CHHATTISGARH MEDICAL SERVICES CORPORATION LIMITED

(Government of Chhattisgarh)

Tender

For

Construction of Regional Drug Warehouse at Durg (C.G.), under National Rural Health Mission scheme

Bill of Quantities (BOQ)

VOLUME-V

October-14



HSCC (INDIA) LTD. (CONSULTANTS & ENGINEERS FOR MEGA HOSPITALS & LABORATORIES) E-6(A), sector-1, NOIDA(U.P) 201301 (India)

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Tender No. HSCC/NRHM/CG./2014 (VI)/01

GENERAL ABSTRACT

Name of Work: Construction of District Drug Warehouse at Chhattisgarh (C.G).

S.No.	DESCRIPTION	Amount (in Rs)	Quoted % (Percent) below or above in figure	Quoted % (Percent) below or above in words	TOTAL AMOUNT (in Rs.)
1	DSR -ITEMS				
1.1	CIVIL WORK	182,27,685.22			
1.2	PLUMBING WORK	4,46,742.95			
2	Non DSR Items				
2.1	PLUMBING WORK	6,92,946.90			
2.2	ELECTRICAL WORK	37,40,548.50			
2.3	HVAC WORK	21,95,469.00			
	Grand Total	253,03,392.57		0.00)

Ρ	Project Name: Construction of Drug Warehouse at various locations in Chattisgarh (Area: 1052 Sqm)						
ABSTRACT OF COST(Civil Work)							
S.No	DESCRIPTION OF WORK	DSR 13 AMOUNT (in Rs.)					
1	EARTHWORK	311973.35					
2	CONCRTE WORK	726132.72					
3	RCC WORK	9551342.85					
4	BRICK WORK	1266524.55					
5	DOORS & WINDOWS	1051978.90					
6	STEEL WORK	291585.25					
7	FLOORING	915150.85					
8	CEILING & ROOFING	1134141.00					
9	FINISHING	1415975.50					
10	ROAD WORK AND DEVELOPMENT	1562880.25					
	TOTAL	18227685.22					

			E	BOQ for Civil Work	
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
1.00	EARTH WORK				
1.01	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed.				
a)	All kinds of soil	445.00	cum	146.50	65192.5
b)	Ordinary rock	20.00	cum	227.80	4556.0
c)	Hard rock (blasting prohibited)	20.00	cum	571.90	11438.0
1.02	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 up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
a)	All kinds of soil.	50.00	cum	148.25	7412.5
1.03	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 up to 1.5 m.	984.00	cum	101.50	99876.0
1.04	Extra for every additional lift of 1.5 m or part there of in excavation/banking excavated or stacked materials.				
a)	All kinds of soil.				
i)	1.5 to 3.0m	30.00	cum	41.75	1252.5
1.05	Supplying and filling in plinth with fine sand under floors including, watering. ramming consolidating and dressing complete.	114.00	cum	843.65	96176.
1.06	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.				

			BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR			
1	2	3	4	5	6			
1.07	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material.							
(a)	Beyond 60 cm girth upto and including 120 cm girth	2.00	each	786.95	1573.9			
(b)	Beyond 120 cm girth upto and including 240 cm girth	2.00	each	3638.05	7276.1			
1.08	Extra for disposal of excavated earth for additional lead beyond 50m or part thereof upto 9 such additional leads							
a)	All kinds of soil	200.00	cum	20.37	4074.0			
1.09	Supplying chemical emulsion in sealed containers including delivery as specified.							
a)	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	40.00	Litre	185.95	7438.0			
1.10	Diluting and injecting chemical emulsion for POST- CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :							
a)	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:							
	With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration	200.00	metre	14.05	2810.0			
					311973.3			

			BOQ for Civil Work		
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
2.00	Concrete Work				
2.01	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:				
a)	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	5.00	cum	4921.70	24608.50
b)	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	47.00	cum	3920.65	184270.55
c)	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	114.00	cum	3672.80	418699.20
2.02	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 etc. up to floor five level, excluding the cost of centering, shuttering and finishing:				
a)	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	5.00	cum	5822.15	29110.75
2.03	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5mm nominal size).	47.00	sqm	220.60	10368.20
2.04	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer specification.	12.00	per 50 kg cement	44.36	532.32
2.05	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.	47.00	sqm	108.75	5111.25

	Description Of Item		E	BOQ for Civil Work	
Item No		Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
	Making plinth protection 50 mm 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 finishing the top smooth.				
		141.00	sqm	378.95	53431.95

			BOQ for Civil Work			
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
3.00	REINFORCED CEMENT CONCRETE					
3.01	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).					
a)	All works upto plinth level	172.00	cum	5704.45	981165.4	
b)	All work above plinth level upto floor V level	326.00	cum	6353.00	2071078.0	
3.02	Centering and shuttering including strutting, propping etc. and removal of form for:					
a)	Foundations, footings, bases of columns, etc. for mass concrete.	143.00	sqm	186.40	26655.2	
b)	Suspended floors, roofs, landings, balconies and access platform.	1155.00	sqm	371.80	429429.0	
c)	Shelves (Cast in situ)	3.00	sqm	371.80	1115.4	
d)	lintels, beams, plinth beams. girders. bressumers and cantilevers.	1541.00	sqm	309.80	477401.8	
e)	Columns, Pillars, Piers, Abutments, Posts and Struts.	585.00	sqm	423.00	247455.0	
f)	Stairs, (excluding landings) except spiral-staircases	9.00	Sqm	375.65	3380.8	
g)	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like.	10.00	sqm	186.40	1864.0	
h)	Extra for shuttering in circular work for		•			
i)	columns	10.00	Sqm	84.60	846.0	
ii)	Beams	10.00	sqm	61.96	619.6	

		BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR		
1	2	3	4	5	6		
3.03	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)						
a)	Suspended floors, <i>roofs,</i> landings, beams and balconies (Plan area to be measured).	3361.00	sqm	145.60	489361.60		
3.04	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.						
a)	Thermo-Mechanically Treated bars						
i)	At all levels	71564.00	Kg	66.50	4759006.00		
3.05	Add for using extra cement in the items of design mix over and above the specified cement content therein.						
		100.00	Qtl	619.65	61965.00		
	Total				9551342.85		

			BOQ for Civil Work		
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
4.00	BRICK WORK				
4.01	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
a)	Cement mortar 1:6 (1 cement: 6 coarse sand)	47.00	cum	4646.50	218385.5
4.02	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
a)	Cement mortar 1:6 (1 cement: 6 coarse sand)	192.00	cum	5124.05	983817.6
4.03	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :				
a)	cement mortar 1:4 (1 cement: 4 coarse sand)	10.00	sqm	574.70	5747.0
4.04	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
a)	Cement mortar 1:4 (1 cement :4 coarse sand)	74.00	sqm	641.30	47456.2
4.05	Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry (with F.P.S. bricks).				
		74.00	sqm	69.50	5143.0
4.06	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine				
	sand).	155.00	Metre	38.55	5975.2
	Total				1266524.5

			BOQ for Civil Work			
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
5.00	DOORS, WINDOWS AND FITTINGS					
5.01	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) :					
a)	For fixed portion					
i)	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	1252.00	kg	380.30	476135.6	
b)	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).					
i)	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	636.00	kg	380.30	241870.8	
5.02	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.					
a)	Pre-laminated particle board with decorative lamination on both sides.	2.00	Sqm	1066.00	2132.0	

				BOQ for Civil Work	
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
5.03	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) :				
a)	With float glass panes of 5.50 mm thickness	126.00	sqm	1009.00	127134.00
5.04	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.				
a)	With brass cover plate minimum 1.25 mm thickness	3.00	each	2194.30	6582.90
5.05	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 :				
a)	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	35.00	sqm	1684.75	58966.25
5.06	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of shutters (over all area of door shutter to be measured).	33.00	sqm	348.45	11498.85
5.07	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :				
a)	Rectangular or square.	17.00	sqm	133.55	2270.35

		BOQ for Civil Work				
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
5.08	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).	0.00		5.00		
	excluding portion inside repate shall be measured).	2.00	sqm	5.80	11.6	
5.09	Providing glass panes, with wooden fillets wherever necessary.					
a)	Float glass panes of thickness 4 mm	1.00	Sqm	825.95	825.95	
5.10	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					
a)	1.0 mm thick.	66.00	sqm	663.20	43771.20	
5.11	Providing and fixing Aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI:3564, embossed on the body,door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.3					
		9.00	each	737.35	6636.15	
5.12	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:					
a)	300x16 mm	1.00	each	215.30	215.30	
b)	250x16 mm	17.00	each	180.45	3067.65	
5.13	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:					
a)	250x10 mm	100.00	each	90.65	9065.00	
b)	150x10 mm	98.00	each	62.75	6149.50	

			E	BOQ for Civil Work	
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
5.14	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 wilh necessary screws etc. complete :				
a)	125 mm	36.00	each	66.95	2410.2
b)	100 mm	2.00	each	52.80	105.60
5.15	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.				
a)	Twin rubber stopper	18.00	each	80.20	1443.6
5.16	Providing and fixing bright finished brass 100 mm 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.	2.00	each	754.45	1508.90
		2.00	each	7 54.45	1500.9
5.17	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.				
a)	255 X 19 mm	166.00	each	262.30	43541.80
5.18	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.				
a)	Powder coated minimum thickness 50 micron aluminium tubular handle bar.	4.00	each	507.90	2031.6
5.19	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.				
a)	Powder coated minimum thickness 50 micron aluminium.	84.00	each	52.40	4401.6
5.20	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of Engineer-in-				
a)	Powder coated minimum thickness 50 micron aluminium	3.00	each	67.50	202.50

Pro	Project Name: Construction of Drug Warehouse at various locations in Chattisgarh (Area: 1052 Sqm)									
				BOQ for Civil Wor	k					
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR					
1	2	3	4	5	6					
	Total				1051978.90					

