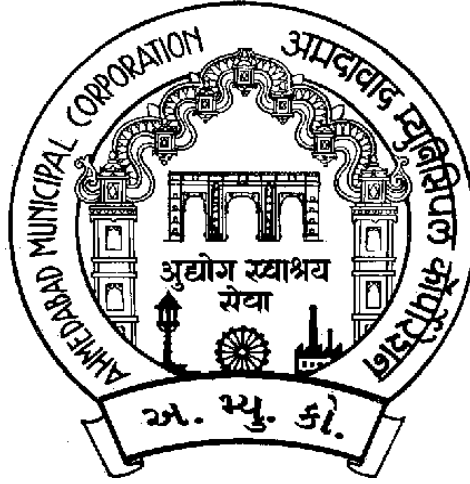


# AHMEDABAD MUNICIPAL CORPORATION

(ENGINEERING DEPARTMENT- NORTH ZONE)



## TENDER DOCUMENT

**REPAIRING AND RENOVATION OF LATE SHREE AMRUTBHAI MAGANLAL  
PATEL PARTY PLOT AT T.P.S. NO.11 RAKHIYAL , F.P. NO.85/P IN SARASPUR-  
RAKHIYAL WARD, NORTH ZONE, AHMEDABAD**

*Volume -II*

*Financial BID*

Client-

**Municipal Commissioner**

**Ahmedabad Municipal Corporation.**

**Sardar Patel Bhavan, Danapith,**

**Ahmedabad**

# AHMEDABAD MUNICIPAL CORPORATION

(ENGINEERING DEPARTMENT-NORTH ZONE)

**Name of Work:- REPAIRING AND RENOVATION OF LATE SHREE AMRUTBHAI  
MAGANLAL PATEL PARTY PLOT AT T.P.S. NO.11 RAKHIYAL , F.P.  
NO.85/P IN SARASPUR-RAKHIYAL WARD, NORTH ZONE,  
AHMEDABAD**

## Bill of Quantities

I. No.	Qty	Items	Unit Rate Rs. Ps.	Per	Amount Rs. Ps.
		<b>Civil Work Estimate</b>			
<b>1</b>		<b>Demolition &amp; Dismantling work</b>			
a	50	Demolition of RCC work using Hydra Breacker including stacking of servicable materials and disposal of unservicable materials with all lead and lift. Removal Of Existing Building Foundation and Super Structure If Any.	1047.38	Cu.M.	52369.00
b	118	Demolition of Brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift.(ii) In Cement Mortar. Removal Of Existing Building Foundation and Super Structure If Any.	544.95	Cu.M.	64304.10
c		Dismantling of sheet roofing including ridges, Hips, Valleys, Gutters etc. stacking of serviceable materials and disposal of unserviceable materials with all lead and lift.			
i	2	(i) G.I. sheet roofing.	47.25	Sq.mt	94.50
ii	2	(ii) A.C. sheet roofing.	53.55	sq.mt	107.10
d	2500	Dismantling steel work including distempering and stacking the materials with all lead and lift.	3.63	Kg.	9075.00
e	20	Dismantling doors, windows, ventilators etc. (wood or steel) shutters including chowkhats architraves, hold fasts and other attachment etc. complete and stacking them with in all lead and lift. (i)Notexceeding 3 Sq.M. in area.	185.85	Each	3717.00
f	910	Removing & Scrapping of Old deteriorated Plaster of any thickness from Masonary / R.C.C. member including stacking of serviceable material & disposal of un serviceable from site of work with all lead & lift.	19.38	Sq.M.	17635.80
g	1350	Dismantling any type tiled of stone floors laid in mortar including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift.	47.25	Sq.M.	63787.50

2		Excavation for foundation including sorting out stacking of useful material & disposing of excavated stuff upto 50 mt. lead. Loose & Soft soil.Excexuted With Mechanical Effort			
a	517	up to 1.5 mt. depth	115.92	Cu.M.	59930.64
b	297.625	1.5 to 3.0 mt. depth.	128.52	Cu.M.	38250.77
c	139	3.0 to 5.0 mt. depth	141.11	Cu.M.	19614.29
d	100	Add extra for Disposing off the excavated stuff of above items for lead of (A) 50 m to 100 m	17.28	Cu.M.	1728.00
e	100	Add extra for Disposing off the excavated stuff of above items for lead of (B) 100 m to 200 m	34.56	Cu.M.	3456.00
f		Providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap, excluding the cost of Concrete, steel reinforcement but including the cost of boring with bentonite solution and the length of the pile to be embedded in pile cap etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap) :			
i	10	400 mm dia. Piles	644.63	Rmt.	6446.30
ii	10	450 mm dia. Piles	705.03	Rmt.	7050.30
g		Extra over single under ream for providing additional bulbs in under reamed piles, under specified diameter excluding the cost of Concrete, steel reinforcement (only the nos. of extra bulbs are to be paid).			
i	1	400 mm dia. Piles	813.05	Each	813.05
ii	1	450 mm dia. Piles	1103.43	Each	1103.43
3a	1	Provdg. & laying cement concrete 1:5:10 (1 cement : 5 course sand : 10 hand broken aggregates 40 mm nominal size) and curing complete, excluding cost of form work in foundation & Plinth.	2492.51	Cu.M.	2492.51
3b		Provdg. & laying cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of form work in			
	161	(A) Foundation and plinth	2976.00	Cu.M.	479136.00
3c	2	Supplying of graded hand brocken stone size of 90 mm to 127 mm at site (Rubble or Spoul)	983.93	Cu.M.	1967.86
3d	10	Labour charges for spreading the spouls 90 mm to 127 mm thick layer good earth filling in voids correcting the grade & camber comp. with rolling, watering, incl. preparing the surface by brushing for removing all loose or dirts ect.comp.	26.79	Sq.mt.	267.90
4	5	Provdg. & laying cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of form work in foundation& plinth.	2653.67	Cu.M.	13268.35

5	1000	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidation each deposited layer by ramming and watering.	129.10	Cu.M.	129100.00
6		Conveyance charges of earth lime, murrum, building rubbish, manure, garbage, sludge, excavated rock, fly ash, aggregate of any kind etc. comp. upto 5 km lead.			
a	100	Conveyance charges upto 1 km	320.20	Cmt	32020.00
b	100	Conveyance charges upto 2 km	347.73	Cmt	34773.00
c	1500	Conveyance charges upto 5 km	408.41	Cmt	612615.00
d	1500	Extra For Lead on Above Item Above 5 km & upto 6 km	9.26	Cmt	13890.00
e	1500	Extra For Lead on Above Item Above 6 km & upto 7 km	9.26	Cmt	13890.00
f	1500	Extra For Lead on Above Item Above 7 km & upto 8 km	9.26	Cmt	13890.00
g	1500	Extra For Lead on Above Item Above 8 km & upto 9 km	9.26	Cmt	13890.00
h	1500	Extra For Lead on Above Item Above 9 km	9.26	Cmt	13890.00
7a	10	Filling in plinth with sand under floors including watering, ramming, consolidating, compacting and dressing etc. completed.	455.63	Cu.M.	4556.30
7b	70	Filling in foundation and plinth with murrum or selected soil in layers of 20 cm. thickness including watering, ramming and consolidating etc. Complete.	286.20	Cmt	20034.00
8		Brick work using common burnt clay building bricks having crushing strength not less than 35 kg/Sq. cm. in cement mortar 1:6 (1 cement : 6 fine sand) conventional brick			
a	91	(a) in foundation & Plinth	3981.21	Cu.M.	362290.11
b	95	Super structure Upto Floor Two Level	4253.46	Cu.M.	404078.70
9		I.Half brick masonry in common burnt clay building bricks having crushing strength note less than 35 Kg/Sq. Cm. in cement mortar 1:4 (1 cement : 4 coarse sand) using conventional brick in Super structure upto floor Four level			
a	25	All Floor Level	646.70	Sq.M.	16167.50
10.1		Providing and laying controlled cement concrete of M-25 Grade and curing complete, Excluding the cost of form work, Scaffolding, cost of reinforcement for reinforced concrete work For any Height up to any FloorLevel.			
a	113	Foundations,Raft,Footings,Mass concrete	4238.04	Cu.M.	478898.52
b1	33	RCC Retaining wall at All Floor	4519.88	Cu.M.	149156.04
c1	36	Tie-Beam, Lintel , Beam- Bracket, Stair Case & Landing, Coping ,Slab, balcony, weather shed, loft , any cantilever etc All Floor	4496.07	Cu.M.	161858.52
d1	17	Columns,Pillars, posts and struts at All Floor	4593.91	Cu.M.	78096.47

10.2		Providing and laying controlled cement concrete of M-20 Grade and curing complete, Excluding the cost of form work, Scaffolding, cost of reinforcement for reinforced concrete work For any Height up to Floor Four Level.			
a	1	Foundations,Raft,Footings,Mass concrete	3977.88	Cu.M.	3977.88
b1	9	Tie Beam , Lintel , Beam- Bracket , Coping ,landing, Slab, balcony, weather shed, loft , any cantilever etc at All Floor	4460.36	Cu.M.	40143.24
c1	1	Column at All Floor	4558.20	Cu.M.	4558.20
d1	1	Stair Case All Floor	5418.91	Cu.M.	5418.91
10.3	10	Providing and laying in position Ready Mixed M250 grade concrete for reinforced cement concrete work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for all lead having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying with all lead and lift, excluding the cost of centering shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained)	4853.56	Cu.M.	48535.60
10.4	5	Providing and laying in position Ready Mixed M200 grade concrete for reinforced cement concrete work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for all lead having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying with all lead and lift, excluding the cost of centering shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained)	4793.10	Cu.M.	23965.50

10.5		Drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 80mm upto 250mm in RCC beams, lintels, columns and slabs to introduce steel bars for sunshades/balconies including fixing the steel bars in position using Hilti Chemical HY200-R but excluding the cost of reinforcement, all complete as per direction of Engineer-In-Charge.			
a	20	8 mm Dia in 80 mm Deep & 12 mm Dia Drilling	183.52	Each	3670.40
b	20	10 mm Dia in 100 mm Deep & 14 mm Dia Drilling	263.66	Each	5273.20
c	20	12 mm Dia in 120 mm Deep & 16 mm Dia Drilling	343.80	Each	6876.00
d	20	16 mm Dia in 160 mm Deep & 20 mm Dia Drilling	608.63	Each	12172.60
e	5	20 mm Dia in 200 mm Deep & 25 mm Dia Drilling	1024.44	Each	5122.20
f	5	25 mm Dia in 250 mm Deep & 32 mm Dia Drilling	1938.54	Each	9692.70
11		Providing and laying controlled cement concrete 1:2:4( 1cement : 2 coarse sand : 4 Graded stone aggregate 20 mm nominal size ) and curing complete, Excluding the cost of form work and reinforcement for reinforced concrete work in:			
a	1	Foundations, footings, base of columns,grade slab and mass concrete.	3923.53	Cu.M.	3923.53
b	1	slab, landing shelves, Balconies, lintels, beams, girders, and cantilever, up to any floor level.	4012.47	Cu.M.	4012.47
c	40	P/A Trimix with dewatering machine and floater machine on constructed R.C.C. work incl. cost of machine and labour etc. comp. as directed.	54.00	Sqmtr	2160.00
d	10	Making 15 mm Groove in R.C.C work on road and filling it with poly sulfied selant and finished it good incl. all labour charges etc. comp. as directed	30.00	Rmt	300.00
e	2	Providing and laying and fixing 25 mm thick expansion joint by hydrocell semi rigid UV resistance with high performance laminated closed cell polythene foam joint filler in sheet foam as directed, etc. complete.	738.13	Sqmt	1476.26
12		Providing form work in ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4 M & removal of the same for in situ reinforced or plain concrete work in			
a	144	(A) Foundation, footings, bases of columns etc. and mass concrete.	171.68	Smt	24721.92
b	100	(B) Flat surface such as soffits of slabs, landing and the like	252.00	Smt	25200.00

c	332	(C) Vertical surfaces such as walls (any thickness) partitions.	229.95	Smt	76343.40
		(D) Columns, pillars, posts & struts.			
d	279	(1) Square, rectangular, polygonal in plan	297.68	Smt	83052.72
e	10	(2) Circular or curved in plan.	422.10	Smt	4221.00
f	215	(H) (1) Sides and soffits of beam, haunchings cantilevers, girders, bressumers, Coping and lintels not exceeding 1 M in depth.	192.15	Smt	41312.25
g	5	(2) Sides and soffits of beam, haunchings cantilevers, girders, bressumers and lintels exceeding 1 M in depth.	259.88	Smt	1299.40
h	5	(L) chullah hoops, weather sheds, chhajjas, carbels etc including edges.	155.78	Smt	778.90
i	2	(M) Staircase with-sloping or stepped soffits incl. risers & strings excluding landing.	242.55	Smt	485.10
j	5	Extra for additional height of propping and centering where the height of propping and centering exceeds 4 .0 M between supporting floor to ceiling including temporary brick or stone pillars for supporting as required. (i)Height more than 4.0 M.and upto 5.0 M.	386.48	Smt	1932.40
13		Providing T.M.T Fe 500D bar reinforcement for R.C.C. work including bending, binding and placing in position complete up to any floor level..			
a	20713	All Floor Level	75.46	Kg.	1563002.98
14	270	Providing and laying polished Kota stone slab (Polished / River Finish, Green colour ) flooring over 20 mm. (average) thick base of cement mortar 1:6 (1 cement : 6 coarse sand) or lime mortar 1:1.5 laid over and joined with grey cement slurry including rubbing and polishing complete.25 mm th.	982.83	Sq.M.	265364.10
15	49	Providing and laying polished Kota stone slab 25 mm. thick in Platform ,Riser of Stair , Skirting, Tread , dado and pillars laid on 10 mm. thick cement mortar 1:3 (1 cement : 3 coarse sand) jointed with grey cement slurry including rubbing and polishing and MAKing groove where it is Required etc. compl	1176.03	Sq.M.	57625.47
16	2	Providing and laying white/Colur glazed tiles 6 mm thick in flooring treads of steps and landing laid on a bed of 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) finished with flush pointing in white cement.	908.17	Sq. M.	1816.34
17	462.5	Providing and layingWhite / Colour glazed tiles of size 600 mmx300mm x 8 mm / 300 mmx 450mm x 8 mm in skirting, risers of steps, Floor and dedo on 10 mm. thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with white cement slurry.	1426.95	Sq. M.	659964.38

