



Name of Work:- Construction of Pre-Engineered building near Hanger at Airstrip(SH: Civil works).

SCHEDULE OF QUANTITY

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
1	CARRIAGE OF MATERIALS				
1.1	Carriage of material by Mechanical Transport including loading, unloading and stacking				
1.1.1	Earth Lead - 2 Km	340	cum	111.50	37910.00
	Sub-Total				37910.00
2	EARTH WORK				
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in-Charge:				
2.1.1	All kinds of soil	2000	sqm	53.00	106000.00
2.2	Earth work in excavation by mechanical means (Hydraulic				
2.2.1	All kinds of soil	1120	cum	125.95	141064.00
2.3	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.				
2.3.1	All kinds of soil.	725	cum	166.40	120640.00
2.4	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				
2.4.1	All kinds of soil				
2.4.1.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	225	metre	225.45	50726.00
2.5	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.	1602	cum	125.75	201452.00
2.6	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
2.6.1	All kinds of soil	450	cum	51.75	23288.00
2.7	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	158	cum	917.75	145005.00
2.8	Supplying chemical emulsion in sealed containers including				
2.8.1	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	900	litre	185.95	167355.00
	Sub-Total				955530.00
3	CONCRETE WORK				
3.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
3.1.1	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	330	cum	4478.15	1477790.00
3.2	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 20mm nominal size).	63	sqm	320.25	20176.00

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3.3	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	20	kg cemen t	47.95	959.00
3.4	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.	63	sqm	91.90	5790.00
3.5	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.	160	sqm	450.35	72056.00
	Sub-Total				1576771.00
4	REINFORCED CEMENT CONCRETE				
4.1	Centering and shuttering including strutting, propping etc. and removal of form for:				
4.1.1	Foundations, footings, bases of columns, etc. for mass concrete	580	sqm	193.95	112491.00
4.1.2	Suspended floors, roofs, landings, balconies and access platform	510	sqm	422.30	215373.00
4.1.3	Lintels, beams, plinth beams, girders, bressumers and cantilevers	1470	sqm	342.90	504063.00
4.1.4	Columns, Pillars, Piers, Abutments, Posts and Struts	812	sqm	467.85	379894.00
4.1.5	Stairs, (excluding landings) except spiral-staircases	136	sqm	419.35	57032.00
4.1.6	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	125	sqm	193.95	24244.00
4.1.7	Edges of slabs and breaks in floors and walls				
4.1.7.1	Under 20 cm wide	75	metre	122.20	9165.00
4.1.8	Weather shade, Chajjas, corbels etc., including edges	500	sqm	521.75	260875.00
4.2	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
4.2.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	45000	Kg	56.60	2547000.00
4.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
4.3.1	Thermo-Mechanically Treated bars of grade Fe-500 D or more.	20000	Kg	56.60	1132000.00
4.4	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	750	metre	34.15	25613.00
4.5	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. (Note :- Cement content considered in this item is @ 330 kg/cum. "Excess/ less cement used as per design mix is payable/recoverable separately).				