			BOQ for Civil Work			
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
6.00	Steel Works					
6.01	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming cost with approved steel primer all complete.					
a)	Fixed to steel windows by welding.	2032.00	kg	103.15	209600.80	
6.02	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railng and staircase railing including applying a priming coat of approved steel primer.					
a)	M.S. tube.	53.00	Kg	97.45	5164.85	
6.03	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.					
a)	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	100.00	Kg	86.50	8650.00	
6.04	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.					
a)	80x1.25 mm M.S. laths with 1.25 mm thick top cover	31.00	sqm	2044.15	63368.65	
6.05	Providing and fixing ball bearing for rolling shutters.	11.00	each	436.45	4800.95	
	Total				291585.25	

	Description Of Item		BOQ for Civil Work			
Item No		Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
7.00	Flooring					
7.01	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc.complete.	854.00	sqm	480.10	410005.40	
7.02	Cement plaster skirting (up to 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.					
a)	18 mm thick.	23.00	sqm	299.20	6881.60	
7.03	Providing and fixing glass strips in joints of <i>terrazo</i> / cement concrete floors.					
a)	40 mm wide and 4 mm thick.	1010.00	Metre	33.80	34138.00	
7.04	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) :					
a)	25 mm thick.	172.00	sqm	1071.70	184332.40	
7.05	Kota stone slabs 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 slabs, including rubbing and polishing					
	complete.	20.00	sqm	1100.85	22017.0	

			BOQ for Civil Work			
tem No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
7.06	Providing and fixing Ist 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.					
		107.00	sqm	793.60	84915.2	
7.07	Providing and laying rectified Glazed Ceramic floor tiles 300x300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc.,					
	complete.	20.00	sqm	1023.15	20463.0	
7.08	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's 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) including grouting the joints with white cement and matching pigments etc., complete					
a)	Size of Tile 600x600 mm	81.00	sqm	1402.55	113606.5	
7.09	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), including grouting the joint with white cement & matching pigments etc. complete.					
a)	Size of Tile 600x600 mm	6.00	sqm	1411.45	8468.7	

				BOQ for Civil Work	
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
7.10	Providing and fixing 18mm 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 of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, induding rubbing, curing, moulding and polishing to edge to give high gloss finish etc. complete at all levels				
a)	Granite of any colour and shade				
i)	Area of slab upto 0.50 sqm	2.00	sqm	3724.70	7449.4
ii)	Area of slab over 0.50 sqm.	3.00	sqm	3769.70	11309.1
7.11	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc complete as per design approved by Engineer-in-Charge				
a)	Granite work.	4.00	metre	210.65	842.6
7.12	Extra for fixing marble /granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive including cleaning etc. complete.				
		4.00	metre	225.75	903.0
7.13	Extra for providing opening of required size & shape for wash basins/ kitchen sink in kitchen platform, vanity counters and similar location in marble/Granite/stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges etc.				
	complete.	3.00	Nos	350.80	1052.4
7.14	Chequered terrazo tiles 22 mm thick with graded marble chips of size up to 6 mm in floors jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :				
a)	Medium shade using 50% white cement 50% ordinary cement	10.00	sqm	876.65	8766.5

Pro	Project Name: Construction of Drug Warehouse at various locations in Chattisgarh (Area: 1052 Sqm)										
				BOQ for Civil Wor	k						
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR						
1	2	3	4	5	6						
	Total				915150.85						

				BOQ for Civil Work	
tem No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
8.00	CEILING & ROOFING				
8.01	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.				
2)	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 :				
a)	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	1285.00	sqm	882.60	1134141.0
	Total				1134141

			BOQ for Civil Work			
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
9.00	Finishing					
9.01	12 mm cement plaster of mix:					
a)	1:6 (1 cement: 6 fine sand)	680.00	sqm	133.85	91018.0	
9.02	15 mm cement plaster on the rough side of single or half brick wall of mix:					
a)	1:6 (1 cement: 6 fine sand)	1124.00	sqm	154.70	173882.8	
9.03	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 6mm thick cement plaster 1:6 (1 cement: 6 fine sand).	1263.00	sqm	215.40	272050.20	
9.04	6 mm cement plaster of mix:					
a)	1:3 (1 cement: 3 fine sand)	1577.00	sqm	120.35	189791.9	
9.05	Finishing walls with Acrylic Smooth exterior paint of required shade:					
a)	New work (Two or more coat applied @ 1.67 <i>ltr/10</i> sqm over and including base coat of water proofing cement paint applied @ 2.20 kgl10 sqm).	272.00	sqm	78.10	21243.2	
9.06	Finishing walls with textured exterior paint of required shade:					
a)	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/1 0 sqm.	1203.00	sqm	127.10	152901.30	
9.07	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:					
a)	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	297.00	sqm	92.75	27546.7	
9.08	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	00.40.00		25.40	260384.6	
	complete.	3049.00	sqm	85.40	2	

	Description Of Item			BOQ for Civil Work	
Item No		Total Qty	Unit	Unit DSR 13 Rate	Amount DSR
1	2	3	4	5	6
9.09	Distempering with 1st quality acrylic distemper, 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.				
a)	Two coats	3099.00	sqm	41.75	129383.25
9.10	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
a)	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	3099.00	sqm	31.55	97773.45
	Total				1415975.50

			BOQ for Civil Work			
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR	
1	2	3	4	5	6	
10.00	ROAD WORK AND DEVELOPEMENT					
10.01	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm. depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50 metres.					
		700.00	SQM	73.55	51485.00	
10.02	Providing and laying C.C. pavement of mix M25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge.					
	(The panel shuttering work shall be paid for separately).	139.00	Cum	6248.00	868472.0	
10.03	Providing and laying in position bitumen hot sealing compound for expansion joints etc					
a)	Using grade 'A' sealing compound.	2500.00	Per cm depth per cm width per m length	1.90	4750.00	
10.04	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction and of approved size and design/ shape laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine					
	sand etc. all complete as per the direction of Engineer-in-charge.	200.00	sqm	557.50	111500.0	

				BOQ for Civil Work	
Item No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
10.05	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 Engineer-in- charge.				
		80.00	cum	3003.10	240248.00
10.06	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement 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).	19.00	Cum	5236.95	99502.05
10.07	Trenching in ordinary soil upto a depth of 60cm including removal and stacking of serviceable materials and then disposing of by spreading and neatly levelling with in a lead of 50m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).				
		90.00	Cum	37.10	3339.00
10.08	Supplying and stacking of well decayed cow dung manure at site including royalty and carriage upto 1 km (Cow dung manure				
	measured in stacks will reduced by 8% for Payment).	30.00	Cum	239.20	7176.0

				BOQ for Civil Work	
tem No	Description Of Item	Total Qty	Unit	DSR 13 Rate	Amount DSR
1	2	3	4	5	6
10.09	Rough dressing the trenched ground including breaking clods & Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.				
		300.00	Sqm	3.05	914.5
10.10	Spreading of sludge, dump manure or/and good earth in required thickness as per direction of office-in charge (Cost of sludge, dump manure or/ and good earth to be paid separately).				
		30.00	Cum	25.15	754.50
10.11	Fine dressing of the ground	300.00	Sqm	1.75	525.00
10.12	Grassing with selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the good earth shall be paid for separately).				
a)	With grass Turf	300.00	Sqm.	6.34	1902.00
10.13	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately):				
a)	Holes 1.2 m dia and 1.2 m deep.	10.00	Each	211.90	2119.00
b)	Holes 60 cm dia, and 60 cm deep.	10.00	Each	90.90	909.00
10.14	Supplying and stacking of good earth at site including royalty. (Earth				
	measured in stacks will be reduced by 20% for payment)	549.00	Cum	308.35	169284.15
	Sub Total				1562880.25
		End of (CIVIL BOQ		

ABSTRACT OF COST PHE

Name of Work: Proposed Drugwarehouse at various locations in Chattisgarh under NRHM Project

S.No.	DESCRIPTION	DSR-2013 Amount (Rs)	Market Amount(Rs)
Α	PLUMBING WORK		
1.00	SANITARY FIXTURES	56,224.65	17,685.00
2.00	SOIL, WASTE AND VENT PIPES	57,463.05	82,241.00
3.00	WATER SUPPLY	1,54,293.85	9,283.00
4.00	SEWERAGE AND DRAINAGE	1,37,145.15	2,10,500.00
5.00	EARTH WORK	13,334.50	0.00
6.00	RAIN WATER PIPING	28,281.75	68,439.60
7.00	BOREWELL	0.00	2,25,314.30
8.00	Miscellaneous	0.00	50,000.00
9.00	FIRE FIGHTING	0.00	29,484.00
	TOTAL	4,46,742.95	6,92,946.90

	Design & Engineering Department						
	Name of Work:BOQ of Proposed Drugwarehouse at various loo	cations ir	Chattisgarh	under NRHM I	Project		
SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
1.00	SANITARY FIXTURES						
1.01	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :						
a)	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	each	1.00	3,265.25	3,265.25		
1.02	 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 : 						
a)	W.C. pan with ISI marked black solid plastic seat and lid	each	3.00	4,613.05	13,839.15	, ,	