18	1	Providing and laying marble stone slab flooring over 20 mm. (Average) base of cement mortar 1:6 (1 cement: 6 coarse sand) or L.M. 1:1.5 laid and jointed with grey cement slurry including rubbing and polishing complete: (A) Marble slab 25 mm. thick.	2194.63	Sq. M.	2194.63
19	80	Providing and laying Vitrified tiles 8 to 10 mm thick , 24" x 24" 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.	1062.50	Sq. M.	85000.00
19b	552	Providing and laying Vitrified tiles 8 to 10 mm thick , 24" x 24" in skirting risers of steps and dedo on 10mm thick cement plaster 1:3 (1cement : 3-coarse sand) and jointed with white cement slurry	1130.15	Sq. M.	623842.80
19c	84	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 ( 1cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finised with flush pointing & cleaning the surface etc. complete for Antiskid	1383.99	Sq.M.	116255.16
19d	80	Providing and Laying Tactile Tile (For Vision Impaired Persons as per Strandards) of Size 300x300x9.8 mm Having with Water Absorption less than 0.5% and Confirming to is:15622 of Approved Make in all Colours and Shades in for Outdoor floors such as footpath, Courtyard, Multi models Location etc., laid in 20 mm Thick Base of Cement Mortar 1:4 ( 1 Cement : 4 Course Sand) in all Shapes & pattern including Grouting the Joints with White Cement mixed with Matching pigment etc. Complete as per Direction of Engineer-in-charge.	1663.72	Sq. M.	133097.60
20	5	Providing and laying Ceramics tiles 6 to 8 mm thick in flooring, treads of steps, landing and dedo on 12 mm. thick cement plaster 1:3 (1 cement : 3 coarse sand) and jointed with white cement slurry.	960.47	Sq. M.	4802.35
21	580	Providing & Laying 18 mm thick Mirror polish granite For flooring , counter , stair riser , tread , skirting , dedo , Jambs , Seating etc. machine cut or chiselled on bed of cement mortar 1:1 pointing with neat cement slurry incl. moulding, Making grooves where it is required etc. comp. as per instruction of engineer in charge.	2385.71	Sq. M.	1383711.80
22a		Providg. 20 mm. thick Finish / Mala cement plaster in single coat on fair side of brick / concrete walls for interior plastering upto any Floor level and finished even and smooth in C.M.1:4.			
i	746	All Floor Level	190.58	Sq.M.	142172.68



b		Providg. 20 mm. thick Finish / Mala cement plaster in single coat plastering on ceilings, Beam side and soffits of stairs upto any Floor level and finished even and smooth in C.M.1:4.			
i	295	All Floor Level	215.15	Sq.M.	63469.25
c	92	Providing & fixing 23 cm wide chicken mesh jali with nails & then application of 15 mm plaster on R.C.C. & masonry joints as per dir. of engg. In charge.	292.59	Sq.mt	26918.28
d	80	Providing and mixing water proofing materials in cement mortar in proportion recommended by the manufacturer. etc. comp. as per instruction of engineer in charge.	48.77	Per Bag of 50 Kg of Cement	3901.60
23a	1946	Providing 20 mm th. Double coat Sand face / Mala Cement Plaster on Walls upto any Height Above Ground level consisting of 12 mm th. Backing coat of C.M. 1:3 ( 1 cement : 3 Ssand ) & 8 mm th. Finishing coat of C.M. 1:1 ( 1 cement : 1 sand ) ets. Complete.	297.68	Sq.M.	579285.28
24a	50	White / Color washing with lime on undecorated wall surfaces (two coats) to give an even shade including thoroughly brooming the surface to remove all dirt, dust mortar drops and other foreign matter.	12.29	Sq.M.	614.50
24b	750	Providing & Applying 3 mm thick External Wall Rustic Type Texture as per Design & Make as Approved by Consultants / Engineer in Charge. Work Includes All Necessary Scaffolding Work upto Any Height.	424.92	Sq.M.	318690.00
24 c	2000	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	174.97	Sq.M.	349940.00
24d	10	P./L. METALIC HERITAGE SURFACE TEXTURE Providing and fixing of HERITAGE textured homogeneous wall finishing system from BAKELITE HYLAM LTD or equivalent make consisting of a two component system of (25 kgs per Pack) made of 92% silica particles coated with fade resistant pigments, 100% acrylic polymer bonding agent (5kgs per pack) with the applied thickness of the coating being between 0.8mm-1.2mm to be applied on acured, smooth level plaster without keying, as per the shades/combinations approved, as per the manufacturer directions, for usages, to be applied by an approved applicator of the manufacturer, as per the directions / supervision of the engineers in charge, all complete. Includes All Necessary Scaffolding Work upto Any Height.	637.38	Sq.M.	6373.80

25a	900	Wall Painting (two coats) with plastic emulsion paint of approved brand and manufacture and of shade required on undecorated wall surfaces to give an even shade, over and including a priming coat with alkali resistance primer of approved brand and manufacture after thoroughly brushing the surface free from mortar droppings, and other foreign matter and also including preparing the surface even and sand -papered smooth	78.44	Sq.M.	70596.00
b	900	Extra over above item for every subsequent coat of wall painting with plastic emulsion paint of approved brand.	33.39	Sq.mt.	30051.00
c	900	Applying two coats of Birla (white cement based) or Asian (acrylic lapy-putty) or equivalent & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.	40.19	Sq.M.	36171.00
26		Providing and supplying ISI marked only standard length Stonewate pipes in standard lengths of following class and diameter including all taxes,insurance, transportiton, fright charges, octroi,inspection charges, loading,unloading, conveyance to departmental stores, stacking etc. complete			
a	120	23 cm dia.	299.00	Rmt	35880.00
26		Lowering, laying and jointing stone ware pipes of following diameters with cement joints in C.M.1:1 proportion in proper position , grade and alignment at all level as directed by Engineer-in- charge including conveyance from stone to site of work, Jointing material etc.comp.			
b	120	23 cm dia.	128.00	Rmt	15360.00
26		Providing & Laying & Jointing glazed stoneware pipes incl. excavation up to 2.0 mt.,refilling, trasporting the pipe to work site, unloading, lowering in trenches, laying and jointing the pipes in c.m. 1:1 incl. all jointing materials such as cement, sand, hemp, bitumen as dire. testing the pipe line to a head of 1.5 mt. and hydraulic test as dire incl. watering trenches, spreading , and carting away of surplus earth within 100 mt.lead as dire. etc. comp.			
c	25	15 cm dia	288.23	Rmt	7205.75
d	20	10 cm dia.	211.05	Rmt	4221.00

27	14	Constructing brick masonry chamber for under ground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35 Kg. Cm <sup>2</sup> in C.M. 1:5 C.I. cover with frame (Lightduty) 455mm x 610 mm internal dimensions total weight of cover with frame to be not less than 38 Kg. (Wt. of cover 23Kg.) 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 15 mm 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 455 mm x 610 mm and up to 850 mm deep	3863.85	No.	54093.90
28 a	5	Constructing Manhole with R.C.C. top slab in 1:2:4 mix (1-cement: 2-coarse sand:4-graded stone aggregate 20 mm 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 1:5 (1-Cement:5-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 20 mm nominal size) finished smooth complete including curing and festing (i) Inside size 900mm x 1200mm and up to 1.5M. deep including C.I. cover with frame size 560 mm diameter total weight of cover and frame to be not less than 128kgs. (Wt. of cover 64Kg. and Wt. of frame 64Kg.) (A) With 230 mm 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 up to 1.50 Metre	19139.07	No.	95695.35
28b	3	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 1:5 (1-Cement : 5-coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1Cement :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 msonry using brick having crushing strength not less than 35Kg. / Sq.cm. in Cement Mortar 1:5 (1- Cement: 5-Coarse sand) (3) C type depth 2.25 Metre for 150mm diameter sewer.	23209.64	No.	69628.92

29a	7	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 340x280x470 mm sizes respectively with standard flush pipe, Waster Pipe, Waste Coupling, PVC Connection and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : Cera Model No. S4020103 or Equivalent	3344.35	No.	23410.45
b	30	Providing and Fixing of C.P. Brass BIB Cock of 15 mm Dia of Jaquar make florentine series model no. 5047n or equivalent make with all necessary fittings. as approved by Engineer - in - charge.,	1564.17	No.	46925.10
c	60	Providing and fixing brass screw down Angle stop tap.(A) 15mm dia. Of Jaquar make florentine series modelno. 5053n or equivalent make with all necessary fittings. as approved by Engineer - in - charge.,	1160.57	No.	69634.20
d	1	Providing and fixing C.P. brass shower rose with 15mm or 20mm inlet Shower Arm.(A) 100mm dia. Each	279.37	No.	279.37
e	20	Providing and Fixing of C.P. Brass Two Way Bib Cock of 15 mm Dia of Jaquar make model no. 041kn or equivalent make approved make with all necessary fittings. as approved by Engineer - in - charge.,	1411.58	No.	28231.60
f	7	Providing and Fixing of C.P. Brass urinal Valve Auto Closing System With Full Built in Control Cock & Wall Flange of 15 mm Dia of Jaquar make model no. 077 or equivalent make approved make with all necessary fittings. as approved by Engineer - in - charge.,	2568.08	No.	17976.56
30	13	Providg. & laying S.W. Gully trap with C.I. garting brick masonry chamber & water tight C.I. cover with frame of 300 mm x 300 mm size ( inside) with standard weight. sqare mouth trap size 150 x100 mm P trap	1234.57	No.	16049.41
31	8000	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	3.91	Litre	31280.00
32	50	Extra rate over item of excavation of earth for excavation of asphalt pavement/RCC of thickness up to 0.20 meter including demolishing the asphalt carpet, metal, soiling / cutting Reinforcement etc.comp. with stacking the material as directed.-up to 0.20 meter thickness	71.42	Sq.M.	3571.00
33	26	P/F PVC / C.I. (span) nahni trap and all of the following nominal dia of self cleansing design with C.I.Screw down or hinged greeting inclusive cost of cutting and making good the walls and floors for drain 75 mm dia. etc. comp.	552.83	No.	14373.58

34a		Providg. And fixing to wall, ceiling & floor in true line and level UPVC pipe Schedule- 40 of make as approved by engg. incharge. pipe shall be fix on wall with the help of clamp at every two meter center to center of shall be concealed as directed including necessary fitting etc. including testing of pipe and joint and fixing the same with adhesive solvent, including cost of all materials of following nominal bore			
i	40	15 mm	71.93	Rmt	2877.20
ii	150	25 mm	90.93	Rmt	13639.50
iii	10	32 mm	117.97	Rmt	1179.70
iv	350	40 mm	146.65	Rmt	51327.50
v	30	50 mm	193.73	Rmt	5811.90
34b		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			
i	5	15 mm	165.21	Rmt	826.05
ii	5	20 mm	202.97	Rmt	1014.85
iii	5	25 mm	247.25	Rmt	1236.25
iv	5	32 mm	330.36	Rmt	1651.80
v	5	40 mm	437.66	Rmt	2188.30
vi	5	50 mm	647.30	Rmt	3236.50
35		Providg. And fixing to wall, ceiling and floor 10.00 kg. F/Sq.Cm2 working pressure polythelene pipes of the following outside diameter, low, density, complete with special flange compression type fittings, wall clips etc. making good wall ceiling and floor.			
a	15	32 mm	116.40	Rmt	1746.00
b	15	(A) 75mm dia	274.68	Rmt	4120.20
c	55	© 110 mm dia	332.91	Rmt	18310.05
36	5	Providing and fixing water closet squatting Pan ( Indian type W.C. Pan) size 580mm (A)VitreousChina. (I)Long pattern = White colour with Trap and Pair of Foot Rest	1351.15	No.	6755.75
37a	7	Providing and fixing white vitreous china extended wall mounting water closet of Cera Make S1043101 Carat Model Or Equivalent Model With EWC Soft Close Seat Cover, Chair Bracket, nuts, bolts and gasket etc complete.	12613.27	No.	88292.89
b	12	Providing and Fixing of C.P. Brass Flush Cock of 25 mm Dia of Jaquar make model no. 081 or equivalent and Outer Body of Jaquar make model no. 5083KPM or equivalent approved make with all necessary fittings. as approved by Engineer - in - charge.,	2732.58	No.	32790.96
c	7	Providing and fixing Health Faucet of Jaquar make model no. 573 or equivalent make as approved by engg. In charge with flexible tube upto 1 metre long etc. complete.	1543.36	No.	10803.52

38a	2	Providing and fixing 24"x18"x8" Carysil Elegance or Equivalent Make of Single Bowl Sink S.S. Matt Finish With Waste Coupling, Waste Pipe,etc. cutting and making good the walls wherever required.	7960.49	No.	15920.98
b	6	Providing and fixing Under counter Wash basine including 15 mm C.P. Brass Pillar tap, 32 mm C.P. Brass Waste of Standard make, Cutting & Making good the wall / granite Wherever Required in White Color : Model S2030101 of Cera Clair Series or Equivalent make Waash basine of size : 520x450 mm	6641.14	No.	39846.84
c	4	Providing and fixing Wall Hung wash basin Including 32 mm C.P. brass waste of standard pattern, cutting and making good the walls / granite wherever require:In White Color : Cera Cadal Or Equivalent Make Wash basin of size 515 x 410 mm	3825.20	No.	15300.80
39a	10	Providg. & fixing 600mm x 450 mm Bevelled edge mirror of superior glass mounted of .6 mm th. A.C. sheet or plywood sheet and fixed to wooden pluge with C.P. brass screws and washers.	825.48	No.	8254.80
39b	2	Providing and fixing mirror of superior 5 mm thick glass required shape and size Fixed With Studs of approved make and shade : Rectangular shape 1500x450 mm	1632.77	No.	3265.54
40	5	Providg. & fixing C.P..Brass towal rail complete with C.P. brass brackets fixed to wooden plugs with C.P. Brass screws.(600 mmx 20 mm size)	597.22	No.	2986.10
41		Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :			
i	5	15 mm dia	886.22	No.	4431.10
ii	1	20 mm dia	1099.94	No.	1099.94
iii	8	25 mm dia	1552.93	No.	12423.44
iv	20	40 mm dia	3312.60	No.	66252.00
v	4	50 mm dia	4613.48	No.	18453.92
42a		Providing and fixing Full Way valve (HEX) with wheel of approved quality :			
i	2	15 mm Full Way valve (HEX)	1461.17	No.	2922.34
ii	1	20 mm Full Way valve (HEX)	1924.61	No.	1924.61
iii	4	25 mm Full Way valve (HEX)	2535.55	No.	10142.20
iv	1	32 mm Full Way valve (HEX)	3377.64	No.	3377.64
v	4	40 mm Full Way valve (HEX)	4661.10	No.	18644.40
vi	2	50 mm Full Way valve (HEX)	6675.14	No.	13350.28
43a	1	Providing and Fixing of C.P.Brass Pillar Cock of 15 mm Dia of Jaquar make model no. 5011n or equivalent make with all necessary fittings. as approved by Engineer - in - charge.,	1725.21	No.	1725.21
b	2	Providing and Fixing of swan neck Sink Tap Wall mount/Plateform Mount Jaquar make model no. 5357n or equivalent make. Rate shall Including of cost of labour, material, necessary fittings etc.	2468.41	No.	4936.82

c	2	Providing fixing of SS grab bar of Jaquar make model no. 1507 or equivalent make with all hardware for Physically Handicap toilet.	1937.24	No.	3874.48
44a	270	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:	1150.48	Sq.M.	310629.60
		(a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.			
		(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.			
		(c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge.			
		(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge			
		(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test."All above operations to be done in order and as directed and specified by the Engineer-in-Charge :and shall be guaranteed for minimum period of 10 years after handing over the completed building by the main contractor to be finished as directed. Stamp paper guarantee 10 years to be furnished before receiving any payment from the client.			
		With average thickness of 120 mm and minimum thickness at khurra as 65 mm.			

