

ABSTRACT OF COST					
S.No. 1 (A):- Shops					
S. No.	ITEM OF CIVIL WORK	AMOUNT			
1.00	Earth Work	Rs.	72813		
2.00	Concrete Work	Rs.	104314		
3.00	R.C.C. Work	Rs.	711417		
4.00	Brick Work	Rs.	210497		
5.00	Marble Work	Rs.	345607		
6.00	Steel Work	Rs.	3290		
7.00	Flooring	Rs.	69482		
8.00	Roofing	Rs.	914		
9.00	Finishing	Rs.	110688		
10.00	Water Proofing Work	Rs.	62079		
		Rs.	1691100	(A)	
11.00	Market Rates Items	Rs.	1513635	(B)	
	Total = (A) + (B) =	Rs.	3204735		

S.No. 1 (A):- Shops						
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate	Amount
					Rs.	Rs.
1.00	2.0	<u>EARTH WORK</u>				
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
	2.28.1	All kinds of soil.	155.00	Sqm	13.95	2162
1.02	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil	120.00	Cum	166.40	19968
1.03	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.				
	2.26.1	All kinds of soil.	6.00	Cum	51.75	311
1.04	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	158.00	Cum	125.75	19869
1.05	1.1.2	Carriage of material by mechanical transport including loading and unloading for a lead upto 1km	39.00	Cum	98.34	3835
1.06	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	10.00	Cum	917.75	9178
1.07	2.34	Supplying chemical emulsion in sealed containers including delivery as specified.				
	2.34.1	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	21.00	Litre	185.95	3905
1.08	2.35	Diluting and injecting chemical emulsion for POST CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
	2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :				
	2.35.3.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	103.00	Sqm	131.90	13586
		Total Earth Work :				72813
2.00	4.0	<u>CONCRETE WORK</u>				
2.01	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.				
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	15.00	Cum	4478.15	67172
2.02	4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing :				
	4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1.00	Cum	6547.70	6548
2.03	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	54.00	Sqm	450.35	24319
2.04	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)	17.00	Sqm	263.10	4473
2.05	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	5.00	Per 50 kg cement	47.95	240
2.06	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	17.00	Sqm	91.90	1562
		Total Cement Concrete work :				104314
3.00	5.0	<u>R.C.C. WORK</u>				
	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including 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 Engineer-in-charge.				
3.01	5.33.1	All works upto Plinth level	25.00	Cum	6446.45	161161
3.02	5.33.2	All works above plinth level upto floor V level	16.00	Cum	7250.05	116001
3.03	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	5.22.6	Thermo-Mechanically Treated bars	3466.00	Kg	56.60	196176
3.04	5.22A	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete. Above plinth level.				
	5.22A.6	Thermo-Mechanically Treated bars	2184.00	Kg	56.60	123614
3.05	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				

	5.9.1	Foundation, footing, bases of columns etc. for mass concrete	41.00	Sqm	193.95	7952	
	5.9.3	Suspended floors, roofs, landings, balconies, and access platform	57.00	Sqm	422.30	24071	
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	103.00	Sqm	342.90	35319	
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	85.00	Sqm	467.85	39767	
	5.9.14	Extra for shuttering in circular work (20% of respective centering and shuttering items)	23.00	Sqm	93.57	2152	
	5.9.15	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	1.00	Sqm	193.95	194	
	5.9.16	Edges of slabs and breaks in floors and walls					
	5.9.16.1	Under 20 cm wide	41.00	metre	122.20	5010	
		Total R.C.C. Work :				711417	
4.00	6.0	BRICK WORK					
4.01	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
	6.1.2	a) Cement mortar 1:6 (1 cement : 6 coarse sand)	6.00	Cum	4751.65	28510	
4.02	6.47	Providing and laying autoclaved aerated cement blocks masonry with 150mm/230mm/300 mm thick AAC blocks in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in- Charge. (The payment of RCC band and reinforcement shall be made for separately).	32.00	Cum	5687.10	181987	
		Total Brick Work :				210497	
5.00	8.0	MARBLE WORK					
5.01	8.12	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :					
	8.12.1	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	35.00	Sqm	2887.85	101075	
5.02	Analysed on DSR	Granite stone slab 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete.	1.00	Sqm	2365.00	2365	
5.03	Analysed on DSR	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including rubbing and polishing complete. Granite stone 30mm thick	35.00	Sqm	4120.00	144200	
5.04	7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases in stone and holes in walls wherever required.	188.00	Kgs	521.10	97967	
		Total Marble Work :				345607	
6.00	10.0	STEEL WORK					
6.01	10.27	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.					
	10.27.4	10 x 140 mm	32.00	Nos	102.80	3290	
		Total Steel Work :				3290	
7.00	11.0	FLOORING					
7.01	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.					
	11.41.2	Size of Tile 600x600 mm	57.00	Sqm	1119.4	63806	
7.02	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, dado, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.					
	11.46.2	Size of Tile 600x600 mm	5.00	Sqm	1135.20	5676	
		Total Flooring Work :				69482	
8.00	12.0	ROOFING					
8.01	12.22	Making khurra 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mx1mx400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete :	4.00	Each	187.60	750	
8.02	12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	4.00	Each	40.90	164	

		Total Roofing Work :				914	
9.00	13.0	FINISHING					
9.01	13.4	12 mm cement plaster of mix :					
	13.4.2	1:6 (1 cement : 6 coarse sand)	147.00	Sqm	168.25	24733	
9.02	13.16	6 mm cement plaster of mix:					
	13.16.1	1:3 (1 cement : 3 fine sand)	17.00	Sqm	143.80	2445	
		18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	129.00	Sqm	255.55	32966	
9.03	13.11						
9.04	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	164.00	Sqm	118.70	19467	
9.05	13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.					
	13.83.2	Two coats	164.00	Sqm	71.00	11644	
9.06	13.45	Finishing walls with textured exterior paint of required shade :					
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	129.00	Sqm	150.65	19434	
		Total Finishing Work :				110688	
10.00	22.0	WATER PROOFING					
10.01	22.7	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 operation:					
		a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with proprietary water proofing compound conforming to IS 2645 over the RCC slab including cleaning the surface before treatment.					
		b) Laying cement concrete using broken bricks / brick bats 25mm to 100 mm size with 50% cement mortar 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS : 2645 over 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS : 2645 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 admixed with proprietary water proofing compound conforming to IS : 2645.					
		d) Finishing the surface with 20mm thick joint less cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300x300 mm square.					
		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 operation to be done in order and as directed and specified by Engineer-in-charge.					
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	60.00	Sqm	1034.65	62079	
		Total Water Proofing work :				62079	
11.00		MARKET RATE ITEMS					
11.01	NS	P/F Acrylic Shutters	29.00	Sqm		0	
11.02	MR	Design detailing providing fabrication assembling and erection of Nano-polymerized fluorinated lacquer, Multi-composed PVDF-lacquer system on both sides, low wick treated, protected against microbial and fungal attack, UV protected, Ferrari, Mehatop N of Mehler or Approved equivalent, system with reduce friction coefficient properties for roofing systems as per the manufacture specifications & as per approved Drawing. The sheeting material shall have minimum tensile strength of 6000/5500 N/50 mm and tear strength of range 500/500N with PVDF finishing and having weight of 1050 gm/sqm having 20 years of warranty. This work shall including raw material patterning, forming, cutting, welding, fixing and installation with GI cable, flashing, hardware required as per the draw mild steel stud all patti, galvanised corner plate, EPDM etc, including lifts up to all heights, tools and plants, and necessary scaffolding as required for all operations. all other accessories/ hardware like, clamping systems structure, cable, edge fittings, tensioning arrangements shall be cover under this item. of the surface before application of primer/ paint. Flashing - Edge of the canopy along the edge of the roof structure shall be properly sealed as to avoid leakages. water for roof covering shall be drained in to the main peripheral gutter of the roof structure. the item shall be executed as per approved drawing	129.00	Sqm	5235.00	675315	
12.00	NS	Tensile Shade Canopy with 902S2 PVC Fabric from Ferrari 902 gsm					

12.01	NS	Design, Supply, Fabrication and Installation of Membrane Panels & steel Cables and GI corner fittings nuts and bolts and associated accessories with membrane works. The design complies with the requirements of BS and, EU Standards. The tensioned membrane structure shall include engineering design of structural members and accessory parts. Membrane system shall include Membrane Fabric, Wire Ropes and Cables, Shackles, Rigging Screws, Clamps and tensioning hardware. Providing and installing Steel structure along with 902 S2 PVDF coated PVC fabric, GI cables and GI coated and powder coated corner fixing, SS toggles and nuts and bolts with 3.16 grade, complete with designing patterning and installation. All the steel structure will be coated with 2 coats of DUCO paint complete with designing fabrication and installation. Approximate Steel qty : 2.5 Kg per sq ft. (16 mtr x 6.25 mtr area)	120.00	Sqm	6986.00	838320	
		Total of Market Rate Items			Rs.	1513635	

ABSTRACT OF COST

S.No.:1 (B) : Restaurant Block					
S. No.	ITEM OF CIVIL WORK	AMOUNT			
1.00	Earth Work	Rs.	424136	/-	
2.00	Concrete Work	Rs.	480879	/-	
3.00	R.C.C. Work	Rs.	5238372	/-	
4.00	Brick Work	Rs.	596359	/-	
5.00	Marble Work	Rs.	1480219	/-	
6.00	Wood Work	Rs.	296603	/-	
7.00	Steel Work	Rs.	6243	/-	
8.00	Flooring	Rs.	631563	/-	
9.00	Roofing	Rs.	564145	/-	
10.00	Finishing	Rs.	307420	/-	
11.00	Aluminium Works	Rs.	59703	/-	
12.00	Water Proofing Work	Rs.	336261	/-	
13.00	Structure Glazing	Rs.	1603497	/-	
		Rs.	12025399	/-	(A)
14.00	Market Rates Items	Rs.	292500	/-	(B)
Total = (A) + (B) =		Rs.	12317899	/-	

S.No.:1 (B) : Restaurant Block						
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate	Amount
					Rs.	Rs.
1.00	2.0	<u>EARTH WORK</u>				
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
	2.28.1	All kinds of soil.	720.00	Sqm	13.95	10044
1.02	2.8	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil	556.00	Cum	166.40	92518
1.03	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.				
	2.26.1	All kinds of soil.	27.00	Cum	51.75	1397
1.04	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	891.00	Cum	125.75	112043
1.05	1.1.2	Disposal of material by mechanical transport including loading and unloading for a lead upto 10km	335.00	Cum	203.42	68146
1.06	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	59.00	Cum	917.75	54147
1.07	2.34	Supplying chemical emulsion in sealed containers including delivery as specified.				
	2.34.1	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	102.00	Litre	185.95	18967
1.08	2.35	Diluting and injecting chemical emulsion for POSTCONSTRUCTION anti-termite treatment (excluding the cost of chemical emulsion) :				
	2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :				
	2.35.3.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	507.00	Sqm	131.90	66873
		Total Earth Work :				424136
2.00	4.0	<u>CONCRETE WORK</u>				
2.01	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.				
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	89.00	Cum	4478.15	398555
2.02	4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing :				
	4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1.00	Cum	6547.70	6548
2.03	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	116.00	Sqm	450.35	52241
2.04	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)	64.00	Sqm	263.10	16838
2.05	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	17.00	Per 50 kg cement	47.95	815
2.06	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	64.00	Sqm	91.90	5882
		Total Cement Concrete work :				480879
3.00	5.0	<u>R.C.C. WORK</u>				

	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including 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 Engineer-in-charge.					
3.01	5.33.1	All works upto Plinth level	128.00	Cum	6446.45	825146	
3.02	5.33.2	All works above plinth level upto floor V level	167.00	Cum	7250.05	1210758	
3.03	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.					
	5.22.6	Thermo-Mechanically Treated bars	17782.00	Kg	56.60	1006461	
3.04	5.22A	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete. Above plinth level.					
	5.22A.6	Thermo-Mechanically Treated bars	23359.00	Kg	56.60	1322119	
3.05	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :					
	5.9.1	Foundation, footing, bases of columns etc. for mass concrete	165.00	Sqm	193.95	32002	
	5.9.3	Suspended floors, roofs, landings, balconies, and access platform	381.00	Sqm	422.30	160896	
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	568.00	Sqm	342.90	194767	
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	393.00	Sqm	467.85	183865	
	5.9.4	Shelves	31.00	Sqm	422.30	13091	
	5.9.14	Extra for shuttering in circular work (20% of respective centering and shuttering items)	315.00	Sqm	93.57	29475	
	5.9.15	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	7.00	Sqm	193.95	1358	
	5.9.16	Edges of slabs and breaks in floors and walls					
	5.9.16.1	Under 20 cm wide	97.00	metre	122.20	11853	
	5.9.19	Weather shade, Chajjas, corbels etc., including edges	342.00	Sqm	521.75	178439	
3.06	5.11	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).					
	5.11.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	381.00	Sqm	171.50	65342	
3.07	5.3	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	82.00	metre	34.15	2800	
		Total R.C.C. Work :				5238372	
4.00	6.0	BRICK WORK					
4.01	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
	6.1.2	a) Cement mortar 1:6 (1 cement : 6 coarse sand)	13.00	Cum	4751.65	61771	
4.02	6.47	Providing and laying autoclaved aerated cement blocks masonry with 150mm/230mm/300 mm thick AAC blocks in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in- Charge. (The payment of RCC band and reinforcement shall be made for seperately).					
			94.00	Cum	5687.10	534587	
		Total Brick Work :				596359	
5.00	8.0	MARBLE WORK					
5.01	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.					
	8.2.2	Granite of any colour and shade					
	8.2.2.1	Area of slab upto 0.50 sqm	4.00	Sqm	3351.95	13408	
5.02	8.2.2.2	Area of slab over 0.50 sum.	23.00	Sqm	3113.30	71606	

5.03	8.5	Extra for providing opening of required size & shape for wash basin/kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	6.00	each	427.95	2568
5.04	8.12	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge :				
	8.12.1	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	126.00	Sqm	2887.85	363869
5.05	Analysed on DSR	Granite stone slab 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete.	13.00	Sqm	2365.00	30745
5.06	11.24	Extra for pre finished nosing to treads of steps of marble stone.	81.00	M	306.25	24806
5.07	Analysed on DSR	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including rubbing and polishing complete. Granite stone 30mm thick	50.00	Sqm	4120.00	206000
5.08	7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases in stone and holes in walls wherever required.	1456.00	Kgs	521.10	758722
5.09	8.10	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.				
	8.10.2	Granite Stone of approved shade	3.00	Sqm	2831.95	8496
		Total Marble Work :				1480219
6.00	9.0	WOOD WORK				
6.01	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
	9.1.1	Second class teak wood	1.00	Cum	92743.05	92743
6.02	9.21	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	22.00	Sqm	1559.75	34315
6.03	9.96	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete.				
	9.96.1	300x16 mm	5.00	Each	212.45	1062
	9.96.2	250x16 mm	7.00	Each	189.20	1324
6.04	9.97	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
	9.97.2	250x10 mm	5.00	Each	88.10	441
	9.97.4	150x10 mm	7.00	Each	64.30	450
6.05	9.100	Providing and fixing aluminium handle ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:				
	9.100.1	125 mm	24.00	Each	51.10	1226