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
1.03	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 :						
a)	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	each	6.00	1,699.95	10,199.70		
1.04	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 :						
a)	Kitchen sink with drain board						
a i)	510x1040 mm bowl depth 250 mm	each	1.00	6,975.40	6,975.40		
1.05	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 :						
a)	Size 600x450x200 mm	each	1.00	2,992.45	2,992.45		
1.06	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 :						
a)	Rectangular shape 453x357 mm	each	1.00	700.30	700.30		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
b)	Providing and fixing full size branded mirrors of 5mm thick float glass (of approved quality) complete with 6mm thick ply backing fixed to wall over suitable hardwood base frame complete with 32mmx19mm decorative teakwood moulding all around duly polished as per drawings and as directed.	sq.m.	1.00			5,000.00	5,000.00
1.07	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	each	1.00	522.2	522.20		
1.08	Providing and fixing toilet paper holder :						
a)	Vitreous china	each	1.00	322.15	322.15		
1.09	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	each	4.00	181.75	727.00		
1.11	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.	each	1.00	16,681.05	16,681.05		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
1.12	Providing and fixing water Jet Nozzle with hose pipe and haif turn CP brass angle valve to be fitted with seat cover of european water closet complete in all respect of approved quality	Each	3.00			1,369.00	4,107.00
1.13	Providing and fixing soap tray with CP brass lid and brackets fixed to wooden cleats with CP brass screws.(Jaquar model no.1131 or equivalent model of other approved make).	Each	1.00			508.00	508.00
1.14	Providing and fixing CP brass towel rail size of 600x20 mm of approved make complete with CP brackets fixed to wooden cleats with CP brass screws(Jaquar model no.1111 or equivalent model of other approved make)	Each	3.00			990.00	2,970.00
1.15	Providing and fixing brass coat hook of approved quality and make complete with material of fixing	Each	2.00			300.00	600.00
1.16	Extra for providing and fixing white vitreous china oval shape wash basin in place of normal wash basin with CI/MS brackets painted white, 15 mm CP brass pillar taps, 32 mm CP brass waste of standard pattern, including painting of fittings and brackets cutting and making good the walls wherever required						
a)	Counter top oval shape wash basin size 550x470 mm with centre tap hole, single 15 mm CP brass swan neck type pillar tap	Each	1.00			1,332.00	1,332.00
1.17	Providing and fixing stainless steel grab bar 25mm dia of required length minimum 750 mm with PVC cleats, C.P. brass screws etc. complete.	Each	1.00			668.00	668.00

	Name of Work:BOQ of Proposed Drugwarehouse at various locations in Chattisgarh under NRHM Project								
SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount		
1	2	3	4	5	6	7	8		
1.18	Providing and fixing vitreous china division plate of size 960x165x325 mm of approved make and design including brass cleats,C.P. brass screws all fittings etc. complete in all respect	Each	1.00			2,500.00	2,500.00		
	SubTotal(Sanitary Fixtures)				56,224.65	5	17,685.0		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
2.00	SOIL, WASTE AND VENT PIPES						
2.01	Providing and fixing soil, waste and vent pipes.						
a)	100 mm dia.		"				
i)	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	Metre	30.00	952.50	28,575.00		
b)	150 mm dia						
	Centrifugally cast (spun) iron socketed pipe as per IS:3989	Metre	20.00			2,100.00	42,000.00
2.02	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 20mm nominal size) including cost of cutting holes and making good the walls etc.						
a)	for 100 mm dia. pipe	Each	1.00	140.65	140.65		
2.03	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.						
a)	100 mm						
a i)	Sand cast iron S&S as per IS-3989	Each	6.00	384.45	2,306.70		
	Providing and fixing plain bend of required degree.						
a)	100 mm						
a i)	Sand cast iron S&S as per IS:3989	Each	9.00	334.50	3,010.50		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
2.05	Providing and fixing heel rest sanitary bend.						
a)	100 mm dia						
a.i)	sand cast iron S&S as per IS-3989	Each	1.00	370.50	370.50		
2.06	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete.						
a)	100x100x100mm						
a.i)	sand cast iron S&S as per IS-3989	Each	1.00	622.55	622.55		
2.07	Providing and fixing door piece, insertion rubber washer 3mm thick, bolts and nuts complete						
a)	100 mm						
a.ii)	sand cast iron S&S as per IS-3989	Each	2.00	512.20	1,024.40		
2.08	Providing and fixing terminal guard.						
a)	100 mm	Each	1.00	433.20	433.20		
a.i)	sand cast iron S&S as per IS-3989						
2.09	Providing and fixing collar						
a)	100 mm						
a.i)	Sand cast iron S&S as per IS-3989	Each	2.00	317.05	634.10		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
2.10	Providing lead caulked joints to sand cast iron /centrifugally cast (spun) iron pipes and fittings of diameter:						
a)	100 mm	Each	40.00	232.30	9,292.00		
2.11	Providing Drip seal joint of approved make for the sand cast iron/centrifugaly cast iron pipes where the workability of lead joint can be effected due to space constraints.						
a)	100 mm	Each	20.00			100.00	2,000.00
2.12	Providing and fixing M.S. stays and clamps for sand cast iron / centrifugally cast (spun) iron pipes of diameter :						
a)	100 mm	Each	1.00	67.35	67.35		
2.13	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:						
a)	100 mm inlet and 100 mm outlet (P trap with 50 mm water seal)						
a i)	Sand cast iron S&S as per IS-3989	Each	10.00	938.05	9,380.50		
2.14	Cutting chases in brick masonary walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement:3 coarse sand:6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1 cement: 4 coarse sand):						

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a)	100 mm diameter pipe	Metre	2.00	302.60	605.20		
2.15	Painting sand cast iron / centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint off any colour such as chocolate, grey, or buff etc. over a coat of primer (of approved quality) for new work:						
a)	100 mm diameter pipe	Metre	4.00	33.85	135.40		
2.16	Providing and fixing floor drain points formed out of 65/50 mm dia GI elbow, including with 75mm dia Stainless Steel grating with frame, embedded in floor, all complete as directed.	Each	2.00			300.00	600.00
2.17	Providing and fixing C.P. brass bottle trap for wash basin including CP waste fittings complete 32 mm dia complete in all respect of approved quality.	Each	6.00			739.00	4,434.00
2.18	Providing and fixing C.P. brass bottle trap for sinks & urinal basin including CP waste fittings complete 40 mm dia complete in all respect of approved quality.	Each	2.00			744.00	1,488.00
2.19	Providing and laying cement concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20 mm nominal size) 80 mm thick all-round the SCI/centrifugally S&S pipe diameter.						
a)	100 mm dia	Metre	30.00			295.90	8,877.00

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
2.20	Providing and fixing dash fastner made of rust proof plated steel for holding the soil/waste supply pipes complete in all respect						
a)	Dash fastner for pipe more than 25 mm dia to 150 mm dia pipe of required size but not less than size 10 mm dia and 50 mm long minimum & shall be capable of taking 6 tonnes load and also include the supporting threaded rod of 8 mm dia and length 450 mm,the support MS structure angles etc. will be paid as per weight separately/approved steel structures support as per drawing.	Each	2.00			200.00	400.00
2.21	Providing and fixing floor clean out plug consist of CI bend & GI socket heavy class with Brass cap & key for opening male threaded cap etc. including lead caulked to CI pipescomplete in all respects as per drawing/ sample approved by Engineer -in - ChargeFCO (floor clean out plug shall be flushed with floor finish						
	100 mm dia/150 mm dia	Each	1.00			1,800.00	1,800.00
2.22	Providing and fixing clean out plug consist of GI socket/nipple heavy class with threaded pludge for opening male threaded cap etc. including lead caulked to CI pipescomplete in all respects as per drawing/ sample approved by Engineer -in -Charge						
	100 mm dia/150 mm dia	Each	1.00			1,500.00	1,500.00

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
2.23	Providing and fixing G.I EXTENSION PIECE for 100 mm dia floor trap formed out of main pipe(Type A) with multiple side inlets, suitable for various dia pipes, side connections, including all fixtures and fittings as per site conditions and as per standard details and water tight sealing of joints and area surrounding the grating and as directed.	Each	8.00			574.00	4,592.00
2.24	Providing and fixing cPVC./GI pipes complete with cPVC /GI fittings including painting, jointing, testing the cost of cutting the chases and making good the same for waste water disposal complete as per direction of engineer incharge.						
a)	32 mm dia nominal bore (Wash basin to floor trap/floor drain)	Metre	8.00			390.00	3,120.00
b)	40 mm dia nominal bore (Sink, Urinal to floor trap)	Metre	2.00			450.00	900.00
c)	50 mm dia nominal bore (Floor Drain to Floor Trap)	Metre	3.00			560.00	1,680.00
2.25	Providing & fixing SS floor trap grating 143x143x5mm thick screwable with SS fixed frame of 150x150 mm size as per approved make & model	each	10.00			780.00	7,800.00
2.26	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.						
a)	In gratings,frames,guard bar,ladder,railings,brackets,gates and similar works .	kg	10.00	86.50	865.00		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
2.27	Providing and fixing WC connector socket(for vitreous china & CI pipe) of EDPM good quality with polypropelene body 100x150/100x250 of approved quality and make complete in all respect.	Each	3.00			350.0	1,050.00
	SUB TOTAL(SOIL, WASTE AND VENT PIPES)				57,463.05		82,241.00

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.00	WATER SUPPLY						
3.01	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.						
	Internal work – Exposed on wall						
a)	15 mm nominal outer dia pipes	Metre	5.00	155.80	779.00		
b)	20 mm nominal outer dia pipes	Metre	30.00	182.15	5,464.50		
c)	25 mm nominal outer dia pipes	Metre	25.00	222.90	5,572.50		
d)	32 mm nominal outer dia pipes	Metre	5.00	287.10	1,435.50		
e)	40 mm nominal outer dia pipes	Metre	2.00	395.60	791.20		
f)	50 mm nominal outer dia pipes	Metre		569.20			
3.02	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 work, including cutting chases and making good the walls etc.						