b	270	Providing and laying broken chine mosaic flooring for terrace using 12 mm to 20 mm broken pieces of glazed tiles to be laid over cement mortar 1:3 to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall,clearing with water and oxalic acid etc. as directed.	739.89	Sq. M.	199770.30
c	280	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	562.40	Sq. M.	157472.00
d	4	Filling in Sunken Portion with good Quality Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm and where directed by the Architect / Engineer-in-charge, in sunk in layer. including watering, ramming where it is required etc. complete, as directed by the Architect / Engineer-in-charge .	4559.61	Cmt	18238.44
45	150	Providing and laying Cement concrete flooring for I.P.S. 1:2:4 (for Indian Patent Stones) (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm. nominal size) lain in layer finished with a floating coat of net cement- 50 mm th etc. complete.	348.08	Sq.M.	52212.00
46a	7000	Structural steel work ( Confirming to IS 4923-1997) riveted, bolted or welded in buildup for all type sections, in framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as per the structural designs and directions of Engineer in charge.	126.68	Kg.	886760.00
b	30	Applying priming coat over new steel and other metel surface after and including preparing the surface by 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.	34.34	Sqmt	1030.20
c	300	Painting two coats (excluding priming coat) on new steel and other metal surface with enamel paint, brushing, interior to give an even shade including cleaning the surface an even shade including cleaning the surface of all dirt, dust and other foreign matter.	86.94	Sqmt	26082.00



d	20	Providing & Fixing 1 mm Thick S.S.-304 Grade 90 cm High S.S. Railing having Hand Rail Member of 50 mm Dia., 3 No. of Horizontal Pipe of 16 mm Dia. & Baluster Supprt of 40 mm Dia. At Every Third Step as per Detail Given. Rate Includes All Work Complete as per Description & as per Direction of Engg. in Charge.	2270.21	R.Mtr.	45404.20
47a	27	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm braced with flat iron diagonals 20x5 mm size with top & bottom rails of T-iron 40x40x6 mm with 38 mm dia. Steel pulleys complete with bolts , nuts , locking arrangement , stoppers , handles including applying a priming coat of red lead paint.	5391.23	Sq. M.	145563.21
b	2	Providing corrugated 0.80 mm (22 gauge) thick G.I. sheets roofing fixed with galvanized iron 'J' or 'L' hook bolts, and nuts 8 mm. dia with bitumen and G.I. limpet washers filled with white lead complete excluding the cost of purlines, rafters and trusses.	719.93	Sq.M.	1439.86
c	2	Providing valleys 900 mm. overall in plain 1.6 mm. thick G.I. sheet Class – 3 fixed with 'J' or 'L' hook bolts and nuts galvanized from 'J' or 'L' hook bolts and bitumen washers complete.	1042.78	Sq.mt.	2085.56
48	6	Providing and fixing rolling shutters of approved make made of 80 mm wide M.S. laths inter-locked together through their entire length and jointed together at the ends by end locks mounted on specially designed pipe shaft with bracket plates, guide channels and arrangements for inside and outside locking with push-pull operation including the cost of hood cover and spring etc. complete.(A) Shutters having width below 3.5 M.	3468.72	Sq.M.	20812.32
49a	7	Providing and fixing 27mm domal Series - 1.2 mm Th. Alluminium Section Three track Sliding window With Metalic Powder Coating and 4 MM Clear Glaas(Non Tuffen) Include All Accessories and Fixture etc. complete as per the direction of Engineer-in-charge.	6373.85	Sq. M.	44616.95
b	30	Providing and fixing 27mm domal Series - 1.2 mm Th. Alluminium Section Two track Sliding window With Metalic Powder Coating and 4 MM Clear Glaas(Non Tuffen) Include All Accessories and Fixture etc. complete as per the direction of Engineer-in-charge.	4999.10	Sq. M.	149973.00
50 a	19	Providing and fixing standared extruded of alluminium section of size 63 mm x 38.10 mm x 1.2mm (Section:2434, @ Wt.0.643Kg/mt ) with colour anodized alluminium frame for ventilation with 5 mm thick frosted glass as details etc complete for Ventilation	1163.92	Sq. M.	22114.48

50 b	7	Providing and fixing standard extruded of aluminium section of size 63.50 x 38.10 x 1.95 mm ( Section no: 4605, @Wt 1.094 Kg / Rmt with colour anodized aluminium frame with 5 mm thick transparent Clear / bronze colour tinted float glass as details etc complete for Fix window.	1509.90	Sq. M.	10569.30
51		Providing and fixing ISI marked 35 mm thick flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters with 1.00 mm thick Decorative Laminated Sheet on both faces of shutters including ISI marked Stainless Steel butt hinges, bright /matt finished 125 mm Stainless Steel handles of approved quality & make, ISI marked oxidised M.S. door latches / Aldrop Conforming to IS:5930 with necessary screws etc. complete as per direction of Engg. incharge.			
a	32	Flush shutter with both side laminate	4332.15	Sq.M.	138628.80
b	90	Providing wood work in frames of Doors, windows clear story windows and othersimilar works wrought, framed and fixed in position. (A) Indian Teak Wood	602.04	10 Cu.Decim	54183.60
53		Providing and fixing 35 mm th. Shutters for doors windows & clearstory windows incl. wood frames as specified 12 cm. x 7cm. size incl. anodised aluminium fixtures and fastenings including primer coat of approved quality and two coats of oil paint etc. complete.			
a	3	Fully glazed	4788.50	Sq. M.	14365.50
b	3	Fully panelled	5478.89	Sq. M.	16436.67
c	3	Partly panelled and partly glazed	5133.69	Sq. M.	15401.07
54	22	Providing and fixing FRP frame size 100x50 mm and 28mm thick FRP depress panel shutter having extra reinforcement on sides & edges in Gel coat finish. The core of the shutter & frame is to be filled up with injected fire retardant grade polyurethane foam done in situ alongwith embedded wooden pieces for stiffening & also taking hinges & finitues. The whole FRP frame & shutter is to be water proof weather proof, termite proof & resistance to mild acid/alkali. Rates are to be inclusive of S.S hinges with necessary screws & aluminium fixtures & fastenings & fastener sleeve.	2354.22	Sq.M.	51792.84
55		Making connection to the ex.M.H.in running sewer incl. Dewatering and other required machinery etc. of following dia pipes at any convenient time. All damaged work shall be well repaired as per instructions. etc..complete.			
a	1	For Pipe 150 mm to 300 mm diameter	1339.29	No.	1339.29

b	1	For Pipe 400 mm to 600 mm diameter	2232.14	No.	2232.14
56	1	Making connection of galvanised Mild steel distribution branch with galvanised mild steel main pipe upto 80mm nominal bore by providing and fixing tee including cutting and threading the pipes complete	600.08	No.	600.08
57a	550	Providing throating or plaster drip, grooves and moulding to Wall , R.C.C. chajja and slab.	41.25	Rmt	22687.50
57b	100	Providing & Laying cement vatta 10 cm x 10 cm in size quarter round in c.m. 1:1 ( 1 cement, 1 coarse sand) laid in one layers finishing with a floating of neat cement watering etc complete as dire.	23.45	Rmt	2345.00
58	300	Carring out plinth treat ment to post construction/ existing structure by spraying chemical solution for termite control treatment including labour and material consist ment with I.S.I specification. Using Chlordene and Chiorpur files 20EC. As Per 6131_ part- II Consentration Weight one percent is recommended i.e one litre 20EC chemical emulsion with 19 liter give 1% concentration inclusive of one litre chemical emulsion appication at the rate of 5 Litre chemical/ Sqm of surface is recommended as per I.S	104.90	Sq.mt	31470.00
59	50	Carring out timber treatment to all wood work including drilling holes and spraying oil based chemical solution on surface of timber work for termite control including labour and material etc. complete. Using Chlordene 20EC. As Per 6113_ part III Consentration Weight 1.00 percent is recommended one litre chemical emulsion dillute with 9 liter of kerosene precent concentration. Total dillute concentration will be 10 litre inclusive of the litre chemical emulsion application 0.75/Litre chemical per one Sqmt printed two coat wood surface.	54.98	Smt	2749.00

60	150	Paver Block Providing and laying shot blasted Non - interlocking, Paver blocks of specified thickness, size, grade of concrete and colour machine made and blasting by automatic shot blasting machine and high density of as per approved sample of approved make for footpath, parking areas, service lanes, cross over and other areas as mentioned in the drawing. Including providing and laying 50 mm thick average bedding layer of coarse sand below paver block as per required grading and specification. Laid paver block shall be mechanically compacted. The work of the paving blocks shall be executed in line and level by skilled mason of flooring work only. Small size of paver block with same specification shall be used at residue or at end. It should be laid in such a way that the no cutting of the paver block to be necessary. If cutting of paver block shall be required, then cut by machine only and laying to be done by skilled flooring mason. The finished surface of the paver block shall have coarse sand Texture Finish. Pave blocks shall be compacted and shall be re-laid if necessary. Actual laid area shall be measured and paid without any wastage. (A) 80 mm thick M-35 grade Grey Paver block of size 200mm x 200mm. As per approved rate	1150.59	Sq.mt.	172588.50
61	300	SProviding 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 (1 cement:3 fine sand) etc complete.	358.06	R.mt.	107418.00
62a	1	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	4558.89	No.	4558.89
b	4	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1200 mm), with double speed adjustment with necessary accessories and screws etc. complete.	1626.10	No.	6504.40

63	15	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including:	3061.95	Sq.mt.	45929.25
		(a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design.			
		(b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc.			
		(c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work cost for ACP cladding is included in this item rate. The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.			

b	2	Providing and fixing Structural Glazing with using the 17 Micron anodised of approved colour aluminium section as transium, mullium of size 63mm x 38mm x 2 mm with using 6 mm thick reflective structural glass of approved make, colour, toughened and shade and fixed with silicone sealant and spacer tap and at corner sealed neoprene foam dust and Air sealed gasket mirrored including scaffolding, cleaning of glass etc.complete at all heights and lifts with all necessary fitting and fixtures, anchore fasteners, necessary M.S. or Aluminium brackets, suitable design for openable or sliding window as per Architectural drawing and as directed by Engineer-in-charge. Grooves between the glasses to be filled with sealant of Dow corning - structural sealant 995, weather sealant 789. The entire facade should be water proof. The mullions are to be connected to bracket by SS-304 nut bolts. Measurement shall be given as per actual execution of the work. (Rate are included providing & fixing of MS structure steel work wherever Required)	3953.75	Sq.mt.	7907.50
64		Providing and Fixing Box type metal letters forming composite box made from 1mm thick stainless steel plate of grade 304 having brush finish of following font size to be fixed at Main Gate in english and or Gujrati and including fixing charges. etc. complete as per direction of Engg. incharge. for Payment Purpose Height of Letter will be measured.			
a	840	Upto 300 mm Height	93.85	R. Inch	78834.00
65a	10	Providing and Fixing MURAL made out of 2mm thick s.s. plate grade 304, including making necessary design as per Architect dwg. Through laser cutting including connection to the R.C.C./Masonry with necessary frame, anchor fastnuts, M.S. Plate etc. complete as per direction of Engg. incharge.	6804.07	Sq.mt.	68040.70
65b	2500	Providing and Fixing Sinage - internal and external signage boards with Vinyle Text on ACP sheet / 2 mm th. S.S. Plate etc. complete as per direction of Engg. incharge.	9.38	Sq.Inch	23450.00

65c	10	Providing and fixing retro Reflective Hi Intensity Micro Prismatic Grade Board using 2mm Aluminum / 4mm ACP, angle iron 75 x 75 x 6mm. Descaling and degreasing the board as per requirement using epoxy reflective process by screen painting as directed etc. complete including transporting and fixing in C.C. 1:2:4 with necessary excavation curing etc. complete as per I.R.C. 67-2012 design. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B)Class B Type-4(MDR/ODR) retro reflective sheeting	7535.31	Sq.mtr.	75353.10
65d	15	Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide liminance coefficient on cement road shall be min 130 mcd/m <sup>2</sup> /lux and Asphalt road shall be min 100 mcd/m <sup>2</sup> /lux during the service life during the day time. The marking should meet the performance criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 352015. Warranty for the Retro reflectivity should be two years.	364.08	Sqmt	5461.20
65e	2	CAT EYE/Pavement Marker(MNC two nail) made out of acrylic StreneAcrylonitrile or hi-impact poly Steren fitted with moulded of methacrylate(MNC)reflector cube corner reflector design, filled with tightly adhering pooting compound as per ASTM D-788 size 11.5x7x1.60 cms or 10x10x1.75 cms provided with bituminous adhesive in sufficient quantity with each unit fixing with two shrank .Reflector on both side.Co efficient of lumination as per specification and compressive strenth 13 tones at 23 degree centigrade etc.B) Double side lenses.	160.71	Nos.	321.42
66a	50	Providing and fixing eco-friendly light weight calcium silicate false ceiling tiles having T egular edge & 15mm 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.	1632.63	Sq.mt.	81631.50

		<p>The Light weight calcium Silicate tile shall be of approved texture Fine fissured/ Spintone/ Cosmos having NRC value of 0.5 &amp; Globe having NRC value of 0.75 NRC or equivalent of size 595X595 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 bothside) consisting of main 'T' runner suitably spaced at joints to get required length and size of 24X38 mm made from 0.30 mm thick (minimum) sheet, 1200 mm centre to centre, and cross 'T' of size 24X28 mm made out of 0.33 mm (Minimum) sheet spaced 1200 mm along spaced between main 'T' at 600 mm centre to centre 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 pre-coated steel of size (24X24X3000mm made of 0.40mm thick (minimum)</p>			
		<p>sheet with the help of rawl plugs at 450mm centre to centre 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, Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25X35X1.6mm fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm G.I. adjustable rods with galvanized steel level clips of size 85X30X0.8mm, spaced at 1200mm centre to centre long main 'T' bottom exposed with 24mm of all T-sections shall be pre-painted with polyester baked paint, for all heights,</p>			
		<p>, as per specifications, drawings and as directed by engineer-incharge. Note:- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tiles shall have NRC. Value of 0.50 (Minimum) for Fine fissured/ Spintone/ Cosmos and 0.75 NRC for Globe, light reflection 85% noncombustible 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</p>			