4.5.1	All works upto plinth level	320	cum	6446.45	2062864.00
4.5.2	All works above plinth level upto floor V level	365	cum	7250.05	2646268.00
4.6	Add for using extra cement in the items of design mix over and above the specified cement content therein.	200	quinta l	672.75	134550.00
	Sub-Total				10111432.00
5	BRICK WORK				
5.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
5.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	38.5	cum	4751.65	182939.00
5.2	Providing and laying autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	100	cum	6818.60	681860.00
5.3	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)	392	cum	5687.10	2229343.00
	Sub-Total				3094142.00
6	MARBLE AND GRANITE WORK				
6.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm				
6.1.1	Granite of any colour and shade				
6.1.1.1	Area of slab over 0.50 sqm	17	sqm	3113.30	52926.00
6.2	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.	15	each	427.95	6419.00
	Sub-Total				59345.00
7	WOOD AND P.V.C. WORK				
7.1	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).	9	sqm	74.35	669.00
7.2	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board				
7.2.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	212	sqm	1559.75	330667.00
7.3	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	212	sqm	365.85	77560.00
7.4	Extra for providing vision panel not exceeding 0.1 sqm in all type				
7.4.1	Rectangular or square	176	sqm	162.60	28618.00
7.5	Providing and fixing M.S. grills of required pattern in frames of				
7.5.1	Fixed to steel windows by welding	500	kg	104.65	52325.00
7.6	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete	92	each	414.45	38129.00
7.7	Providing and fixing ISI marked aluminium butt hinges 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:				
7.7.1	125x75x4 mm	420	each	118.20	49644.00
7.8	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS :				
7.8.1	300x16 mm	92	each	212.45	19545.00
7.9	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 :				

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
7.9.1	250x10 mm	122	each	88.10	10748.00
7.9.2	200x10 mm	138	each	76.15	10509.00
7.9.3	150x10 mm	9	each	64.30	579.00
7.1	Providing and fixing aluminium handles, 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 :				
7.10.1	125 mm	214	each	51.10	10935.00
7.11	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.				
7.11.1	Twin rubber stopper	100	each	38.00	3800.00
7.12	Providing and fixing aluminium casement stays, 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.	155	each	49.50	7673.00
7.13	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				
7.13.1	1.5 mm thick	424	sqm	837.40	355058.00
	Sub-Total				996459.00
8	STEEL WORK				
8.1	Structural steel work in single section, fixed with or without	13600	kg	58.45	794920.00
8.2	Steel work in built up tubular (round, square or rectangular hollow				
8.2.1	Hot finished seamless type tubes	1295	kg	93.90	121601.00
8.3	Steel work welded in built up sections/ framed work, including				
8.3.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	1650	kg	85.95	141818.00
8.4	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
8.4.1	M.S. tube	262	kg	92.00	24104.00
8.5	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				
8.5.1	10 x 160 mm	450	each	125.65	56543.00
	Sub-Total				1138986.00
9	FLOORING				
9.1	Cement concrete pavement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete.	16	cum	5804.35	92870.00
9.2	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) :				
9.2.1	25 mm thick	300	sqm	1158.10	347430.00
9.3	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	56	sqm	1238.20	69339.00
9.4	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	210	metre	84.85	17819.00
9.5	Extra for Kota stone/ sand stone in treads of steps and risers using single length up to 1.05 metre.	62	sqm	18.95	1175.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
9.6	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.	300	sqm	744.80	223440.00
9.7	Providing and laying vitrified floor tiles in different sizes (thickness				
9.7.1	Size of Tile 600x600 mm	1900	sqm	1119.40	2126860.00
9.8	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joint with white cement & matching pigments etc. complete.				
9.8.1	Size of Tile 600x600 mm	108	sqm	1135.20	122602.00
	Sub-Total				3001535.00
10	ROOFING				
10.1	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
10.1.1	In 75x75 mm deep chase	200	metre	153.00	30600.00
10.2	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	12	each	187.60	2251.00
10.3	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				

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10.3.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I	790	sqm	806.20	636898.00