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a)	15 mm nominal outer dia pipes	Metre	40.00	254.95	10,198.00		
o)	20 mm nominal outer dia pipes	Metre	25.00	281.35	7,033.75		
c)	25 mm nominal outer dia pipes	Metre	15.00	336.25	5,043.75		
d)	32 mm nominal outer dia pipes	Metre	5.00	407.40	2,037.00		
3.03	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 cement,trenching,refilling and testing of joints complete as per direction of Engineer in Charge.						
	External Work						
a)	50 mm nominal outer dia pipes	Metre	10.00	517.20	5,172.00		
b)	25 mm nominal outer dia pipes	Metre	25.00	203.10	5,077.50		
3.04	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :						
a)	50 to 80 mm nominal bore	Each	1.00	722.0	721.95		
3.05	providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)						
a)	25 mm nominal bore	Each	2.00	427.80	855.60		
)	32 mm nominal bore	Each	2.00	500.35	1,000.70		
c)	40 mm nominal bore	Each	1.00	584.20	584.20		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
d)	50 mm nominal bore	Each	1.00	749.40	749.40		
3.06	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main						
a)	50 mm nominal bore	Each	1.00			600.00	600.0
	Providing and fixing unplasticised PVC connection pipe with brass unions:						
a) a i)	45 cm length 15 mm nominal bore	Each	11.00	67.35	740.85		
		Laon	11.00	07.00	140.00		
3.08	Constructing masonary 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 100x100x75 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) necessary excavation foundation concrete 1:5:10 (1 cenment:5 fine sand: 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design						
a)	With F.P.s bricks	Each	1.00	1,070.30	1,070.30		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.09	Constructing masonary chamber 60x60x75 cm, inside in brick work in cement mortar 1:4 (1 cement: 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement: 2 coarse sand:4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cenment:5 fine sand: 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design						
a)	With F.P.s bricks	each	1.00	6,441.05	6,441.05	j	
3.10	Painting CPVC/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						
a)	15 mm nominal outer dia pipes	Metre	5.00	8.60	43.00)	
)	20 mm nominal outer dia pipes	Metre	30.00		303.00		
)	25 mm nominal outer dia pipes	Metre	25.00		333.75		
)	32 mm nominal outer dia pipes	Metre	5.00		78.75		
)	40 mm nominal outer dia pipes	Metre	2.00		37.40		
,	50 mm nominal outer dia pipes	Metre		22.00			
3.11	Painting G.I. /CPVC pipes and fittings with two coats of anti- corrosive bitumastic paint of approved quality.						
a)	50 mm diameter pipe	Metre	10.00	12.65	126.50)	
)	25 mm diameter pipe	Metre	25.00	7.90	197.50		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.12	Providing and filling sand of grading zone V or coarser grade all- round the G.I./CPVC pipes in external work						
a)	50 mm diameter pipe	Metre	10.00	69.05	690.50		
b)	25 mm diameter pipe	Metre	25.00	108.95	2,723.75		
3.13	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 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.						
	Treated water Tank and Untreated water tank	per litre	5,000.00	6.3	31,500.00		
3.14	Providing and fixing C.P brass bib cock of approved quality confirming to IS:8931.						
a)	15 mm nominal bore	Each	3.00	458.40	1,375.20		
3.15	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.						
a)	15 mm nominal bore	Each	4.00	795.20	3,180.80		
3.16	Providing and fixing C.P. brass angle valve for basin mixer and geyser/cisterns points of approved quality conforming to IS:8931.						
a)	15 mm nominal bore	Each	11.00	506.70	5,573.70		

SI.	Description of Item	Unit	Total qty.	DSR 2013	Amount	Market Rate	Market
No.		_		Rate (Rs)	DSR-13		Amount
1	2	3	4	5	6	7	8
3.18	Providing and fixing PTMT ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./H.P.H.D. plastic ball.						
a)	40 mm nominal bore, 206 mm long weighin not less than 690 gms	Each	2.00	969.65	1,939.30		
3.19	Cutting holes upto 30x30 cm in walls including making good the same						
a)	with common burnt clay F.P.S.(non modular) bricks	Each	10.00	196.40	1,964.00		
3.20	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement:2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof	Each	10.00	176.30	1,763.00		
3.21	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 10 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.						
a)	15 mm diameter	Each	2.00			240.00	480.00
b)	20 mm diameter	Each	6.00			332.00	1,992.00
3.22	Providing and fixing mosquito proof coupling of approved Municipal design for scour and vent pipes for RCC overhead tanks complete in all respects						
a)	20 mm diameter	Each	1.00			44.80	44.80
b)	25 mm diameter	Each	2.00			50.00	100.00

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
c)	32 mm diameter	Each	1.00			55.00	55.00
d)	40 mm diameter	Each	1.00			60.20	60.20
3.23	Providing and fixing C.P. brass lab sink pillar tap with long elbow operating lever handle of approved model and make complete in all respect (Aqua bath, Jaquar, Marc)	Each	2.00			2,525.50	5,051.00
3.26	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :						
a)	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	each	1.00	6441.05	6,441.05	5	
3.27	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :						
a)	20 mm diameter pipe	metre	20.00	6.15	123.00		
d)	80 mm diameter pipe	metre	30.00	18.05	541.50)	

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.28	Providing and filling sand of grading zone V or coarser grade all- round the G.I./CPVC pipes in external work						
a)	20 mm diameter pipe	metre	20.00	62.40	1,248.00		
b)	80 mm diameter pipe	metre	30.00	112.30	3,369.00		
3.29	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required:						
a)	20 mm nominal bore	each	2.00	355.2	710.40		
b)	80 mm diameter pipe	each	2.00	956.60	1,913.20		
3.30	Providing and fixing C.I. double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (The tail pieces, tapers etc. if required will be paid separately):						
a)	50 mm dia	each	1.00	4773.30	4,773.30		
3.31	Providing and fixing garden hydrant of approved quality and make complete in all respect	each	2.00			450.0	900.0
3.32	Providing and fixing G.I. pipes class B complete with G.I. fittings including trenching and refilling etc.						
a)	20 mm dia nominal bore	Metre	20.00	186.25	3,725.00		
b)	80 mm dia nominal bore	Metre	30.00	628.35	18,850.50		
	SUB TOTAL(Water Supply)				1,54,293.85		9,283.00

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
4.00	SEWARAGE & DRAINAGE						
4.01	Providing laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the pro-portion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete.						
a)	100 mm diameter	Metre	6.00	197.60	1,185.60		
4.02	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:						
a)	100 mm diameter S.W. pipe/RCC NP2	Metre	6.00	543.55	3,261.30		
b)	150 mm diameter S.W. pipe/RCC NP2	Metre	50.00	664.80	33,240.00		
4.03	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 300x300 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:.						
a)	150x100mm size P type			1546.95			
a.i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	3.00	1,520.90	4,562.70		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
4.04	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						
a)	150 mm dia R.C.C. pipe	Metre	50.00	340.35	17,017.50		
4.05	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1cement : 2 coarse sand : 4graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 (1cement : 4 coarse sand : 8graded stone aggregate 40 mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design.						
a)	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):						
a i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	4.00	8,062.70	32,250.80		
4.06	Extra depth for manholes						
a)	Size 90 x 80 cm						
a i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	1.00	5,481.40	5,481.40		

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
4.07	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement: 3 coarse sand: 6 graded stone aggregate 40mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design:						
a)	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg., fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) :						
a i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	1.00	8,241.55	8,241.55		
4.08	Extra depth for circular type manhole 0.91m dia (at bottom) with beyond 0.91m to 1.67 m						
ı)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	0.50	4,698.40	2,349.20		

61. 10.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
4.09	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 mm x 25 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 specification 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	10.00	295.20	2,952.00		
4.10	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 cemnet 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 (including obtaining approval from DJB/Municipal corporation)						
a)	For pipes 100 to 250 mm dia	Each	1.00	330.50	330.50		
4.11	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 :						

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	6.00	3,774.95	22,649.70		
4.12	Constructing brick masonry open surface drain including factory made perforated RCC cover with edge protected with MS plate of 3 mm thick with bricks of class designation 75 in cement mortar 1:4 (1 cement : 4 fine sand) including earth excavation, 10cm thick bed concrete 1:5:10 (1 cement: 5 fine sand :10 graded stone aggregate 40mm nominal size) and 25mm thick cement concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 12.5 mm nominal size) for filling hunches including 12mm cement plaster 1:4 (1 cement:4 coarse sand) with a floating coat of neat cement inside the drain, its top and exposed side including disposal of surplus earth complete as per standard design.						
	25cm drain 30cm average depth						
a)	With F.P.S bricks	Metre	100.00			1,800.00	1,

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
4.13	Constructing septic tank, of size 1.8mx1.1mx2.5m approx. height(Height to be fixed as per site requirement i.e. below invert level of last manhole (1.2 m water depth), in brick work 1:6 cement mortar with wall thickness 230 mm upto 1.2 m & 345 mm more than 1.2 m and 300 mm (minimum) base slab all as per detail design including all excavation, 10 cm thick bed concrete in 1:4:8 (one cement: 4 fine sand: 8 stone aggregate 40 mm) cement plaster 1:3 (one cement :3 coarse sand) with a floating coat of neat cement, top slab in RCC M20, including centring, shuttering and steel work, also providing and fixing two nos.D.I. manhole cover & frame of size 560mm dia.(medium duty) and cost of 75mm dia C.I. vent pipe upto 2 m height with C.I. Ventilating Cowl and providing & fixing 150 mm dia SW tees for inlet and outlet, C.I Rungs@300 mm c/c all complete in every respect as per drawing and as directed. The agency has to provide the shop drawings (structure and PHE) as per IS requirements and obtain the approval from HSCC.	Each	1.00			30500.0	30,500.00
4.14	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.						
a)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	2.00	1811.5	3,622.90		
	SUB TOTAL(SEWERAGE AND DRAINAGE)				1,37,145.15	•	2,10,500.00

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
5.00	EARTH WORK						
5. 01	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means in foundation,trenches or drains(not exceeding 1.5m in width or 10 sqm on plan) ,including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m						
a)	All kinds of soil	cum	10.00	146.5	1,465.00		
5. 02	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 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:						
a)	All kinds of soil						
i)	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	metre	60.00	192.8	11,565.00		
5.03	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m	cum	3.00	101.50	304.50		
	SUB TOTAL(EARTH WORK)				13,334.50		