66b	30	Providing and fixing single layer water proof gypsum board 12.5 mm thick of the make New good Group Co.Ltd. or equivalent & New good Group Co.Ltd. company sections using water proof board of size 1220 mm x 1830 mm x 8.0 mm suspended by G.I suspender of size 25 mm x 3 mm with intermediate channel of size 18mm x40mm x0.80mm at 1220 mm center to center ceiling section of size 40mmx 35mmx 0.55mm at 457 mm center to center and perimetre chanel A of size 20mm x 27mm x 30mm x 0.50mm at edges & drops including paper taps and soffit cleat, anchor fastener, scoch bolt connecting cleat joining compound top coat on ceiling including making necessary opening for light fitting, diffuser etc. complete as per detail drawing as directed.	600.94	Sq.mt.	18028.20
67a	5	Providing and Fixing 6 mm thick Lexan Polycarbonate multi wall roofing sheet fixed with hilti screw and rubber silicon sealer and alluminium strip of size 50 x 3 mm etc complete as directed by Engineer in charge	1427.62	Sq.mt.	7138.10
b	6	Providing Making & Fixing Glow sign Board of suitable size as per approved color-Designed Back Light Material fixed on G.I. sheet Box of suitable size with concealed Light Fittings, Necessary Scaffolding etc. complete as per direction of Officer in charge.	2499.55	Sq.mt.	14997.30
68		Providing and supplying ISI Standard RCC pipes (of sulphate resisting Cement )in standard lengths of following class and diameter suitable for rubber ring joints (socket and spigot) including all taxes,insurance, transportation,treight charges,octroi,inspection charges, loading,unloading, conveyance to departmental stores, stacking etc. comple			
		Class NP3 Test pressure 0.7 Kg/Sq.Cm			
a	50	300 mm Diameter	755.00	Rmt	37750.00
b	10	450 mm Diameter	1361.00	Rmt	13610.00
68		Lowering, laying and jointing R.C.C. pipes in C.M.1:1 1/2 of following diameters in proper position , grade and alignment at all level as directed by Engineer-in- charge including conveyance from stone to site of work, labour giving hydraulic testing as per ISI code.			
		NP3 Pipe			
c	50	300 mm Diameter	119.00	Rmt	5950.00
d	10	450 mm Diameter	171.00	Rmt	1710.00

69	5	Constructing Bombay Pattern Type Catch Pit of size 0.60 x 0.60 depth up to 1 mt including excavation, B.B.C.C. (1:5:10), 23 cms thick brick maso. wall in the prop. of CM (1:6) with 40 mm thick IPS flooring in the prop M15 at bottom and 15 mm thick cement plaster inside the catch pit in the proportion of CM (1:3) with out jali etc. comp. as directed.	3125.00	No	15625.00
70	5	CatchPit Jali Fixing P/F FRC catch pit jali with frame 600mm x 600mm clear opening etc. comp.. As directed by engineer in charge.	1522.00	No	7610.00
71	15	Providing & Fixing Sun Control Reflective Type Film / Frosted Film as Selected by Architect/ Engg. In Charge For Glass Doors / Windows etc. as Directed.	646.37	Sq.mt.	9695.55
72	15	Providing & Fixing in Position Vertical Roller Blinds with Minimum 3 % and Maximum 5 % Light Transperace Screen Fabric Incuding Providing & Fixing of Powder coated G-Channel at the Topof Window with necessary Screw , Cleats etc. and PVC Roller ( Weight Pipe) and PVC Chain For Up and Down Movement of Blinds etc. of Approved Make and as per Drawings / Instruction of Engg. in Charge For All Colors and Shades. Rates Includes all Lead and Lift For All Floor Level, All Height , All Material , Accessories, Fixing , Scaffolding , Labor etc. Complete in All Respects. All Required Accessories & Material must be From Same Manufacturer.	1372.03	Sq.mt.	20580.45
		PERCOLATION WELL			
73	240	Drilling of pilot bore hole in Alluvial Strata by direct Rotary Rig of 250 mm.	694.64	Rmt	166713.60
74	240	Reaming 400 mm	212.50	Rmt	51000.00
75	2	Electro Logging charges with carting	16071.43	Job	32142.86
76	120	Providing and Installing 200 mm dia IS:12818 upvc Casing Pipe "CM" class plain Pipe	1193.75	Rmt	143250.00
77	2	Providing and Installing 200 mm dia IS:12818 upvc End Cap, with Air Vent cowl	669.64	Set	1339.28
78	120	200 mm dia Regular with 1.5 mm sloted size cage type trapezoidal shape wire wound little carbon galvanized screen confirming to IS:8110	1146.43	Rmt	137571.60
79	20	Supply of Pea sized Gravel	2029.46	Cmt	40589.20
80	2	Air Vent of 50 mm Bend	401.79	Unit	803.58
81	240	Lowering and Removing of Dropline up to Depth 186 mtr.	147.32	Rmt	35356.80
82	2	Air Compressor 60 CFM/150 PSI	22205.36	Ls	44410.72
				<b>Total Rs.</b>	<b>15328830.49</b>
<b>I. No.</b>	<b>Qty</b>	<b>Items</b>	<b>Unit Rate</b>	<b>Per</b>	<b>Amount</b>
			<b>Rs. Ps.</b>		<b>Rs. Ps.</b>

		<b>Electrical Work Estimate</b>			
<b>1</b>		<b>INTERNAL WIRING</b>			
1.1		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 ZHFR/HRFR 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.			
	65	(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete	505.05	Pt	32828.25
1.2		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 ZHFR/HRFR 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 four or more step type electronic fan regulator with separately 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.			
	15	(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete	701.40	Pt	10521.00
1.3		Point wiring for 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 ZHFR/HRFR 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 covered with appropriate front plate modules erected on / in wall / ceiling for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed.as per pipe erected with following type of accessories.			
		Note:- Maximum up to 6 mtrs length, excess will be considered as Mains for Secondary Point.			
	20	(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete	174.30	Pt	3486.00

1.4		Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade ZHFR/HRFR 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.			
1.4.1	10	[I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board	530.25	Pt	5302.50
		(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete			
1.4.2	5	[II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board.	774.90	Pt	3874.50
		(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete			
1.4.3	10	[III] For 16A Plug and 16 amp switch with 2-4 sq.mm Cu. Wire with 2.5 sq.mm ( green) earthing wire from mcb d b board.	906.15	Pt	9061.50
		(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete			
1.5	15	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	255.00	Pt	3825.00
1.6		Point wiring for Two Way Controlled 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 ZHFR/HRFR PVC insulated multi strand copper wires erected in below type of pipe with 6A Modular type switches and following type of accessories 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 batten/angle holder or ceiling rose or H.D.Connector as directed.			
	1	(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete	627.90	Pt	627.90
1.7		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.			
1.7.1	2	(1)One No. SP 6 Amp.	150.00	E.a.	300.00

1.7.2	2	(2) One No 5 pin plug	150.00	E.a.	300.00
1.7.3	10	(7) Blank Plate Single	25.00	E.a.	250.00
1.7.4	5	(9) 16 Amp. SP one way switch	179.00	E.a.	895.00
1.7.5	5	(10) 6/16Amp. Universal socket	198.00	E.a.	990.00
1.7.6	2	(13) 6A/10A/16A/20A/25A/32A Single pole Modular MCB Switch	307.00	E.a.	614.00
1.7.7	2	(14) 6A/ 10A/ 16A/ 20A/ 25A/ 32A Double Pole Modular MCB Switch	406.00	E.a.	812.00
1.8		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			
1.8.1	125	(a)20 mm	24.00	Mtr	3000.00
1.8.2	200	(b) 25 mm	33.00	Mtr	6600.00
1.8.3	30	(c) 32 mm	54.00	Mtr	1620.00
1.8.4	15	(d) 40 mm	67.00	Mtr	1005.00
1.9		Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes.			
1.9.1	40	(1) 20 mm	17.00	Mtr	680.00
1.9.2	30	(2) 25 mm	21.00	Mtr	630.00
1.9.3	120	(3) 32 mm	27.00	Mtr	3240.00
1.9.4	20	(4) 40 mm	37.00	Mtr	740.00
1.9.5	10	(5) 50 mm	46.00	Mtr	460.00
1.10.		providing and erecting Mains with ISI marked electrolyte stranded copper conductor, Non PVC Zero Halogen free fire retardant insulated copper conductor, insulated wire (HRFR) conforms to IS-694, erected in existing pipe with 1.5sq. mm copper conductor of same specifications for earth continuity of following size.			
		In Existing medium class Rigid PVC pipe and accessories			
1.10.1	140	(a) 2 wire 1.5 sq. mm	51.00	Mtr	7140.00
1.10.2	225	(b) 2 wire 2.5 sq. mm	71.00	Mtr	15975.00
1.10.3	110	(a) 2 wire 4 sq. mm	101.00	Mtr	11110.00
1.10.4	20	(b) 2 wire 6 sq. mm	139.00	Mtr	2780.00
1.11		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 of following size			
		(A) with medium class Rigid PVC pipe and accessories			
1.11.1	20	(h) 4 wire 6 sq. mm	258.00	Mtr	5160.00
1.11.2	25	(i) 4 wire 10 sq. mm (use earth wire of 4 sq.mm )	421.00	Mtr	10525.00

1.12		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.			
1.12.1	20	(e) One wire 6.00 sq. mm	56.00	Mtr	1120.00
1.12.2	20	(f) One wire 10.00 sq. mm	91.00	Mtr	1820.00
1.12.3	10	(g) One wire 16.00 sq. mm	141.00	Mtr	1410.00
1.12.4	10	(h) One wire 25.00 sq. mm	234.00	Mtr	2340.00
1.12.5	60	(i) One wire 35.00 sq. mm	298.00	Mtr	17880.00
1.13		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.			
1.13.1	250	e) 1.50 Sq.mm 3 core round PVC sheathed	46.00	Mtr	11500.00
1.13.2	225	h) 2.50 Sq.mm 3 core round PVC sheathed	77.00	Mtr	17325.00
1.13.3	90	k) 4.00Sq.mm 4 core round PVC sheathed	175.00	Mtr	15750.00
1.14		Supplying & erecting M.S. Box having 16 Gauge painted with red oxide or Heavy duty PVC box erected flushed on wall or concealed in wall with necessary plastering & finishing as directed of following size.			
1.14.1	5	(a) 100 mm x 100 mm x 75 mm(d)	47.00	No	235.00
1.14.2	5	(b) 175 mm x 100 mm x 75 mm(d)	76.00	No	380.00
1.14.3	2	(c) 200 mm x 250 mm x 75 mm(d)	88.00	No	176.00
1.14.4	2	(d) 250 mm x 300 mm x 75 mm(d)	111.00	No	222.00
1.15		Supplying and laying UPVC cable trunking system comprising unplasticised polyvinyl, chloride rigid material with ignition free and flame proof confirming BS with necessary end caps Internal and external bend, flat bends, coupler, tee etc..All necessary accessories and measuring of following sizes			
1.15.1	10	(2) 100 mm x 50 mm trunking	424.00	Mtr	4240.00
1.15.2	10	(4)100 mm x 50 mm trunking with TWIN compartment With clip in divider	1309.00	Mtr	13090.00
1.16		Supplying & erecting 20 Amp 10 KA 'C Curve' single pole MCB with 20 Amp. Plug socket, company fabricated powder coated sheet steel enclosure erected as directed with connection.			
	1	[A] Metal Clad Socket with metal clad top	522.00	E.a.	522.00
1.17	1	Providing & erecting insulated socket 3P+N+E with Plug 32A rating which is comprised of Four pole MCB slot and insulated socket IP40	2169.00	E.a.	2169.00
		<b>SUB - TOTAL OF INTERNAL WIRING</b>			<b>234531.65</b>
<b>2</b>		<b>Switchgears , Panels , MCBDBs &amp; MCBs</b>			
<b>2.1</b>		<b>PANELS</b>			

2.1		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.			
	8	ICS=100% of ICU only	6112.00	No	48896.00
2.2		Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. at 415 V. having normal current rating 125A. 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.			
	3	ICS=100% of ICU only	7976.00	No	23928.00
2.3		Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. at 415 V. having Normal current rating 200A. with variable 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.			
	2	ICS=100% of ICU only	16061.00	No	32122.00
2.4		Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 35 KA. and above at 415 V. having normal current rating 250A. with variable 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.			
	2	ICS=100% of ICU only	24979.00	No	49958.00
2.5		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..			
2.5.1	3	(1) 15 A -100 A , CT Ratio 1/100	4641.00	No	13923.00
2.5.2	4	(2) 125 A -200 A , CT Ratio 1/200	4934.00	No	19736.00
2.5.3	1	(3) 250 A -400 A , CT Ratio 1/400	5362.00	No	5362.00
2.6	20	Fabricating the box type items made from M.S. Sheet with A.I. supports, wings, doors, handles other hardware materials as per requirement design with finishing by three tank powder coating processed inside and outside painted, erected as directed including minor civil work. to install above MCCB.	179.00	Kg	3580.00

2.7	35	providing and erecting Miniature circuit breaker single pole 0.5A to 2A system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark	268.00	No	9380.00
2.8	20	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	111.00	No	2220.00
2.9		Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity			
2.9.1	30	(A) 6 to 32 Amp.	297.00	No	8910.00
2.9.2	10	(B) 40 Amp.	327.00	No	3270.00
2.10.		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			
2.10.1	2	(a) 6 to 32 Amp.	590.00	No	1180.00
2.10.2	2	(b)40 Amp.	662.00	No	1324.00
2.10.3	7	(c)63 Amp.	730.00	No	5110.00
2.11		Providing & erecting 415 V MCB three Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity			
	1	(c)63 Amp.	709.00	No	709.00
2.12		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			
	12	(ii) 40Amps. DP	2213.00	No	26556.00
2.13		Providing and erecting following additional parts for panel mounting MCCBs			
	10	(A)Extended operating rotary handle with pad lock with three position trip,off,on suitable for 25A to 250 A panel mounting cat-III	865.00		8650.00
2.14	4	Supplying and erecting approved make panel mounting type Digital Voltmeter having 3 digits LED display, 0 to 750 AC Volts range erected on existing panel board with all connection .with manufacturers calibration certificate.	1263.00	No	5052.00