10.4	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 form 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 texture 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. Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made	790	sqm	1497.90	1183341.00
10.5	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS: 8183, density 48 kg/ m3, 50 mm thick, wrapped in 200 G Virgin Polythene bags fixed to ceiling with metallic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24 gauge wire mesh, for top most ceiling of building	790	sqm	393.20	310628.00
10.6	Providing and fixing thermal insulation with Resin bonded rock wool conforming to IS: 8183, density 48 kg/m3, 50 mm thick, wrapped in 200 G virgin Polythene bags placed over existing false ceiling and held in position by criss- crossing Gl wire.	790	sqm	219.80	173642.00
	Sub-Total				2337360.00
11	FINISHING				
11.1	12 mm cement plaster of mix :				
11.1.1	1:6 (1 cement: 6 coarse sand)	1720	sqm	168.25	289390.00
11.2	15 mm cement plaster on rough side of single or half brick wall of				
11.2.1	1:6 (1 cement: 6 coarse sand)	2630	sqm	194.60	511798.00
11.3	20 mm cement plaster of mix :				
11.3.1	1:4 (1 cement: 4 coarse sand)	2500	sqm	252.40	631000.00
11.4	6 mm cement plaster of mix :				
11.4.1	1:3 (1 cement : 3 fine sand)	1500	sqm	143.80	215700.00
11.5	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
11.5.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.30 kg/10	3310	sqm	96.80	320408.00
11.6	Applying priming coat:				
11.6.1	With ready mixed pink or Grey primer of approved brand and	3310	sqm	34.95	115685.00

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11.7	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
11.7.1	On steel work	370	sqm	122.50	45325.00
11.8	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :				
11.8.1	Two or more coats on new work	7950	sqm	84.45	671378.00
11.9	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
11.9.1	Two or more coats on new work	347	sqm	78.40	27205.00
11.1	Extra for addition of synthetic Polyester triangular fibre of length 6 mm, effective diameter 10-40 microns and specific gravity of 1.34 to 1.40 in cement plaster/mortar by using 125 gms. of synthetic Polyester triangular fibre for 50 Kgs. cement used in cement mortar as per directions of Engineer-in-Charge.	888	Per Bag of 50 Kg of cement	58.10	51593.00
11.11	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	10380	sqm	87.35	906693.00
	Sub-Total				3786175.00
12	DISMANTLING & DEMOLISHING				
12.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
12.1.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	1	cum	997.05	997.00
12.2	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
12.2.1	In cement mortar	40	cum	842.75	33710.00
12.3	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	12	cum	120.55	1447.00
	Sub-Total				36154.00
13	ROAD WORK				
13.1	"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). Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately.		cum		
13.1.1	Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer	38	cum	7160.40	272095.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
13.2	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).	5.25	cum	5012.65	26316.00
13.3	Providing and erecting 2.00 metre high temporary barricading at	185	metre	1579.40	292189.00
	Sub-Total				590600.00
14	SANITARY INSTALLATIONS				
14.1	Providing and fixing wash basin with C.I. brackets, 15 mm C.P.				
14.1.1	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	6	each	2020.60	12124.00
14.2	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 :				
14.2.1	Kitchen sink with drain board				
14.2.1.1	510x1040 mm bowl depth 250 mm	6	each	4120.80	24725.00
14.3	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required :				
14.3.1	Size 600x450x200 mm	16	each	3211.45	51383.00
14.4	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer- in-charge.	21	each	795.15	16698.00
14.5	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
14.5.1	Flexible pipe				
14.5.1.1	32 mm dia	16	each	73.25	1172.00
14.6	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
14.6.1	Rectangular shape 453x357 mm	6	each	752.80	4517.00
14.6.2	Rectangular shape 1500x450 mm	6	each	1323.10	7939.00
14.7	Providing and fixing toilet paper holder :				
14.7.1	C.P. brass	9	each	385.35	3468.00
14.8	Providing and fixing soil, waste and vent pipes :				
14.8.1	100 mm dia				
14.8.1.1	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	490	metre	925.55	453520.00
14.9	Providing and fixing M.S. 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 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