	Name of Work:BOQ of Proposed Drugwarehouse at various lo	cations ir	n Chattisgarh	under NRHM I	Project		
SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
6.00	RAIN WATER PIPING						
6.01	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	Each	10.00	37.25	372.50		
6.02	Providing and fixing rain water ,soil, waste and vent pipes.						
a)	100 mm dia.						
a i)	Centrifugally cast (spun) iron socketed pipe as per IS:3989	Metre	12.00	952.50	11,430.00		
b)	150 mm dia pipe as per IS:3989	Metre	25.00			2,100.00	52500.0
0.03	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 20mm nominal size) including cost of cutting holes and making good the walls etc.						
a)	for 100 mm dia. pipe	Each	18.00	140.65	2,531.70		
b)	for 150 mm dia pipe	Each	6.00			131.6	789.6
6.04	Providing and fixing plain bend of required degree.						
a)	100 mm						
a ii)	Sand cast iron S&S as per IS:3989	Each	6.00	334.50	2,007.00		
b)	150 mm	Each	3.00			1065.0	3195.0
6.05	Providing and fixing heel rest sanitary bend.						
a)	100 mm dia						
a.ii)	sand cast iron S&S as per IS-3989	Each	6.00	370.5	2,223.00		
b)	150 mm dia	Each	3.00			1211.0	3633.0

	Name of Work:BOQ of Proposed Drugwarehouse at various lo	ocations ir	n Chattisgarh	under NRHM F	Project		
SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
6.06	Providing and fixing collar						
a)	100 mm						
a.ii)	Sand cast iron S&S as per IS-3989	Each	6.00	317.05	1,902.30		
c)	150 mm	Each	3.00			930.0	2790.0
6.07	Providing lead caulked joints to sand cast iron /centrifugally cast (spun) iron pipes and fittings of diameter:						
a)	100 mm	Each	30.00	232.30	6,969.00		
b)	150 mm	Each	12.00			401.0	4812.0
6.08	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:						
a)	100 mm diameter pipe	Metre	25.00	33.85	846.25		
c)	150 mm diameter pipe	Metre	12.00			60.0	720.0
	SUB TOTAL(Rain Water pipe & fitting)				28,281.75		68,439.60

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
7.00	BOREWELL(1 No)						
7.01	Drilling by suitable rig a suit site condition from ground level in all kind of soils and weathered rock including boulders (excluding rock) diameter of bore 150mm including carry out hydrological survey report before boring & getting the approval based on Hydrogeological survey before start of the work. Also getting approval from local authority if any required						
a)	0-30m	metre	30.00			150.0	4500.0
b)	30-60m	metre	30.00			250.0	7500.0
c)	60-90m	metre	30.00			350.0	10500.0
7.02	Extra additional for drilling in Ordinary Rock if any found	metre	10.00			1200.0	12000.0
7.04	Providing and lowering GI casing/housing pipe 100mm dia. with wall thickness class -B standard design.	metre	30.00			800.0	24000.0
7.05	Providing & fixing GI screen/slotted pipe with 1.5 mm to 3mm (slots as per strata condition) including sockets of standard design						
a)	50 mm dia GI socketed pipe	metre	40.00			650.0	26000.0
7.06	Providing and fixing in position threaded iron cap with locking arrangement of approved design to prevent foreign matters getting into the bore-hole as required.	Each	1.00			5500.0	5500.0
7.07	Providing and laying rounded pea gravel washed & served 3 to 6 mm nominal boreas per relevant ISI code.	Cum	2.00			2000.0	4000.0
7.08	Providing and laying cement concrete 1:2:4 mix for sanitary sealing of well at top.	Cum	1.00			3500.0	3500.0

				Name of Work:BOQ of Proposed Drugwarehouse at various locations in Chattisgarh under NRHM Project									
escription of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount							
2	3	4	5	6	7	8							
	2	Cription of Item Unit	Scription of ItemUnitTotal qty.234										

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
7.09	Supplying, lowering and fixing in position reducer ,MS bail plug with "U" hooks as per IS:2800-1964.	Each	1.00			1000.0	1000.0
7.10	Development of Tubewell including testing of yield depression & quality of water (for all parameters of potable water), contractor to obtain certificate for quality for water from Competent Authority approved by client or Engineer- In -Charge.						
a)	Development of Tube well by high capacity air compressor till the clear water discharge but not more than 100 hours.	per hour	40.00			300.0	12000.0
7.12	Providing and fixing brass full way valve with C.I. wheel of approved make, tested to a pressure of 21 kg/sqcm.						
a)	40 mm dia	Each	1.00			1106.3	1106.3
7.14	Providing & fixing G.I. pipes (heavy class)confirming to IS with special fittings in external works including earthwork ,excavationin all kinds of soil including ordinary rock,refilling, painting pipes & fitting complete in all respects.						
	40 mm dia	Metre	70.00			500.0	35000.0
7.15	Providing & filling sand of grading zone V or coarser grade all around GI pipe in external work						
	40 mm dia	Metre	70.00			75.0	5250.0

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
	Providing and installing submersible pump and electrical panel suitable for 6" dia casing of bore with SS/ Brass impeller, high tensile SS/ Brass shaft, copper wound squirrel cage wet type induction motor 2880 rpm, 415 V, 50 Hz,3 phase A.C. supply, conforming to ISS: 8034-1976, capacity 50-150 litre per minute at 30-60 m head along with a directly coupled submersible type squirrel cage electric induction 1 H.P(minimum). motor suitable for operation on 400 V, 3 phase, 50 c.p.s. A.C. supply, water lubricated bearings and provided with pivoted segment type thrust bearings to withstand non-vertical lead with minimum wear and tear and duly fitted with device to take up the expansion of water with heating of motor, including supply, testing and commissioning of elctrical panel from the same manufacturer, complete with all accessories in all respects.						
	including supplying laying and fixing water proof PVC insulated flat submersible cable 3 with end termination with its accessories. complete in all respect as required., fully automaticta starter, overload relay, contactor, Timer, Push Buttons and Auto-manual selector switch etc complete as required.	set	1.00			73458.0	73458.0
	SUBTOTAL (BOREWELL)						225314.3
8.0	0 Miscellaneous						
	 Providing the following brand new vehicle at any time for exclusive use of engineer during currency of contract. The number of vehicles and period shall be informed by the engineer as per requirement. The rate are inclusive of service of drivers, fuel, oil, consumable and maintenance etc complete. 						
a)	Indica or equivalent as required	Km	5,000.00			10.0	50000.
,	SUBTOTAL (Miscellaneous)		,				50000.

SI. No.	Description of Item	Unit	Total qty.	DSR 2013 Rate (Rs)	Amount DSR-13	Market Rate	Market Amount
1	2	3	4	5	6	7	8
9.00	FIRE FIGHTING						
9.01	Providing and fixing fire extinguisher of carbon dioxide type consisting of brand new high pressure steel cylinder bearing IS: 7285 mark and having the approval of controller of explosives Nagpur, wheel type valve bearing IS:3224/15683 mark internal discharge tube, 1 meter long high pressure discharge hose, non conducting horn, suspension bracket, fully charged bearing IS: making fixed to wall as directed.						
	4.5kg capacity cylinder	each	2.00			6,900.00	13,800.00
9.02	Providing and fixing 9 liters capacity fire extinguisher water type gas pressure conforming to IS marking, fixed to wall.IS:15683	each	2.00			1,642.00	3,284.00
9.03	Providing and fixing ABC type fire extinguishers complete in all respects. IS:15683 ISI marked						
	Capacity 6.0 Kg.	each	2.00			2,200.00	4,400.00
9.04	Providing and fixing ABC type automatic modular ceiling mounted type extinguisher with body powder coated 10 lts. Capacity min. 300 mm dia 68 degree centigrade bul temperature complete in all respect of approved make and model	each	1.00			8,000.00	8,000.00
	SUBTOTAL (FIRE FIGHTING)						29484.0
	Note: Based on the tender drawing the agency has to prepare the internal & external plumbing & fire fighting shop drawing and obtain the approval of the same before start of work						

HSCC

.No.	Description	Amount In Figure (In Rs.)
1	SUBHEAD 1 : DG SET & ACCESSORIES	996300
2	SUB HEAD 2:MV PANELS	456200
3	SUB HEAD 3- : MCB DISTRIBUTION BOARDS.	56156
4	SUB HEAD 4: WIRING	658275
5	SUB HEAD 5: LIGHT FIXTURE AND FANS	382549
6	SUB HEAD 6: TELEPHONE SYSTEM	18105
7	SUB HEAD 7: LT CABLES	413196
8	SUBHEAD 8: EARTHING, SAFETY EQUIPMENTS AND MISC.	474168
9	SUBHEAD 9: OUT DOOR LIGHTING	285600
	GRAND TOTAL FOR ALL ELECTRICAL WORKS	3740549

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S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
1.00	SUBHEAD 1 : DG SET & ACCESSORIES				
1.01	SOUND PROOF DG SETS OF 100 KVA.				
	DG SET OF 100 KVA including AMF PANEL				
	Supply, installation, testing and commissioning of sound proof (silent type) Diesel Generating set having 100 KVA Prime Power Ratings, 415 volt at 1500 RPM, 0.8 power factor suitable for 50 Hz, 3 phase system, suitable bhp, Water cooled Radiator type diesel engine- alternator set mounted on common base frame, return fuel cooler, battery & battery charger, Anti Vibration mounting pads, Engine alternator safeties, electronic governor including all accessories, their wiring and control cable between DG set and panel etc. is also in the scope of supply, including its connections etc. complete as per technical specification This includes the following:				
	 Supplying and fixing of suitable sizes Heavy class MS pipe for DG exhaust complete with bends, elbow, flanges etc including silencer and catalytic convertor exhaust pipe chimney as per CPCB norms for exhaust of DG sets. 				
	- Supply and fixing of 50mm thick compressed mineral wool insulation (Rock wool) for D.G. exhaust pipe with 24 gauge aluminium sheet cladding etc. as required for the under mentioned dia pipe.				
	 Supply, installation, testing and commissioning of suitable size fuel pipe for connecting diesel engine to individual day service tank including supply and fixing of required valves & filters etc. as required. 				