2.15	4	Supplying and erecting approved make panel mounting type Digital Ammeter having 3 digits LED display, external CT operated, calibrated for 0 to 1000 Amps suitable to operate on 500 Volt AC , erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	1543.00	No	6172.00
2.16	8	Supplying and erecting Ammeter / Voltmeter selector switch for 3 phase AC Supply 500 V on existing panel board with necessary connections.	314.00	No	2512.00
2.17	27	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	272.00	No	7344.00
2.18	3	Supplying & erecting approved make Power Factor Meter 150mm dia flush/projection type/ balanced & unbalanced load to work with appropriately provided CT's 100/5A to 400/5A ratio & other accessories complete erected in M.S. box & connected to the circuit by means of PVC copper Core leads.	5052.00	No	15156.00
2.19	30	Supplying and erecting approved make suitable panel indicator LED type lamp, lens cover, complete erected with necessary connections.	43.00	No	1290.00
2.20.	24	Providing & erecting insulated socket 3P+N+E with Plug16A rating which is comprised of Four pole MCB slot and insulated socket IP40	1690.00	No	40560.00
2.21		Supplying and erecting triple pole & neutral 440V/ 500V panel mounting Aluminium Busbars with four equal Nos. of bus having current density not more than 0.8 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 busbar,erected in existing cubical panel with necessary connections.			
2.21.1	50	(A) Suitable for 100 Amp. Capacity	654.00	RnMtr	32700.00
2.21.2	30	(B) Suitable for 200 Amp. Capacity	1027.00	RnMtr	30810.00
2.21.3	10	(C) Suitable for 300 Amp. Capacity	1455.00	RnMtr	14550.00
		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.			
2.22	22	(A) Suitable for 100 Amp. Capacity	1942.00	RnMtr	42724.00

2.23		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-aluminium 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 excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium 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			
	8	(i) with 350mm depth	14755.00	Sqmtr	118040.00
2.24		Providing & erecting weather proof, dust & vermin proof, floor mounted front operated outdoor type double door cubical panel board necessary IP-54 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-aluminium 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 excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium 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			
	14	(i) with 350mm depth	16162.00	Sqmtr	226268.00
2.25		Supplying & erecting XLPE(IS:7098)(I)-88 ISI unarmoured copper cable 1.1 KV grade to be erected as directed of following size.			
2.25.1	60	(N) 4 core 16 Sq. mm	721.00	Mtr	43260.00
2.25.2	50	(M) 4 core 10 Sq. mm	568.00	Mtr	28400.00
2.25.3	40	(C) 2 core 6 Sq. mm	202.00	Mtr	8080.00
2.25.4	50	(B) 2 core 4 sq.mm	130.00	Mtr	6500.00
2.26		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.			
2.26.1	350	(a) One wire 1.00 sq. mm	12.00	Mtr	4200.00
2.26.2	190	(b) One wire 1.50 sq. mm	17.00	Mtr	3230.00
2.27	1	Design, fabrication, assembling, supply, installation, testing and commissioning of cubicle type, 25KVAR, Voltage Rating 415V A.C., 3-Phase, APFC Panel having 5-steps ( 2-3-5--5-10 kvar heavy duty can type capacitors ) with suitable rating of Incomer MCB, CT. as per approved by engineer incharge.	130141.00	No	130141.00
		MCBDBs and MCBs			
2.28	90	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. conforming to IS 8828/1996 with ISI Mark	111.00	E.a.	9990.00

2.29		Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity			
2.29.1	4	(A) 6 to 32 Amp.	297.00	E.a.	1188.00
2.29.2	2	(B) 40 Amp.	327.00	E.a.	654.00
2.30.		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			
2.30.1	4	(a) 6 to 32 Amp.	590.00	E.a.	2360.00
2.30.2	2	(b)40 Amp.	662.00	E.a.	1324.00
2.30.3	2	(c)63 Amp.	730.00	E.a.	1460.00
2.31	4	Sheets steel powder coated enclosure suitable for incorporating One/Two nos. MCB.	175.00	E.a.	700.00
2.32		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			
		(A) single phase incoming and horizontal single phase outgoing			
		(b) sheet steel double door (IP-43)			
2.32.1	3	(i)4 way	747.60	E.a.	2242.80
2.32.2	1	(i)4 way	623.00	E.a.	623.00
2.32.3	3	(iii)8 way	1369.20	E.a.	4107.60
2.32.4	1	(iii)8 way	1141.00	E.a.	1141.00
2.32.5	1	(iv)12 way	1773.60	E.a.	1773.60
2.32.6	1	(iv)12 way	1478.00	E.a.	1478.00
2.33		(B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI)			
		(b) sheet steel double door			
2.33.1	2	(i)4 way	2779.20	E.a.	5558.40
2.33.2	1	(i)4 way	2316.00	E.a.	2316.00
2.33.3	1	(iii)8 way	4054.80	E.a.	4054.80
2.33.4	1	(iii)8 way	3379.00	E.a.	3379.00
2.34		Supplying & erecting Sheet Steel powder coated Cable end termination Box to be mounted on Top or Bottom of the MCB Distribution Box for housing/covering Extra wires & Cables, suitable for following size of MCB DB Box.			
2.34.1	2	(G) Three Phase 8 Way	819.60	E.a.	1639.20
2.34.2	1	(G) Three Phase 8 Way	683.00	E.a.	683.00
2.35		providing and erecting Approved make ELCBs / 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			
2.35.1	3	(i) 25 Amps.DP	1950.00	E.a.	5850.00
2.35.2	1	(ii) 40Amps. DP	2213.00	E.a.	2213.00
2.35.3	4	(iii) 63 Amps. DP	2628.00	E.a.	10512.00
2.36		Providing and erecting Sheet Steel powder coated Vertical MCB distribution board (VTPN) - flush / surface mounted double door (IP54) fitted with insulated copper busbar, isolated neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986,IP-54 suitable for 63/100 AMP TPN MCCB + RCCB as incomer and three phase outgoing as per following .(The DBs should be used of same company of MCB to be used)			
	1	(B)6 way outgoing	12061.00	E.a.	12061.00
2.37		Providing & erecting 415 V MCB three Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity			
2.37.1	4	(b)40 Amp.	641.00	E.a.	2564.00
2.37.2	2	(c)63 Amp.	709.00	E.a.	1418.00
2.38	12	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.	69.00	E.a.	828.00
2.39	12	Providing & erecting Medium Voltage Danger Notice Board sticker as per language suggested by engineer incharge of standard size as per IS-2551	26.00	E.a.	312.00
		<b>SUB - TOTAL OF Switchgears , Panel and MCBDBs.</b>			<b>1114233.40</b>
<b>3</b>		<b>EARTHING</b>			
		<b>Follow IS code :3043 is the guideline for the earthing</b>			
3.1	250	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.	77.00	KG	19250.00
3.2	10	Providing and erecting required size Copper strip for earthing of H.T. OCB / ACB/ Transformer, LT panel board, Motors etc. using copper clamp.	787.00	KG	7870.00
3.3	10	Providing and erecting Annealed bare Copper wire 8 to 16 SWG.	787.00	KG	7870.00
3.4	90	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	77.00	KG	6930.00
3.5		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 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.(approved make OEM has to submit test certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 W/ meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted.			
3.5.1	15	(a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr Back filling compound - 1 Nos Bag of 15 Kg.	4546.00	E.a.	68190.00
3.5.2	3	(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.	8551.00	E.a.	25653.00
3.6	2	Supply, installation,testing and commissioning of Chemical Earthing with UL Certified 17.2mm Dia. X 3000mm Long 254 Micron-Copper bonded M.S. Rod manufactured as per IEC 62561-2 with 25Kg Bentonite powder plus " U " bolt rod clamp complete with Lockable high performance chamber suitable & tested for 5000T capacity with SS Hardware.or equivalent	12230.00	No	24460.00
		<b>SUB - TOTAL OF Earthing</b>			<b>160223.00</b>
<b>4</b>		<b>CABLES, Cable Termination and cable Trenches</b>			
4.1		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			
4.1.1	70	(A-1) 3 1/2 core 35 Sq. mm ( 16 Sq. mm 1/2 core)	218.00	Mtr	15260.00
4.1.2	20	(B) 3 1/2 core 50 Sq. mm ( 25 Sq.1/2 mm core)	282.00	Mtr	5640.00
4.1.3	160	(D) 3 1/2 core 70 Sq. mm ( 35 Sq. mm 1/2 core)	375.00	Mtr	60000.00
4.1.4	50	(E) 3 1/2 core 95 Sq. mm ( 50 Sq. mm 1/2 core)	486.00	Mtr	24300.00
4.2		Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables			
4.2.1	90	(a) 4 core 4 Sq. mm	116.00	Mtr	10440.00

4.2.2	350	(b) 4 core 6 Sq. mm	125.00	Mtr	43750.00
4.2.3	410	(c) 4 core 10 Sq. mm	139.00	Mtr	56990.00
4.3		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			
4.3.1	250	(d) 4 core 16 Sq. mm	152.00	Mtr	38000.00
4.3.2	100	(e) 4 core 25 Sq. mm	189.00	Mtr	18900.00
4.4		Supplying & erecting XLPE(IS:7098)(I)-88 ISI unarmoured copper cable 1.1 KV grade to be erected as directed of following size.			
4.4.1	15	(G) 3 core 6 Sq. mm	290.00	Mtr	4350.00
4.4.2	10	(H) 3 core 10 Sq. mm	439.00	Mtr	4390.00
4.5		Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand / Solid Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables.			
4.5.1	90	(A) 4 core 2.5 Sq. mm	269.00	Mtr	24210.00
4.5.2	525	(B) 4 core 4 Sq. mm	361.00	Mtr	189525.00
4.5.3	90	(C) 4 core 6 Sq. mm	505.00	Mtr	45450.00
4.6		Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables.			
	25	(C) 4 core 10 Sq. mm	670.00	Mtr	16750.00
4.7	650	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.	55.00	Mtr	35750.00
4.8	440	Covering of cable with second class bricks or cement tiles laid cover the cable crosswise & also on both sides with covering of 7.5 Cm. layer of sand above & below cable (16 bricks per meter)	139.00	Mtr	61160.00
4.9	15	(A) Making trench in Hard Murrum / 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.	74.00	Mtr	1110.00
4.10.	5	(B) If additional machinery like hammer driller or JCB use [Add]	354.00	Mtr	1770.00
4.11		Drilling the road without breaking the road surface (Asphalt) for laying of cable for feeding power supply by making up to following size of holes at both ends complete.			
4.11.1	5	(A) Up to 100 mm bore dia	488.00	Mtr	2440.00
4.11.2	5	(B) Up to 150 mm bore dia	610.00	Mtr	3050.00
4.12		Supplying following size of Light duty "A" Class G.I. Pipe & erecting as directed by Engineer-in-charge.			
	20	(A) 25 mm dia	171.00	Mtr	3420.00

4.13		Providing & laying. R.C.C. Hume pipe for cable to be laid 90 cm. below ground across the road crossing or on floor with necessary material in an approved manner and making the ground as per original.			
4.13.1	75	( B ) 400 mm dia	394.00	Mtr	29550.00
4.13.2	55	( C ) 300 mm dia	340.00	Mtr	18700.00
4.14		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			
4.14.1	360	(A)50 mm outer dia	62.00	Mtr	22320.00
4.14.2	630	(B)63mm outer dia	73.00	Mtr	45990.00
4.14.3	50	(C))90 mm outer dia	95.00	Mtr	4750.00
4.14.4	50	(D)120 mm outer dia.	136.00	Mtr	6800.00
4.15		Providing & laying approved make ISI marked Rigid PVC pipe having 6Kg / cm <sup>2</sup> (Class-3) to be erected at road crossing on or floor as directed for laying of cable. The pipes as following size of dia & weight per 6 mtr.			
4.15.1	15	(D) 75 mm inner Dia. (5.5 Kg/6RMT)	124.00	Mtr	1860.00
4.15.2	10	(F) 110 mm inner Dia. (11.63 Kg/6 RMT)	234.00	Mtr	2340.00
4.16		Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables.			
4.16.1	14	(a) 2 to 4 core 2.5 / 4 Sq. mm	33.00	E.a.	462.00
4.16.2	60	(b) 2 to 4 core 6 Sq. mm	38.00	E.a.	2280.00
4.16.3	16	(c) 2 to 4 core 10 Sq. mm	38.00	E.a.	608.00
4.16.4	10	(d) 2 to 4 core 16 Sq. mm	47.00	E.a.	470.00
4.16.5	8	(e) 2 to 4 core 25 Sq. mm	51.00	E.a.	408.00
4.17		Providing and, fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables.			
4.17.1	12	(B) 3 & 1/2 core 35/50 Sq. mm	75.00	E.a.	900.00
4.17.2	12	(C) 3 & 1/2 core 70 Sq. mm	102.00	E.a.	1224.00
4.17.3	8	(D) 3 & 1/2 core 95 Sq. mm	130.00	E.a.	1040.00
4.18		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.			
4.18.1	100	(B) 10 Sq.mm	13.00	E.a.	1300.00
4.18.2	52	(C) 16/25 Sq.mm.	15.00	E.a.	780.00
4.18.3	30	(D) 35/50 Sq.mm.	20.00	E.a.	600.00
4.18.4	18	(E) 70 Sq.mm.	25.00	E.a.	450.00
4.18.5	20	(F) 95 Sq.mm.	40.00	E.a.	800.00



4.19		Solder less crimping type Copper 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.			
	80	(A) 1.5/2.5 to 6 Sq.mm	8.00	E.a.	640.00
		<b>SUB - TOTAL OF Cables,Cable Terminations &amp; Cable Trenches</b>			<b>810927.00</b>
<b>5</b>		<b>Light Fixtures &amp; Fans</b>			
		Supply , Installation, testing and commissioning of pre-wired, LED fitting/post top luminaries etc of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, flexible, copper conductor, single core cable with flexible conduits and coupler and earthing etc. as required. Note:- The LED Light fixtures should comply all international standards third party ( LM 79 for complete fixture, LM 80 for individual LED ). The Manufacturer / Channel Partner of the Manufacturer has to submit 4- Years unconditional free Replacement Guarantee for complete fixture.			
5.1		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 die cast powder coated and high U.V. & corrosion resistance with diffuser 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.)			
5.1.1		( A ) Tube Light with integral / non integral driver			
5.1.1a	2	(iii) 18-20 Watts, Surge - 2KV,IP-20, conventional 4 feet	293.00	No	586.00
5.1.1b	25	(v) 36-40 Watts, Surge-2 KV, IP-20, conventional 4 feet	530.00	No	13250.00
5.1.2		(B) LED Panel Light with provision for Plane front frame with translucent cover fixed to housing complete.IP20			
5.1.2a	4	(a)up to 8 Watts,4" x 4", Surge-2 KV	271.00	No	1084.00
5.1.2b	30	(iii) 12-15 watts, 6" x 6", Surge-2 KV	462.00	No	13860.00
5.1.2c	12	(iv) 18 to 20 watts, 8" x 8", Surge- 2 KV	607.00	No	7284.00
5.1.3		(F) Spot Light 425 Lumens, Surge-2KV			
5.1.3a	6	(a) 3 to 7 Watts	805.00	No	4830.00
5.1.3b	6	(b) 8 to 11 Watts	1354.00	No	8124.00
5.1.4	2	(H) Mirror Light 9 Watts, wall mounted	309.00	No	618.00

		minimum 1 feet long			
5.2	4	Providing and erecting PVC body surface or pendent mounting LED Bulk type 9 watt Lighting Fitting with electronic driver. And lumen output from luminaire 720lm , input voltage range 90-300VAC , 50Hz cool white(3000 to 6500k), inbuilt driver, -20degC to +60degC working temperature, AL frame with Beam Angle 120deg	780.00	No	3120.00
5.3	12	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 mm sweep complete having 3blades with aluminium blades with , canopy & 30 cm. down rod erected with earthing.(Make shall be approved by Engineer in charge))	1929.00	No	23148.00
5.4	18	Supplying & erecting approved make low noise decorative exhaust fan having size 200mm with 1350 RPM with square frame ABS body with inbuilt lowers & square frame.	1687.00	No	30366.00
5.5	12	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.	107.00	No	1284.00
5.6	12	Providing 2.5mm.thick laminated acrylic sheet to cover the fan hook or Fan box.	18.00	No	216.00
5.7	12	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.	107.00	Mtr	1284.00
5.8		Supplying & erecting single phase approved make industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM			
	4	[D] 450 mm dia 900 RPM	3306.00	No	13224.00
5.9	4	Providing suitable M.S. louver shutter of the Exhaust fan.	365.00	No	1460.00
5.10.	3	Supplying & erecting electro galvanised G.I. wire micro mesh jali cover of grade 304 required size with suitable wooden frame duly fitted in wall outside of exhaust fan for insect protection.	628.00	Sqmtr	1884.00
		<b>SUB - TOTAL OF Light Fixtures &amp; Fans</b>			<b>125622.00</b>
<b>6</b>		<b>External lighting</b>			