14.9.1	For 100 mm dia pipe	120	each	167.35	20082.00
14.1	Providing and fixing plain bend of required degree.				
14.10.1	100 mm dia				
14.10.1.1	Hubless centrifugally cast (spun) iron pipes epoxy coated inside & outside IS:15905	90	each	307.10	27639.00
14.11	Providing and fixing single equal plain junction of required degree :				
14.11.1	100x100x100 mm				
14.11.1.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	27	each	503.40	13592.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
14.12	Providing and fixing terminal guard :				
14.12.1	100 mm				
14.12.1.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	27	each	355.85	9608.00
14.13	Providing and fixing shielded coupling for Hubless centrifugally cast iron pipe				
14.13.1	100 mm dia				
14.13.1.1	SS 304 grade coupling with EPDM rubber gasket	500	each	360.50	180250.00
14.14	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 walls and floors :				
14.14.1	100 mm inlet and 100 mm outlet				
14.14.1.1	Hubless centrifugally cast (spun) iron epoxy coated inside & outside as per IS:15905	52	each	677.60	35235.00
14.15	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :				
14.15.1	100 mm diameter pipe	490	metre	40.65	19919.00
14.16	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	9	each	9685.70	87171.00
14.17	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	12	each	5162.20	61946.00
	Sub-Total				1030988.00
15	WATER SUPPLY				
15.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. EXTERNAL WORK				
15.1.1	32 mm nominal outer dia Pipes	90	metre	250.55	22550.00
15.2	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. INTERNAL WORK - EXPOSED ON WALL				
15.2.1	15 mm dia nominal bore	180	metre	186.40	33552.00
15.2.2	20 mm dia nominal bore	36	metre	224.15	8069.00
15.2.3	25 mm dia nominal bore	62	metre	247.85	15367.00
15.2.4	32 mm dia nominal bore	102	metre	308.35	31452.00
15.2.5	40 mm dia nominal bore	24	metre	394.15	9460.00
15.2.6	50 mm dia nominal bore	6	metre	472.40	2834.00
15.3	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :				
15.3.1	15 mm dia nominal bore	120	metre	285.70	34284.00
15.3.2	20 mm dia nominal bore	60	metre	316.20	18972.00
15.4	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
15.4.1	15 mm dia nominal bore	20	metre	160.20	3204.00
15.4.2	20 mm dia nominal bore	20	metre	186.30	3726.00
15.4.3	25 mm dia nominal bore	100	metre	205.85	20585.00
15.4.4	50 mm dia nominal bore	100	metre	342.70	34270.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
15.4.5	65 mm dia nominal bore	120	metre	451.70	54204.00
15.5	Providing and fixing brass stop cock of approved quality :				
15.5.1	15 mm nominal bore	38	each	260.10	9884.00
15.6	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
15.6.1	25 mm nominal bore	27	each	428.20	11561.00
15.6.2	32 mm nominal bore.	6	each	500.75	3005.00
15.6.3	40 mm nominal bore	3	each	584.70	1754.00
15.6.4	50 mm nominal bore	3	each	749.90	2250.00
15.6.5	65 mm nominal bore	3	each	1286.80	3860.00
15.7	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
15.7.1	25 mm nominal bore	3	each	331.95	996.00
15.8	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
15.8.1	20 mm nominal bore	4	each	280.65	1123.00
15.9	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design :				
15.9.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	9	each	1195.35	10758.00
15.1	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :				
15.10.1	15 mm diameter pipe	200	metre	9.95	1990.00
15.10.2	20 mm diameter pipe	56	metre	11.80	661.00
15.10.3	25 mm diameter pipe	62	metre	15.50	961.00
15.10.4	32 mm diameter pipe	102	metre	18.40	1877.00
15.10.5	40 mm diameter pipe	24	metre	21.75	522.00
15.10.6	50 mm diameter pipe	6	metre	25.75	155.00
15.11	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
15.11.1	25 mm diameter pipe	100	metre	9.10	910.00
15.11.2	50 mm diameter pipe	100	metre	14.80	1480.00
15.11.3	65 mm diameter pipe	120	metre	18.25	2190.00
15.12	Providing and filling sand of grading zone V or coarser grade, allround the G.I. pipes in external work :				
15.12.1	50 mm diameter pipe	100	metre	74.95	7495.00
15.12.2	65 mm diameter pipe	120	metre	118.30	14196.00
15.13	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
15.13.1	20 mm nominal bore	4	each	170.95	684.00
15.13.2	25 mm nominal bore	15	each	205.80	3087.00
15.13.3	32 mm nominal bore	10	each	240.65	2407.00
15.13.4	40 mm nominal bore	2	each	298.75	598.00
15.13.5	50 mm nominal bore	10	each	384.90	3849.00
15.13.6	65 mm nominal bore	10	each	617.20	6172.00
15.14	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, 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				