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
	-	Fabrication of supports for exhaust pipe, fuel pipe or for any other purpose out of suitable M.S. structural steel including supplying and applying of enamel paint of approved shade after one coat of steel primer of reputed company.				
	-	Supplying and fixing of suitable capacity cable adapter box for alternator.				
	-	Providing and fixing oil tank of 990 litres capacity complete with suitable M.S. fabricated MS stand oil level indicator gauge tank and stand duly painted, complete with float switches etc. as required.				
	-	Factory assembled Sound proof Canopy as per pollution control board requirement to achieve noise level desired during night condition, with base frame, doors, inspection window, fresh air supply fans etc				
	-	Any other item required for completion of system above (D.G. set).				
	C.	ENCLOSURE :				
		Fabrication, PVC Sleeving, Control/Power Wiring and necessary electrical/ mechanical interlocking etc any other item required for proper functioning of the system complete as required.				
		DG SET WITH AMF Panel as mentioned above	Set	1	996300	996300
		TOTAL SUBHEAD 1: DG SETS AS MENTIONED ABOVE				996300

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
2.00		SUB HEAD 2:MV PANELS				
		Supply, installation, testing and commissioning of following M.V. cubicle type totally enclosed, wall mounted/Free standing type, powder coated, dust, damp and vermin proof, indoor type Distribution Board/Panel complete with busbars, M.V. danger notice plate, interconnections with suitable capacity aluminium leads/solid aluminium strips/rods, connection of incoming and outgoing cables with thimbles, and having following incoming and outgoing switchgears complete as per technical specification and as required.				
		NOTE				
		All MCCBs shall have Ics=Icu=100%				
		MCB Should be connected throught terminal Strip of suitable rating				
		MV PANEL: GROUND FLOOR				
2.01						
	a)	INCOMER:				
		250 Amp 415 volts, 35 KA (Ics=Icu=100%) FP MCCB with variable current settings and having microprocessor based Instantaneous overcurrent, O/L, S/C & E/F protection release.				
		R,Y&B phase indicating lamp (LED type) with 2A/6A control SP MCB				
		ON, OFF, TRIP indication(LED Type)				
		Extended rotary operating mechanism with door interlocking with defeat feature and padlock facility. MCCB should have spreader links & phase barriers.				
		1 No. 0 to 500 V Digital voltmeter with selector switch.				
		Digital ammeter & KWH meter with selector switch with one set Suitable C.Ts.				

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
b)	BUSBARS:				
	400Amp TPN Aluminium busbars				
c)	OUTGOING:				
i)	9 Nos. MCCB as per following details / specifications:				
	63 Amps,415 volts, (Ics= Icu=100%)TP+NL, 35 KA Moulded Case Circuit Breaker with thermal magnetic release having variable current settings .				
	ON, OFF, TRIP indication(LED Type)				
	Extended rotary operating mechanism with door interlocking with defeat feature and padlock facility. MCCB should have spreader links & phase barriers.				
iii)	8 no. 63 Amps, 415 volts, 9 KA ,Four Pole, Miniature Circuit Breaker.				
	MV PANEL : AS MENTIONED ABOVE	Set	1.00	247700	247700
	Supply, installation, testing and commissioning of factory Fabicated Contractor switched standard APFC Panel of 35 kVAr similar to (L&T etaSYS -MH-1 Cat no LTAPMH0351B2) or or approved				
2.02	equivalent complete	set	1.00	208500	208500
	TOTAL SUB HEAD 2: MV PANEL AS MENTIONED ABOVE				456200

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
		SUB HEAD 3- : MCB DISTRIBUTION BOARDS.				
3.00		MCB DISTRIBUTION BOARD				
3.01		Supplying & fixing following way, three pole and neutral sheet steel, MCB distribution board, 415 volts, on recess/surface complete with loose wire box, terminal blocks, tinned copper busbar, neutral link, earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder coated including earthing connection bolt etc. as per technical specifications and as required.(but without MCB & RCCB).				
	i	4 way (8+12), Double door	Each	1	2970	2970
	ii	6 way (8+18) Double door	Each	1	3595	3595
	iii	8 way (8+24), Double door	Each	3	4202	12606
3.02		Supplying & fixing 6 Amps to 32 Amps rating, 240 volts,'B' series, miniature circuit breaker suitable for lighting & other loads of following poles in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications & as required.				
	i	Single pole	Each	102	169	17238
3.03		Supplying & fixing following rating, four pole, 415 volts, Miniature Circuit Breaker (MCB),in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications and as required.				
	i	25 Amps	Each	1	900	900
	ii	40 Amps	Each	2	1280	2560
	iii	63 Amps	Each	3	1280	3840
3.04		Supplying & fixing following rating, four pole, 415 volts, Residual Current Circuit Breaker (RCCB) having a sensitivity current upto 300 mA in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications and as required.				

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
i	25 Amps	Each	1	1907	1907
ii	40 Amps	Each	2	1900	3800
iii	63 Amps	Each	3	2200	6600
3.05	Supplying and fixing Single pole Blanking plate in the existing MCB DB complete as required.	Each	20	7	140
	TOTAL SUB HEAD-3: MCB DISTRIBUTION BOARDS AS MENTIONED ABOVE				56156

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
		SUB HEAD 4: WIRING				
4.00		WIRING				
4.01	i	Wiring for light point/fanpoint/ exhaust fan point/call bell point with 1.5 sq.mm. PVC insulated, fire retardant low smoke (FRLS) copper conductor cable, single core/ multi strand, in steel conduit (Including supplying & recess laying of MS conduit and accessories) including the following and complete as required.				
	ii	Supplying and Fixing Modular type switches (modular Bell push in case of call bell points) in suitable size modular metal boxes, base plate & modular cover plates, space for fixing electronic fan regulator in case of fan point wiring & space for fixing 5A socket on the board etc.				
	iii	Supplying and fixing Hexagonal fan Boxes with 3 mm thick hylem sheet covers in case of Fan Points				
	iv	Supplying & Fixing Ceiling Rose in case of Exhaust Fan Points etc.				
		Note :				
		i) Unless otherwise specified all the conduiting work to be done in recess				
		Point wiring as mentioned above	Point	140	1003	140420
4.02	i	Wiring for twin control light points with 1.5 sq.mm. PVC insulated, FRLS copper conductor cable in MS conduit (including supplying and recess laying of MS conduit) including the following and complete as required.				
	ii	Supplying and Fixing Modular type two numbers 2 Way switches in suitable size modular metal boxes, base plate & modular cover plates etc.				
		Note :				
		i) Unless otherwise specified all the conduiting work to be done in recess				
		Wiring for twin control light points as mentioned above	Point	5	1069	5345

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
4.03		Wiring for Submain/ circuit wiring with following size of PVC insulated FRLS copper conductor single core/multi strand cable in recessed steel conduit (including supply & laying of recessed conduit) as required.				
	i	2X1.5 Sqmm with 1 No. 1.5 sqmm PVC FRLS insulated, copper conductor for earthing.				
	ii	2X2.5 Sqmm with 1 No. 2.5 sqmm PVC FRLS insulated, copper conductor for earthing.	Metre	150	175	26250
	iii	2X4 Sqmm with 1 No. 4 sqmm PVC insulated FRLS copper conductor for earthing	Metre	260 375	200	52000 86625
	iv	2X6 Sqmm with 1 No. 6 sqmm PVC insulated FRLS copper conductor for earthing	Metre	300	315	94500
	v	2X10 Sqmm with 1 No. 10 sqmm PVC insulated FRLS copper conductor for earthing	Metre	50	417	20850
	vi	4X4 Sqmm with 2 No. 4 sqmm PVC insulated FRLS copper conductor for earthing	Metre	20	365	7300
	vii	4X6 Sqmm with 2 No. 6 sqmm PVC insulated FRLS copper conductor for earthing	Metre	50	509	25450
	viii	4X10 Sqmm with 2 No. 10 sqmm PVC insulated FRLS copper conductor for earthing				
	ix	4X16 Sqmm with 2 nos 16 sq mm PVC insulated FRLS copper conductor for earthing.	Metre Metre	100 50	803	80300 58850
4.04		Supplying and fixing suitable Module GI box on surface or in recess including providing and fixing 3 pin 5/6 amps. modular socket outlet with shutters and 5/6 amps. modular type switch with indicator type, base plate, modular cover plate, connections etc. and all civil works 'complete as required.				
			Each	10	380	3800

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
4.05	Supplying and fixing suitable modular GI box on surface or in recess including providing and fixing 6 pin 15/16 A modular socket outlet with shutters and 15/16 A modular switch with indicator, base plate, modular cover plate, connections, etc. and all civil works complete as required.				
		Each	25	483	12075
4.06	Supplying and fixing suitable Modular metal box on surface or in recess including providing and fixing three nos 3 pin 5/6 amps. modular socket outlet with shutters and one no. 10 amps. modular type switch, base plate, modular cover plate, connections etc. and all civil works 'complete as required. (Computer Point)				
		Each	5	855	4275
4.08	Supply and fixing following 20 Amps, 240 volts, 2P+E, Industrial Socket Outlet (with plugs) in a metal box with 20 SP MCB in a sheet steel cover on surface or recess complete with all accessories including connections, testing and commissioning etc. as required.	Each	E	1247	(225
		Each	5	1247	6235
4.09	Supply and fixing following 32 Amps, 240 volts, 2P+E, Industrial Socket Outlet (with plugs) in a metal box with 20 SP MCB in a sheet steel cover on surface or recess complete with all accessories including connections, testing and commissioning etc. as required.				
		Each	10	1500	15000
4.10	Supplying, providing & fixing cordless musical bell with batteries etc of approved make complete as required.				
		Each	2	500	1000
4.11	Supply and fixing following FP MCB, 415 volts, 10 KA (Isc), "C" curve Four Pole with thermal magnetic release having variable current setting (0.8 to 1.0 In) in a sheet steel enclosure on surface complete with all accessories including , connections, testing and commissioning etc. as required.				
i	63 Amp	Each	6	3000	18000
	TOTAL SUBHEAD: 4- WIRING AS MENTIONED ABOVE				658275