		Supply , Installation, testing and commissioning of pre-wired, LED fitting /post top luminaries etc of all types of external lights, complete with all accessories and tube etc. directly on pole / pole bracket , including connection with 1.5 / 2.5 sq. mm FRLS PVC insulated, 3 core flexible, copper conductor, with flexible conduits and coupler and earthing etc. as required.			
6.1		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.)			
6.1.1		(A) Street Light (IP-65), Surge protection - 4KV /5000K integral and 10 kv non integral ,Light must have 440VAC line supply protection. It should withstand 48 hours for 440VAC line supply.			
	4	(f) Above 60 watts to 90 watts ( Required 72w )	5917.00	No	23668.00
6.1.2		(B) Flood Light (IP-65), Surge -4KV/5000K ,Light must have 440VAC line supply protection. It should withstand 48 hours for 440VAC line supply			
6.1.2.a	34	(c) Above 60 watts to 90 watts	6028.00	No	204952.00
6.1.2.b	6	(v) above 120 to 160 watts	8370.00	No	50220.00
6.1.2c	22	(vii) above 200 to 250 watts	10711.00	No	235642.00

6.2		<p>Supply of approved make frp/grp pole having following specifications :</p> <p>FRP/GRP pole made by centrifugal moulding process using thermoset resin polyester/epoxy resin system having minimum glass content 45.0%.The pole should be in one piece and tapered round in shape, having smooth outside surface finish and should be totally free from corrosion as well as non conductive and shock proof. Pole should be provided with FRP/GRP base bracket duly fabricated from metal(M.S) and duly clad with FRP/GRP material to avoid any metal exposure and painted with PU paint.</p> <p>Pole should have mechanical properties i.e 1. Specific gravity (ASTM D 792) 1.3-1.8 Kg/m<sup>3</sup>, 2. Glass Content % by weight (ASTM D 2584) 45.0 -55.0%, 3. Water absorption (ASTM D 570) &lt;0.5%, 4. Tensile Strength (ASTM D 638) 200+/-50Mpa, 5. Flexural strength (ASTM D 790) 250+/-50Mpa, 6. Compressive Strength (ASTM D 695) 200+/-50MPa, 7. Yield Strength (ASTM D638) 250 +/-50MPa.</p>			
		<p>Pole should be flame retardant as per IS 6746. Resin used shall be UV resistance and pigmented. Pole should be painted with first coat of epoxy primer and then two coats of highly weather resistance polyurethane paint to ensure proper adhesion of the paint. Minimum thickness shall be 80 to 100 micron. Deflection of the pole shall not exceed more than 10.0 % of the length of the pole for the given load. Pole should be generally made as per the dimensional data, performance criteria and some interchangeability features of poles as per the standard ANSI C123.20 latest version of ASTM D 923/01 including cable termination box with necessary accessories. The size of pole and type of installation with foundation, Anchor Base &amp; Internal junction box as per the manufacturer details and site requirement. The cost of 6 Mtr &amp; 10 Mtr pole's Flood light mounting ring is included.</p>			
		(3) 'B' class (Heavy Duty) frp/grp pole suitable for base plate mounting			
6.2.1	16	<p>[D] Overall Length of 6.0 meter, Average thickness : 7mm, Top/Bottom Outside Dia. 76/176mm +/-2. Weight of Pole 25.0 Kg approx. (Without base) Metal Anchor Base duly frp clad (Size : 340 Ø * 12mm thk, Mounting hole PCD 285mm * 6 nos. of 20 Ø hole)</p>	16815.00	E.a.	269040.00

6.2.2	8	[H] Overall Length of 10.0 meter, Average thickness : 9mm, Top/Bottom Outside Dia. 76/244mm +/-2.Weight of Pole 62.0 Kg approx. (Without base) Metal Anchor Base dully frp claded (Size : 450 Ø * 18mmthk , Mounting hole PCD 390mm * 6 nos. of 20 Ø hole	34768.00	E.a.	278144.00
6.3		Providing FRP/GRP arm bracket of having 15° arm with 50 mm OD pipe *5 mm thk,1000mm long from pole centre			
6.3.1	1	(a) Single arm bracket	1882.00	No	1882.00
6.3.2	1	(b) Double arm bracket	2390.00	No	2390.00
6.4	6	Supplying & erecting sintex make SMC press moulded composite FRP. loop-in, loop-out approx. 2mm thick box complete with bakelite connector strip 4way & hinged doors having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on wall ( c)150mm x 125mm x 100mm [deep].	472.00	No	2832.00
6.5	28	Providing cement concrete.for foundation or for concrete filling in 1:2:4 ratio with 20 to 25 mm stone metal dully plastered with necessary curing for pole muffing or any other purpose.	5077.00	CU Mtr	142156.00
6.6	4	B' class galvanised iron pipe 32 mm outside dia 45 cms long dully welded on 20 cms x 20 cms x 3 mm thick M.S. base plate, erected on wall or corner for mounting street light luminaire with necessary hardware materials dully painted.	340.00	No	1360.00
		<b>SUB - TOTAL OF External Lighting</b>			<b>1212286.00</b>
<b>7</b>		<b>misc.</b>			
7.1	1	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.	2332.00	Job	2332.00
7.2		Supplying and erecting Flexible PVC insulated multistrand multicore 1.1 kv grade ISI marked copper wires of following size to be erected as directed.			
	90	e) 1.50 Sq.mm 3 core round PVC sheathed	46.00	Mtr	4140.00
7.3		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 .			
	90	(a) 20 mm	24.00	Mtr.	2160.00

7.4	1	Providing & erecting water cooler having storage capacity 150 Ltr. & cooling capacity 150 Ltr.per hour @ an ambient 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.	55340.00	No	55340.00
7.5	1	Supplying and erecting water filter cum purifier with ultra violate technology. (Aquaguard / waterdoc model or equivalent symphony/ crystal/videocon model)	5371.00	No	5371.00
7.6		Providing & erecting open well horizontal mono block pump set with cast iron body, complete for three phase submersible motor having			
7.6.1	2	[B] For 2 HP 3 phase open well horizontal mono block pump set suitable for 200 LPM @ 25 mtr head suitable for 50 mm dia delivery pipe	10628.00	No	21256.00
7.6.2	1	[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	15552.00	No	15552.00
7.7		Supplying & erecting approved make motor control cubical panel (Direct - on - line) made from 16 G. CRCA sheet duly epoxy powder painted inside and outside with hinged doors and locking, arrangement consisting of suitable size of ON- OFF isolator (AC - 3/23duty) main fuses, single phasing preventer, indicating lamps for R- Y - B phases, overload relay, Automatic water level controller, Ammeter, Voltmeter each with two way selector switch incoming, wires duly socket crimped, main contactor & overload relay, start - stop push buttons, to be erected on angle iron frame grouted on wall as directed. The isolator, overload relay & contactors will be of L & T, Siemens or BCH make only.			
	3	(a) DOL up to 5.0 H.P.	7646.00	No	22938.00
		Split A/C work			
		Note :- Premium category:O-General, Mitsubishi electric			
7.8		Providing and erecting approved make split air-conditioning unit consisting of copper condensing unit with fan motor, 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 powder coated Stand, Eco Friendly green gas charging, 15A plug top & Remote Control)			

		with necessary core cutting.			
		(1)For ISEER Range (KWH/KWH)(3.1 to 3.99) Premium Category			
	2	(c) for 1.7 to 2.0 ton capacity	58706.00	No	117412.00
7.9		Supplying and installing MS angle , powder coated / Painted standard type of wall/floor stand mount for outdoor unit of split AC of following capacity, erected with necessary hardware materials as directed.			
	2	(B) 35mm*35mm*5mm thick M.S angle suitable for above 2 TR to 4 TR Capacity of ac machine	1496.00	No	2992.00
7.10.	30	Supplying and erecting insulated pair of soft copper tubing including power and control cable,necessary PVC drain pipes for Split AC machine up to 4 TR capacity	956.00	RMT	28680.00
7.11	2	carry out RCC Core cutting- up to 100 mm dia./200mm thick Wall/beam/slab with providing PVC pipe of 3 mm thick inside and necessary finishing on both ends of wall .	1188.00	No	2376.00
		<b>SUB - TOTAL OF MISC. Work</b>			<b>280549.00</b>
		<b>TOTAL COST OF ELECTRICAL WORK</b>			<b>3938372.05</b>
<b>8</b>		<b>BUYBACK ITEMS</b>			
		Removal and Disposal of Serviceable & Un Serviceable Material including Cleaning Site. The Total Responsibility and Liability of This Removal Works Including Site Clearance Shall Be of The Contractor. This Removal Includes all Hidden & Exposed Electrical Items of Building.			
8.1	-1	Buyback and Dismantle, of Existing electrical Wiring, Switch Boards, Light fixtures,ceiling fans, Wires, Pipes, Cables with all charges like loading, unloading, transportation etc..	2000.00	LOT	-2000.00
8.2	-1	Buyback and Dismantle of Existing Distribution Panel with all charges like loading, unloading, transportation etc..	1500.00	No	-1500.00
8.3	-1	Buyback and Dismantle, of Existing electrical street light polesand flood lights,pole boxes with all charges like loading, unloading, transportation etc..	90825.00	LOT	-90825.00
		<b>TOTAL COST OF BUYBACK ITEMS</b>			<b>-94325.00</b>
			<b>TOTAL AMOUNT</b>		<b>3844047.05</b>
<b>I. No.</b>	<b>Qty</b>	<b>Items</b>	<b>Unit Rate</b>	<b>Per</b>	<b>Amount</b>
			<b>Rs. Ps.</b>		<b>Rs. Ps.</b>
<b>1</b>		<b>CCTV WORK</b>			
		Final specification and block diagram shall be submitted by CCTV camera system vendor.			

1.1	1	SITC of 1/2.8" CMOS 3MP IP Fixed Lens IR rugged DOME Camera having progressive scanning system , Pixels 3MP (2304 x 1296),Lens 2.8 mm, Fixed, F1.4, Minimum Illumination color / BW: Color: 0.002 Lux @ F1.6, BW 0 Lux IR ON,IR Distance 40 Mtrs,Wide Dynamic Range 130 Db,Privacy Masking Off/On (5 Areas),Local Storage Micro SD/SDHC/SDXC card slot (2TB),Gain Control 0 ~ 100%,Angle of View (H x V) H:87.2° V:49.1°,Ethernet 10 Base-T/100 Base-TX Ethernet (RJ-45),Protocols:IPv4, IPv6, TCP/IP, HTTP, HTTPS, RTSP/RTP/RTCP, IGMP/Multicast, SMTP, SNMP, DHCP, NTP, DNS, DDNS, CoS, QoS,802.1X, UPnP, mDNS(Bonjour), UDP, ICMP, ARP, TLS, SFTP,Body Material Aluminium + Polycarbonate,Number of Video Streams 4,Ingress Protection IP66, IP67, Event Notification HTTPS, HTTP, SMTP, ONVIF, Bit Rate 100 K ~ 6 Mbps Certificates: FCC PART 15, CE (EN 55032), ICES-003,CE (EN 55035),UL listed to UL/CSA 62368-1, BIS IS 13252 (Part 1)/IEC 69050-1,RoHS, REACH, WEEE,BIS ER, STQC	13222.00	No	13222.00
1.2	22	SITC of 1/2.8" CMOS 3MP IP Fixed Lens IR rugged Bullet Camera having progressive scanning system , Pixels 3MP (2304 x 1296),Lens 3.6 mm, Fixed, F1.4, Minimum Illumination color / BW: Color: 0.002 Lux @ F1.6, BW 0 Lux IR ON,IR Distance 50 Mtrs,Wide Dynamic Range 130 Db,Privacy Masking Off/On (5 Areas),Local Storage Micro SD/SDHC/SDXC card slot (2TB),Gain Control 0 ~ 100%,Angle of View (H x V) H:87.2° V:49.1°,Ethernet 10 Base-T/100 Base-TX Ethernet (RJ-45),Protocols:IPv4, IPv6, TCP/IP, HTTP, HTTPS, RTSP/RTP/RTCP, IGMP/Multicast, SMTP, SNMP, DHCP, NTP, DNS, DDNS, CoS, QoS,802.1X, UPnP, mDNS(Bonjour), UDP, ICMP, ARP, TLS, SFTP,Body Material Aluminium + Polycarbonate,Number of Video Streams 4,Ingress Protection IP66, IP67, Event Notification HTTPS, HTTP, SMTP, ONVIF, Bit Rate 100 K ~ 6 Mbps, Certificates: FCC PART 15, CE (EN 55032), ICES-003,CE (EN 55035),UL listed to UL/CSA 62368-1, BIS IS 13252 (Part 1)/IEC 69050-1,RoHS, REACH, WEEE,BIS ER, STQC	13222.00	No	290884.00
1.3	1	Supply , Installation , Testing and commissioning of 32 Channel NVR (Network Video Recorder) Embedded Linux based for recording upto 32CH at 1080P, 960fps with 04 nos. SATA HDDs minimum 40TB storage or more (recording requirement all cameras recording at 2MP, 25fps for 30 days), H.265 HEVC/H.264/MJPEG codec decoding, Front	66202.00	No	66202.00