15.14.1	Rectangular tank	6000	per litre	7.25	43500.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
	Sub-Total				430454.00
16	DRAINAGE				
16.1	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 :				
16.1.1	100 mm diameter	15	metre	216.25	3244.00
16.1.2	150 mm diameter	38	metre	327.05	12428.00
16.1.3	200 mm diameter	175	metre	423.35	74086.00
16.2	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 :				
16.2.1	100 mm diameter S.W. pipe	15	metre	622.95	9344.00
16.2.2	150 mm diameter S.W. pipe	38	metre	761.85	28950.00
16.2.3	200 mm diameter S.W. pipe	175	metre	888.10	155418.00
16.3	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 :				
16.3.1	250 mm diameter S.W. pipe	150	metre	656.60	98490.00
16.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
16.4.1	100x100 mm size P type				
16.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	38	each	1602.40	60891.00
16.5	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 :				
16.5.1	250 mm dia. R.C.C. pipe	150	metre	482.05	72308.00
16.6	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with 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 :				
16.6.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :				
16.6.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	16	each	8634.10	138146.00
16.6.2	Inside size 120x90 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) :				
16.6.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	8	each	18422.40	147379.00
16.7	Extra for depth for manholes :				
16.7.1	Size 90x80 cm				
16.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	metre	5718.60	5719.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
16.8	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 112 mm 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.	8	each	327.90	2623.00
16.9	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :				
16.9.1	For pipes 100 to 250 mm diameter	4	each	391.15	1565.00
16.1	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :				
16.10.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	20	each	4043.10	80862.00
	Sub-Total				891453.00
17	ALUMINIUM WORK				
17.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
17.1.1	For fixed portion				
17.1.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	7520	kg	384.50	2891440.00
17.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
17.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	1965	kg	444.90	874229.00
17.2	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):				
17.2.1	With float glass panes of 5.50 mm thickness	110	sqm	1003.95	110435.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
17.3	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
17.3.1	With stainless steel cover plate minimum 1.25 mm thickness	18	each	2054.40	36979.00
17.4	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	296	sqm	3176.20	940155.00
17.5	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer- in-charge complete.				
17.5.1	205 X 19 mm	310	each	211.60	65596.00
17.5.2	355 X 19 mm	92	each	237.15	21818.00
17.6	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.				
17.6.1	Powder coated minimum thickness 50 micron aluminium tubular handle bar	58	each	509.30	29539.00
17.7	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	14	each	359.00	5026.00
17.8	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.				
17.8.1	Powder coated minimum thickness 50 micron aluminium	214	each	55.50	11877.00
	Sub-Total				4987094.00
18	WATER PROOFING				
18.1	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	65	sqm	298.30	19390.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
18.2	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer- in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer- in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
18.2.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	242	sqm	1034.65	250385.00
	Sub-Total				269775.00
19	MINOR CIVIL MAINTENANCE WORK.				
19.1	Providing and laying 70 mm thick factory made RCC grass Grid paver blocks of M30 grade made by block making machine with strong vibratory compaction, of size 600mm x 400mm and of approved design , laid over and including 50mm thick compacted bed of fine sand, filling the joints and holes with mix 50% available Earth and 50% fine sand etc. all complete as per the direction of Engineer-in-charge	484	Sqm	1622.20	785145.00
19.2	Providing & fixing AC sheet strips 75 mm wide 6 mm thick in CC flooring pavement etc. complete.	100	Metre	38.00	3800.00
19.3	Providing and laying in position cement concrete of 1:5:10 (1 Cement : 5 coarse sand (zone-III) : 10 graded brick aggregate 40 mm nominal size) excluding the cost of centring and shuttering	10	Cum	4367.95	43680.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