6.06	9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete:					
	9.101.2	a) Twin rubber stopper	12.00	Each	38.00	456	
6.07	9.103	Providing and fixing bright finished brass 100mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete	6.00	Each	622.15	3733	
6.08	9.127	Providing & Fixing decorative high pressure laminated sheet of plain/ wood grain in gloss/ matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.					
	9.127.1	1.5mm thick	44.00	Sqm	837.40	36846	
6.09	9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand: 6 graded stone aggregate 20mm nominal size).	66.00	each	118.60	7828	
6.10	9.147D	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single/ double glass panes, wire mesh and silicon sealant shall be paid separately)					
		Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable.					
c)	9.147D.4	Three track three panels sliding window with fly proof S.S wire mesh (Two nos. glazed & one no. wire mesh panels) made of (big series) frame 116 x 45 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 1.75 sqm).	16.00	Sqm	7261.20	116179	
		Total Wood Work :				296603	
7.00	10.0	STEEL WORK					
7.01	10.27	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm ²), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.					
	10.27.2	10 x 80 mm	12.00	Nos	74.75	897	
	10.27.4	10 x 140 mm	52.00	Nos	102.80	5346	
		Total Steel Work :				6243	
8.00	11.0	FLOORING					
8.01	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.					
	11.41.2	Size of Tile 600x600 mm	259.00	Sqm	1119.4	289925	

8.02	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, dado, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.					
	11.46.2	Size of Tile 600x600 mm	122.00	Sqm	1135.20	138494	
8.03	MR	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, dado, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.					
	MR	Size of Tile 1500x600 mm	106.00	Sqm	1250.00	132500	
8.04	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :					
	11.26.1	25 mm thick	61.00	Sqm	1158.10	70644	
		Total Flooring Work :				631563	
9.00	12.0	ROOFING					
9.01	12.22	Making khurra 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mx1mx400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete :	4.00	Each	187.60	750	
9.02	12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	4.00	Each	40.90	164	
9.03	12.53	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main 'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm,					
		resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved exture 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 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T'. bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge.	35.00	Sqm	1497.90	52427	

9.04	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I.					
		wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :					
	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I	170.00	Sqm	806.20	137054	
9.05	12.55	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete, including providing skirting upto 150 mm height along the parapet walls in the same manner.	325.00	Sqm	1150.00	373750	
		Total Roofing Work :				564145	
10.00	13.0	FINISHING					
10.01	13.4	12 mm cement plaster of mix :					
	13.4.2	1:6 (1 cement : 6 coarse sand)	444.00	Sqm	168.25	74703	
10.02	13.16	6 mm cement plaster of mix:					
	13.16.1	1:3 (1 cement : 3 fine sand)	109.00	Sqm	143.80	15674	
10.03	13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	129.00	Sqm	255.55	32966	
10.04	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	552.00	Sqm	118.70	65522	
10.05	13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.					
	13.83.2	Two coats	810.00	Sqm	71.00	57510	
10.06	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade					
	13.61.1	Two or more coats on new work	10.00	Sqm	78.40	784	
10.07	13.45	Finishing walls with textured exterior paint of required shade :					
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	400.00	Sqm	150.65	60260	
		Total Finishing Work :				307420	
11.00	21.0	ALUMINIUM WORKS					
11.01	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):					
	21.3.2	With float glass panes of 5.50 mm thickness	16.00	Sqm	1003.95	16063	

	9.1	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	6.00	Sqm	74.35	446
11.02	21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately).	8.00	Sqm	4608.85	36871
11.03	21.8	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
	21.8.1	Upto 5mm depth and 5 mm width	36.00	rm	62.45	2248
11.04	21.12	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.				
	21.12.2	Powder coated minimum thickness 50 micron aluminium tubular handle bar	8.00	each	509.3	4074
		Total Aluminium Works :				59703
12.00	22.0	<u>WATER PROOFING</u>				
12.01	22.7	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 operation:				
		a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with proprietary water proofing compound conforming to IS 2645 over the RCC slab including cleaning the surface before treatment.				
		b) Laying cement concrete using broken bricks / brick bats 25mm to 100 mm size with 50% cement mortar 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS : 2645 over 20mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS : 2645 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 admixed with proprietary water proofing compound conforming to IS : 2645.				
		d) Finishing the surface with 20mm thick joint less cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300x300 mm square.				
		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 operation to be done in order and as directed and specified by Engineer-in-charge.				
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	325.00	Sqm	1034.65	336261
		Total Water Proofing work :				336261
13.00		<u>Structure Glazing</u>				
13.01	25.1	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).	1727.00	Kgs	338.25	584158
13.02	25.2	Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:				

		a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)- cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including:					
		b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon seperator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.					
		c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment , including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.					
		d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.					
		e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and unctional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes 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 structural glazing as specified, cleaning and rotection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance haracteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineerin-Charge.					
		Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this subhead. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal places.					

		Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories					
		Performance Laboratory Test for Air Leakage Test (-50pa to – 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr"					
		Static Water Penetration Test. (50pa to 1500pa) as per ASTM E- 331- 09 testing method for a range up to 2000 ml."					
		Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml"					
		Structural Performance Deflection and deformation by static air pressure test (1.5 times desing wind pressure without any failure) as per ASTM E- 330-10 testing method for a range upto 50 mm"					
		Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test" Tests to be conducted on site 6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000ml"					
		Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000 ml	166.00	Sqm	2409.90	400043	
13.03	25.3	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc.					
		all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. "(Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.26.2)"For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm."					
	(i)	Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.	166.00	Sqm	3730.70	619296	
		Total of Structural Glazing			Rs.	1603497	
14.00		<u>MARKET RATE ITEMS</u>					
14.01		Providing and fixing in true horizontal level Open cell Aluminum lay-in ceiling tiles with border panels forming flush-tegular edge of size 600mmx600mmx38mm having Fire Performance CLASS 0/Class 1 (BS 476). The tile of 'Global white' color with cell size 150mm X 150mm shall be laid on white painted 15mm profile grid system comprising Main runners (3000mm), 1200mm and 600mm cross tees with 15mm white flanges and 38mm web height/ Equivalent as per manufacturers recommendations all complete	150.00	Sqm	1950.00	292500	
		Total of Market Rate Items			Rs.	292500	

ABSTRACT OF COST					
S.No. 1 (C) Toilet Blocks					
S. No.	ITEM OF CIVIL WORK	AMOUNT			
1.00	Earth Work	Rs.	62090	/-	
2.00	Concrete Work	Rs.	102205	/-	
3.00	R.C.C. Work	Rs.	858839	/-	
4.00	Brick Work	Rs.	252493	/-	
5.00	Marble Work	Rs.	332245	/-	
6.00	Wood Work	Rs.	207327	/-	
7.00	Steel Work	Rs.	897	/-	
8.00	Flooring	Rs.	332169	/-	
9.00	Roofing	Rs.	130480	/-	
10.00	Finishing	Rs.	86548	/-	
11.00	Aluminium Works	Rs.	4313	/-	
12.00	Water Proofing Work	Rs.	117950	/-	
		Rs.	2487557	/-	(A)
14.00	Market Rates Items	Rs.	650000	/-	(B)
Total = (A) + (B) =		Rs.	3137557	/-	

S.No. 1 (C) Toilet Blocks

Item No	DSR 2016	Description of Item	Quantity	Unit	Rate	Amount	
					Rs.	Rs.	
1.00	2.0	<u>EARTH WORK</u>					
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.					
	2.28.1	All kinds of soil.	165.00	Sqm	13.95	2302	
1.02	2.8	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
	2.8.1	All kinds of soil	92.00	Cum	166.40	15309	
1.03	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation/ banking excavated or stacked materials.					
	2.26.1	All kinds of soil.	5.00	Cum	51.75	259	
1.04	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	141.00	Cum	125.75	17731	
1.05	1.1.2	Disposal of material by mechanical transport including loading and unloading for a lead upto 10km	49.00	Cum	203.42	9968	
1.06	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	10.00	Cum	917.75	9178	
1.07	2.34	Supplying chemical emulsion in sealed containers including delivery as specified.					
	2.34.1	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	9.00	Litre	185.95	1674	
1.08	2.35	Diluting and injecting chemical emulsion for POSTCONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :					
	2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :					
	2.35.3.1	With Chlorpyrifos/Lindane E.C. 20% with 1% concentration	43.00	Sqm	131.90	5672	
		Total Earth Work :				62090	
2.00	4.0	<u>CONCRETE WORK</u>					
2.01	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.					
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	15.00	Cum	4478.15	67172	
2.02	4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing :					
	4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1.00	Cum	6547.70	6548	
2.03	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	51.00	Sqm	450.35	22968	
2.04	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)	15.00	Sqm	263.10	3947	
2.05	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	4.00	Per 50 kg cement	47.95	192	
2.06	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	15.00	Sqm	91.90	1379	
		Total Cement Concrete work :				102205	
3.00	5.0	<u>R.C.C. WORK</u>					

3.01	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including 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 Engineer-in-charge.					
	5.33.1	All works upto Plinth level	23.00	Cum	6446.45	148268	
3.02	5.33.2	All works above plinth level upto floor V level	27.00	Cum	7250.05	195751	
3.03	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.					
	5.22.6	Thermo-Mechanically Treated bars	3109.00	Kg	56.60	175969	
3.04	5.22A	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete. Above plinth level.					
	5.22A.6	Thermo-Mechanically Treated bars	3670.00	Kg	56.60	207722	
3.05	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :					
	5.9.1	Foundation, footing, bases of columns etc. for mass concrete	29.00	Sqm	193.95	5625	
	5.9.3	Suspended floors, roofs, landings, balconies, and access platform	98.00	Sqm	422.30	41385	
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	123.00	Sqm	342.90	42177	
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	73.00	Sqm	467.85	34153	
	5.9.4	Shelves	6.00	Sqm	422.30	2534	
	5.9.16	Edges of slabs and breaks in floors and walls					
	5.9.16.1	Under 20 cm wide	43.00	metre	122.20	5255	
		Total R.C.C. Work :				858839	
4.00	6.0	BRICK WORK					
4.01	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
	6.1.2	a) Cement mortar 1:6 (1 cement : 6 coarse sand)	2.00	Cum	4751.65	9503	
4.02	6.47	Providing and laying autoclaved aerated cement blocks masonry with 150mm/230mm/300 mm thick AAC blocks in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for separately).	42.00	Cum	5687.10	238858	
4.03	6.45	Half brick masonry with non modular fly ash bricks of class designation 10, conforming to IS :12894, in super structure above plinth and upto floor V level.					
	6.45.2	Cement mortar 1:4 (1 cement :4 coarse sand)	5.00	Sqm	769.50	3848	
4.04	6.15	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	5.00	Sqm	56.85	284	
		Total Brick Work :				252493	
5.00	8.0	MARBLE WORK					
5.01	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.					
	8.2.2	Granite of any colour and shade					
	8.2.2.1	Area of slab upto 0.50 sqm	3.00	Sqm	3351.95	10056	
5.02	8.2.2.2	Area of slab over 0.50 sum.	5.00	Sqm	3113.30	15567	
5.03	8.5	Extra for providing opening of required size & shape for wash basin/kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	10.00	each	427.95	4280	
5.04	8.10	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.					
	8.10.2	Granite Stone of approved shade	7.00	Sqm	2831.95	19824	

5.05	analysed on D	Stone work (machine cut edges Veneer work) for wall lining upto 10 m height, backing filled with a grout of 12 mm thick cement mortar 1:3 (1 Cement : 3 coarse sand) and jointed with Cement mortar 1:2 (1 cement : 2 stone dust), including rubbing and polishing complete. Granite stone 30mm thick	41.00	Sqm	4120.00	168920	
5.06	7.25	Providing and fixing stainless steel cramps of required size and shape for anchoring stone wall lining to the backing or securing adjacent stones in stone wall lining in cement mortar 1:2 (1 cement : 2 coarse sand), including making the necessary chases in stone and holes in walls wherever required.	218.00	Kgs	521.10	113600	
Total Marble Work :						332245	
6.00	9.0	WOOD WORK					
6.01	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).					
	9.1.1	Second class teak wood	1.00	Cum	92743.05	92743	
6.02	9.21	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:					
	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	16.00	Sqm	1559.75	24956	
6.03	9.96	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete.					
	9.96.2	250x16 mm	20.00	Each	189.20	3784	
6.04	9.97	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:					
	9.97.4	150x10 mm	10.00	Each	64.30	643	
6.05	9.100	Providing and fixing aluminium handle ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:					
	9.100.1	125 mm	20.00	Each	51.10	1022	
6.06	9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete:					
	9.101.2	a) Twin rubber stopper	10.00	Each	38.00	380	
6.07	9.103	Providing and fixing bright finished brass 100mm mortice latch and lock ISI marked with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete	1.00	Each	622.15	622	
6.08	9.38	Providing and fixing 4mm thick coir veneer board, ISI marked IS : 14842, plain lining with necessary screws, priming coat on unexposed surface etc., complete	63.00	Sqm	837.40	52756	
6.09	9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand: 6 graded stone aggregate 20mm nominal size).	60.00	each	118.60	7116	

6.10	9.147D	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately)					
		Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable.					
c)	9.147D.3	Two track two panels sliding window made of (big series) frame 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 1.75 sqm upto 2.50 sqm).	4.00	Sqm	5826.05	23304	
Total Wood Work :						207327	
7.00	10.0	STEEL WORK					
7.01	10.27	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.					
	10.27.2	10 x 80 mm	12.00	Nos	74.75	897	
Total Steel Work :						897	
8.00	11.0	FLOORING					
8.01	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.					
	11.41.2	Size of Tile 600x600 mm	100.00	Sqm	1119.4	111940	
8.02	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, dado, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.					
	11.46.2	Size of Tile 600x600 mm	194.00	Sqm	1135.20	220229	
Total Flooring Work :						332169	
9.00	12.0	ROOFING					
9.01	12.22	Making khurra 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mx1mx400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete :	4.00	Each	187.60	750	
9.02	12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	4.00	Each	40.90	164	

9.03	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I.					
		wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :					
	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I	30.00	Sqm	806.20	24186	
9.04	12.54	Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring T with :					
	12.54.2	GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electrostatically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.	69.00	Sqm	1527.25	105380	
Total Roofing Work :						130480	
10.00	13.0	FINISHING					
10.01	13.4	12 mm cement plaster of mix :					
	13.4.2	1:6 (1 cement : 6 coarse sand)	46.00	Sqm	168.25	7740	
10.02	13.16	6 mm cement plaster of mix:					
	13.16.1	1:3 (1 cement : 3 fine sand)	3.00	Sqm	143.80	431	
10.03	13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	165.00	Sqm	255.55	42166	
10.04	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	49.00	Sqm	118.70	5816	

