.housing.. (1) 15 A -100 A , CT Ratio 1/100	1	Ea.	4687.41	4687.41
195	175.	Providing and erecting metallic vitrified danger notice board as per language suggested by engineer incharge for MEDIUM VOLTAGE installation to be erected as per IS-2551.	3	Ea	69.69	209.07
196	176.	Providing following type of Modular Type Accessories mounted with PVC / metallic/Wooden box, single mounting base frame covered with textured / metallic/white front plate, modules erected with necessary connections as per site situation directed by Engineer In charge. (7) Blank Plate Single	20	Ea	24.24	484.80
197	177.	Providing and erecting XLPE(IS:7098) (I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in	150	Mtr.	105.04	15756.00

		existing trench / pipe of following size of cables. (C) 3 core 6 Sq. mm				
198	178.	Providing and erecting XLPE (IS:7098) (I)-88 ISI armoured cable multistrand / Solid Aluminum conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (B) 4 core 6 Sq. mm	180	Mtr.	124.23	22361.40
199	179.	Providing and erecting XLPE (IS:7098) (I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 16 Sq. mm	200	Mtr.	151.50	30300.00
200	180.	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armored cable complete without going tails, insulating tape etc for following size of cables. (B) 2 to 4 core 6 Sq. mm	8	Ea	38.38	307.04
201	181.	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armored cable complete without going tails, insulating tape etc for following size of cables. (D) 2 to 4 core 16 Sq. mm	4	Ea	47.47	189.88
202	182.	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (A) 1.5/ 2.5/4/6 Sq.mm	28	Ea.	6.06	169.68
203	183.	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (C) 16/25 Sq.mm.	16	Ea.	15.15	242.40
204	184.	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron	6	Ea	8636.51	51819.06

		galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistance mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)-Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphur content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (c) For Electrical Installation covering Transformer Neutrals, Lightning arrester Earthing, A.C.Plant & Sensitive Computer System(like Automation, SCADA) i.e independent Earthing in normal soil. Length of Pipe : 3.00 mtrs Back filling Compound :2 nos Bags of 25 Kg.				
205	185.	Providing and erecting required size Copper strip for earthing of H.T. OCB / ACB/ Transformer, LT panel board, Motors etc. using copper clamp.	30	Kg.	794.87	23846.10
206	186.	Providing and erecting required size HOT deep Galvanised iron strip for earthing of H.T., OCB/ ACB/ Transformer LT panel board, Motors etc. using proper clamp.	20	Kg.	77.77	1555.40
207	187.	Supplying and erecting approved make oscillating type bracket fan A.C. 230V. 50cy/s 400/450 mm sweep wall mounted with height adjustment and rotary tilting device complete with guard, flexible Core plug top complete erected with lead wires as directed.	1	Ea	2534.09	2534.09
208	188.	Providing & erecting Approved make Power Saving 50-Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230-volt A.C. 50 Hz 1200	30	Ea	1948.29	58448.70

		mm sweep complete having 3 blades with aluminium blades with, canopy & 30 cm. down rod erected with earthing. (Make shall be approved by Engineer in charge))				
209	189.	Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with proper insulation without leakage and earthing.	30	Mtr.	108.07	3242.10
210	190.	Supplying & erecting fan hook box of 10 mm M.S. round bar bounded to the RCC bars up to 50mm length each side and pierced through a 16 Gauge M.S. box / Heavy Duty PVC box complete erected concealed in Ceiling with necessary finishing.	30	Ea	108.07	3242.10
211	191.	Providing 2. 5mm.thick laminated acrylic sheet to cover the fan hook or Fan box.	30	Ea.	18.18	545.40
212	192.	Supplying & erecting approved make low noise decorative exhaust fan having square frame ABS body with inbuilt lowers & square frame. 200mm with 1350RPM Cat.II	8	Ea	1703.87	13630.96
213	193.	Providing recess in wall or window frame suitable for erection of Exhaust fan complete with plastering and colour washing to match the colour of the wall or window complete with expanded metal in order to render the fitting in accessible and the room water-proof.	8	Ea	189.88	1519.04
214	194.	Supplying and erecting approved make Instantaneous type water heater with 3ltr.capacity rust free container housed in ABS plastic body insulated with glass wool / puff insulation and 3 Kw heating elements, adjustable thermostat 300 C to 850 C with set to operate at 850 C (+/-60 C) auto reset indication lamps, thermal cut-out, safety valve fusible plug etc. Premium Category	5	Ea.	4735.89	23679.45
215	195.	Supplying and erecting led lamps with following wattage capacity of 220 to 240 voltage, minimum 15000 burning hours life, 500 V in built-surge protection, Polycarbonate diffuser, mounting suitable for E14 / E27 / B22 lamp holders, pf >= 0.5 (A) LED Lamps integral type, with PC diffuser suitable LAMP holder (ii) 5 to 8 watts cat - III	44	Ea	112.11	4932.84
216	196.	Supplying and erecting led lamps with following wattage capacity of 220 to 240	6	Ea	404.00	2424.00