19.4	Design,supply, engineering, fabricating , transporting, assembling at site, erection & fixing in position of factory finished custom designed Pre-engineered building structure (PEB in abbreviation herein after) made by using high strength Structural Steel of grade E 350 B&R conforming to latest IS 2062.The PEB structure shall be welded type and made as per the required profile & shape, thickness and size and connections at supports shall be of high strength bolted type complete as shown on the design /General Arrangement drawings and directions of Engineer-in-charge. The welded builtup plate columns, girders, portal beams,base plates,stiffener plates and other elements of required profiles and shapes comprising the PEB structure shall be made using CNC cutting machine/or other appropriate method of cutting which avoids any changes in the physical and mechanical property of the steel plates and does not cause any secondary stresses due to the cutting out of the plates for making customized profiles.The details are as per in drawing No. S-A/01A R2, S-A/03A R3 , S-A/03B R3.The scope of work includes:				
19.4.1	a) The item also includes preparation of shop drawings & their approval, making necessary templates, all cutting, shearing, grinding, welding (using automatic submerged arc welding/ metal arc welding or as specifically approved), transportation from workshop to site, developing any approaches, making all connections including at supports using HS structural type bolts of required length and size with appropriate double nuts, washers, connection plates as per design drawings i/c fixing and casting the bolts in concrete all complete as per drawing scheme, providing and fixing shear connectors /studs & fusion weld to top of horizontal member as shown in drawings, providing adequate temporary supports, sand jacks, scaffolding & staging & erection on site including making temporary locking arrangement, splicing of members as per drawings and all other incidental labour ,tools,plants & equipments & operations etc. as may be required to complete the job starting from "fabrication of Pre-engineered building structure in workshop to its erection at final position at site complete as per drawing & specification".				

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
19.4.1.1	<p>b) Procurement of all materials shall be done from approved manufactures. Also complete methodology for Pre-engineered building structural steel work and name of workshop for fabrication works, testing facilities, fixing & erection procedures etc. are to be intimated for approval of Engineer - in - Charge.</p> <p>c) The item includes working at all heights and levels and making provision & arrangement for required opening / inserts for fixing lights fixtures & funning cable conduits where ever required .This item also includes conducting all test on materials & welded fabricated parts as per relevant code, specification & direction of Engineer - in - Charge. The scope also includes design & fabrication of any additional temporary structure including all type of lifting brackets, supporting brackets ,which will be required for transportation & erection in position / launching of fabricated part or complete element in position at all heights and levels. Temporary bolts & nuts to be used during assembling & shall be removed before site erection. Provision of stability during erection against wind load or any other type of loading on structural steel members during erection. All safety measures required to execute & complete the work shall be followed.</p> <p>B) Measurement and payment shall be made only for structural steel (of grade E-350) which is erected & is part of permanent structure & shall be paid as per approved shop drawings. Weight of Splice plates, insert plates at connections, stiffeners, cleats, brackets, packing pieces, diaphragm gussets (taking overall square dimension) fish plates (of grade E-350) High Strength bolts used at all connections and shear studs etc. shall be added to the payable weight. The cost of HS bolts (i/c nut and washer) at</p>	64100	Kg	97.00	6217700.00