10.05	13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.					
	13.83.2	Two coats	78.00	Sqm	71.00	5538	
10.06	13.45	Finishing walls with textured exterior paint of required shade :					
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	165.00	Sqm	150.65	24857	
		Total Finishing Work :				86548	
11.00	21.0	ALUMINIUM WORKS					
11.01	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item)					
	21.3.2	With float glass panes of 5.50 mm thickness	4.00	Sqm	1003.95	4016	
11.02	9.12	Extra for providing frosted glass panes 4 mm thick instead of ordinary float glass panes 4 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	4.00	Sqm	74.35	297	
		Total Aluminium Works :				4313	
12.00	22.0	WATER PROOFING					
12.01	22.7	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 operation:					
		a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with proprietary water proofing compound conforming to IS 2645 over the RCC slab including cleaning the surface before treatment.					
		b) Laying cement concrete using broken bricks / brick bats 25mm to 100 mm size with 50% cement mortar 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS : 2645 over 20mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS : 2645 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 admixed with proprietary water proofing compound conforming to IS : 2645.					
		d) Finishing the surface with 20mm thick joint less cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300x300 mm square.					
		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 operation to be done in order and as directed and specified by Engineer-in-charge.					
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	114.00	Sqm	1034.65	117950	
		Total Water Proofing work :				117950	
13.00		MARKET RATE ITEMS					
13.01	MR	Providing and installing Merino or approved equivalent TITAN CEILING HUNG SS series cubicles of width and depth as per drawings of height 2400 mm. Made from solid grade compact high pressure laminate as per IS:2046 manufactured under high specific pressure > 5 MPa and temperature >120oC with bunch of kraft papers impregnated with thermosetting phenolic resin and decorative papers made of Alpha cellulose fiber impregnated with thermosetting melamine resin which provide superior scratch, abrasion, heat, chemical, impact, graffiti & moisture resistance along with anti-bacterial properties. All Pilasters and doors shall be of 18mm thick HPL compact board with chamfered edge. All Pilasters will be suspended from the wall mounted					

		Top Rail and section fixed with a steel plate from above the false ceiling. The assembled parts at the top below ceiling will then be beautifully concealed by the Stainless Steel Box Up construction. Pilasters will be routed at its vertical ends to facilitate closure of Doors. The intermediate panel shall be of 12 mm thick HPL and anchored to the wall and pilasters. The visible height from finished-floor level (FFL) to false ceiling is 2400mm, including a floor clearance of 150mm and without any support from the bottom in suede finish. Size of panels shall be as per drawings and specifications.					
		<p>Hardware and Accessories shall be as follows:</p> <ul style="list-style-type: none"> • H shaped (Top) head frame structure made of extruded Aluminum grade 6063 T5-50 micron epoxy powder coated for surface protection. Size to be 125x70x5T. Corner joinery section, Size to be 40x16.5x1.8T. U-Channel Wall joinery section, Size to be 22x16x1.6T. Door stopper section, Size to be 21x12.5x1.6T. • Spring loaded Butt Hinges made from Stainless steel grade 304. Surface finish to be matt type. Covers to be lacor coated. • Conical shape Coat hook with rubber stopper made from Stainless steel grade 304. Surface finish to be matt type. • Round Door knob diameter 30 mm with grooves for better hand grip made from Stainless steel grade 304. Surface finish to be matt type. • Rotating Thumb-turn locking system with privacy indicator made from Stainless steel grade 304. Surface finish to be matt type. • Stainless steel grade 304 screws. • Anti-rotation Nylon polyamide grade-6 expandable wall plugs. • The Work shall complete as per drawing, specifications, manufacturers recommendations and as directed by the Engineer in charge. Size (1500x25)mm 	10.00	each	65000	650000	
		Total of Market Rate Items			Rs.	650000	

<u>ABSTRACT OF COST</u>				
S.No. 2 : Pathway				
<u>S. No.</u>	<u>ITEM OF CIVIL WORK</u>	<u>AMOUNT</u>		
1.00	Earth Work	Rs.	21723	/-
2.00	Concrete Work	Rs.	268689	/-
3.00	Road work	Rs.	512872	/-
Total		Rs.	803284.00	/-

S.No. 2 : Pathway						
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate	Amount
					Rs.	Rs.
1.00	2.0	EARTH WORK				
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
	2.28.1	All kinds of soil.	800.00	Sqm	13.95	11160
1.02	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	84.00	Cum	125.75	10563
		Total Earth Work :				21723
2.00	4.0	CONCRETE WORK				
2.01	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and				
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	60.00	Cum	4478.15	268689
		Total Cement Concrete work :				268689
3.00	16.0	ROAD WORK				
3.01	16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	160.00	Cum	10.70	1712
3.02	16.91	Providing and laying factory made chamfered edge Cement Concrete paver blocks In foot path, park & lawns driveway or light & traffic parking etc. of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of course sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand, all complete as per manufacturer's specifications & direction of Engineerin-Charge.				
	16.91.2	80mm thick Cement concrete paver block of M-30 grade with approved colour, design & pattern.	800.00	Sqm	638.95	511160
		Total Road Work :				512872

ABSTRACT OF COST

S.No.3 Road				
<u>S. No.</u>	<u>ITEM OF CIVIL WORK</u>	<u>AMOUNT</u>		
1.00	Earth Work	Rs.	148118	/-
2.00	Road work	Rs.	9759397	/-
	Total	Rs.	9907515	/-

S.No. 3 Road							
Item No.	DSR 2016	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.	
1.00	2.0	EARTH WORK					
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.					
	2.28.1	All kinds of soil.	9509.00	Sqm	13.95	132651	/-
1.02	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	123.00	Cum	125.75	15467	/-
		Total Earth Work :				148118	
2.00	16.0	ROAD WORK					
2.01	16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	1123.00	Cum	10.70	12016	/-
2.02	16.43	"Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately).					
	16.43.1	Cement concrete prepared with batch mixing machine	1123.00	Cum	6893.25	7741120	/-
2.03	16.80	Construction of dry lean cement concrete sub base over a prepared sub-grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineerin- charge.	562.00	Cum	450.35	253097	/-
2.04	16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					
	16.78.2	With material conforming to Grade-II (size range 53 mm to 0.075 mm) having CBR Value-25	842.00	Cum	2080.15	1751486	/-
2.05	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	35.00	Cum	47.95	1678	/-
		Total Road Work :				9759397	

<u>ABSTRACT OF COST</u>				
S.No. 4 Under Ground Tank				
<u>S. No.</u>	<u>ITEM OF CIVIL WORK</u>	<u>AMOUNT</u>		
1.00	Earth Work	Rs.	33069	/-
2.00	Concrete Work	Rs.	13434	/-
3.00	RCC Work	Rs.	539174	/-
4.00	Flooring Work	Rs.	82230	/-
5.00	Water proofing	Rs.	163315	/-
	Total	Rs.	831222	/-

S.No. 4 Under Ground Tank							
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.	
1.00	2.0	<u>EARTH WORK</u>					
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.					
	2.28.1	All kinds of soil.	42.00	Sqm	13.95	586	/-
1.02	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.					
	2.6.1	a) All kinds of soil	198.00	Cum	125.95	24938	/-
1.03	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	60.00	Cum	125.75	7545	/-
		Total Earth Work :				33069	/-
2.00	4.0	<u>CONCRETE WORK</u>					
2.01	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.					
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	3.00	Cum	4478.15	13434	/-
		Total Cement Concrete work :				13434	/-
3.00	5.0	<u>R.C.C. WORK</u>					
3.01	5.37	Providing and laying in position ready mixed M-25 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 leads, 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, 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.					
	5.37.1	All works upto Plinth level	37.00	Cum	6713.60	248403	/-
3.02	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.					
	5.22.6	Thermo-Mechanically Treated bars	3649.00	Kg	56.60	206533	/-
3.03	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :					
	5.9.1	Foundation, footing, bases of columns etc. for mass concrete	9.00	Sqm	193.95	1746	/-
	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	190.00	Sqm	378.60	71934	/-
	5.9.3	Suspended floors, roofs, landings, balconies, and access platform	25.00	Sqm	422.30	10558	/-
		Total R.C.C. Work :				539174	/-
4.00	11.0	<u>FLOORING</u>					
4.01	11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	91.00	Sqm	744.80	67777	/-
4.02	11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including pointing the joints with white cement and matching pigment	21.00	Sqm	688.25	14453	/-
		Total Flooring :				82230	/-
5.00	22.0	<u>WATER PROOFING</u>					

5.01	22.1	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : (i) 1st layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. (ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. (iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cu dm/sqm thoroughly embedded in the 2nd layer.					
	22.1.1	Using rough kota stone	31.00	Sqm	1017.55	31544	/-
5.02	22.2	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :					
	22.2.1	Using rough Kota stone	95.00	Sqm	1253.30	119064	/-
5.03	22.4	Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete					
	22.4.1	Serrated with central bulb (225 mm wide, 8-11 mm thick)	50.00	metre	254.15	12708	/-
		Total Water proofing :				163315	/-

ABSTRACT OF COST				
S.No. 5 Boundary Wall				
S. No.	ITEM OF CIVIL WORK	AMOUNT		
1.00	Earth Work	Rs.	200353	/-
2.00	Concrete Work	Rs.	139463	/-
3.00	R.C.C. Work	Rs.	2123456	/-
4.00	Brick Work	Rs.	552733	/-
5.00	Steel Work	Rs.	259778	/-
6.00	Flooring	Rs.	154775	/-
7.00	Finishing	Rs.	508388	/-
	Total	Rs.	3938947	/-

S.No. 5 Boundary Wall							
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate Rs.	Amount Rs.	
1.00	2.0	EARTH WORK					
1.01	2.28	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.					
	2.28.1	All kinds of soil.	644.00	Sqm	13.95	8984	/-
1.02	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.					
	2.6.1	a) All kinds of soil	720.00	Cum	125.95	90684	/-
1.03	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	592.00	Cum	125.75	74444	/-
1.04	1.1.2	Disposal of surplus earth by mechanical transport including loading, unloading for a lead upto 10.00 Km.	129.00	Cum	203.42	26241	/-
		Total Earth Work :				200353	
2.00	4.0	CONCRETE WORK					
2.01	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.					
	4.1.8	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	24.00	Cum	4478.15	107476	/-
2.02	4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 12.5mm nominal size)	87.00	Sqm	263.10	22890	/-
2.03	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	23.00	Per 50 kg cement	47.95	1103	/-
2.04	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	87.00	Sqm	91.90	7995	/-
		Total Cement Concrete work :				139463	

3.00	5.0	<u>R.C.C. WORK</u>					
	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including 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 Engineer-in-charge."					
3.01	5.33.1	All works upto Plinth level	105.00	Cum	6446.45	676877	/-
3.02	5.33.2	All works above plinth level upto floor V level	35.00	Cum	7250.05	253752	/-
3.03	5.22	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.					
	5.22.6	Thermo-Mechanically Treated bars	8306.00	Kg	56.60	470120	/-
3.04	5.22A	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete. Above plinth level.					
	5.22A.6	Thermo-Mechanically Treated bars	4756.00	Kg	56.60	269190	/-
3.05	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :					
	5.9.1	Foundation, footing, bases of columns etc. for mass concrete	260.00	Sqm	193.95	50427	/-
	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	376.00	Sqm	342.90	128930	/-
	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	586.00	Sqm	467.85	274160	/-
		Total R.C.C. Work :				2123456	
4.00	6.0	<u>BRICK WORK</u>					
4.01	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
	6.1.2	a) Cement mortar 1:6 (1 cement : 6 coarse sand)	1.00	Cum	4751.65	4752	/-
4.02	6.32	Brick work with clay flyash F.P.S. (non modular) brick of class designation 7.5 in superstructure above plinth level up to floor five level in :					
	6.32.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	104.00	Cum	5269.05	547981	/-
		Total Brick Work :				552733	
5.00	10.0	<u>STEEL WORK</u>					
5.01	10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.					
	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	3948.00	Kgs	65.80	259778	/-
		Total Steel Work :				259778	

6.00	11.0	FLOORING					
6.01	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	125.00	Sqm	1238.2	154775	/-
		Total Flooring Work :				154775	
7.00	13.0	FINISHING					
7.01	13.11	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand).	1179.00	Sqm	255.55	301293	/-
7.02	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade					
	13.61.1	Two or more coats on new work	376.00	Sqm	78.40	29478	/-
7.03	13.45	Finishing walls with textured exterior paint of required shade :					
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm	1179.00	Sqm	150.65	177616	/-
		Total Finishing Work :				508388	

ABSTRACT OF COST (ELECTRICAL)					
S.No.6 Electrical Works					
S No	DESCRIPTION			DSR AMOUNT	
				Non-DSR AMOUNT	
A	Point Wiring			Rs.	580962
					0
B	Submain & Control Wiring			Rs.	316625
					0
C	Cables			Rs.	193384
					179190
D	Distribution Boards			Rs.	98861
					0
E	Provision for Voice & Data			Rs.	5910
					4200.00
F	Earthing			Rs.	154138
					0
G	Panels & Floor Boards			Rs.	0
					677600
H	Substation Equipments			Rs.	0
					995700
I	Safety Items			Rs.	0
					56205
	TOTAL			Rs.	1349880
					1912895
	GRAND TOTAL			Rs.	3262775

SCHEDULE OF QUANTITIES (ELECTRICAL)							
S.No.6 Electrical Works							
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate	DSR Amount	Non-DSR Amount
					Rs.	Rs.	Rs.
A.1	1.3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.					
	1.3.3	Group C	316	Point	1037.00	327692.00	
A.2	1.5	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	465	Metre	239.00	111135.00	
A.3	1.6	Wiring for light/ power plug with 4X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	270	Metre	366.00	98820.00	
A.4	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
	1.24.1	5/6 amps switch	34	Each	84.00	2856.00	
	1.24.3	15/16 amp switch	18	Each	114.00	2052.00	
	1.24.4	3 pin 5/6 amp socket outlet	34	Each	81.00	2754.00	
	1.24.5	6 pin 15/16 amp socket outlet	18	Each	153.00	2754.00	
A.5	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	34	Each	288.00	9792.00	
A.6	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	100	Each	24.00	2400.00	
A.7	1.27	Supplying and fixing following size/module, GI box along with Modular base & cover plate for modular switches in recess etc. as required.					
	1.27.1	1 or 2 Module	10	Each	175.00	1750.00	
	1.27.2	3 Module	52	Each	185.00	9620.00	
	1.27.3	4 Module	2	Each	205.00	410.00	
	1.27.4	6 Module	4	Each	258.00	1032.00	
	1.27.5	8 Module	15	Each	297.00	4455.00	
	1.27.6	12 Module	10	Each	344.00	3440.00	
		SUBHEAD TOTALS CARRIED TO SUMMARY				580962.00	
B		submain and control wiring					
B.1	1.7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required					
	1.7.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	375	Metre	181.00	67875.00	
	1.7.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	225	Metre	206.00	46350.00	
	1.7.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	100	Metre	237.00	23700.00	
	1.7.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	100	Metre	324.00	32400.00	
	1.7.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	150	Metre	392.00	58800.00	
	1.7.6	2 X 16 sq. mm + 1 X 6 sq. mm earth wire	100	Metre	530.00	53000.00	
B.2	1.20	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.					
	1.20.2	25 mm	100	Metre	147.00	14700.00	
	1.20.3	32 mm	100	Metre	198.00	19800.00	
		SUBHEAD TOTALS CARRIED TO SUMMARY				316625.00	
C		cables					
C.1	7.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
	7.1.1	Upto 35 sq. mm	350	Metre	206.00	72100.00	
	7.1.2	Above 35 sq. mm and upto 95 sq. mm	100	Metre	214.00	21400.00	
	7.1.3	Above 95 sq. mm and upto 185 sq. mm	10	Metre	223.00	2230.00	
	7.1.4	Above 185 sq. mm and upto 400 sq. mm	50	Metre	248.00	12400.00	
C.2	9.1	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.					
	9.1.31	3½ X 400 sq. mm (82mm)	8	Each	1389.00	11112.00	
	9.1.21	3½ X 35 sq. mm (32mm)	4	Each	282.00	1128.00	
	9.1.33	4 X 16 sq. mm (28mm)	20	Each	255.00	5100.00	
	9.1.25	3½ X 120 sq. mm (45mm)	4	Each	500.00	2000.00	