		voltage, minimum 15000 burning hours life, 500 V in built-surge protection, Polycarbonate diffuser, mounting suitable for E14 / E27 / B22 lamp holders, pf >= 0.5 (A) LED Lamps integral type, with PC diffuser suitable LAMP holder (v) 21 to 30 watts cat - III				
217	197.	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminium casted body with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15 %, CCT 3000 K to 6500K, Luminaire efficacy > 85 lumens/watt , LED driver efficiency > 85 % (fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Square/ Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete. IP20 (iii) 16-20 watts, Surge-2 KV cat - III	129	Ea	589.84	76089.36
218	198.	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminum casted body with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15 %, CCT 3000 K to 6500K, Luminaire efficacy > 85 lumens/watt, LED driver efficiency > 85 % (fitting required LM-79 & LM-80 Certificates) (NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer in charge	30	Ea	758.51	22755.30

		may select any wattage capacity between the ranges shown.) (A) Square/ Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete. IP20 (iv) 22-24 watts, Surge-2 KV cat - III				
219	199.	Supplying & erecting dual channel amplifier ,power handling capacity of 180 watt ,four micro phone inputs with independent level control ,built in FM tuner, with preset memories, USB drive & SD card for MP3 playback ,100v /telephone input with priority and VOX, frequency response-80 Hz to 18k Hz Philips / /distortion less than 1% @ rated power up to 50 units [[Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	1	Ea.	11128.18	11128.18
220	200.	SITC of 3LCD Lamp based projector having wxga (1280x800) or better resolution with minimum white brightness of 3800 lumens and color brightness of 3800 lumens. The projector should have minimum 1HDMI,1VGA input. Having contrast ratio of 15000:1 or more. the projector should have auto vertical key stone correction of +/- 30 degree and Manual Horizontal of +/-30 degree. the projector should have optical lens, throw ratio 1.30-1.56:1. Zoom Factor of 1.2. Lens focus Manual having focal length 16.9mm to 20.28mm. projector should have features like AV mute slide, quick corner and split function and should support wireless functionality with inbuilt wifi or wifi dongle. [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	1	Ea.	33895.60	33895.60
221	201.	SITC of 100-inch Self Lock MW (7 x 5) Insta lock Slow Retraction Screen, Aspect Ratio-4:3 [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	1	Ea.	3810.73	3810.73
222	202.	SITC of Rack Mounting kit for the control unit. [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	1	Ea.	4814.67	4814.67
223	203.	Providing and erecting water cooler having storage capacity 80Ltr. & cooling capacity 40 Ltr. per hour @ an ambient	2	Ea.	41342.33	82684.66