		Panel with LEDs Indication for Power & HDDs Status, 3 nos. USB, ONVIF S, Time Sync with NTP, Encrypted Streaming & Control, 2-Way Audio Line & Out, PTZ Operation Pan, Tilt, Zoom, Support, Pre & Post Alarm Recording Support, Recording/Evidence Clip Export to USB, 16 Channel Synchronous Playback, Playback control i.e Play, Pause, Stop, Fast Forward, Backward, Speed Control, Timeline & Zoom; Snapshot, Web Client, Central Monitoring Software, iPhone; iPad; Android based Mobile clients, 02HDMI & 01VGA Output, 04 On Board HDDS each up to 10TB, Alarm Input (16 nos.), Alarm Output (04 nos.), RS232/485, eSATA, 256 Mbps throughput, NDAA Section 889 Compliant, Operating Temperature -10°C to 55°C, Certification : Certifications: ONVIF compliant, UL/CSA 62368-1, CE (EN 50130-4), FCC Part 15, EN 55032, NDAA & RoHS (EN63000) compliant. Including fixing accessories and cable termination with required connectors/Jack, complete in all respect as per instruction of engineer in-charge.			
1.4	2	Supply Installation Testing & Commissioning of 8TB Surveillance Harddisk	25150.00	No	50300.00
1.5	1	Supply, Installation, Testing and Commissioning of 43 inch, Professional LED Display Cum Commercial TV with Android 11 & Inbuilt play store, UHD resolution, 400 nits brightness, It's 24*7 usage, 50,000 hours life, 3 years warranty, Android 11 with inbuilt play store, Inbuilt wifi, Landscape / Portrait mode, Inbuilt Bluetooth, 2 GB / 16 GB Memory, Inbuilt SOC with HDMI cable	53465.00	No.	53465.00
1.6		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			
	1450	(b) 25 mm	33.00	Mtr	47850.00
		CAT 6 UTP Cable			
1.7		Supplying & erecting approved make LAN cable of following size in existing pipe as per direction			
	1170	[C] CAT - 6	47.00	Mtr	54990.00
1.8		RACK			
1.8.1	1	Supply, Installation, Testing & Commissioning of 9U wall mount rack.	12053.57	No	12053.57
1.8.2	4	Supply, Installation, Testing & Commissioning of weather proof outdoor rack.	12840.00	No	51360.00
1.9	300	SITC of O. F.Cable 06F Outdoor - Armoured Unitube SM - HDPE Sheath (Including Five year free maintenance with guarantee)	50.00	Mtr	15000.00
1.10.		Providing & laying approved make ISI			

		marked HDPE 6Kg / cm2 (Class-3) as per IS:4984:1995 PE-80 to be erected at road crossing on or floor as directed for laying of cable. The pipes as following size of dia & weight per 6 mtr.			
	950	(A) 40 mm inner Dia.	107.00	Mtr	101650.00
1.11	5	SITC of LIU 12 PORT Rack Mount - Loaded (LC) SM [Approved by Competent Authority i.e. not Below the rank of Executive Engineer ]	6833.00	No	34165.00
1.12	60	SITC of PIGTAIL LC SM SIMPLEX LENGTH- 1m [Approved by Competent Authority i.e. not Below the rank of Executive Engineer ]	772.00	No	46320.00
1.13	8	SITC of PATCH CORD LC-LC SM DUPLEX LENGTH- 3m [Approved by Competent Authority i.e. not Below the rank of Executive Engineer ]	1883.00	No	15064.00
1.14	8	SITC of Maximum distance of up to 10 km Hot-pluggable Single-mode fiber 1000BASE-LX (IEEE 802.3z standard) Duplex LC connector MSA, RoHS-compliant	4754.00	No	38032.00
1.15	1	SITC of 24 x 10/100/1000BASE-T PoE ports 4 x Gigabit RJ45/SFP Combo ports Advanced L2 switching and security features L2+ Static Routing Optional "standard mode" or "surveillance mode" management user interface 193 W PoE budget (Including Five year free maintenance with guarantee)	31680.00	No	31680.00
1.16	4	SITC of 8 x 10/100/1000BASE-T PoE ports 2 x Gigabit SFP ports Advanced L2 switching and security features L2+ 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 ]	18218.00	No	72872.00
1.17	1	Supply, Installation Testing & Commissioning 5 Mtr. HDMI Interface Cable as per the detailed Specifications supports transmission of 4K Signals as per the detailed Specifications	820.00	No	820.00
1.18	45	Supply, installation, fixing, testing and commissioning of PVC Junction box for CCTV Camera, IP65, outdoor application. Junction Box size will be as per vendor's requirement and site condition.	440.00	No	19800.00
1.19	2	SITC of Patch Panel Cat 6 UTP Keystone Type- 24 Port-Fully Loaded (Including Five year free maintenance with guarantee)	4357.00	No	8714.00
1.20.	48	SITC of Jack Cat 6 Keystone UTP (Including Five year free maintenance with guarantee)	160.00	No	7680.00
1.21	45	SITC of CAT6 UTP 24AWG PATCH CORD:1M, Plug 30U' Snag less (Including Five year free maintenance with guarantee)	155.00	No	6975.00
		<b>SUB -TOTAL OF CCTV SYSTEM</b>			<b>1039098.57</b>
<b>2</b>		<b>COMPREHENSIVE Maintenance</b>			

		<b>Annual Comprehensive Type Maintenance Contract of CCTV System For 1-Year DLP + ONE Year</b>			
2.1	1	Annual comprehensive Type Maintenance Charges only During Guarentee / Defect Liability period.	FREE	Year	0.00
2.2	1	Annual comprehensive Type Maintenance Charges for 1st Year after Guarentee / Defect Liability period.	25977.46	Year	25977.46
		<b>SUB -TOTAL OF CCTV Comprehensive Maintenance work</b>			<b>25977.46</b>
			<b>TOTAL</b>		<b>1065076.03</b>
<b>I. No.</b>	<b>Qty</b>	<b>Items</b>	<b>Unit Rate</b>	<b>Per</b>	<b>Amount</b>
			<b>Rs. Ps.</b>		<b>Rs. Ps.</b>
<b>1</b>		<b>FIRE FIGHTING SYSTEM</b>			
		<b>Design, Drawings, Supply, installing, testing and commissioning of FIRE HYDRANT WORKS</b>			
		Internal / External Hydrant			
1.1		FIRE PUMPS			
		Supplying, Installation, Testing and Commissioning of electric driven main Hydrant fire pump and Sprinkler pump suitable for automatic operation and consisting of following: complete in all respect as required.			
		i) Suitable HP Squirrel cage induction motor, TEFC, suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 class protection for enclosure, horizontal foot mounted type with Class - 'F' insulation, conforming to IS-325.			
		ii) M.S. fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required.			
		iii) Suitable cement concrete foundation duly plastered with anti vibration pads.			
		The pump shall be capable of giving not less than 150% discharge at ahead not less than 65% of the rated head.			
1.1.1	1	a) Horizontal type, single stage, centrifugal, end suction pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq. cm. at highest and farthest outlet at specified flow of 2280 lpm at 65 Mtr. head conforming to IS 1520.with suitable size of footvalve confirming to IS 4038, Pressure rating PN2 , preventing entry of foreign body to pump through suction pipe, perfectly flat seating surfaces for good sealing.	230151.00	Set	230151.00

1.1.2	1	Supplying, Installation, Testing and Commissioning of electric driven pressurisation pump suitable for automatic operation and consisting of following: complete in all respect as required	61717.00	Set	61717.00
		a) Horizontal type, single stage, centrifugal, end suction pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal at specified flow of 180 lpm at 56/70 m. head conforming to IS: 1520.with suitable size of footvalve confirming to IS 4038, Pressure rating PN2 , preventing entry of foreign body to pump through suction pipe, perfectly flat seating surfaces for good sealing.			
		b) Suitable HP Squirrel cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 Class of protection for enclosure, horizontal foot mounted type with Class F' insulation, conforming to IS : 325.			
		c) M.S. fabricated Common base plate, flexible rubber coupling, coupling guard, foundation bolts etc. as required.			
		d) Suitable cement concrete foundation duly plastered with anti vibration pads.			
1.1.3	1	Supplying, Installation, Testing and Commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following: complete in all respect as required	506181.00	Set	506181.00
		a) Horizontal type, single stage, centrifugal, end suction pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq. cm at highest and farthest outlet at specified flow of 2280 lpm at 65/70 m. head conforming to IS 1520.			
		b) Suitable HP, 1500 /1800 RPM water cooled with radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12/24 volts electric starting equipment, 180 AH lead acid battery with battery stand, exhaust pipe extended upto 6 m. outside pump house duly insulated with 50 mm thick glass wool with 1.0 mm. thick aluminium sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc. as required.			

		c) One 200 Ltr capacity day oil storage tank fabricated from 3 mm thick M.S. plates. Tank shall be provided with inlet, outlet, overflow, air vent, drain connections, filling connection & level indicator. Tank shall be mounted on a suitable steel structure (Painted with 2 coats of red oxide paint). Tank shall be provided with two or more coats of synthetic enamel paint outside over two coats of red oxide primer.			
		d) M.S. Fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required.			
		e) Suitable cement concrete foundation duly plastered with anti vibration pads.			
1.2		<b>FIRE PANELS</b>			
1.2.1	1	Fabrication, Supplying, Installation, Testing & Commissioning of electrical control panel of cubical construction, floor mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, inter-connection, having switchgears and accessories mounting and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for main fire pump, pressurisation pump complete as per CPWD specification with following in coming and Outgoings, suitable for operation on 415V, 3 phase, 50Hz Ac Supply with enclosure protection class IP 42 as required :suitable for operation on 415 V, 3 phase, 50 HZ, AC supply with enclosure protection class IP 42 as required.	259210.00	No	259210.00
		<b>A. Incoming Feeder:-</b>			
		(i) 1 No of 200 A,35KA, 415V,FP MCCB with Thermalmagnetic Based Releases having O/C, S/C ,E/F protection, Digital ELR 96x96mm with CBCT, FP Spreader Terminals 1 set= 8 Pcs, Extended Rotory Handle for MCCB, 240V AC Shunt Trip coil for MCCB.			
		(ii) LED type indicating Lamp with suitable rating 2 Amp SP MCB:- 1 Set (each set comprise of R,Y,B)			
		(iii) Digital type 3 phase Multi function Meter with suitable rating of MCB & 3 Nos. of single core epoxy resin cast type CTs of 200/5 Amps, 10 VA, CL 1.0 ratings -1 Set.			
		<b>B. Busbar:-</b>			
		415 V, 200 Amps, FP Aluminium Busbars with Heat shrinkable color code insulation sleeves.			
		<b>OUTGOINGS:-</b> ( All outgoing feeders for pumps should have digital Ammeter with selector switches and LED type ON,OFF,Trip indicating Lamps )			

		Main Fire Pump			
		1 sets - 125 A, 25kA TPN MCCB, lcs=100% lcu, with fully automatic Star/Delta starter suitable for 50 HP pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation.			
		SPRINKLER PUMP			
		1 sets - 125 A, 25kA TPN MCCB, lcs=100% lcu, with fully automatic Star/Delta starter suitable for 50 HP pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation.			
		JOCKEY PUMP:-			
		1 no.63A,16KA MCCB lcs=100%,Extended Rotry handle with TM release having O/C & S/C protection with 10 HP fully automatic star/ delta starter , current sensing type, Single Phase Preventer, ON/OFF Push Button & LED type Indicating lamps complete with all accessories and internal wiring required for automatic operation, selector switch, for local/remote, auto/manual operation			
		Diesel Engine Control.			
		Control for Diesel Engine comprising:			
		i) Auto/Manual selector switch & 3 attempt starting device, timers and relays as required, push buttons, start/stop in manual mode.			
		ii) LED type Indication lamp for High/Low Lub. Oil pressure, High Water Temp and Engine ON indication.			
		iii) Battery charger suitable for 12 V/24 V DC with boost and trickle selector switch, 0-30 V DC volt meter, 0-20 Amp DC Ammeter.			
		iv) All standard relays, accessories for automatic operation of diesel engine, wiring with 1.5 sq mm PVC insulated copper wire between various sensors and system controller / starter, suitable size cable for battery charging etc. as required.			
		System Controller			
		Designing, Supply, Installation, Testing and Commissioning of system controller to control operation of Main Electric Fire Pump, Diesel Pump, Pressurisation Pump, Terrace Pump in sequence as per specification consisting of relays, timers, sensors, annunciation window for fault indication, control wiring complete as specification.			
		SEWAGE PUMPS			
		3 NOS. 25A DP MCB " C " Curve			
1.3	3	Providing and fixing in position the industrial type pressure gauges with gun	967.73	Set	2903.19

		metal / brass valves complete as required			
1.4	3	Providing, fixing, testing and commissioning of Pressure Switch with Needle Valve.	1329.87	Set	3989.61
1.5		Providing, laying, testing & commissioning of 'C' class heavy duty MS Pipe conforming to IS 1239 i/c fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., in ground including excavation and providing cement concrete blocks as support, anticorrosive treatment with coaltar/asphalt tape as per IS 10221, refilling the trench etc. of following sizes complete as required .( For HYDRANT			
	30	100MM Dia	2300.63	Mtr	69018.90
1.6		Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges,tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required :			
1.6.1	40	25 mm Dia.	672.50	Mtr	26900.00
1.6.2	20	32mm Dia.	769.22	Mtr	15384.40
1.6.3	10	40 mm Dia	934.63	Mtr	9346.30
1.6.4	20	80 mm Dia	1703.85	Mtr	34077.00
1.6.5	525	100 mm Dia	2309.46	Mtr	1212466.50
1.6.6	5	150mm Dia	3230.53	Mtr	16152.65
1.6.7	12	200mm Dia ( wall thickness 6.3mm )	4938.01	Mtr	59256.12
1.7		Supplying and fixing Single headed internal / External hydrant valve with 1 No. 63 mm dia instantaneous FM Gunmetal/Stainless Steel coupling and cast iron wheel,ISI marked, conforming to IS 5290 (type A) with blank Gunmetal/Stainless Steel cap and chain as required :			
	13	Single headed Stainless steel	5549.04	No	72137.52
1.8	13	Providing, fixing, testing and commissioning of Wall mounting swing type first aid Fire Hose Reel with drum, hanging bracket, 30 M x 25 mm dia high pressure hose reel tubing as per IS:884 with shut nozzle and ball valve and all required accessories.	10499.50	No	136493.50
1.9	13	Supply, Installation, Testing and Commissioning of Weather proof Standard Fire Hose Cabinet wall mounting type (750 mm x 600 mm x 250 mm deep) having Double door opening with necessary locking arrangement by allan key suitable for housing 2 no.x15 mtrs. hose pipe, 1no. Branch pipe & nozzle spanner.Duly synthetic enamel painted.	4726.50	No	61444.50
1.10.	26	Providing ISI marked RRL (IS : 636, type-A) fire hose pipe 15 meter long and 63 mm dia with ISI marked (IS : 903) Stainless steel male and female coupling bound and rivetted to hose pipes with copper rivets and copper wire complete as required.	4020.55	No	104534.30
1.11	13	Providing Stainless steel ISI marked 63 mm. dia. male Instantaneous pattern short branch	1502.28	No	19529.64

		pipes with 20 mm dia. Nozzle as per IS : 903, suitable for 10 Kg/sqcm operating pressure and suitable for interconnections to hose pipe coupling as required.			
1.12		Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904			
	1	2 way - 100 mm dia M.S. Pipe	6094.09	No	6094.09
1.13	1	Providing, fixing, testing and commissioning of 25 mm dia Air Release Valve and Ball Valve assembly for Air release system.	1949.25	No	1949.25
1.14	1	Providing, fixing, testing and commissioning Pressure Relief Valve 25mm dia with Ball Valve.	4940.68	No	4940.68
1.15	13	Supplying and fixing orifice plate made out of 6 mm thick stainless steel (Grade 304) with orifice of required size to be fitted between flange & landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required.	1932.76	No	25125.88
1.16		Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required :			
1.16.1	1	50mm Dia	3245.91	No	3245.91
1.16.2	5	80mm Dia	3888.58	No	19442.90
1.16.3	4	100mm Dia	6026.30	No	24105.20
1.16.4	5	150mm Dia	8098.94	No	40494.70
1.16.5	2	200mm Dia	13745.61	No	27491.22
1.17		Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS:5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required :			
1.17.1	1	50mm Dia	5233.58	No	5233.58
1.17.2	4	100mm Dia	9988.10	No	39952.40
1.17.3	2	150mm Dia	16076.77	No	32153.54
1.18		Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange.			
1.18.1	1	80mm Dia	4257.37	No	4257.37
1.18.2	2	100mm Dia	6023.59	No	12047.18
1.18.3	2	150mm Dia	10073.06	No	20146.12
1.18.4	1	200mm Dia	20125.33	No	20125.33
1.19	13	Supply, Installation, Testing and Commissioning of Brass. Ball Valves with all fittings required. 25mm size	737.27	No	9584.51
1.20.		Supplying and erecting Flexible PVC insulated multistrand multicore 1.1 kv grade ISI marked copper wires of following size to be erected as directed.			
	40	f) 1.50 Sq.mm 4 core round PVC sheathed	67.00	Mtr	2680.00