	9.1.27	3½ X 185 sq. mm (57mm)	4	Each	814.00	3256.00	
	9.1.34	4 X 25 sq. mm (28mm)	28	Each	258.00	7224.00	
	9.1.32	4 X 10 sq. mm (25mm)	4	Each	203.00	812.00	
	9.1.36	3½ X 50 sq. mm (35mm)	4	Each	358.00	1432.00	
	9.1.23	3½ X 70 sq. mm (38mm)	8	Each	394.00	3152.00	
	9.1.23	3½ X 95 sq. mm (45mm)	4	Each	482.00	1928.00	
C.3	8.1	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 11kV grade of following size direct in ground including excavation , sand cushioning protetive covering, refilling the trench etc as required					
	8.5.2	Above 120 sq. mm and upto 400 sq mm	50	Metre	301.00	15050.00	
		LT Cables					
C.4	MR	Supply of following XPLE armoured 1.1 KV grade conforming to I.S.7098/1554Aluminium Conductor Cables :					
		Supply of following sizes of PVC sheathed PVC/XLPE insulated Aluminium conductor armoured cable of 1.1 KV grade conforming to IS:7098 part-1 / IS:1554 part-1 respectively & ISI marked.					
	(a)	3.5 C x 300 Sqmm XLPE cable	50	RM	988.00		49400
	(b)	3.5 C x 120 Sqmm XLPE cable	10	RM	434.00		4340
	©	3.5 C x 95 Sqmm XLPE cable	50	RM	347.00		17350
	(d)	3.5 C x 70 Sqmm XLPE cable	50	RM	287.00		14350
	(e)	3.5 C x 50 Sqmm XLPE cable	50	RM	211.00		10550
	(f)	3.5 C x 35 Sqmm XLPE cable	100	RM	163.00		16300
	(g)	4 C x 25 Sqmm	50	RM	148.00		7400
	(h)	4 C x 16 Sqmm	50	RM	108.00		5400
	(i)	4c x 10 sqm XLPE cable	50	RM	95.00		4750
C.5	MR	HT XLPE Cable 11 KV:					
		Supplying, laying, testing & commissioning cable XLPE insulated screened PVC bedded, galvanized steel strip or wire armored with aluminum conductor 11 KV grade along with two turns of 4.5 WG continue earth wire from end to end and of the following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
		3 C x 120 sq mm	50	meter	987.00		49350
C.6	10.5	11 KV CABLE JOINTING:					
		Supplying and making outdoor cable end terminations with heat shrinkable cable jointing kit complete with all accessories including lugs suitable for following size of 3 core XLPE aluminium conductor cable of 11KV grade as required					
	10.5.2	120 sq mm	4	nos.	8265	33060	
		SUBHEAD TOTALS CARRIED TO SUMMARY				193384.00	179190.00
D		DB					
D.1	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	25	Each	7.00	175.00	
D.2	2.10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	2.10.1	Single pole	144	Each	173.00	24912.00	
	2.13	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	2.13.1	40 amps	3	Each	667.00	2001.00	
	2.13.2	63 amps	3	Each	678.00	2034.00	
	2.13.3	100 amps	1	Each	859.00	859.00	
D.3	2.5	Supplying and fixing following way, vertical type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)					
	2.5.2	8 way (4 + 24), Double door	3	Each	5664.00	16992.00	
	2.5.3	12 way (4 + 36), Double door	3	Each	7189.00	21567.00	
D.5	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
	2.14.1	25 amps	9	Each	1650.00	14850.00	
	2.14.2	40 amps	9	Each	1719.00	15471.00	
		SUBHEAD TOTALS CARRIED TO SUMMARY				98861.00	
E		PROVISIONS FOR VOICE, DATA, SECURITY & TV SYSTEMS					
E.1	1.24	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
	1.24.6	Telephone socket outlet	6	Set	96.00	576.00	
	1.24.7	TV socket outlet	2	Set	97.00	194.00	

E.2	1.18.2	Supplying and drawing following pair, 0.5 sq.mm FR PVC insulated copper conductor, unarmoured telephone cable in the existing surface / recessed steel / PVC conduit as required.					
		2 Pair	120	Mtr.	19.00	2280.00	
	MR	10 Pair	50	Mtr.	84.00		4200.00
E.3	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tin copper braid and protected with PVC sheath in the existing surface / recessed steel / PVC conduit as required.	40	Mtr.	29.00	1160.00	
E.4	1.53	Supplying and drawing of UTP 4 pair CAT6 LAN cable in the existing surface / recessed steel / PVC conduit as required.					
	1.53.1	1 run of cable	50	Mtr.	34.00	1700.00	
		SUBHEAD TOTALS CARRIED TO SUMMARY				5910.00	4200.00
F		EARTHING					
F.1	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	16	Set	4327.00	69232.00	
F.2	5.6	Earthing with Copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	4	Set	8289.00	33156.00	
F.3	5.9	Supplying and laying 25 mm X 5 mm G.I. strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	100	Metre	85.00	8500.00	
F.4	5.14	Providing and fixing 25 mm X 5 mm Copper strip on surface or in recess for connections etc. as required.	25	Metre	698.00	17450.00	
F.5	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	100	Metre	129.00	12900.00	
F.6	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	500	Metre	23.00	11500.00	
F.7	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	50	Metre	28.00	1400.00	
		SUBHEAD TOTALS CARRIED TO SUMMARY				154138.00	
G		PANEL BOARDS					
G.1	MR	MAIN LT PANEL					
		Designing, fabricating, transporting, unloading, storing, fixing in position, testing and commissioning the following sheet steel cubicle type panels fabricated from 1.6mm thick CRCA sheet, dust and vermin proof, outdoor type, double door, with canopy, TPN Panels with hinged lockable doors fabricated from 2mm thick CRCA sheet, suitable for 415V, 3 phase 4 wire 50Hz AC supply with rear access for cable alley and with segregated bus-bar chamber with aluminium bus bar and including supplying and fixing following switchgears, meters and accessories, inter-connections, bonding to earth, powder coated painting and marking as specified. Switch boards complete as per schematic diagram:					
		Type of construction: Form 3					
		IP classification: 42					
		All MCCBs in Main LT Panel shall have minimum 36 kA breaking capacity					
		The LT PANEL shall be electrically inter-locked as shown in Schematic diagram and as detailed in the Specifications					
		Colour: Gray Powder Coated, as per approved sample.					
		Incomings:					
		1 nos, 250 Amps. 4 pole MCCB and 1 nos. 160 Amps 4 pole MCCB, i.e four pole Moulded Case Circuit Breaker of fault breaking capacity 36 KA (ICS=ICU up to 433 V) electrically operated, fitted with interlocked door, automatic safety shutters, mechanical ON/OFF and service/test/isolated position indicators and frame earthing contact, confirming to IS: 13947-2 1993 as amended up-to-date complete following accessories for each MCCB					
		a) Independent manual spring closing mechanism-1 No.					
		b) Microprocessor release (EMI & EMC certified) for over current, earth fault & short circuit protection-1set.					
		c) Digital type Voltmeter, with selector switch & back up HRC fuses/MCB's-1 set.					
		d) Digital type Ammeter, with selector switch and one set of 3 nos. CT's of ratio 1600/5A Class I accuracy and 15 VA burden-1 set. (Ratio to be filled up).					
		e) 3 Nos. Phase indication LED lamps for each incoming with 2 Amp back up HRC fuse, breaker 'ON' indicating light with 2 A HRC fuse, test terminal block set, fuses, circuits as per standard practice, auxiliary contacts for positive interlocking of the breakers as required.					
		f) Shunt trip coil 220 V AC.					

		Bus Coupler:					
		1 No.-250 Amps horizontal four pole drawout type, MCCB of fault breaking capacity 36 KA (ICS=ICU up to 433V) electrically operated, with interlocked door, automatic safety shutters, mechanical ON/OFF and service/test/isolated position indicators and frame earthing contact, conforming to IS-13947-2-1993 as amended up to date complete with following accessories for each MCCB					
		a) Independent manual spring closing mechanism-1 No.					
		b) Breaker 'ON' indicating light with back up 2 A HRC fuse test terminal block, fuses, circuits as per standard practice, auxiliary contact contractors for positive electrical interlocking of breakers, etc as required-1 set.					
		Bus Bars:					
		TPN aluminum bus bars of minimum of 400 Amps capacity with heat shrinkable colored sleeves and I/C DMC/SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc. for withstanding fault level of 25 MVA for 1 Sec.					
		Interlocking:					
		Electrical through advance contacts in MCCB's (Incomers & Bus Couplers) and mechanical (Castel Key) interlocking should be provided to ensure that only one supply is available at one time on each section of bus and to eliminate any possible of accidentally approaching two supplies at one bus section.					
		Outgoings:					
		(a) 160 Amps TPN MCCB (ICS=25 kA) - 2 Nos.					
		(b) 100 Amps TPN MCCB (ICS=25 kA) - 2 Nos.					
		(c) 63 Amps, TPN, MCB -08 Nos.					
		(d) 40 Amps, TPN, MCB -2 Nos.					
		CAPACITOR PANEL (80 KVAR): -					
		Supply, install, test and commissioning of floor mounted capacitor panel 40 KVAR Capacity in 6 step automatic Power factor correction relay with setting for "Set Power Factor Bandwidth ",and with integral PF meter.					
	MR	Panel complete as above with capacitor panel	1	each	257900.00		257900.00
G.2	MR	METER PANEL					
		Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of OUTDOOR TYPE cubicle type 11 kV metering panel fabricated out of 14 SWG CRCA sheet steel, free standing floor readable dust and vermin proof with arrangement for sealing the covers and doors, re-inforcement of suitable size angle iron, channels, T sections of flats wherever necessary. Cable gland plate shall be provided on bottom of metering panel. Panel shall be treated with all anti-corrosion process prior to powder coating.					
		Approval shall be obtained from concerned Electricity Board for the shop drawings before fabrication.					
		The metering panel shall comprise the following					
		Trivector Meter of Secure make, accuracy class 0.5					
		3 nos cast resin CT's of 5/1 amps CT ratio, 15VA burden and accuracy class 0.5					
		1 no. 3 phase potential transformer of approved make by Electricity Board					
		Ratio 11000V/√3/110/√3					
		VA Burden 100VA					
		Class 0.5					
		The metering panel shall be complete with all interconnections etc. as above including calibration of instruments as per Electricity Board.	Set	1	184100		184100
G.3	MR	HVAC Panel					
		Designing, fabricating, transporting, unloading, storing, fixing in position, testing and commissioning the following sheet steel cubicle type panels fabricated from 1.6mm thick CRCA sheet, dust and vermin proof, outdoor type, double door, with canopy, TPN Panels with hinged lockable doors fabricated from 2mm thick CRCA sheet, suitable for 415V, 3 phase 4 wire 50Hz AC supply with rear access for cable alley and with segregated bus-bar chamber with aluminium bus bar and including supplying and fixing following switchgears, meters and accessories, inter-connections, bonding to earth, powder coated painting and marking as specified. Switch boards complete as per schematic diagram:					
		Type of construction: Form 3					
		IP classification: 42					
		The LT PANEL shall be electrically inter-locked as shown in Schematic diagram and as detailed in the Specifications					
		Colour: Gray Powder Coated, as per approved sample.					
		Incomings:					

		1 no, 160 Amps, 4 pole MCCB , i.e four pole Moulded Case Circuit Breaker of fault breaking capacity 25 KA (ICS=ICU up to 433 V) electrically operated, fitted with interlocked door, automatic safety shutters, mechanical ON/OFF and service/test/isolated position indicators and frame earthing contact, conforming to IS: 13947-2 1993 as amended up-to-date complete in all respect					
		Bus Bars:					
		TPN aluminum bus bars of minimum of 250 Amps capacity with heat shrinkable colored sleeves and I/C DMC/SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc. for withstanding fault level of 25 MVA for 1 Sec.					
		Outgoings:					
		(a) 63 Amps, TPN, MCB -6 Nos.					
	MR	Panel complete as above	1	each	84800.00		84800.00
G.4		Plumbing Panel					
		Supplying, installation, testing and commissioning of cubical type outdoor panel with canopy suitable outdoor use for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland plates I/C cleaning and finishing complete with 7 tank process for powder coating in approved shade, bus bar supports, with short circuit withstand capacity of 25 MVA for 1 Sec., bottom base channel of MS section not less than 100mm x 50mm x 5mm thick, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with 2.5 sq.mm. PVC insulated copper conductor S/C cable alleys, cable gland plates in two half, I/C providing following switchgears: -					
		Incomer: 1nos 100A TPN MCCB.					
		1 no 96mm x 96mm digital Voltmeter and Ammeter with LCD display for voltage & current with suitably rated CTs and MCB protection.					
		1 set of three phase indicating lamps with suitable protection.					
		Busbar: Equally sized three phase and neutral copper bus bars suitably sized to carry 200A current with colour coded heat shrinkable sleeves.					
		Outgoing:					
		2nos 63A TPN MCBs					
		2nos 40A TPN MCBs					
		2nos 25A TPN MCBs					
	MR	Panel complete as above	1	each	70800		70800.00
G.5		External lighting panel					
		Supplying, installation, testing and commissioning of cubical type outdoor panel with canopy suitable outdoor use for 415 V, 3 Phase, 4 Wire 50 Hz AC supply system fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland plates I/C cleaning and finishing complete with 7 tank process for powder coating in approved shade, bus bar supports, with short circuit withstand capacity of 25 MVA for 1 Sec., bottom base channel of MS section not less than 100mm x 50mm x 5mm thick, fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 Nos. earth stud, solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with 2.5 sq.mm. PVC insulated copper conductor S/C cable alleys, cable gland plates in two half, I/C providing following switchgears: -					
		Incomer:1nos 63A TPN MCCB					
		1 no 96mm x 96mm digital Voltmeter and Ammeter with LCD display for voltage & current with suitably rated CTs and MCB protection.					
		1 set of three phase indicating lamps with suitable protection.					
		Busbar: Equally sized three phase and neutral copper bus bars suitably sized to carry 100A current with colour coded heat shrinkable sleeves.					
		Outgoing:					
		5nos 32A TPN MCBs					
		Panel complete as above	2	each	40000.00		80000.00
		SUBHEAD TOTALS CARRIED TO SUMMARY					677600
H		SAFETY ITEMS					
H.1	MR	Providing of Rubber mat 1 metre wide and 6mm thick to with stand 3.3KV dielectric strength Latest as per IS 15652.	5	mtrs	1777		8885
H.2	MR	Providing of Rubber mat 1 metre wide and 12mm thick to withstand 15KV dielectric strength Latest as per IS 15652.	5	mtrs	2666		13330
H.3	MR	Providing of Set of 4 Nos. 9 Litre capacity GI bucket painted in post office red colour with prior coat of red-oxide paint and written with white paint 'FIRE' and mounted on MS angle iron frame with bracket of appropriate size & capacity I/c filling sand etc.	2	nos	3022		6044