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
5 .00		SUB HEAD 5: LIGHT FIXTURE AND FANS				
5.00		LIGHT FIXTURES AND FANS				
5.01		Supply of following light fixture with high efficiency electronic ballast, starter, tubes/lamps, capacitor, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.				
	i	2XTL-5 28 watt box type fluorescent light fixture with reflector(Philips TMS 122M 2XTL5 28 W EBT or approved equivalent) (136b/136w)				
			Each	60	2540	152400
	ii	1XTL-5 28 watt box type fluorescent light fixturewith reflector(Philips TMS 122M 1XTL5 28 WEBT or approved equivalent) (136b/136w)	Each	44	2000	88000
	•••	2X 28 watt Surface flourscent light fixture (Philips TCS 150 2XTL-28W EBT or approved equivalent). (236 SMO1)	D 1	20	2.120	<i>c</i> 0.400
	iii	1X36 watt surface mounted type fluorescent light fixture with opal acrylic diffuser (Philips TCS019 1XTL-D36W EBT or approved equivalent) (136AC1)	Each	20	3420	68400
	iv		Each	4	2100	8400
		2X28 watt surface mounted type fluorescent light fixture water proof luminaries (Philips TCW450 2XTL5-28W EBT or approved equivalent)				
	v		Each	2	4110	8220
5.02		Supply of following compact fluorescent light fixture with electronic ballast, starter, capacitor, yellow light lamps, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.				
	i	1x9 watt Bulk Head light fixture (Philips FXC 101 1XPL-S/2P11 W AC GR or approved equivalent) BH	Each	10	1150	11500
	ii	2X18 watt Mirror top with frosted glass (Decon 05CA or approved equivalent) (w toilet)	Lucii	10	1120	11500
			Each	2	1820	3640

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
	iii	Surface mounted Batten holder (Plastic) with 13 watt CFL				
			Each	5	200	1000
	iv	2 X 18 watt surface mounted down light frosted glass (DECON:PL-2X18 W 03NBS 01 or approved equivalent) (DL0)	Each	6	2135	12810
5.03		Supply of following ceiling fans (Crompton Greaves High Speed Plus (BEE -5Star Rated) Air delivery equal or higher then 210 Cmm or approved equivalent) complete with double ball bearing, motor, blades, downrod, canopies, capacitor, modular type electronic fan regulator, suitable for operation on 230 volts, 50 Hz., 1 phase, AC supply complete as required.				
	i	1200 mm sweep	Each	2	2600	5200
5.04		Supply of 900 RPM, 300 mm (Crompton Greaves Trans Air or approved equivalent) exhaust fan suitable for single phase 230 volts, 50 Hz., AC supply complete with motor, louvers/shutters etc. complete as required.	Each	2	2670	5340
5.05		Supply of 400 mm sweep, Crompton greaves model high flow 16" wall mounted fan complete with double ball bearing, motor, blades, capacitor etc suitable for single phase 230 volts, 50 Hz., AC supply, complete as required.	Each	1	2350	2350
5.06		Installation, testing and commissioning of prewired, fluorescent fittings of all types, complete with all accessories and tube etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, FRLS copper conductor, single core/ multi strand cable etc. as required.				
			Each	130	91	11830
5.07		Installation, testing and commissioning of prewired, compact fluorescent lamp fixture (CFL fixtures)of all types, complete with all accessories and lamp etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, FRLS copper conductor, single core/ multi strand cable				
		etc. as required.	Each	23	91	2093

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
5.08	Installation, testing and commissioning of ceiling fan and modular type electronic fan regulator(Electronic regulator to be fixed in switch board) including wiring the down rod and connection with 1.5 sqmm FR PVC insulated, copper conductor single core/multi strand cable including providing & fixing phenolic laminated sheet cover on the fan box, etc. as required.				
		Each	2	338	676
5.09	Installation, testing and commissioning of exhaust fan up to 400 mm sweep in the opening, including making the hole to suit the size of the above fan including , fixing of louvers/ shutters with frame making good the damages etc. as required.				
		Each	2	270	540
5.10	Installation, testing and commissioning of wall mounted fan up to 400 mm sweep including supply and fixing wall bracket arrangement complete as required.	Each	1	150	150
0.00					
	TOTAL SUBHEAD 5: LIGHT FIXTURE & FANS AS MENTIONED ABOVE				382549

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
		SUB HEAD 6: TELEPHONE SYSTEM				
6.00		TELEPHONE SYSTEM				
6.01		Supplying drawing, connecting and testing of 0.5mm dia annealed copper conductor PVC insulated PVC sheathed telephone Wire/cables in Existing M.S/ PVC conduit or a racks as required.				
	i	2 pair Telephone cable. (0.5 mm)	Meter	100	17	1700
6.02		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.				
	i	20 mm	Metre	50	131	6550
	ii	25 mm	Metre	25	152	3800
6.03		Supply, fixing, connecting and testing of telephone modular sockets modular plate anodised MS box and blanking plate in surface / recessed including connectionetc as required.				
	i	Telephone socket outlet (RJ-11 telephone Jack Single with Shutter)	Each	5	179	895
6.04		Supplying, Installation, testing and commissioning of following sizes of telephone distribution board in M.S. hinged type lockable box duly painted complete with Krone type tag block etc. including terminations of cable as required.				
	iii	10 Pair				

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
6.05		Supplying and drawing of following pairs 0.5mm dia annealed bare copper conductor Polythene insulated, core twisted into pairs armoured telephone cable on surface/tray with saddels including termination of cables at both sides in Krone Tag Block etc. complete as required.				
	iii	10 Pair	Metre	20	113	2260
		Supply of Analog phones Without display having following features ; Pulse or tune Dailing 3 repertory Keys, 10 Speed Dailing Number, Last Number redial , Manual Pause, Adjustable volume etc (Before procurement of this item, the contractor shall have necessary approval approval of quantity from HSCC/Client.)	Each	2	1200	2400
			-			
		TOTAL SUBHEAD 6: TELEPHONE SYSTEM AS MENTIONED ABOVE				18105

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
	SUB HEAD 7: LT CABLES				
7.00	LT CABLES				
7.01	Supply of following sizes of 1.1 kV grade multicore aluminium conductor PVC sheathed armoured XLPE cable as per IS 7098.				
	i 3.5 Core 240 Sqmm.	Metre	150	1210	181500
	i 3.5 Core 25 Sq mm	Metre	100	195	19500
i	ii 4 Core 10 Sq mm	Metre	100	140	14000
j	v 4 Core 6 Sq mm	Meter	50	108	5400
	v 3 Core 10 Sqmm.	Meter	50	117	5850
	i 3 Core 6 Sqmm.	Meter	50	99	4950
	ii 3 Core 4 Sqmm.	Meter	50	89	4450
V	iii 2 Core 10 Sq mm	Metre	400	103	41200
7.02	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required				
	i Up to 35 sq.mm	Metre	560	181	101360
j	v Above 185 Sq mm and up to 400 Sq mm	Metre	105	215	22575
7.03	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade direct in the existing RCC/ Hume/Stoneware/Metal pipe as required				
	Up to 35 sq.mm	Metre	120	15	1800
j	v Above 185 Sq mm and up to 400 Sq mm	Metre	23	53	1192.5
7.04	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade on surface or on existing cable tray complete as required.				
	i Up to 35 sq.mm	Metre	120	19	2280
	v Above 185 Sq mm and up to 400 Sq mm	Metre	23	84	1890

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
7.05		Supplying and making end termination with suitable size Copper lugs including double compression glands of following sizes of 1.1. kv grade multicore aluminium conductor PVC insulated and PVC sheathed				
	i	3.5 Core 240 Sqmm.	Each	6	474	2844
		3.5 Core 25 Sq mm	Each	8	100	800
	iii	4 Core 10 Sq mm	Each	4	125	500
	iv	4 Core 6 Sq mm	Each	2	72	144
	v	3 Core 10 Sqmm.	Each	4	50	200
	vi	3 Core 6 Sqmm.	Each	2	60	120
	vii	3 Core 4 Sqmm.	Each	4	40	160
	viii	2 Core 10 Sq mm	Each	12	40	480
		TOTAL SUBHEAD 7: LT CABLES AS MENTIONED ABOVE				413195.5

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
	SUBHEAD 8: EARTHING, SAFETY EQUIPMENTS AND MISC. ITEMS				
8.00	EARTHING, SAFETY EQUIPMENTS AND MISC. ITEMS				
8.01	Earthing with copper plate 600mmX600mmX3mm thick including accessories, and providing masonary enclosure with cover plate having locking arrangement and watering pipe etc., including charcoal or coke and salt complete as required.	Set	2	11000	22000
8.02	Earthing with GI plate 600mmX600mmX6mm thick including accessories, and providing masonary enclosure with cover plate having locking arrangement and watering pipe etc., including charcoal or coke and salt complete as required.	Set	6	6000	36000
8.03	Supplying and laying 25mmX5mm GI strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	30	97	2910
8.04	Providing and fixing 25mmX5mm GI strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	70	120	8400
8.05	Supplying and laying 50mmX6mm GI strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	30	243	7275
8.06	Providing and fixing 50mmX6mm GI strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	50	300	15000
8.07	Providing and fixing25mmX5mm Copper strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	70	766	53620