		temp of 45° C. The outlet temp. of the water should drop by 15° C within a hour, The water cooler should be comprising of hermetically sealed compressor, fan motor, condensing unit, water tank surrounded by evaporating coil, thermostats, relay etc. complete with necessary inlet & outlet connection. The body of water cooler will be made from Stainless Steel. °				
224	204.	Supplying & erecting reverse osmosis (RO) water purification system with M.S. powder coated pedestal frame, prefilter housing carbon filter suitable buster DC pump, auto low & high pressure switches with following size of LPH capacity & erected as directed [D] 100 LPH with 1 phase / 3 phase Raw water pump of 500LPH @ 2.5kg/cm ² - (1No - Kirloskar /CRI/Lubi), Dual media filter 10"x54" - (1 No), Micron cartridge filter 20" x 2.5" (1No), High pressure pump 500LPH @ 10kg/cm ² - (1No - Shinge /CRI /Lubi), RO Membrane housing with RO membrane of 40*40 - (1No), RO pressure tube 4" x 1E - (1No), 0 - 1200LPH Rotameter -(2 Nos), with Recovery Rate 50%.	2	Ea.	65052.08	130104.16
225	205.	Supplying and erecting approved make Conical Pole (Standard) Made from HR sheet steel. The pole should be made as per IS. and shall be coated with hot dip galvanizing as per IS 2629/2633/4759 with required base plate and integral Junction box consist of terminal plate of min 6mm Hylam sheet, standard profile 35mmX7.5mm Din-Rail for MCB Mounting, stud type terminal and arrangement for cable terminations erected on suitable foundation (included) with necessary GI nut-bolts/J-Bolts. as per details given by manufacturer considering site requirement.The length of poles are as below (C) 5 Mtr. Long 65mm Top X140 mm bottom dia, 3mm thickness.	20	Ea.	6403.40	128068.00
226	206.	Providing and erecting street light pole bracket comprising main B Class MS pipe of 4.2 cm/require outside dia. complete with suitable B Class M.S. sleeve tubing of approx. 45cms.length and suitable for 76.5	20	Ea	561.56	11231.20

		mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms. [A] Single Arm bracket 1 Mtr				
227	207.	Supplying & erecting approved make SMC press moulded composite FRP. loop-in, loop-out approx. 2mm thick box complete with Bakelite connector strip 5way(3P+N+E), DIN rail for mounting mob & hinged doors as per requirement having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamps & earth bolt of following size of box. (A) 300mm x 200mm x 100mm [deep]	20	Ea	898.90	17978.00
228	208.	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V, Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K, Uniformity ratio > 0.45, Luminaire efficacy > 100 lumens/watt . LED driver efficiency > 85 %. (fittings required LM-79 & LM-80 certificates) (NOTE: Below description have shown ranges of Wattage capacity of LED fittings. The Engineer in charge may select any wattage capacity between the ranges shown.) (A) Street Light (IP-65), Surge protection -4KV integral and, Light must have 440VAC line supply with over-voltage protection. (i) above 36 to 48 watts Cat-III	20	Ea	3345.12	66902.40

229	209.	Providing and fixing Terminal board of size 5.0 x 127 x 152.4 mm. Bakelite sheet with suitable brass studs with nuts, washers and clamps of size 25mm x 3mm suitable for pole painted with one coat of red lead paint.	20	Ea.	146.45	2929.00
230	210.	Supplying & erecting approved make Digital time switch having lithium cell 6 years operative and operate battery backup 1 channel day clock with 14 memory programme, suitable to operate on 240V + 5%, 16A with, floating contacts Minimum switching setup time 1 minimum & LCD display. Also comprised permanent ON/OFF switching. Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.	1	Ea	3168.37	3168.37
231	211.	Supplying & erecting power contactor, AC3 duty for time switch complete erected as per direction Cat III (B) 2 pole 250V 32 Amp.	1	Ea	1883.65	1883.65
232	212.	Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. (e) 1.50 Sq.mm 3 core round PVC sheathed	60	Mtr.	44.44	2666.40
233	213.	Supplying and erecting B class Galvanized iron pipe having smooth finished bore of the pipe on both ends erected nuts and bolts along the pole / wall shaping the pipe as per site requirement. Pipe dia as following. (C) 40 mm dia.	80	Rmt	249.47	19957.60
234	214.	Providing and erecting Pipe type earthing with 40 mm dia 2.5 mtr long 'B' grade G.I. pipe with necessary coupling buch buried in specially prepared earth pit & G.I. earth wire of 8 SWG erected & connected as directed (For panel) For using salt and charcoal / coke as required for pipe type earthing.	20	Ea.	994.85	19897.00
235	215.	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene (conforming to IS 14930 II) with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	350	Rmt	62.62	21917.00