H.4	MR	Supplying and fixing of Carbon dioxide (CO2) type fire extinguishers of 9 Kg each mounted on wall hooks confirming to IS code and cylinders fully charged of following capacity.	2	nos	10239		20478
		9 KG					
H.5	MR	Providing of First Aid Box as approved by St. John Ambulance Brigade/Indian Red Cross conforming to IS 2217-1963.	1	nos	978		978
H.6	MR	Supply and fixing of Foam fire extinguishers, portable 9 litre capacity hanged on wall with bracket complete as required.	2	Nos.	2323		4646
H.7	2.21	Providing and fixing MV danger notice plate of 200mm x 150mm made of mild steel, atleast 2 mm thick, and vitreous enamelled white on both sides and with iscription in single red colour on front side as required	8	nos.	149.00		1192
H.8	2.22	Providing and fixing HT danger notice plate of 250mm x 200mm made of mild steel, atleast 2 mm thick, and vitreous enamelled white on both sides and with iscription in single red colour on front side as required	4	nos.	163.00		652
		SUBHEAD TOTALS CARRIED TO SUMMARY				56205	
I		Substation Equipments					
I.1	MR	TRANSFORMER:					
		Supply, Installation, testing and commissioning, of 100kVA, 11kV/433V 3 Phase , oil type transformer, 50 Hz Delta Star Connected, winding temp indicator, control for alarm/ trip circuit with Off Load Tap Changers including supplying and fixing all necessary control cables for operation to respective HT breaker for protection circuits along with construction of reqired RCC platform complete in all respect.	1	nos.	185300.00		185300
I.2	MR	11kV HT VCB PANEL BOARD:					

		2-POLE STRUCTURE:					
		1.0 Supply, erection and commissioning of 2-pole structure for terminating 11 KV O.H. supply from supply company as per specifications and drawing. The 2-pole structure shall comprise of:-					
		a) MS tubular swaged pole 11 mtrs high (410SP 24) (as per latest relevant BS standard) or as per Indian std., in cement concrete foundation 1:3:6 (1 cement : 3 coarse sand : 6 graded aggregate 40mm nominal size) including excavation and refilling etc. as required. The rate shall be inclusive of painting with 2 coats of aluminium paint (on red oxide). The portion of pole under the ground shall be provided with 2 coats of bituminous paint -2 Nos.					
		b) Steel sections, channels angles, flats, clamps, GI nuts, bolts and required hardware etc of different sizes for cross arms, bracings, supports etc. for pole GODO etc. including anticlimbing barbed wires (conforming to BS Standard) having 4 points barbs spaced 75 ±12mm apart. All steel structure shall be given 2 coats of red oxide primer and 2 finishing coats of aluminium paint as required as per drawings and direction of Engineer-in-charge -Lot					
		c) Supply, installation, testing and commissioning of 11 KV class disc/pin/support insulators complete with clamps and fixing hard disc/pin/support insulators complete with clamps and fixing hard wares etc. complete as required as per drawings and direction of Engineer-in-charge -Lot					
		d) Supply, installation, testing and commissioning of 11 KV station class thyrite type lightning arrestors complete with mounting arrangement (on all phases) -1 Set					
		e) Supply, installation, testing and commissioning of drop out -lock out (DOLO) fuse, gang operating device (Air Break Switch) with pad locking arrangement (operating rod to be supported properly), complete with operating handle and locking arrangement -1 Set					
		f) Supply, installation, testing and commissioning of GI stay set complete with 20mm dia 1.8 M long stay rod with 450 x 450 x 7.5 mm anchor plate with thimbles, stay clamps, 7/4.00 mm dia GI stay wire, turn buckle (20mm x 600mm) strain insulator bow tightner in cement concrete 1:3:6 foundation as excavation and refilling -1 Sets					
		2-pole structure as described above.	1 nos.	73800.00			73800.00
I.3	MR	11KV HT VCB PANEL BOARD:					
		Supply, Installation, Testing and Commissioning of High Voltage Switchgear suitable for indoor installation 11 KV 3 phase 50 Hz AC Supply, 350 MVA breaking capacity, metal clad, draw out type, vacuum circuit breaker, motor charged, equipped with short circuit, over current, earth fault protection, master relay and auxiliary relay for transformer protection, PT, CT Operated Ammeter, Voltmeter indicating lamp etc as per IS: 13118 amended up to date.					
		Complete as above	1 nos.	294600.00			294600.00
		DG SETS					
I.4	MR	Supply, Installation, Testing, Commissioning (SITC) of 62.5 KVA of D.G. Set with in built AMF Panel, complete with engine, alternator, base frame, radiator/heat exchanger, fuel tank, control panel, fuel piping foundation, all electrical interconnection, loop earthing, silencer pipe/ exhaust chimney as per latest CPCB norms, standard accessories and acoustic enclosure.	1 nos.	442000.00			442000
		SUBHEAD TOTALS CARRIED TO SUMMARY					995700

SCHEDULE OF QUANTITIES						
S.No.7 Landscaping						
Item	DSR 2016	Description of Item	Quantity	Unit	Rate	Amount
No.					Rs.	Rs.
1.01	MR	FICUS BENJAMINA	20	Nos	200.00	4000
1.02	MR	ROYSTONEA REGIA	20	Nos	800.00	16000
1.03	MR	AZADIRACHTA INDICA	20	Nos	150.00	3000
1.04	MR	ALBIZIA SAMAN	20	Nos	150.00	3000
1.05	MR	CASSIA FISTULA	20	Nos	200.00	4000
1.06	MR	FICUS BENGHALENSIS	20	Nos	200.00	4000
1.07	MR	FICUS RELIGIOSA	20	Nos	200.00	4000
1.08	MR	CRAPE MYRTLE	20	Nos	400.00	8000
1.09	MR	MANGIFERA INDICA	20	Nos	300.00	6000
1.10	MR	JUNIPERUS VIRGINIANA	20	Nos	200.00	4000
1.11	MR	DALBERGIA SISSOO	20	Nos	300.00	6000
1.12	MR	HERITIERA FOMES	20	Nos	400.00	8000
1.13	MR	SHOREA ROBUSTA	20	Nos	200.00	4000
1.14	MR	MADHUCA LONGIFOLIA	20	Nos	400.00	8000
1.15	MR	ARECA CATECHU	20	Nos	200.00	4000
1.16	MR	CASIA JAVANICA	20	Nos	1000.00	20000
1.17	MR	FOXTAIL ORCHID	20	Nos	200.00	4000
1.19	MR	WASHINGTONIA FILIFERA	20	Nos	400.00	8000
1.20	MR	SRACA ASOKA	20	Nos	800.00	16000
1.21	MR	CYCUS REVOLUTA	20	Nos	60.00	1200
1.22	MR	FICUS PANDA	20	Nos	45.00	900
1.23	MR	FICUS DANIELLA	20	Nos	200.00	4000
1.24	MR	FICUS STARLITE	20	Nos	60.00	1200
1.25	MR	HEMELIA PATENS	20	Nos	30.00	600
1.26	MR	DURANTA GOLDEN	20	Nos	60.00	1200
1.27	MR	FICUS ELASTICA	20	Nos	20.00	400
1.28	MR	OPHIOPOGON JAPONICUS	20	Nos	30.00	600
1.29	MR	PENNISETUM SETACEUM RUBRUM	20	Nos	40.00	800
1.30	MR	PENNISETUM SETACEUM RUBRUM	20	Nos	30.00	600
1.31	MR	RHOEO SPATHACCA	20	Nos	40.00	800
1.32	MR	FERNS	20	Nos	35.00	700
1.33	MR	GRASS	7826	SQ M	70.00	547820
1.34	2.3	Supplying and stacking of good earth at site and profile making with available/ supplied earth in terraces, slopes, mounds as per contour plan or as per design intents	800	SQ M	332.55	266040
2.00	MR	Chair bench manufactured with M-30 grade concrete	18	Nos	6097.00	109746
3.00	MR	Waste Segregation Trolley Made of SS- 4 nos. Each Bin Capacity 60 Lts. Each	3	Nos	20900.00	62700
4.00	MR	75MM WIDE IIM RAIPUR WORD MARK BUILDING NAME 100MM UPPER CASE LETTER HEIGHT (SINGLE LINE SPACING ADDRESS/ ZONE (OPTIONAL): 75MM HEIGHT UPPER CASE LETTER CNC ENGRAVED LETTERING & GRAPHIC COLOUR FILLED (TEXT STYLE, COLOUR, FINISHES AS/TECH SPECS & BOQ) ANNODISED ALUMINIUM 21 RECTANGULAR HOLLOW FRAME 2MM THK, 2MM THK ALUMINIUM SHEET	2	Nos	31860.00	63720
5.00	MR	ALUMINIUM PLATE (600X450) MM, 2MM THK CNC ENGRAVED LETTERING & GRAPHIC COLOUR FILLED (TEXT STYLE, COLOUR, FINISHES AS/TECH SPECS & BOQ)	2	Nos	10620.00	21240
6.00	MR	CNC ENGRAVED LETTERING & GRAPHIC COLOUR FILLED (TEXT STYLE, COLOUR, FINISHES AS/TECH SPECS & BOQ) ICON (AS PER STANDARD ICON (AS PER STANDARD 2MM SS PLATE (150X150) MM Braille	2	Nos	1700.00	3400
7.00	MR	CNC ENGRAVED LETTERING & GRAPHIC COLOUR FILLED (TEXT STYLE, COLOUR,FINISHES AS/TECH SPECS & BOQ SS CABLE WIRE OF THK AS PER TECH SPECS & BOQ Size 200mm x 100mm	2	Nos	990.00	1980
Total Landscape Works:						1223646

S.No. 8 HVAC					
S No	Description - Variable Refrigerant Volume System	Unit	Qty.	Rate (Rs)	Total Amount (Rs)
1.0	Supply, Installation, Testing and Commissioning of VRV Modular Type Air-conditioning System with Inverter Based Technology with Steplless Control Multiple Scroll Compressors with factory fitted Indoor and Outdoor Units, Individual Temperature Controller with each Indoor Unit complete with interconnected refrigerant piping with control wiring as per Standards and specifications between Indoor and Outdoor Units, full charge of refrigerant gas and oil after necessary vacuumising, nitrogen flushing and pressure testing of system.				
1.1	Lifting, Shifting, Supply, Installation, Testing and Commissioning of Outdoor Units Equiped with Highly efficient Multiple scroll Compressors with all Variable speed in each outdoor unit with noise level not exceeding 67db(A), etc. with Nitrogen Reprocessing, vacuumising, Charging and Top-up of R410 A gas as per requirement at site.				
1.1.1	RXYMQ20- (VRV-X) Heat Pump	Nos.	1	539,900.00	539,900.00
1.2	Lifting, Shifting, Supply, Installation, Testing and Commissioning of Indoor Units with outer cabinet equipped with pre air-filters, multispeed Inverter Motor, DX Coil Section, Drain Pain, Builtin Drain Pump,electronic expansion valves, pipe connections, PCBs etc.				
1.2.1	Ductable -Type AC				
1.2.1.3	FXMQ250	Nos.	2	129,400.00	258,800.00
2.0	Lifting, Shifting, Supply, Installation, Testing and Commissioning of System Controllers				
2.1	Corded Remote Controllers	Nos.	2	2,000.00	4,000.00
3.0	Lifting, Shifting, Supply, Installation, Testing and Commissioning of Interconnecting "Y" Joints i.e. Refnet Joints/Header with Insulation for refrigerant piping				
3.1	Y Joints (72T, 33T, 22T)	Nos.	2	7,000.00	14,000.00
4.0	Supply, Installation, Testing and Commissioning of refrigerant piping, tees, sockets, expanders and reducers as per requirement at site complete with supports, threaded rods, channel, tie, fastners etc. interconnecting the outdoor condensing units and indoor evaporating units with closed cell elastomeric nitrile rubber tubular insulation of 19mm on gas pipe line and 13mm on liquid pipe line. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)				
4.1	28.6 mm (0.99mm- Half Hard Pipe with 19mm Insulation)	Rmt	50	1,650.00	82,500.00
4.2	22.2 mm (0.8mm- Half Hard Pipe with 19mm Insulation)	Rmt	135	1,250.00	168,750.00
4.3	19.1 mm (0.8mm- Half Hard Pipe with 13mm Insulation)	Rmt	20	1,050.00	21,000.00
4.4	15.9 mm (0.8mm- Soft Pipe with 13mm Insulation)	Rmt	25	950.00	23,750.00
4.5	12.7 mm (0.8mm- Soft Pipe with 13mm Insulation)	Rmt	75	850.00	63,750.00
4.6	9.5 mm (0.8mm- Soft Pipe with 13mm Insulation)	Rmt	40	750.00	30,000.00
5.0	Supply, Installation, Testing and Commissioning of 2 core x 0.75/1.0 sq.mm copper conductor shielded data cable as per requirement at site complete with supports, threaded rods, channel, tie, fastners etc. for control between indoor and outdoor unit & for communication between Indoor Unit & Remote Controllers in suitable PVC Conduit (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)	Rmt	276	160.00	44,160.00
6.0	Supply, Installation, Testing and Commissioning of Ms perforated cable trays for exposed refrigerant pipes and cables horizontally and vertically along with threaded rod, nut, bolt, saddle, tie etc. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)				
6.1	400mm	Rmt	30	950.00	28,500.00
7.0	Supply, Installation, Testing and Commissioning of Hard u-PVC condensate drain piping with 9 mm thick closed cell elastomeric nitrile rubber tubular insulation up to the nearest drain point along with necessary fittings. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Rmt basis as applicable)				
7.1	40mm	Rmt	30	240.00	7,200.00
7.2	32mm	Rmt	40	160.00	6,400.00
8.0	Air Distribution				
8.1	Supply, Installation, Testing and Commissioning of Un-Insulated Square/ Rectangular sheet metal ducts as per requirement at site complete with threaded rods, channel, tie, fastners, brackets/slotted "C" channel for supply air ducting as per the approved shop drawings.(Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)				
8.1.1	24 Gauge GSS(0.63mm)	Sq.mt.	120	862.50	103,500.00
8.1.2	22 Gauge GSS(0.8mm)	Sq.mt.	40	977.50	39,100.00
8.2	Supply, Installation, Testing and Commissioning of extruded aluminum powder coated supply air grills/dampers with dampers. (Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)	Sq.mt.	3	9,075.00	27,225.00
8.3	Supply & Installation of extruded aluminum powder coated return air Linear grills/diffusers without dampers. (Quantities Quoted here are purely and only for estimation purpose on tentative basis only and To be Charged as per actual measurement at site on Rmt/Sq.mt. basis as applicable)	Sq.mt.	4	8,195.00	32,780.00
9.0	Insulation				
9.1	Supply, Installation, Testing and Commissioning of Closed cell crossed linked Nitrile Insulation sheet over the duct (one layer externally on the duct).(Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)				
9.1.1	9mm thick	Sq.mt.	120	522.50	62,700.00
9.2	Supply, Installation, Testing and Commissioning of acoustic lining glass wool insulation of 25mm thick with density of 24Kg/cum fiber glass covered with perforated aluminuim 26 SWG sheet, tissue paper, fly mesh, GI nuts, bolts and washers etc.(Quantities Quoted here are only for estimation purpose on tentative basis and However they are to be Charged as per actual measurement at site on Sq.mt. basis as applicable)	Sq.mt.	40	555.50	22,220.00
10.0	Supply,Installation charges of fire retardant flexible Canvas Connection between Indoor Units and Ducts and Filters for Ducted Units	Nos.	4	6,050.00	24,200.00