1.21	1	SITC of fire pump start stop push buttons in box.	954.50	No	954.50
1.22		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			
	40	(b) 25 mm	33.00	Mtr	1320.00
1.23	1	Supply, Installation, Testing and Commissioning of Single action Manual Pull Station.Shock and Vibration Resistant, pull Down Lever Remains Down Until Reset. Shall be Polarity Insensitive (with all mounting accessories , complete with Junction Box for mounting on Surface, Cable lugs at Ends, cable compression glands, cable tags and ferruling.	1201.75	No	1201.75
1.24	1	Supply, Installation, Testing and Commissioning of Conventional Sounder cum strobe having tone settings with range of 95dbA and field selectable 15/30/75/110 candelas.(with all mounting accessories , complete with Junction Box for mounting on surface, cable lugs at ends, cable compression glands, cable tags and Ferruling.)	1201.75	No	1201.75
1.25		SPRINKLERS			
		Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating with required accessories :			
1.25.1	6	Pendent Sprinkler 57°C standard response (K-80) UL Listed	362.25	No	2173.50
1.25.2	6	Pendent Sprinkler 68°C standard response (K-80) UL Listed	471.50	No	2829.00
1.26		Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets,center bracket, stockbar of following sizes complete as required etc of following sizes as required:			
	4	700mm	1247.38	No	4989.52
		CABLES AND TERMINATIONS			
1.27		Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable.			
1.27.1	36	(B) 3 core 4 Sq. mm	285.00	Mtr	10260.00
1.27.2	36	(G) 3 core 6 Sq. mm	392.00	Mtr	14112.00
1.28		Providing and erecting XLPE(IS:7098)(I)-88			

		ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable.			
1.28.1	10	(D) 3 core 10 Sq. mm	495.00	Mtr	4950.00
1.28.2	30	(E) 3 core 16 Sq. mm	720.00	Mtr	21600.00
1.29		Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables.			
1.29.1	25	(D) 8 core 2.5 sq.mm	315.00	Mtr	7875.00
1.29.2	25	(G) 12 core 2.5 sq.mm	415.00	Mtr	10375.00
1.30.		Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables.			
1.30.1	8	(A) 2 to 4 core 2.5 / 4 Sq. mm	33.00	No	264.00
1.30.2	4	(C) 2 to 4 core 10 Sq. mm	38.00	No	152.00
1.30.3	4	(D) 2 to 4 core 16 Sq. mm	47.00	No	188.00
1.31		Solder less crimping type Copper 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.			
1.31.1	24	(A) 1.5/2.5 to 6 Sq.mm	8.00	No	192.00
1.31.2	16	(B) 10 Sq.mm	10.00	No	160.00
1.31.3	16	(C) 16 Sq.mm.	12.00	No	192.00
1.32		Providing and fixing approved make Perforated C type cable tray. Made from sheet steel. The cable tray should be single or double bended as per required and as per IS 2062/1079 and shall be coated with hot dip galvanizing as per IS 2629/4759. with max 17.5% perforation with coupler plate / Fish plate and GI hardware like nut - bolt and washers etc. erection with necessary support( included) as per Specification and as per instruction of engineer in charge..			
1.32.1	20	(1) 50 X 50 X 1.6 mm Thick	302.00	RnMtr	6040.00
1.32.2	30	(4) 200 X 50 X 1.6 mm Thick	492.00	RnMtr	14760.00
1.33	1	Charges of Preparing Design , Drawings ,Testing of Fire Fighting System with necessary Approval from Local Fire authority.( Including Pre-NOC and NOC from Fire authority. )	67796.61	job	67796.61
1.34		Providing, fixing, testing and commissioning of below Auto Glow Signages.			
1.34.1	13	Fire Hydrant 4" X 12"	514.97	No	6694.61
1.34.2	13	Fire Hose Reel.4" X 12"	514.97	No	6694.61
1.34.3	2	DCP Extinguisher 8"x 4"	480.00	No	960.00
1.34.4	2	CO2 Extinguisher 8"X 4"	480.00	No	960.00
1.35		FIRE EXTINGUISHER			
1.35.1	4	FIRE EXTINGUISHER Supplying, Installation, Testing and commissioning of	2724.25	No	10897.00

		Dry Chemical Powder (DCP) 6 Kg Fire Extinguisher Mono Ammonium Phosphate Powder 40, Stored Pressure Type, Pressure Gauge, Controllable discharge mechanism Class A, Rating 3A & Class B rating 21B as per IS 15683 ISI MARK (ABC Dry Chemical Powder - MAP 40%)fitted with required accessories including wall suspension brackets.			
1.35.2	4	Supplying, fixing, testing and commissioning of CO2 type Fire Extinguisher of capacity 4.5 kg filled with Co2 Gas as per IS 15222 with controll discharge mechanismfitted with Hose & Horn applicable on Class B fire rating 21B confirms to IS 15683, bearing ISI mark. Co2 Cylinder as per IS 7285.	6526.00	No	26104.00
1.35.3	2	Providing & fixing of ISI marked water CO2 type Portable fire extinguisher,9 LTR capacity, Hydraulic test pressure 35Kgf/cm2, Discharge range 2 Mtr,Average discharge time: Min. 13Sec,Fire Rating 3A,Grade: IS:15683.	3450.00	No	6900.00
1.35.4	1	Providing,fixing, testing and commissioning of 10Kg Modular type fire extinguisher having Nitrogen expellant ,ceiling mounted,Sprinkler Nozzle is gas tight the release temperature is adjusted with sprinkler imported bulb set at 57 degree C or 68 degree C ,coverage area 4 to 5 sqmtr,	2950.00	No	2950.00
1.36	2	Supplying, Installation, Testing and commissioning Sewage water submersible pumping sets of CI casing & impeller, SS shaft, including with inbuilt water level sensors for operating the pumps automatically and all accessories suitable for operation on 220 V-240 V, single phase, 50 Hz. AC supply etc. as reqd.	19676.50	No	39353.00
		> 10 mm solid handling capacity,Minimum Capacity - 50 LPM,Minimum Head > 13.5 Mtr			
		<b>SUB-TOTAL OF FIRE HYDRANT System</b>			<b>3475062.84</b>
<b>2</b>		<b>Annual Comprehensive Type Maintenance Contract of for Above Fire Fighting System For 1-Year DLP + ONE Year</b>			
		Every six months Testing certificates with Photographs should be sent to competent authority by concern contractor.			
2.1	1	Annual comprehensive Type Maintenance Charges only During 1st Year DLP / Defect Liability period.	0.00	Year	0.00
2.2	1	Annual comprehensive Type Maintenance Charges for 1st Year after Guarentee / Defect Liability period.	86876.57	Year	86876.57
		<b>SUB TOTAL of Annual Comprehensive Maintenance of Fire Fighting Sytem</b>			<b>86876.57</b>
			<b>TOTAL</b>		<b>3561939.41</b>
		<b>LANDSCAPING WORK :</b>			
1	2800	LAYING OUT LAWN – After excavating soil	85.00	Sq.mt.	238000.00

		upto 30 cm. depth & removing unwanted stuff, stones etc. Preparing soil for planting by supplying and mixing 6 inch river fine site and 0.5 cmt FYM maximum 100 sqmt of lawn area and doing termicide @ 1 fit / 100 sqmt area and planting selection 1 type / approved lawn grass at maximum 6 cm x 6 cm distance and maintain it upto 120 days. Maintainance include all operations i.e. watering, grass cutting, gap filling, applying of fertizer if require etc.			
2	1260	Supplying, Spreading and leveling of good earth like firtile soil as directed etc compt.	575.00	Cmt.	724500.00
3	280	Supplying, Spreading and leveling of good quality river Kap Filling 100 mm as directed etc comp.	575.00	Cmt.	161000.00
4	550	Supply and Planting saplings of Hedge plants like kadvi mahendi, karmda, dyuranta, nikodeviya etc. specifies bag size is 4 inch x 6 inch, well established & free from disease at site. as per the instructions	15.00	Nos	8250.00
5	280	Supply and Planting saplings of Ficus panda, Ficus benjamina, Ficus benjamina variegated, Ficus longisland bag size is 13 inch x 13 inch, well branched, well established & free from disease at site as per the instructions	150.00	Nos	42000.00
6	150	Supply and Planting saplings of (Jasud, Ixora, Ticoma Gaudi-chaudi, Gultora, Jetropha, Haemeliya, Chandani, Mogaro, Galfemia, , Allamenda, Desi Gulab, Euphorbia mili, Jasud Hybrid, Chandani double, Madhukamini, Madhumalti, Ticoma Capensis, Ixora draft, Nikadevia, English Karen etc.) having height of minimum 2.00 to 2.5 ft. and bag size is 8 inch x 10 inch, well branched, well established & free from disease at site as per the instructions.	85.00	Nos	12750.00
7	400	Supply and Planting saplings of Golden Bamboo having height of minimum 5 to 6 ft. and bag size is 8 inch x 10 inch, well branched, well established & free from disease at site as per the instructions.	45.00	Nos	18000.00
8	40	Supply and Planting saplings of Palm(Botal palm,foxtel) having height of minimum 10.00 to 12.00 ft. and bag size is 21 inch x 21 inch, well branched, well established & free from disease at site as per the instructions	3500.00	Nos	140000.00
9	40	Supply and Planting saplings of champa (deshi) having height of minimum 8 to 10 ft. and bag size is 15 inch x 16 inch, well branched, well established & free from disease at site as per the instructions.	450.00	Nos	18000.00
10	20	Supply, Spreading and leveling of Brick dust (Chharu) particle size having maximum 10 mm	1300.00	Cmt	26000.00
11	140	Supply Saplings and Planting of trees species as specified ( Alstonia scholaris, Erythrina indica, Jacaranda	250.00	Nos	35000.00

		mimosifolia, Delonix regia, Anthocephalus cadamba, Spathodea companulata, Neem (Azadirachta indica), Lagerstromia speciosa, Tabebuia argentea, Cordia sebestena, Mimosa elengi, Bauhinia blakeana, Kigelia pinnata, Cassia fistula, Banyan, Ficus religiosa, Peltophorum, Bottle brush, Silver Oak, Billi, Mahogany, Pendula, Desi Asopalav, Sevan, Badam, Ficus infectoria, Pinkesiya, Millingtonia hotensis, Rain Tree, Bakm limdi, kasid, Ashok tree, parkia, Tabebuia Rosea, millettia, etc.) having height of minimum 7.00 to 8.0 ft. and bag size is 13 inch x 13 inch, well branched, well established & free from disease at site as per the instructions.			
12	150	Supplying insecticides at site well packed in bottle of 20 litre. weight including royalty and carriage with all leads and lifts (product to be brought in company sealed packing only)	300.00	20 L Bottle	45000.00
				<b>Total Rs.</b>	<b>1468500.00</b>

Signature of Bidder

Seal

Date

AHMEDABAD MUNICIPAL CORPORATION  
ENGINEERING DEPARTMENT- NORTH ZONE

**Name of Work : REPAIRING AND RENOVATION OF LATE SHREE AMRUTBHAI MAGANLAL PATEL PARTY PLOT AT T.P.S. NO.11 RAKHIYAL , F.P. NO.85/P IN SARASPUR-RAKHIYAL WARD, NORTH ZONE, AHMEDABAD**

**FINANCIAL BID (Online Only)**

Sr.No.	Description	Amount
1	Amount For Civil Work	Rs.1,53,28,830.49
2	Amount For Electrical Work ( New Electrical Work & Existing Fitting Buyback Item)	Rs. 38,44,047.05
3	Amount For CCTV Work with Annual Comprehensive Maintenance for 1 Years after completion of DLP	Rs. 10,65,076.03
4	Amount For Fire Fighting System Work with Annual Comprehensive Maintenance for 1 Years after completion of DLP	Rs. 35,61,939.41
5	Amount For Lawn Area & Landscape Work	Rs. 14,68,500.00
	<b>Total</b>	<b>Rs. 2,52,68,392.98</b>

I/We am/are willing to carry out work at \_\_\_\_\_ % above / below (should be written in figures and words)  
the estimated cost mentioned above.

Estimated cost put to tender : **Rs. 2,52,68,392.98**

Add \_\_\_\_\_ % above : Rs \_\_\_\_\_

Net: Rs \_\_\_\_\_

In words : Rupees \_\_\_\_\_

\_\_\_\_\_

Estimated cost put to tender : **Rs. 2,52,68,392.98**

Deduct \_\_\_\_\_ % below : Rs \_\_\_\_\_

Net : Rs \_\_\_\_\_

In words : Rupees \_\_\_\_\_

\_\_\_\_\_

Signature of Bidder  
Seal  
Date

Additional City Engineer ( N.Z. )  
Ahmedabad Municipal Corporation