19.5	<p>Providing and fixing trapezoidal TRIMDEK Zinalume steel profile sheet roofing of 1015 mm effective cover width and normal 25 to 30mm deep ribs with subtle square fluting in the five pan at nominal 200 mm centre-to-centre. The end ribs shall be designed for anti-capillary action, to avoid any seepage of water through the lateral overlap. The feed material shall be manufactured out of nominal 0.45mm Base Metal Thickness (BMT), Hi-Tensile steel with minimum 550MPa yield strength, metallic hot-dipped coated with Aluminium-Zinc alloy (55% Aluminium, 43.5% Zinc,1.5% silicon) as per AS1397 - Zinalume AZ150 (Minimum150 gram/square meter total on bothsides) of Tata BlueScope steel,JSW Steel make or equivalent.The original steel coil manufacturer's test certificate for the chemical and mechanical properties of steel must be submitted for approval of the Engineer in charge prior to installation. The sheet shall have brand marking of the original sheet/coil manufacturer giving product details on the back of the sheet at every 1 meter c/c for confirming genuinity of the material.The steel sheet shall be fastened with nominal 40 µm zinc coated or nominal 25 µm zinc-tin alloycoated Hex head, selfdrilling screw as per AS 3566-2002 Class 3 fasteners of approved make (Buildex or equivalent) with EPDM washer as per the requirement considering the profile shape and design load. The fastener size shall be calculated as per the design or manufacturers recommendations. The profile sheet, fastener size etc. shall be got approved. All the accessories like flashing /trim/ capping shall be made from the same material which is used for main roof cladding application. The rate is inclusive of the cost of all the materials i.e. sheet,screws etc complete (upto any pitch in horizontal/vertical or curved surface) cutting to size and shape as required involved in the complete execution of the roofing</p>	908	Sqm	633.00	574764.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
19.6	Providing and fixing metal decking 0.80 mm thick zinc coated steel sheet grade 245 mpa (minimum) with zinc coating not less than 275 gm/Sqm in corrugated form for the purpose of shuttering for laying of RCC as detailed in drawing No.S-A/02 R3. The overlaps etc shall not be paid seperately. The finished plan area shall be measured for payment. Fixing shall also not be paid seperately.	5200	Sqm	592.00	3078400.00
19.7	"Providing & Fixing Glass body liquid soap dispenser, Make : Jaquar cat no. ACN-CHR-1135N or approved equivalent make etc. with simple push lever fitted with liquid soap (one time) including cutting and making good the walls, wherever required." "	9	Each	1039.00	9351.00
19.8	Providing and fixing CP brass sink cock with normal swivel spout, Make : Jaquar Cat No. 5357ND or approved equivalent complete to the satisfaction of Engineer in charge.	12	Each	1681.00	20172.00
19.9	Providing & fixing of CP brass pressmatic self closing pillar tap , Make : Jaquar Cat No. PRS-031 or approved equivalent all as per direction of Engineer in charge.	15	Each	1647.00	24705.00
19.1	Providing and fixing SS Bottle Trap , Make : Jaguar cat no. ALD-CHR-769 or approved equivalent and other ancillary fittings, cutting and making good the walls wherever required complete as per direction of Engineer in charge.	12	Each	1114.00	13368.00
19.11	Providing and fixing CP brass Waste coupling for Urinal, Make : JQUAR ALDCHR-705 or approved equivalent , SS body as suitable towash basin crain connection and other ancillary fittings, cutting and making good the same wherever requierd complete as per dir	12	Each	416.00	4992.00
19.12	Providing & fixing C.P. hand spray with lever control (health faucet) of Make : Jaquar cat no. ALD-CHR-585 or approved equivalent and flexible hose 1 m/1.2m long connection with C.P. holder for hand spray complete in all respects as per direction of Eng	9	Each	2432.00	21888.00
19.13	Providing and fixing SS COAT Hook of Make : Jaquar cat no. AKP-35791P or approved equivalent complete including consumable items, cutting and making good the walls where required.	9	Each	498.00	4482.00
19.14	Providing & Fixing of 15 mm dia angle valve of Make : Jaquar cat no. FLR-5053N or approved equivalent with C.P. brass wall flange with any other items complete including unplasticised PVC connection pipe with brass unions of 45cm length & 15mm nominal bore complete in all respect.	30	Each	1665.00	49950.00
19.15	Providing and fixing push fit type WC pan connector of Make : Kohler Cat No.1036902 or approved equivalent with high quality polypropylene plastic with rubber sealing washer. The internal rubber gasket in EASI-fit pan connectors and extremely water tighsupplied spring loaded seal guard. single mould sealing fins made of flexible EVA body, including bush/adaptor. complete in all respect.	9	Each	938.00	8442.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
19.16	Providing and fixing ABS hand drier of best quality, to be operated with 230 volts, single phase, with fully hygienic condition with all accessories of Make : Uronics cat no. eh. 22 or approved equivalent including cutting and making good the walls, where	9	Each	6205.00	55845.00