236	216.	Providing & erecting 240 V MCB double pole switch for lighting Load (B Curve) having 10 KA breaking capacity & confirms to IS: 8828 in existing box having following capacity (A) 6 to 32 Amp. Cat-III	20	Ea.	278.76	5575.20
237	217.	Making trench in Hard Murdrum / Tar Road of suitable width of 90 cm or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	150	Mtr.	62.62	9393.00
238	218.	Making trench in soft soil of suitable width of 90 cm deep for laying cable or locating the fault all over the run and back filling the same and making the surface as normal ground.	180	Mtr.	46.46	8362.80
239	219.	Supplying & erecting carbon dioxide (CO2) fire extinguisher user of following capacity with necessary clamps made from 50 x 6 mm M.S. Flat with nut & bolts grouted in wall complete. [A] For 4.5 Kg Capacity	3	Ea	6591.26	19773.78
240	220.	Supplying & erecting ABC powder type 'Ceasefire' type Fire extinguisher as per IS 13849 or 1 Kg capacity with necessary clamp for erection on wall	3	Ea	848.40	2545.20
241	221.	Providing & erecting open well type horizontal mono block pump set with stainless steel body having following specification (C) 1 H.P. single phase open well motor pump set suitable for 185 LPM discharge @ 25 mtr. head, suitable for 32 mm dia. Delivery pipe with control panel. Cat III	1	Ea.	9613.18	9613.18
242	222.	Providing & erecting open well horizontal mono block pump set with cast iron body, complete for three phase submersible motor having [C] For 3 HP 3 phase open well horizontal mono block pump set suitable for 85 LPM to 270 LPM @ 11 mtr to 33 mtr head suitable for 50/65 mm dia delivery pipe Cat III	1	Ea.	15707.52	15707.52
243	223.	Supplying & erecting approved make Automatic liquid level controller 6A. with sensor testing as per instruction of Engineer in charge on site complete with wiring connection with existing wires, with copper conductor from pump to upper and lower tank.	2	Ea.	2355.32	4710.64
244	224.	Supplying & erecting approved make motor control cubical panel [Star delta] made from 16G CRCA sheet duly epoxy	1	Ea.	7250.79	7250.79

		powder painted inside and outside with hinged doors and locking with suitable size of ON - OFF isolator (AC 3 / 23 duty) main fuses. Digital volt and current meter (in a single unit) with micro controller based control unit and current sensing single phasing preventer electronic overload protection, over voltage (Programmable) protection and under voltage (Programmable) protection, prod less dry run protection programming facility for setting of all parameter like overload current, high voltage limit, low voltage limit, dry run limit with digital indication on seven segment LED display for any fault like over load, high voltage, low voltage, dry running single crimped, electronic star delta timer, feather touch start / stop push buttons to be erected on angle iron frame. Grouted on wall the contactors will be of L& T, Siemens, BCH make only) (A) DOL up to 5.0 H.P.				
245	225.	SITC of Analogue Addressable Manual Call Point with Integral Short Circuit Isolator, Analogue Addressable Protocol having, Bi-colored status LED (red for alarm, amber for (short-circuit), non-frangible element fitted as standard (conforms to EN54), pulsing/non-pulsing can selectable via panel, electronically addressed, Approved by LPCB. (Including Five-year free maintenance with guarantee)	3	Ea	6060.00	18180.00
246	226.	SITC of addressable loop powered Base sounder with integral Beacon, includes 51 user- selectable tones (all tones EN54-3 compatible), variable sound output 50 ~ 98 dB(A) (± 2 dB(A)) output at 1 metre, Auto shut down feature prevents noise pollution, 'O' rated beacon to EN-23, IP21 rated for internal use, sounder and beacon can operate independently, Approved by LPCB (Including Five year free maintenance with guarantee)	3	Ea	6741.75	20225.25
247	227.	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required.	300	Mtr.	124.23	37269.00