	GRAND TOTAL VALUE				1,604,435.00
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S.No.9 Fire Fighting						
S No	Item Code	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	MR	Providing, laying, jointing and testing of following sizes of pipes conforming to IS-1239 with all accessories like all fittings (upto 50mm dia threaded G.I.forged fittings and above 50 mm dia MS forged fittings with welded joints shall be used) fittings including tees, elbows, reducers, flanges, rubber gaskets, nuts bolts, washer. And fixing the pipe on floor / wall /ceiling with suitable size clamps, hangers, structural steel supports as per specification,core cutting wherever required & directed at site including cutting holes and chases in brick, R.C.C work and making good the same to original conditions complete in all respects.Arrows showing direction of flow to be marked(with paint of approved colour) on each pipeall vertical pipes inside shafts shall be provided with common angle iron supports as per draining, Providing two coats of synthetic enamel paint of approved shade over a coat of primer including painting of legends both direction arrow as per the approval of the architects / consultants.				
		For wet riser & sprinkler System - M S `C' Heavy class pipe				
		a)25 mm dia (4.05mm thickness)	42	RM	291	12222
		b)32 mm dia (4.05mm thickness)	39	RM	375	14625
		c) 40 mm dia (4.05mm thickness)	55	RM	436	23980
		d) 50 mm dia (4.47mm thickness)	10	RM	618	6180
		h)150 mm dia (5.40mm thickness)	18	RM	2118	38124
3.1		Supply,installation, testing and commissioning of electrically driven Fire/ Sprinkler pump, suitable for automatic operation consisting of the following:				
(a)	MR	Fire Pumps 1620 lpm at 20 m Multistage Horizontal Pump with CI Casing Br Imp, CS shaft, with Mech Seal,Glycerine Filled SS Pressure Gauge with isolation valve at discharge side of each pump, suction & discharge flange, coupled with High Efficiency Motor/ MS Heavy Base Frame with Bottom and Top Mounting Plates, Pin Bush Coupling with safety margin of over 2, Coupling Guard, High Tensile Fasteners. Pump set provided with AVM Pads heavy duty design for vibration elimination level. The pump should meet the condition of Local fire Authority). Location-Pump room at basement level near underground water tank.				
(b)	MR	Cement concrete foundation (200mm High) with cement concrete plaster complete with antivibration arrangement of cushy foot mountings.	1	NO	150000	150000
3.2	MR	Supply, installation, testing and commissioning of Diesel Engine driven fire pump suitable for automatic operation comprising of the following:				
(a)	MR	Fire Pumps 1620 lpm at 20 m Multistage Horizontal Pump with CI Casing Br Imp, CS shaft, SS Sleeve with Mech Seal,Glycerine Filled SS Pressure Gauge with isolation valve at discharge side,suction & discharge flange, coupled with Diesel Engine 1500 rpm, 1500 rpm, MS Heavy Base Frame with Bottom and Top Mounting Plates, Pin Bush Coupling with safety margin of over 2, Coupling Guard, High Tensile Fasteners. Pump set provided with AVM Pads heavy duty design for vibration elimination.The pump should meet the condition of Local fire Authority. Location-Pump room at basement level.				
(b)	MR	Radiator Cooled Diesel engine of speed 2900 RPM for the above pump with automatic starting mechanism and other accessories including fuel tank (fabricated from 3mm MS sheet painting with two coats of synthetic enamel paint over a coat of primer) capacity 200 lts (fitted with Magnetic oil level indicator, MH with cover drain valve, Air vent hydraulic pumps including structural supports (painted with approved shade), 2 Nos. x 12 volt battery, heat exchanger with necessary piping connections & fittings flexible coupling, coupling guard & exhaust pipe as per drawing complete as required.				
(c)	MR	Common base plate for (a) and (b) from M.S. channel of required size.				
(d)	MR	Cement concrete foundation (200mm High) with plaster, Antivibration arrangement of cushy foot mountings.				
(e)	MR	24 volts, 180 AH Lead battery - Exide make (12 volts - 2 Nos.) with boost / trickle charger for starting the engine automatically as required.				
(f)	MR	Providing & fixing AMF autostart panel with pressure switch for diesel engine complete with all accessories, wiring & cabling including connection to diesel engine complete as required ready for working.	1	NO.	150000	150000
3.3	MR	Supply, installation, testing and commissioning of jockey pump comprising of the following:				

(a)	MR	Fire Pumps 180 lpm at 20 m (3.7kW) Multistage Horizontal Pump with CI Casing Br Imp. CS shaft, Mech seal, Glycerine Filled SS Pressure Gauge with isolation valve at discharge side of pump,suction & discharge flange, coupled with High Efficiency IE2 Motor / 2 Pole, MS Heavy Base Frame with Bottom and Top > Mounting Plates, Pin Bush Coupling with safety margin of over 2, Coupling Guard, High Tensile Fasteners. Pump set provided with AVM Pads heavy duty design for vibration elimination. The pump should meet the condition of Local fire Authority. Location-Pump room at basement level.				
(b)	MR	Cement concrete foundation (200mm High) with plaster, Antivibration arrangement of cushy foot mounting.	1	NOS	85295	85295
4	MR	Providing & fixing of butterfly valve suitable for working pressure 15 Kg/Sqcm.& test pressure 30kg/sqcm with flanges, nut bolts & gaskets complete required. a) 65 mm dia b) 80 mm dia c) 100 mm dia d) 150 mm dia	2 2 2 5	NOS. NOS NOS NOS	3150 3384 4401 6902	6300 6768 8802 34510
5	MR	Providing and fixing of C.I. dual plate wafer type check valve suitable for working pressure of 15 Kg/Sqcm & test pressure 30kg/sqcm with flanges, Nut, bolts & washers, painting etc. complete as required. c) 150 mm dia	4	NOS	8924	35696
6	MR	Providing & fixing double flanged flexicon expansion joint with unit control of standard length as per manufacturers specs tested to a pressure of 30Kg/Sqcm including rubber gaskets, flanges, nuts, bolts and washers complete as required. d) 150 mm dia	2	NOS	9095	18190
7	MR	Providing and fixing C.I.'Y' strainer with bronze perforated sheet basket including rubber gasket, flanges, nuts, bolts and washers, complete as required. b) 150 mm dia	1	NOS.	17223	17223
8	MR	Providing & fixing gun metal single head fire hydrant valve with 80 mm N.B. flanged inlet, brass spindal, one no. 63 mm dia female instantaneous outlet type. G.M. coupling,blank cap, chain. Conforming to IS:5290. Including tapping from wet riser complete as required.	1	NOS	8824	8824
9	MR	Providing & fixing swinging type First Aid hose reel in red colour with 36 mts long and 20 mm dia dia heavy duty rubber water hose, 20 mm dia globe valve stop cock, terminating with G.M. coupling & nozzle of 5mm outlet with shut off valve confirming to IS 8090 - 1976 complete with drum and brackets for fixing on wall, bolts & nuts conforming to IS:884-1969 complete as required.	1	NOS	9464	9464
10	MR	Providing and Fixing Hose pipe, 63 mm dia and 15 mts long, duly reinforced, rubber lined suitable for bursting pressure not less than 22 Kg/Sqcm. conforming to IS 636-1988 type A with gun metal heavy duty instantaneous type coupling (Pair male & female parts) conforming to IS 903. Complete as required.	2	NOS	6475	12950
11	MR	Providing and Fixing 63 mm dia instantaneous pattern branch short gunmetal pipe, 16 mm dia nozzle conforming to IS 903, suitable for inter connection to hose pipe coupling complete as required.	1	NOS	3042	3042
12	MR	Providing and fixing standard firemans axe with heavy rubber handle.	1	NOS	754	754
13	MR	Providing and fixing inlet breaching having C.I. body four way gun metal 63 mm dia instantaneous inlets conforming to IS 903 fitted with non return valves, 25 mm dia gun metal drain cock, blank cap, brass chains and 150 mm dia flanges with all accessories suitable for local fire tender complete as required.	1	NOS	13481	13481
14	MR	Providing and fixing of G.M. Fire Brigade adopter assembly with 150 mm dia outlet, suitable for local fire tender complete as required.	1	NO.	7060	7060
16	MR	Providing and fixing 4 mm thick glass door of size 2.1 m x 0.9 m with anodized aluminium frame of size 0.10 x 0.05 M with centre opening for fire hose cabinet. Suitably marked on the outside with the letters "FIRE HOSE" including locking arrangement. All aluminium work to be in Red P.O. colour.	1	NOS	11716	11716
17	MR	Providing and fixing suction & delivery headers of required length fabricated from 6mm thick M.S. rolled and welded pipe (as per IS 3589) suitable for 15 Kg/Sqcm working pressure & 30 kg/sqcm test pressure with end flange connections having inlet & outlet flanged connections as per drawing. 150 mm dia pressure gauge with stop cock. Including supports from wall, floors & ceiling complete as required. a) 200 mm dia (6mm thickness)	5	RM	7260	36300

18	MR	Providing and fixing ISI Marked of approved make Fire Extinguishers complete with all accessories as per manufacturer's specifications.				
		a) CO ₂ gas nozzle type - 9 Litre capacity (IS:15683).	6	NOS	13894	83364
		b) Mechanical Foam gas cartridge type. 9 Kg capacity (IS:15683).	6	NOS	3154	18924
		c) ABC dry powder stored pressure type 6 kg capacity (IS:15683).	6	NOS	5107	30642
20	MR	Providing & fixing cast iron foot valve complete with flange.- 150mm dia.	1	NO.	6000	6000
21	MR	Providing & fixing C.P.brass quartzoid bulb sprinklers of size 15mm dia (Pendent type)to be operated at 68Deg.C complete.				
		a) Pendant type	56	NOS.	234	13104
		b) Side wall type	5	NOS.	605	3025
22	MR	Providing & Fixing of installation control valve with turbine type automatic Alarm Gong to be connected with control valve, drain & test valve all flanged connections as per manufacturer's specifications complete.				
		a) 150 mm dia	1	NO.	36289	36289
		TOTAL CARRIED TO SUMMARY				902854

S. No. 10 FIRE DETECTION SYSTEM							
S No	DSR 2016	Description of Item	Quantity	Unit	Rate	DSR Amount (Rs)	Non-DSR Amount (Rs)
1	MR	Supply, Installation, Testing & Commissioning of Main fire alarm panel of 2 Zone microcontroller based with its own fire detection zone interface card for initiating and indicating devices with power supply & Battery Charger. The panel shall have its own operating system, E-PROM for event logging system etc as required. a) Material construction - CRC sheet with powder coating. b) Display Type - Display consisting of 32 CHR backlight alphanumeric with 16 X 2 LCD Display. Keypad for operation and monitoring display requirement to display all types alarm condition, short, open condition and should also indicate time & date. The batteries shall be sufficient for 30 Mins. in alarm Condition and 48 Hrs in normal condition.	1	Set	40500		40500
2	MR	Supply, installation, testing & commissioning of MANUAL CALL POINT complete with hammer & chain, M.S. box duly painted in red colour including connections etc.	4	Nos.	1685		6740
3	MR	Supply, Installation, testing & commissioning of Electronic dual tone Hooter.	4	Nos.	1713		6852
4	MR	Supply, Installation, Testing & Commissioning of Multi Sensing (Photo+Heat) detector with standard mounting base, LED, complete with MS Powder coated Junction Box for mounting on Surface / on False Ceiling / Below False Floor, Cable lugs at Ends, cable compression glands, cable tags and Ferruling.	16	Nos.	4000		64000
5	1.20.2	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.					
		25 mm	200	RM	142	28400	
6	1.17.2	Supply & laying of 2 X 1.5 sqmm Flexible Copper Conductor FRLS Cable in existing conduit.	200	RM	36	7200	
		SUBHEAD TOTALS CARRIED TO SUMMARY				35600	118092

SUMMARY OF STRUCTURE AND FINISHING WORK COST		
S. No. 11 SEPTIC TANK (20000Ltr)		
S.NO.	DESCRIPTION	Total Amount (IN RS.)
Part 1 -	SITE DEVELOPMENT AND EARTH WORK	21,800
Part 2 -	PLAIN and REINFORCED CEMENT CONCRETE WORK	170,622
Part 3 -	WATER PROOFING	70,162
Part 4 -	MISCELLANEOUS WORKS	31,621
	Total Cost	294,205

DETAILED ESTIMATE OF SEPTIC TANK (20000 Ltr)						
S. No. 11 SEPTIC TANK (20000Ltr)						
1.0		SITE DEVELOPMENT AND EARTH WORK				
1.1		EARTH WORK IN EXCAVATION				
1.1.1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means over areas including disposal of excavated earth, lead upto 50m and lift upto 1.5m, surface to be levelled and neatly dressed.				
a	2.6.1	All kinds of soil	cum	200	74	14,800
1.2		Earth Filling				
1.2.1	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. (Net consolidated area fill volume will be computed from the initial and final levels. Volume in slopes, embankments etc. will be computed applying appropriate formula, as per CPWD specification).	cum	200	35	7,000
		Total carried over to summary				21,800
2.0		CONCRETE WORK (PLAIN AND RCC)				
		(Rates for all cement concrete items plain and reinforced described below shall include work from Basement Level to top of last roof including roof of machine room, Mumty, over head water tanks and parapets above at all floors and for all heights, required hacking of the surfaces for smooth plaster. (This section covers cast in situ structural and architectural as well as precast structural and architectural concrete work).				