19.17	"Providing & Fixing Aerosol Perfume Dispenser (Digital programming) of Make : Euronics, Cat no : EA03 or approved equivalent fixed to wooden cleats with C.P brass screws, complete including cutting and making good the walls wherever required. "	9	Each	1815.00	16335.00
19.18	Providing & Fixing SS body paper towel dispenser Capacity 450-500Paper Towels of Make : Euronics, Cat no : EP01 or approved equivalent complete with brackets fixed to wall with PVC rawl plug with CP brass screws complete in all respects, including cutti	9	Each	2979.00	26811.00
19.19	Providing and fixing cast brass floor clean out plug 100 mm with suitable insert keys for opening, male threaded joint with GI socket lead caulked to soil pipe/waste pipe of CI and CI (LA) pipe as required complete as per instruction of the Engineer in ch	6	Each	2529.00	15174.00
19.2	Providing and fixing G.I. reducer/hopper/elbow (Floor Drain) of 100 x 50 mm, complete as per instructions of the Engineer in charge (grating and G.I. pipe to be paid separately)	6	Each	805.00	4830.00
19.21	Proving and fixing 100 mm dia G.I. inlet fitting consisting of 100 mm dia (Lenght upto 450 mm) main G.I. pipe with multiple G.I. sockets (Inlets) of required diameter welded to it (as per site requirement) and fixing the same to C.I. trap and setting in c	30	Each	1568.00	47040.00
19.22	Providing and fixing Auto Air Vent for cold water supply risers, suitable for pressure not less than 15 Kg/Sq. cm.	3	Each	465.00	1395.00
19.23	Providing and fixing 75mm transparent rubber buffers with washers and necessary screws etc. complete (best make of approved quality)	120	Each	42.00	5040.00
19.24	Providing and fixing of white vitreous china under counter oval wash basin 560x450 mm , Hindware cat no. 10017 or approved equivalent with CP brass waste assembly, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer in charge. based on 2016 DAR item no 17.7.1 page no. 1079	15	Each	2690.00	40350.00
19.25	Providing and fixing 60 cm wide Zinalume sheet roofing accessories (ridges) fixed with polymer coated J, or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers etc complete :0.5 mm thick TCT with Al-zinc alloy coating (55% Al, 43.5% Zinc,1.5% silicon) not less than 150 gm/m ² using self drilling/ self tapping screws complete :	80	Meter	318.00	25440.00
19.26	Providing rain water gutter of 90 cm wide overall made of Zinalume sheet fixed with polymer coated J, or L hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers etc complete : 0.5 mm thick TCT with Al-zinc alloy coating (55% Al, 43.5% Zinc,1.5% silicon) not less than 150 gm/m ² .The MS support frame structure required for the gutter shall be paid separately in appropriate item.	80	Meter	988.00	79040.00

Item.No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
19.27	<p>Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.☐</p> <p>100 mm overall thickness partition with 12.5 mm thick double layer fire rated/ moisture resistant board on each face of partition wall conforming to IS: 2095: part ☐</p>	1200	Sqm	2091.00	2509200.00
19.28	<p>Providing and laying in position C.C of specified grade excluding the cost of centring and shuttering all work upto plinth level 1:5:10 (1 cement : 5 coarse sand : 10 graded brick aggregate 40 mm nominal size) with available brick bats.</p>	32	cmt	2468.65	78997.00
19.29	<p>Carrying out post construction antitermite treatment conforming to IS: 6313 part III complete as per following details:</p> <p>(A) Operation shall be carried out in through manner seeking the termite in their hide outs and other similar location resource shall be taken to inject oil/water based solution of chloropyrifos 20 % E.C 1% (by weight) concentration all tracesof termite presence should be removed so that reinfestation aterwords may easily be detected.</p> <p>(B) The solid treatment in foundation to be treated with chemical emulsion 7.5 litre per sqm of the vertical surface of the substructure in facilitate this approx. 12 mm dia. holes shall be drilled as close a possible to the plinth wall and 30 cm. apart.</p> <p>(C) Similarly 12 mm dia. holes shall be drilled at the junction of the wall and floor inside the building at a omterval of 30 cm apart to reach the soil below and chemical emulsion required into each holes operated pump to soak the soil below till the refusal of maximum 1 litre per hole and then the holes shall be properly sealed.</p> <p>"</p>	1192	Sqm	35.81	42686.00
	Sub-Total				13809022.00
	Total				49141185.00