248	228.	SITC of Microprocessor based Networkable Analogue Addressable Fire Alarm Control Panel. The Panel shall be compliant with EN54-2, EN54-4 and approved by LPCB. The Fire Alarm Control Panel shall have inbuilt 3 loops and expandable upto 4 Loops. The Panel must have large graphic display. The Panel must also have the capability to take Addressable Intelligent Wired and Wireless Devices on same loop. Each loop shall have a capacity of 127 analogue Addressable devices and 127 Base sounders/Base Sounder Beacons. The Panel shall have 240 V AC power supply along with automatic Battery Charger. Approved by LPCB (Including Five-year free maintenance with guarantee)	1	Ea	221190.00	221190.00
249	229.	Supply, Installation, Testing and Commissioning of 4MP Varifocal Lens Dome Type Camera, H.265 4MP IR Turret Dome N/W Camera, Manual Varifocal 2.8-12mm, 50M, Micro SD, DC12V/PoE, IP67/IK10, Basic IVA, 4MP resolution (2560 × 1440), True day/night, Digital WDR, 3D DNR, HLC & BLC, Triple streams, Smart codec by ROI, Built in MIC, Cyber Security, Basic intelligent video analytics, Audio In, NDAA Compliance, UL, CE, FCC Certified (Including Five year free maintenance with guarantee)	8	Ea.	11458.36	91666.92
250	230.	Supply, Installation, Testing and Commissioning of 4MP Varifocal Lens Bullet Camera, H.265 4MP IR Bullet N/W Camera, Manual Varifocal 2.8-12mm, 50M, Micro SD, DC12V/PoE, IP67/IK10, Basic IVA, 4MP resolution (2560 × 1440), True day/night, Digital WDR, 3D DNR, HLC & BLC, Triple streams, Smart codec by ROI, Cyber Security, Basic intelligent video analytics, NDAA Compliance, UL, CE, FCC Certified (Including Five year free maintenance with guarantee)	3	Ea.	11458.36	34375.09
251	231.	Supply, Installation, Testing and Commissioning of 16 Channel Network Video Recorder (NVR), 1, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface, Supports H.265+/H.265/H.264/H.264+ decoding formats, Embedded NVR, 2 HDD Bays, up to 6TB capacity each disk, HDMI, VGA output, 1-	1	Ea.	21417.99	21417.99

		ch @ 8 MP / 4- ch @ 1080p, Incoming bandwidth 160Mbps, Outgoing 80 Mbps, CE FCC, BIS, Operating Temp -10 deg to 55 deg C, 2xUSB 2.0 1USB and serial Interface (Including Five year free maintenance with guarantee)				
252	232.	SITC of SCREEN SIZE 80 cm diagonal (32" INCH), RESOLUTION HD (1366*768), USB INPUT (2.0 SUPPORT) 2*Side(USB2.0), HDMI INPUT 3*Side(HDMI 1.4), USB DEVICE SUPPORT USB Supported HDD, HOTEL MODE Yes, Basic, BLUETOOTH Yes (Ver. 4), WIFI TYPE(STANDARD) 802.11a/b/g/n 2.4G 2T2R, Built-in, WIFI BAND TYPE 2.4GHz, OS & VERSION INFO Android 'P' - 9.0, MEMORY FLASH 8GB EMMC, RAM 1.5GB , DDR3 2133 Mhz. (Including Five-year free maintenance with guarantee)	1	Ea.	50904.00	50904.00
253	233.	SITC of 8 x 10/100/1000BASE-T PoE ports2 x Gigabit SFP ports Advanced L2 switching and security featuresL2+ Static Routing Optional "standard mode" or "surveillance mode" management user interface 65W PoE budget [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	2	Ea.	18400.18	36800.36
254	234.	Supply, Installation, Testing and commissioning of 4 TB Surveillance Series Hard disk supporting 24X7 operational efficiency	1	Ea.	15821.65	15821.65
255	235.	Providing & Erecting Network rack with following capacity with Necessary cooling fan, Cable manager,6A PDU, equipment rack with necessary mounting accessories. (A) 9 U	1	Ea.	11555.08	11555.08
256	236.	Providing and erecting Inverter based approved make split air-conditioning unit consisting of condensing unit with variable speed fan motor, inverter type hermetically sealed rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by means of extra supplied proper insulated copper tubing, drain PVC pipes suitable for (cost includes Eco Friendly green gas charging and 15A plug top & Remote Control & MS Stand) with necessary core cutting. (2) For 4/5 Star Rating of current year (A) for 1.5 ton capacity- Premium Cat.	1	Ea.	40254.56	40254.56