		Plain cement concrete				
2.1	4.19	Providing and laying in position ready mixed plain cement concrete, using fly ash and cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, excluding the cost of centering, shuttering and finishing, including cost of curing, 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.				
		Note :				
		(1) Excess/less cement used than specified in this item is payable/ recoverable separately.				
		(2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS : 456. Uniform blending with cement is to be ensured in accordance with clauses 5.2 and 5.2.1 of IS: 456 -2000 in the items of BMC and RMC.				
2.1.1	4.19.1	All works upto plinth level :				
a	4.19.1.1	M-15 grade plain cement concrete (cement content considered @ 240 kg/cum)	cum	6,067	3.5	21,233
		Cast - in -situ concrete				
2.3	5.40	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using fly ash and cement content as per approved design mix, and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, 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, 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.				
		NOTE- (1) Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.				
		(2) Fly ash conforming to grade I of IS 3812 (Part-1) only be used as part replacement of OPC as per IS : 456. Uniform blending with cement to be ensured in accordance with clauses 5.2 and 5.2.1 of IS:456 -2000 in the items of BMC and RMC.				
2.3.1	5.40.1	All works up to Plinth level.	cum	6692	13	86,994
2.5	5.9	Centering and shuttering				

		Approved Marine plywood shuttering and centering for structural concrete work in locations called for including strutting, propping, bracing, bolting, wedging, casing, striking, removal etc. complete for any size, section, thickness. Props shall consist of well designed steel pipes adequately braced (wooden ballies as props shall not be permitted). The item to include centering and shuttering at all heights and levels.				
		Allow for forming grooves, drip course, chamfers, cut-outs, openings etc. where called for and for dressing with approved shuttering oil to prevent adhesion. Unexposed concrete surfaces subsequently left untreated (in the condition obtained on removal of form work) shall not constitute exposed concrete work and shall be measured under this item only. Irregular shapes with sides which may not be perpendicular to each other for shapes not conforming to rectangle or square shall not be paid separately. (quoted rate to include all staging upto any height).				
		Foundation, raft slabs, raft beams, plinth beam, pedestals/ bases of columns grade slab, Retaining walls (any thickness), suspended floors, roofs, landings, balconies, stairs and landings, slabs of water tank, ramp slabs, lintels, beams, floor beams, girders, cantilever beams, deep beams, ramp beams, Columns, pillars, piers, abutments, posts and struts, off sets & projection of columns, transfer columns, lift walls, water tank walls, swimming pool wall ,ramp walls, all structural walls, Shelves in kitchen/ pantries and toilets, Parapets, Planters, vertical fins, balcony facias, projections, pergolas as per the shape and profiles indicated in the drawings, Cornices, moulding , bands , corbelling, strips, Folded plate staircase steps etc.				0
						0
a.	5.9.1	Foundation, raft slabs, raft beams, plinth beam, pedestals/ bases of columns grade slab etc.	sqm	194	10	1,940
b.	5.9.2	Retaining walls (any thickness)	sqm	379	100	37,860
c.	5.9.3	Suspended floors, roofs, landings, balconies, stairs and landings, slabs of water tank, ramp slabs, lintels, beams, floor beams, girders, cantilever beams, deep beams, ramp beams etc.	sqm	422	20	8,446

2.6	5.22	Reinforcement steel				
		Laying and fixing in position steel reinforcement in all reinforced concrete work, including straightening, cutting, removal of loose rust by wire brush and coating with cement slurry, bending, hoisting, laying in position to the shape and profile required at all levels and heights as per drawing and design and/ or as directed, binding with 16 gauge MS annealed steel wire etc. complete. (Quoted rate also to include providing & fixing the binding wire, cement mortar spacer blocks etc.)				
2.6.1	5.22.6	Thermo mechanically Treated Reinforcement (TMT) or High yield strength Deformed (Tor steel) bars of all size & grades. Basic Rate of Steel : Rs. 50000/Tonne				
a		FE-500 Grade	MT	5,660	2.5	14,150
		Total carried over to summary				170,622
3.0		WATER PROOFING				
		(Quoted Rates are for all heights, depths, levels, leads and lifts) The operations describe below are only indicative & the item is to be executed as per technical/ manufacturer's specification. Testing shall be done by ponding water (150mm depth) for 72 hours.				
		Note: (The Water proofing work must be executed by an approved specialised Agency. The Contractor shall give a 10 years guarantee as per instruction of the Project Manager).				
3.1		Injection Waterproofing				
		Providing and applying Injection water proofing treatment for basement, under ground tank and other RCC structure with the following operations				

a		FOR VERTICAL WALLS				
		From inside :- Providing and laying water proofing treatment by chemical injection grout process in water tank (Under ground and Over head) or other areas using 20mm dia MS nozzles of minimum 25mm deep in walls placed and fixed @1.2m distance in both direction in the wall and @ 0.75m c/c along construction joints, consisting of injecting cement slurries of different viscosities under pressure by pump using acrylic based water proofing chemical mixed with neat cement slurry and sealing off nozzles after the injection operation with suitable admixture of approved make manufacturers specification	sqm	250	75	18,750
						0
b		FOR HORIZONTAL SURFACES				0
		Providing and laying water proofing treatment by chemical injection grout process on base raft of under ground water tank or other area as per specifications comprising of two layers of Cement mortar 1:3 mixed with Acrylic water proofing compound, providing and fixing 20 mm pipe sleeves at 1.2m C/C and grouting acrylic based water proofing chemical mixed with neat cement slurry through the pipes with, complete with cutting & sealing of the pipes as per specification and direction of Project Manager.	sqm	250	12	3,000
						0
3.2		Glazed Tiles				0
a	11.36	Providing and fixing 1st quality ceramic glazed wall & floor tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	745	65	48,412
		Total to be carried over the summary				70,162
						0
4.00		MISCELLANEOUS WORKS				
		(Quoted Rates are for all heights, depths, levels, leads and lifts)				0
						0
4.1		Foot Rest for Water Tank				

a	19.16	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910, on 12 mm dia steel bar conforming to IS: 1786, having minimum cross section as 23 mmx25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	each	328	16	5,246
4.2		PVC Water Stopper				0
		Providing and Placing in position suitable PVC water stops conforming to IS:12200 for construction/ expansion joints between two RCC members and fixed to the reinforcement with binding wire before pouring concrete etc. complete :				0
a	22.4.2	Dumb bell with central bulb (180 mm wide, 8 mm thick)	rmt	201	14	2,810
4.3		Man Hole Cover				
	19.18	Supplying and fixing C.I. cover with frame for manholes :				
	19.18.3	560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg	each	5,891	4	23,565
		Total carried over to summary				31,621

SCHEDULE OF QUANTITIES (SANITARY/ PLUMBING)

S.No. 12 Sanitary and Plumbing Works

Item No.	DSR 2016/ M R	DESCRIPTION OF ITEM	QTY	UNIT	RATE	DSR Amount (In Rs)	Non-DSR Amount (In Rs)
1	17.3	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :					
		17.3.1 W.C. pan with ISI marked white solid plastic seat and lid	16	Each	4593.75	73500.00	
2	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:					
		17.7.1 White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	16	Each	2298.55	36776.80	
3	17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :					
		17.10.1 Kitchen Sink with Drain Board					
		17.10.1.1 510 x1040 mm bowl depth 250 mm	6	each	4120.80	24724.80	
4	17.28	Providing and fixing PVC waste pipe for sink or wash basin including PVC. waste fittings complete.					
		17.28.2 Flexible pipe					
		17.28.2.1 32mm	22	Each	73.25	1611.50	
5	17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:					
		17.4.1 One urinal basin with 5 litre white P.V.C. automatic flushing cistern	13	Each	3494.15	45423.95	
6	17.31	Providing and fixing mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	16	Each	817.95	13087.20	
7	17.34	Providing and fixing toilet paper holder					
		17.34.1 C.P. brass	16	Each	385.35	6165.60	
8	17.35	Providing and Fixing soil, waste and vent pipes					
		17.35.1 100 mm dia					
		17.35.1.2 Centrifugally cast (spun) iron socketed pipe as per IS: 3989	190	M	921.65	175113.50	
		17.35.2 75 mm dia					
		17.35.2.2 Centrifugally cast (spun) iron socketed pipe as per IS: 3989	57	M	794.55	45289.35	
9	17.70	Providing and fixing PTMT Bottle Trap for Wash basin and sink.					
		17.70.2 Bottle trap 38 mm single piece moulded with height of 270	35	Each	518.15	18135.25	
10	17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	2	Each	305.55	611.10	
11	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.					
		17.73.2 600 mm long towel rail with total length of 645 mm, 78 mm wide and effective height of 88 mm, weighing not less than 190 gms	2	Each	422.70	845.40	
12	17.60	Providing and Fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the floor and walls					
		17.60.2 100mm inlet and 75 mm outlet					
		17.60.2.1 Sand cast iron S&S as per IS - 3989	36	Each	1072.80	38620.80	
13	17.65	Painting sand cast iron/centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey or buff etc. over a coat of primer (of approved quality) for new work.					
		17.65.1 a) 100mm dia meter pipe	190	M	40.65	7723.50	
		17.65.2 b) 75mm dia meter pipe	57	M	31.00	1767.00	
14	17.37	Providing and fixing MS holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.					
		17.37.1 For 100mm dia pipe	127	Each	167.35	21253.45	
		17.37.2 For 75mm dia pipe	20	Each	165.05	3301.00	
15	17.38	Providing and fixing bend of required degree with access door insertion rubber washer 3mm thick bolts and nuts complete					
		17.38.1 100mm					
		17.38.1.2 Sand Cast iron S&S as per IS-3989	20	Each	384.90	7698.00	
		17.38.2 75mm					
		17.38.2.2 Sand Cast iron S&S as per IS-3989	10	Each	317.85	3178.50	
16	17.39	Providing and fixing plain bend of required degree					
		17.39.1 100mm					
		17.39.1.2 Sand Cast iron S&S as per IS-3989	20	Each	334.95	6699.00	

		17.39.2	75mm					
		17.39.2.2	Sand Cast iron S&S as per IS-3989	10	Each	248.20	2482.00	
17	17.40	Providing and fixing heal rest sanitary bend						
		17.40.1	100mm					
		17.40.1.2	Sand Cast iron S&S as per IS-3989	20	Each	370.95	7419.00	
		17.40.2	75mm					
		17.40.2.2	Sand Cast iron S&S as per IS-3989	20	Each	312.05	6241.00	
18	17.43	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.						
		17.43.1	100x100x100 mm					
		17.43.1.2	Sand cast iron S&S as per IS - 3989	20	Each	623.00	12460.00	
19	17.56	Providing and fixing terminal guard						
		17.56.1	100mm					
		17.56.1.2	Sand Cast iron S&S as per IS-3989	8	Each	333.80	2670.40	
20	17.57	Providing and fixing collars						
		17.57.1	100mm					
		17.57.1.2	Sand Cast iron S&S as per IS-3989	212	Each	351.20	74454.40	
21	17.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes & fittings of dia						
		17.58.1	a) 100mm	196	Each	309.95	60750.20	
		17.58.2	b) 75mm	64	Each	263.60	16870.40	
22	17.59	Providing and fixing MS stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter.						
		17.59.1	100mm	106	Each	62.00	6572.00	
23	18.49	Providing and fixing C.P. brass bib cock of approved quality to conforming to IS 8931.						
		18.49.1	15 mm nominal bore	16	Each	371.70	5947.20	
24	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.						
		18.51.1	15 mm nominal bore	12	Each	492.55	5910.60	
25	18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS : 8931.						
		18.52.1	15 mm nominal bore	16	Each	545.95	8735.20	
26	18.53	Providing and fixing C.P. brass angle valve for basin mixer and gyser points of approved quality conforming to IS : 8931						
		18.53.1	15 mm nominal bore	54	Each	475.70	25687.80	
27	18.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.		16	Each	112.30	1796.80	
28	17.61	Cutting						
		17.61.1	100 mm dia	16	M	355.70	5691.20	
29	18.76	Cutting holes upto 30 X 30 cm in walls including making good the same.						
		18.76.1	With common burnt clay F.P.S. (non modular) bricks	16	Each	219.20	3507.20	
30	18.78	Making chases upto 7.5 X 7.5 cm in walls including making good after housing G.I. pipe etc.		16	M	93.85	1501.60	
31	18.7	Providing and						
		Internal work						
		18.7.2	20mm nominal outer dia pipes	10	M	179.95	1799.50	
		18.7.3	25mm nominal outer dia pipes	20	M	216.20	4324.00	
		18.7.4	32mm nominal outer dia pipes	83	M	289.05	23991.15	
		18.7.5	40mm nominal outer dia pipes	49	M	385.50	18889.50	
		18.7.6	50mm nominal outer dia pipes	34	M	548.55	18650.70	
32	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.						
		Concealed						
		18.8.1	15mm nominal outer dia pipes	36	M	246.20	8863.20	
		18.8.2	20mm nominal outer dia pipes	39	M	284.85	11109.15	
		18.8.3	25mm nominal outer dia pipes	34	M	333.60	11342.40	
		18.8.4	32mm nominal outer dia pipes	28	M	412.90	11561.20	
33	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings. This includes jointing of pipes and fittings with one step CPVC solvent, trenching, refilling, and testing of joints complete as per the direction of the engineer incharge						
		External						
		18.9.6	50mm nominal outer dia pipes	100	M	484.25	48425.00	
		18.9.7	62.5mm nominal outer dia pipes	50	M	1081.75	54087.50	
		18.9.8	75mm nominal outer dia pipes	10	M	1201.05	12010.50	
34	18.17	Providing and fixing gun metal gate valve with C.I. Wheel of approved quality (screwed end).						
		18.17.1	25 mm dia. nominal bore	4	Each	428.20	1712.80	
		18.17.2	32 mm dia. nominal bore	8	Each	500.75	4006.00	
		18.17.3	40 mm dia. nominal bore	4	Each	584.70	2338.80	
		18.17.4	50 mm dia. nominal bore	4	Each	749.90	2999.60	
		18.17.5	65 mm dia. nominal bore	1	Each	1286.80	1286.80	
		18.17.6	80 mm dia. nominal bore	1	Each	1919.50	1919.50	
35	18.18	Providing and fixing ball valve (brass) of approved quality. High or low pressure, with plastic floats complete :						
		18.18.3	25 mm nominal bore	2	Each	331.95	663.90	

36	18.19	Providing and fixing gun metal non-return valve of approved quality (screwed end).					
		18.19.4	32 mm nominal bore				
		18.19.4.2	Vertical	2	Each	1080.60	2161.20
37	18.21	Providing and fixing unplasticised PVC connection pipe with brass unions.					
		18.21.1	30 cm length				
		18.21.1.1	15 mm nominal bore	38	Each	59.40	2257.20
38	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	15000	Litre	7.25	108750.00	
39	2.10	Excavating					
		2.10.1	All kinds of soil				
		2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	150	M	225.45	33817.50
40	19.4	Providing and fixing square-mouth S.W. gully trap grade 'A' complete with C.I. Grating brick masonry chamber with water tight C.I. Cover with frame of 300 X 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :					
		19.4.1	100 X 100 mm size P type				
		19.4.1.2	With Sewer bricks conforming to IS : 4885	15	Each	1619.55	24293.25
41	19.7	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :					
		19.7.1	Inside size 90 X 80 cm and 60 cm deep including C.I. cover with frame (light duty) 455 X 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)				
		19.7.1.2	With Sewer bricks conforming to IS : 4885	10	Each	8678.85	86788.50
		19.7.3	Inside size 120 X 90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg)				
		19.7.3.2	With Sewer bricks conforming to IS : 4885	2	Each	23088.60	46177.20
42	19.8	Extra for depth of manholes					
		19.8.1	Size 90x80cm				
		19.8.1.2	With Sewer bricks conforming to IS : 4885	10	Meter	5848.95	58489.50
		19.8.2	Size 120x90cm				
		19.8.2.2	With Sewer bricks conforming to IS : 4885	2	Meter	7006.10	14012.20
43	19.27	Constructing brick masonry road gully chamber 50 X 45 X 60 cm with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 coarse sand) including 500 X 450 mm precast R.C.C. horizontal grating with frame complete as per standard design :					
		19.27.1	With F.P.S. bricks	30	Each	4043.10	121293.00
44	19.32	Making soak pit 2.5 m diameter 3.0 m deep with 45 X 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 18 m long complete as per standard design.					
		19.32.1	With common burnt clay F.P.S. (non modular) bricks of class	1	Each	20681.55	20681.55
45	MR	For feeding Domestic/ Flushing water to entire Project. Variable Speed-Location - Near underground domestic water tank with Providing and fixing electronic type level indicator for water tank mounted in panel with level display, alarm when water level is low or high, full range from one level to four level display and manual reset for alarm etc. with electrical wiring conduit supports from wall & ceiling probs and all other accessories complete as required.					
	(b)	Capacity 3 LPS each minimum					
		Head 25 Mts.					
		RPM 2800 / 3HP					
		No. of pumps 1	3	nos.	21784.00		65352.00
46	12.41	Providing and Fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10mm gap for thermal expansion, (i) Single socketed pipes.					
		12.41.2	110 mm diameter	100	Metre	236.35	23635.00
47	12.22	Making khurras 45 x 45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over P.V.C sheet 1 m x 1m x 400 micron, finished with 12 mm plaster cement 1:3 (1 cement: 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	16	each	187.60	3001.60	
48	12.42	Providing and					
		12.42.1	Coupler				
		12.42.1.2	110mm	33	Each	102.65	3387.45
		12.42.5	Bend 87.5				
		12.42.5.2	110mm bend	16	Each	113.10	1809.60
		12.42.6	Shoe (Plain)				
		12.42.6.2	110mm	16	Each	98.00	1568.00