257	237.	<p>Providing and erecting Inverter based approved make split air-conditioning unit consisting of condensing unit with variable speed fan motor, inverter type hermetically sealed rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by means of extra supplied proper insulated copper tubing, drain PVC pipes suitable for (cost includes Eco Friendly green gas charging and 15A plug top & Remote Control & MS Stand) with necessary core cutting.</p> <p>(2) For 4/5 Star Rating of current year</p> <p>(C) for 2.0-ton capacity-Premium Cat.</p>	2	Ea.	64649.09	129298.18
258	238.	<p>Supply, Installation, Testing & Commissioning of following size of Grid Tied Solar Power Plant with Solar Panels (ALMM approved): Frame Material: Anodized Aluminum alloy Frame with Twin Wall Profile, Front Cover: High Transmission Low-Iron Tempered Glass (AR Coated), High efficiency and positive power tolerance Pmax: 0/+5, Module Efficiency should be approx. 18%-21%, Normal operating temperature 45'C, Junction Box with Waterproof IP67 & MC4 Compatible and Enclosed with Bypass diodes, 100% Electroluminescence test to ensure error free Modules, Thep. temp. co-efficient of the PV module shall equal or better than -0.45%/degree C. Solar PV modules of minimum fill factor 75% to be used. Unit Production: - 4 to 5 Unit /kw /day (Actual) (1Year Avg) With 10-year Product warranty and 25-year Linear Power Warranty.,</p> <p>Solar Inverter: MPPT Range: 80-1000 V, Max efficiency: 97.5% - 98.9%, O/p Frequency: 50/60Hz, Operating Altitude (m) ≤4000, O/p Power Factor: ~1, O/P THDi: <3%, Operating Temperature Range: -25~60°C, Anti-islanding Protection: Integrated, Input Reverse Polarity Protection Integrated, Insulation Resistor Detection Integrated, Residual Current Monitoring Unit Integrated, Output Over Current Protection Integrated, Output Short Circuit Protection Integrated, Output Over Voltage Protection Integrated, Protection Degree: IP65, User Interface</p>	50	Per KW	42156.39	2107819.50

		LCD & APP ,Datalogger & Communication: GPRS / Wi-Fi, Module Mounting Structure: Seamless Box Pipe / 'C' Channel of suitable size for rooftop solar installations with good stability against wind & weight load., Hot Dipped Galvanized steel coils. suitable arrangement for base plate for foundation, solar panel mounting, the structure should be suitable for carry the load of solar panel, wiring, sprinkler system etc. with necessary foundation work/wall mount, j bolt, anchor fastener etc. the nut bolt used for installation of structure should be (SS 304) quality. and Balane of System with necessary Switchgears (Suitable size and protection of ACDB & DCDB), inter connecting wiring, earthing system, lightening arrester system, all Liaoning work with various gov. department like state nodal agency, DISCOM & CEIG is included in agency scope(Excluding GEDA Application fees, Solar connectivity Charges, Meter connectivity Charges, Meter testing Charges.) (D) Grid Tied Solar Power System: 26 - 50 kW (3 - phase)				
259	239.	Providing & erecting Automatic solar panel cleaning system for solar power projects which includes necessary plumbing work (UPVC pipes and accessories) from source of water to project site (up to 30 meters),Suitable size of sub mercible/ open well motor, necessary wiring for motor and sprinkler system with safety, timer circuit for automatically on/off the sprinkler system, necessary size and number of nozzles/JET (minimum 1 Nozzle/Jet per module). (D) 21KW-50KW System	50	Per KW	3681.45	184072.50
260	240.	Booster Pump- Electric Motor Driven: SITC of: Back Pull-out End Suction Type -Single Stage, Self Priming, Centrifugal Pump for booster Fire Pump with Electric Motor, Mechanical Seal, Base-frame and Couplings. MOC: -Casing-CI, Impeller- Bronze, Shaft- SS 410, Sleeve-SS410. Capacity: 450 LPM, 3HP Speed: 2900 Approx Pump shall be capable of furnishing not less than 150% of rated capacity at a	1	Set	95000.0	95000.0