49	12.43	Providing and fixing unplasticised PVC pipe clips of approved design to unplasticized PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete					
		12.43.2	110mm	67	Each	181.40	12153.80
50	12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams		16	Each	40.90	654.40
51	19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
		19.6.3	250 mm dia. R.C.C. pipe	20	meter	482.05	9641.00
		19.6.4	300 mm dia. R.C.C. pipe	10	meter	518.55	5185.50
		19.6.5	450 mm dia. R.C.C. pipe	10	meter	720.95	7209.50
52	8.10	Providing and fixing stone slab table rubbed, edges rounded and polished of size 75x50cm deep and 1.8cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size as per direction of engineer in charge and finished smooth					
		8.10.2	Granite stone of approved shade	4.88	Sqm	2831.95	13805.76
53	MR	Providing and fixing Float Glass Mirror of minimum 6mm thickness, of required shape and size of "Modiguard"/ "Saint Gobain" make, with 6mm thick water proof ply wood board backing conforming to IS 710 including making necessary holes in the mirror, if required. The ply wood board shall be rigidly fixed to the wall using required stainless steel screws, rawl plugs etc. The mirror shall be fixed to the ply wood board backing using necessary CP brass screws and around moulded beading of 25x25mm, made out of teak wood using epoxy adhesive mitred joints etc. all complete, as per the architectural drawings, as specified and as directed by the Engineer-in-Charge. (The rate of the item includes cost of all inputs of labour, material, T&P, all other incidental charges involved in the work. For the purpose of payment, the actual area of the mirror shall be measured in sqm.)		15	sqm	1494.00	22410.00
54	MR	Providing & fixing Hand Shower (Health Faucet) with 8mm dia, 1M long PVC tube and wall hook CP brass wall flange. Make: Jaquar, Cat No. ALD-BLK-583.					
		For supply of sanitary fixtures as per above details		16	Each	1066.00	17056.00
55	23.1	Boring/ drilling bore well of required dia for casing/ stainer pipe, by suitable method prescribed in IS:2800 (part-1) including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of engineer-in-charge, upto 90 metre depth below ground level.					
		23.1.1.1	300mm dia	50	metre	370.70	18535.00
56	23.4	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS : 12818, including hire & labour charges, fittings & accessories etc, all complete, for all depths, as per direction of engineer-in-charge.					
		23.4.2	150mm nominal size dia	50	metre	529.35	26467.50
57	23.5	Supplying, filling, spreading & levelling stone boulders of size range 5cm to 20cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge		4	cum	921.90	3687.60
58	23.6	Supplying, filling, spreading & levelling gravels of size range 5mm to 10mm, in recharge pit, over the existing layer of boulders, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge		4	cum	1038.05	4152.20
59	23.7	Supplying, filling, spreading & levelling coarse sand of size range 1.5mm to 2mm, in recharge pit, in the required thickness over the gravel layer, for all leads & lifts, all complete as per direction of Engineer-in-charge		4	cum	1038.05	4152.20
60	23.8	Gravel packing in tubewell construction, in accordance with IS:4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge		4	cum	1175.60	4702.40
61	23.9	Providing and fixing factory made precast RCC perforated drain covers, having concrete strenght not less than M-25, of size 1000x 450 x 50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional TMT hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6mm complete, all as per direction of engineer in charge		1	each	959.35	959.35
62	19.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :					
		19.1.2	150 mm diameter	100	meter	327.05	32705.00
		19.1.3	200 mm diameter	150	meter	423.35	63502.50
		19.1.4	250 mm diameter	150	meter	692.50	103875.00
63	19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :					
		19.2.2	150 mm diameter S.W. pipe	40	meter	761.85	30474.00
		19.2.3	200 mm diameter S.W. pipe	60	meter	888.10	53286.00
		19.2.4	250 mm diameter S.W. pipe	60	meter	1027.00	61620.00
68	19.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design					

		19.3.2	150 mm diameter S.W. pipe	60	meter	479.85	28791.00	
		19.3.3	200 mm diameter S.W. pipe	90	meter	564.00	50760.00	
		19.3.4	250 mm diameter S.W. pipe	90	meter	656.00	59040.00	
69	MR	Providing and fixing suitable model of R.O. plant 150 ltrs. Per hour flow rate connected to a water cooler of capacity 150 Litres having capacity to treat the raw water having TDS 1200 ppm and not less than 40%. The treated water should have TDS less than 100 ppm and hardness less than 50 ppm. The operating voltage to 230 volt AC +/- 10% alongwith required capacity pump and solenoid valves, dry run protection of pump, automatic tank level control, inbuilt auto flush timer for periodic flushing of membranes, over voltage and over current protection with switch mode power supply system antiscaling dosing system complete in all respects including installation and fittings with the following provisions: (a)10 micron polypropylene sediment pre filter (b)10 micron bacteriostatic activated carbon block on line micron filter with 5 micron rating (c)2 Nos. of reverse osmosis memberane with 0.0001 micron pore size energy saving poly amide type (d)UV lamp of minimum capacity 150LPH and minimum lamp wattage 9W		1	Each	82234.00		82234.00
70	MR	Providing and Fixing water cooler of capacity 150 Liters of dimension approx 615mm x 615mm x 930mm made up in stainless steel having approx weight of 90 Kgs with power consumption of 1630 - 1650 watts complete in all respect having five faucets (F110034 - Hindware) or equivalent including all accessories as per the direction of the engineer in charge.		1	Each	109646.00		109646.00
			Total:			Rs	2167686.36	296698.00

SCHEDULE OF QUANTITIES								
S. No. 13 TUBEWELL								
S No	DSR-2018 MR	Description	Unit	Qty	DSR Rate (Rs.)	NS Rate (Rs.)	DSR Amount (Rs)	NS Amount (Rs)
1	23.1	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart / bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer - in-charge, upto 90 metre depth below ground level.						
	23.1.2	Rocky strata including boulders						
a).	23.1.2.1	300mm dia	Meter	90	855.10		76,959	
2	23.2	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart / bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer - in-charge, beyond 90 metre upto 150 metre depth below ground level.						
	23.2.2	Rocky strata including boulders						
a).	23.2.2.1	300mm dia	Meter	50	927.10		46,355	
3	23.3	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.						
a).	23.3.2	150 mm dia	Meter	100	572.30		57,230	
3	23.4	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge						
a).	23.4.1	100 mm dia	Meter	100	448.04		44,804	
4	23.8	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.	Cum	3	1,175.60		3,527	
5	23.12	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	Hour	48	542.20		26,026	
6	23.13	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of:						
a).	23.13.2	150mm dia	Each	1	182.95		183	
7	23.14	Providing and fixing M.S. clamp of required dia to the top of casing / housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts of required size complete.						
a).	23.14.2	150mm dia	Each	1	1,017.70		1,018	
8	M R	Providing sanitary sealing on top as per I.S. with 1:3:6 PCC Block of size 1m x 1m x 1m.	Each	1		5,800.00		5,800
9	M R	Supplying, Installation, Testing, commissioning and lowering of submersible pumps set as per specifications (enclosed in cage) by using 'C' class column pipes (pipes including in separate column of schedule) including binding submersible cable, 1no. pressure gauge with isolation cock along with column pipes with suitable size of clamps. The submersible pump set with direct coupled motor rated for 3 phase, 50 cycle 415 ± 10% volts A/c supply with the following duty.						
a).	M R	Total head - 150 mts.						
		Flow rate - 8000 ltr/ hr. (Minimum)-5 hp motor (appx.)	Each	1		186,810.00		186,810
10	M R	Supply & Installation of G.I Class 'C' column pipe with flanges at 6m intervals including all fittings, flanges, clamps as required.						
a).	M R	50 mm dia	Meter	100		900.00		90,000
11	18.17	Providing & fixing gun metal gate valve with C.I wheel of approved Quality (screwed end):						
i).	18.17.4	50 mm dia	Each	1	749.90		750	

12	18.19	Providing & fixing gun metal non-return valve of approved Quality (screwed end):						
i).	18.19.4	50 mm nominal bore						
	18.19.4.2	Vertical	Each	1	1,080.60		1,081	
		TOTAL					257933.00	282610.00

S. No. 14 SOLAR LED STREET LIGHT					
MR	70 W Standalone Solar LED Street lighting Blue tooth operated system including hybrid charging device complete with 7 M long Octagonal Hot dip Galvanized pole 4 mm thick with base plate, 4 nos. fdn bolts, SA bracket. The average thickness of galvanization is 70 Microns or more. The solar lighting system will be supplied along with Solar Gel battery (IS 13369 :1992- MNRE Approved), TUV certified PV module (IEC 61215-2; IEC61730 ; IEC61701) of adequate capacity to provide 36 Hrs back up complete with all accessories & Metallic Battery box. Havells is registered in MNRE as a channel partner having SP 1 A credit rating & it's own photometry lab approved by NABL. 5 years warranty will be provided on the complete system against manufacturing defects only. Warranty certificate for complete solar street lighting system will be issued along with supply of complete set of materials from the company.	20	Each	87900.00	1758000.00
MR	Supplying, Installation, Testing and Commissioning of 8 W LED BOLLARD Housing made up of aluminum pipe powder coated black after phosphochromate treatment with aluminum heat sink for effective thermal management, sturdiness & excellent corrosion resistance. Mounting flange of MS sand casting is used at the bottom.	10	Each	3270.00	32700.00
TOTAL					1790700.00

S. No. 15 LIGHTING FIXTURES							
Item No	DSR 2016	Description of Item	Quantity	Unit	Rate	DSR Amount	Non-DSR Amount
					Rs.	Rs.	Rs.
S. No. 16 LIGHTING FIXTURES & FITTINGS							
1	1.41	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	267	Each	100.00	26700.00	
2	1.45	Installation, testing and commissioning of ceiling fan including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable including providing and fixing phenolic sheet cover on the fan box as required etc	34	Nos.	132.00	4488.00	
3.1	1.50.1	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.					
		Upto 450 mm sweep	15	Nos.	224.00	3360.00	
3.2	1.51	Extra for fixing the louvers/ shutters complete with frame for exhaust fan of all sizes.	15	Nos.	99.00	1485.00	
4	MR	Supply of ISI marked energy efficient exhaust fan plastic ideal for mounting on glass window with 200mm sweep (Havells Cat No. Ventilair DX 200mm sweep or equivalent)	15	Each	994.00		14910.00
5	MR	Supply of LED Tubelight batten including lamp fitting and all accessories as required. (Philips Cat no. - 31082 slimline 18 watt LED wall lamp or Equivalent)	52	Each	865.00		44980.00
		1200 mm sweep	34	Each	1355.00		46070.00
6	MR	Supply of LED concealed lighting suitable for 2x2 false ceiling grid including lamp fitting and all accessories as required. (Philips Cat no. - Cirrus RC365B LED 33 5000PSU or Equivalent)	57	Each	4054.00		231078.00
7	MR	Supply of 1 x 12watt LED wall mounted light fixture for mirror light complete with lamp and all accessories as required. (Philips Cat No. - Hexa LED 30965 or Equivalent)	16	Each	1174.00		18784.00
8	MR	Surface 1 x 15watt LED surface mounted downlighter fitting and all accessories as required. (Philips Cat no. - DN170C LED10S-4000 PSU WH or Equivalent)	20	Each	2060.00		41200.00
9	MR	Surface 1 x 10 watt LED recess mounted downlighter fitting and all accessories as required. (Philips Cat no. - DN191B LED6S-6500 PSU WH S1 or Equivalent)	50	Each	1326.00		66300.00
10	MR	Supply, Installation, Testing and Commissioning of LED EXIT SIGN Light Maintained having 3 hours backup for emergency exit suitable for auditoriums complete in all respect as required (Prolite Cat No. PEL 111 E/M/A or equivalent)	2	Each	2947.00		5894.00
		TOTAL				36033.00	469216.00

GRAND SUMMARY			
PROPOSED WAYSIDE AMENITIES AT BUDDHA & RAMAYANA CIRCUIT UNDER SWADESH DARSHAN SCHEME AT GAYA-KUSHINAGAR ROAD			
S No	DESCRIPTION	DSR Items Total Amount (IN Rs)	Non-Scheduled Items Total Amount (IN Rs)
1.00	CIVIL WORKS (BUILDINGS)	16204055	2456135
2.00	PATHWAY	803284	
3.00	ROAD	9907515	
4.00	U G TANK	831222	
5.00	BOUNDARY WALL	3938947	
6.00	ELECTRICAL WORKS	1349880	1912895
7.00	LANDSCAPE		1223646
8.00	HVAC		1604435
9.00	FIRE FIGHTING		902854
10.00	FIRE ALARM	35600	118092
11.00	SEPTIC TANK	294205	
12.00	PLUMBING WORKS	2167686	296698
13.00	TUBEWELL	257933	282610
14.00	SOLAR LED STREET LIGHT		1790700
15.00	LIGHTING FIXTURES & FITTINGS	36033	469216
	SUB-TOTAL	35826360	11057281
A	GRAND TOTAL	46883641	

S No. 1 : Civil Works						
S NO	DESCRIPTION	Scheduled Items Amount (IN Rs)	Non-Scheduled Items Amount (IN Rs)	Total	No of Blocks	Total Amount (IN Rs)
A	SHOPS	1691100	1513635	3204735	1	3204735
B	RESTAURANT BLOCK	12025399	292500	12317899	1	12317899
C	TOILET BLOCK	2487557	650000	3137557	1	3137557
	SUB TOTAL	16204055	2456135			
	GRAND TOTAL					18660190