		head not less than 65% of rated head The shut off head shall not exceed 120% of rated head. UOM: -Price Per Complete set of Pump + Motor + Accessories. Note: -01. Minor civil work like hole/ Core Cutting etc. are in bidder's scope. Make: KSB/Kirloskar/Wilo				
261	241.	Booster Pump Control Panel-Auto/Manual Type. Supply, Installation and Testing of: Electric Control Panel for Booster Pump. all pumps can be Start Automatically (by Pressure Switch) or manually. Design As per the Detail Specifications given. UOM: -Price Per Set. Make: L&T, SIEMENS	1	Set	23000.0	23000.0
262	242.	Pressure Gauge with Siphon Tube and Cock. Supply, Installation and Testing of: Pressure Gauge with Siphon Tube and Cock. MOC: -4" Dial- Glycerin filled- Stainless Steel Body Pressure Gauge with GI Siphon Tube and Brass Cock. Size: -Dial: 4" (100 mm) Range: 0 - 16 Bar (kg/cm2) UOM:-Price Per Unit	2	No.	1150.0	2300.0
263	243.	Pressure Switch with Siphon Tube and Cock. Supply, Installation and Testing of: Pressure Switch with Siphon Tube and Cock. Size:- Range suitable for System Design Pressure. UOM:-Price Per Unit	1	No.	1265.0	1265.0
264	244.	Pipe Laying. Supply, Fabrication, Installation, Hydro Testing & Painting of Under Ground Pipe. With necessary Pipe Fitments (Flanges, Bands, Socket etc.), MS Support/Clamps/Hangers/rapinfo-coating etc. Hardware (Gaskets, Nut-Bolts, Paint etc.), Consumables (Welding Rod, etc.) and Labour Charge. Quality: GI, C-Class (Heavy). Paint: UOM:-Price Per Running Meter Size: 100 mm	23	R.Mtr	2120.0	48760.0
265	245.	Pipe Laying. Supply, Fabrication, Installation, Hydro Testing & Painting of Above Ground Pipe. With necessary Pipe Fitments (Flanges, Bands, Socket etc.), MS Support/Clamps/Hangers etc. Hardware (Gaskets, Nut-Bolts, Paint etc.), Consumables (Welding Rod, etc.) and Labour Charge. Quality: GI, C-Class (Heavy).	20	R.Mtr	1907.0	38140.0

		Paint: UOM:-Price Per Running Meter Size: 100 mm				
266	246.	Check Valve (Non Return Valve) Supply, Installation and Testing of: Check Valve (Ball type or Swing type) with necessary pipe fitments, hardware and consumables. MOC:-Body: Cast Iron (With Flange Ends). Standard: ISI Marked. UOM:-Price Per Each No. Size: 100 mm	1	No.	4680.0	4680.0
267	247.	Butterfly Valve Supply, Installation and Testing of: Butterfly Valve with necessary pipe fitments, hardware and consumables. MOC:-Body: Cast Iron, Disk: SS, Seat: Nitrile. UOM:-Price Per Each No. Size: 100 mm	3	No.	2910.0	8730.0
268	248.	Air Release Valve- 25 mm Supply, Installation and Testing of: Air Release Valve Check Valve with necessary pipe fitments, hardware and consumables. MOC:-Body: Gunmetal / SS. UOM:-Price Per Each No.	1	No.	1175.0	1175.0
269	249.	Fire Hydrant Landing Valve (Stainless Steel (SS-304), ISI Marked): Supply, Installation and Testing of: Fire Hydrant Landing Valve with necessary pipe fitments, hardware and consumables. MOC:-Body: Stainless Steel (SS-304), Working Parts: Stainless Steel (SS-304), Coupling: Stainless Steel (SS-304), Standard: -ISI Marked. Size:-63 mm (Flange End: NB 75 mm, PCD 160 mm) UOM:-Price Per Each No.	3	No.	3735.0	11205.0
270	250.	Fire Hose Pipe (Delivery Hose)- 63 mm x 15 m Supply, Installation and Testing of: Fire Hose with Hose Couplings. RRL (ISI Mark- Type A) Fire Hose. Hose Couplings: ISI Marked Stainless Steel. With SS Wire Binding. Standard: - ISI Marked & TAC Approved Hose. Size:-63 mm dia x 15m long Hose. UOM:-Price Per Each Set.	3	No.	3100.0	9300.0
271	251.	Cabinet For Fire Hose (Hose Box)- Single Type Supply, Installation and Testing of: Fire Hose Cabinet (Hose Box) suitable to accommodate 01 no. of 15 m long fire	3	No.	1850.0	5550.0

		hoses and 01 no. of nozzle. With Lock-n-key facility. Wall Mounting Design. MOC: 16 Gauge MS Box with Powder Coating Standard: - As per Guidelines. Size:- Suitable for 01 nos. of 15 m long hoses. UOM:-Price Per Each No.				
272	252.	Fire Hose Nozzle- Short Branch Pipe Nozzle. Supply, Installation and Testing of: Short Branch-pipe Nozzle. MOC: Stainless Steel (SS-304). Standard: ISI Marked, Heavy Quality. Size:- 63 mm X 20 mm UOM:-Price Per Each No.	3	No.	1150.0	3450.0
273	253.	Fire Hose Reel Set (ISI)-19 mm x 30 m - Rubber Hose. Supply, Installation and Testing of: Fire Hose Reel Set with necessary pipe fitments, hardware and consumables. MOC:-Drum: 16 G Powder Coated MS, Hose: 19 mm X 30 m heavy-duty RUBER hose. Shut-off Nozzle: SS-304. With Control Valve: SS- 25mm Ball Valve. Standard: ISI Marked. Heavy Quality. Size:-19 mm dia x 30m long Hose. UOM:-Price Per Each No.	3	No.	5485.0	16455.0
274	254.	Fire Service In-let (In-let Connection for Fire Brigade)-2 Way Type. Supply, Installation and Testing of: Fire Service Inlet with necessary hardware and consumables. MOC:-Body: Heavy-duty CI. Couplings/NRV: Gunmetal. Standard: -Made As per IS Standard-Heavy duty quality. Size:-Couplings: 63 mm, 100 mm E-table Flange End. UOM:-Price Per Each No.	1	No.	3590.0	3590.0
275	255.	Approval of Fire Hydrant & Entire Fire Protection System from Local Fire Authority and any other relevant statutory authority at initial and various other stages of work, including preparation of report/drawings as per fire authority requirement. Contractor shall include cost of all liason work which are not explicitly mentioned above but are mandatory to have fire authority approval (any statutory charges will be paid extra).	1	No.	30000.0	30000.0
ELECTRICAL WORK: TOTAL Rs.						5408716.28
CIVIL WORK: TOTAL Rs.						42457741.86
TOTAL Rs.						47866458.14

Note:-

1. Unit Rates specified for various items to be executed as per Schedule "B" in the price bid are excluding GST and inclusive of all labour, materials, testing charges, equipment's, all incidental charges involved in the items & **1% Labour Cess** and as specified in the mode of measurement & payment of detailed specifications of items, & all other taxes, royalty, octroi, transportation cost etc. all as applicable presently and as to be enforced for future by any / all including Central/State Govt. and Statutory bodies from time to time.
2. For round the clock Maintenance clause as per tender of Building work/ Wirings/ Street Lights/ Camera and necessary equipment etc. minimum persons are to be engaged as suggested by EIC.
3. Rates quoted should be as per minimum wages act, Government of Gujarat and must include PF, ESIC and Bonus, failing which can result into disqualification of bidder.

I/We agree to carry out above work at _____ % above the estimated Rate put to tender

Percentage in words (_____)

I/We agree to carry out above work at _____ % below the estimated Rate put to tender

Percentage in words (_____)

Estimated Amount put to

Tender **Rs. 47866458.00**

Add % Above Rs. _____

Net Amount Rs. _____ (In figures).

Rs. _____ (In Words).

Estimated Amount put to

Tender **Rs. 47866458.00**

Deduct % Below Rs. _____

Net Amount Rs. _____ (In figures)

Rs. _____ (In Words)

I/we have read the condition mentioned in this tender and agree to abide by the same.

Signature of contractor.

**Executive Engineer
GIDC, VAPI**