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
8.08	Supplying and laying 25mmX5mm Copper strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	30	680	20400
8.09	Supplying and laying 50mmX6mm Copper strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	30	1500	45000
8.10	Providing and fixing 50mmX6mm Copper strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	50	1450	72500
8.11	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I.pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required	Metre	30	1019	30570
8.12	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	Metre	50	391	19550
8.13	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	Metre	100	34	3400
8.14	Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.				
i)	300 mm dia	Metre	50	529	26450

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
8.15		Cable Route Marker				
		Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Each	4	310	1240
			Lucii	-	010	1210
8.16		Providing & Fixing of Safety Equipmet				
	i)	Providing and fixing M.V. danger notice plate of 200mmX150mm made of mild steel, atleast 2mm thick and vitreous enammelled white on both sides and with inscription in signal red colour on front side as required.	Each	2	68	136
	ii)	Supply & erection of the following Safetyand testing Equipment including miscellanoes items like Clamps, nuts & Bolts, rawl plugs etc at suitable places as required.				
	a)	Supplying and laying of 1.1kV grade 1 metre wide anti skid chequered type rubber mat.				
			Metre	5	1800	9000
	b)	G.I buckets of 4 nos of 5 Litres Capacity duly painted white inside and red oxide paint out side and witten 'FIRE' with white paint & Filled with Dry sand and mounted on M.S angel iron bracket of Size 50x50x6mm thick and 1200mm long including grounting in walll /floor etc as required .				
			Set	1	1810	1810
	c)	Supply and fixing shock treatment chart in English, Hindi and local language mounted on 5mm thick Plywood and 3mm thick plain glass front complete as required.			-	
			Set	1	687	687
	d)	Supplying and fixing Foam type 9 ltrs capacity fire extinguishers as approved by ISI complete as required.	Set	2	4800	9600
	e)	Supplying and fixing Dry Chemical powder type 5 Kg capacity fire extinguishers as approved by ISI complete as required.	Set	2	4200	8400

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
	f)	Supplying and fixing CO2 type 4.5 Kg capacity fire extinguishers as approved by ISI complete as required.	Set	12	5310	63720
	g)	Supplying, storing, handling and fixing in position First Aid Medical Box complete as per technical specifications as required.	Each	1	3500	3500
8.17		Providing & fixing rigid PVCpipe complete with fittings, clamps including trenching & refilling/ wall cutting & plastering, etc. (for cable entry) with all minor civil & mech. Works complete as required.				
	i	50 mm dia nominal bore	Metre	20	200	4000
	ii	150 mm dia nominal bore	Metre	30	300	9000
8.18		Fabrication and Installing following size of preforted M.S Cable tray including Horizontal and vertical bends, reducers,tee, crossmember and other accessories as required and duly Suspended from the ceiling with M.S 12mm rod suspenders and including painting etc. as required.				
	i)	150mmwidth x 50mm depth x1.6mm thickness	Metre	125	880	110000
	ii)	300mmwidth x 50mm depth x1.6 mm thickness	Metre	10	1329	13290
	iii)	450mmwidth x 62.5mm depth x2.0mm thickness	Metre	5	2042	10210
		TOTAL SUBHEAD 8: EARTHING AS MENTIONED ABOVE				474168

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
		SUBHEAD 9: OUT DOOR LIGHTING				
9.00		OUT DOOR LIGHTING				
9.01		Supply, erection, testing and commissioning of external swaged steel tubular pole with following specifications & items :				
	i	9.0 Mtrs. high swaged steel tubular pole with arm length around 1.5 Metre, the construction of the pole shall be as per IS:2713 - 1980 410 SP-30 with base plate 450mmX450mmX6mm complete as per requirement with two coats of spray paints of approved shade.				
	ii	1X150 watts street light fixture with 150watts high pressure sodium vapour (HPSV) lamp complete with control gear, acrylic cover cover etc. similar to Philips SRP 051/150 W or approved equivalent including its wiring with 2X4 sq.mm. PVC insulated, FRLS copper conductor and 1.5 sqmm PVC insulated, FRLS copper earth wire from control box complete as required.				
	iii	Suitable size 32 A DP MS Control box with 2 no. incoming and outgoing terminals and 2 nos. tap-out terminal with 6A DP MCB complete as required - 1 Set				
	iv	Suitable number(s) 40mm dia Class-B GI Pipe(s) from above control box to upto 0.5 metre below ground level for power cable entry				
	v	Providing foundation including excavation, shuttering, alingment of poles, casting etc. including lean concrete at the bottom as per CPWD/ BIS specifications.				
	vi	The above installations shall be completed as CPWD specifications and as required				
	a.	Steet Tubular Poles(9M) Single Arm as mention above	Set	6	17900	107400
	b.	Steet Tubular Poles (9M) same as above but for Double Arm as mention above	Set	2	25800	51600

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
9.02		Supply, installation, testing and commissioning of external post top lantern with following accessories and complete as required :				
	i	4m high (3.3m above ground) 80mm dia GI pole as approved, adopting socket at top for fixture mentioned below, base plate 300 x 300 x 6mm and provision for mounting junction box etc 1 set.				
	ii	1 x 70 W Post top lantern with 70W HPSV lamp (Philips SPC 101 x SON 70 W E or equivalent) and its wiring with 2 x 2.5 sq.mm PVC insulated copper wire and 1.5 sqmm PVC insulated copper earth wire from control box .				
	iii	Suitable size 20A DP MS Control box with 2 no. incoming and outgoings terminals and 2 nos. tap- out terminal with 1 nos. 5A HRC fuses complete 1 set.				
	iv	Suitable number(s) 40mm dia Class-B GI Pipe(s) from above control box to upto 0.5 metre below ground level for power cable entry				
	v	Providing 400x400x1000mm deep 1:3:6 ratio cement concrete including excavation shuttering alignment of poles casting etc. including 100mm thick lean concrete shall be provided at the bottom				
		Supply, installation, testing and commissioning of 4 meter pole with external post top lantern as mentioned above	Set	8	6700	53600
9.03		Supply, installation, testing and commissioning of Post top lantern with 70W SON lamp ((Philips SPC 101 x SON 70 W E or equivalent) and its wiring with 2 x 2.5 sq.mm PVC insulated copper wire and 1.5 sqmm PVC insulated copper earth wire from control box - 1 set				
			Set	2	4700	9400
9.04		Supply, installation, testing and commissioning of bollard lamps 1X18 watts CFL (Philips HCS360 1XPL-C/2P 18W GR Sonara bollard in gree color or equivalent) control box - 1 set.				
			Each	6	4000	24000
						0

S.No.		Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
9.09		Road Lighting Panel				
		Supply, installation, testing and commissioning of following outdoor type with canopy, IP-54 protected M.V. cubicle type totally enclosed, free standing type, dust, damp and vermin proof, MV Panel, busbars, M.V. danger notice plate, interconnections with suitable capacity aluminium leads/solid aluminium strips/rods, connection of incoming and outgoing cables with thimbles, stove enamelled painted and having following incoming and outgoing switchgears complete as required.				
	1	INCOMER:				
		63 Amps,415 volts, TP+NL, 35 KA Moulded Case Circuit Breaker with thermal magnetic release having variable current settings .				
		R,Y&B phase indicating lamp (LED type) with 2A control SP MCB ,ON, OFF , TRIP for MCCB				
		Extended rotary operating mechanism with door interlocking with defeat feature and padlock facility. MCCB should have spreader links & phase barriers.				
		1 Set of timer switch & 100A TP contactor with nuetral link (for street lights control) .				
		BUSBARS:				
		300 Amp TPN Aluminium busbars				
		OUTGOING:				
	i	30 Nos. 16 Amp 415 volts, DP MCB				
		Feeder Pillar as mention above	Set	1	36000	36000

S.No.	Description	Unit	Total Qty	Rate in Figures (in Rs.)	Amount (in Rs.)
9.10	Spiral earthing made out of 6 SWG GI wire , 50mm Dia, 115 turns closely wound ,1.5 mtr below ground, earth pit of 350 Dia., 1.5 mtr depth including providing charcoal and salt for earthing at alternate layers of 300 mm depth (total 3 layers),connections etc. complete as required.				
	TOTAL SUBHEAD 9: OUTDOOR LIGHTING AS MENTIONED ABOVE	Set	12	300	3600
	TOTAL SUBILEAD 7. OUTDOOK LIGHTING AS MENTIONED ABOVE				285600
	GRAND TOTAL FOR ALL ELECTRICAL WORKS				3740548.5
	End of Electrical BOQ				

I	DISTRICT DRUG WARE HOUSE, AT CHATTI	<u>SGARH</u>
	SUMMARY SHEET FOR HVAC WORKS	
SECTION	DESCRIPTION OF WORKS	AMOUNT (Rs.)
	Total for HVAC Works at "District Drug Ware House" Chattisgarh	2195469

BOQ ITEM NO.	DESCRIPTION OF ITEM	TOTAL Quantity	UNIT	RATE IN FIGURES (in RS)	AMOUNT (Rs.)
1	2	3	4	5	6
	s are to be quoted in the below mentioned form and shall include the supply, insi as specified and all such items what so ever which may be required to fulfill the				
	The tenderer shall quote rates in figures and in words under column 5&6 and	extend amount t	o column 7		
	Sub Head -A, Equipments				
1.0	Supply , installation , testing and commisioning of air cooled Ductable split type unit with scroll compressors suitable for 3 Phase 50 Hz AC supply comprising of the following.				
	a) Outdoor condensing Unitsb) Indoor Evaporative Units with fine filters.				
	c) Interconnecting Refrigerant and drain piping with insulation wherever required, refrigerant and oil. The unit shall include refrigerant piping, power cabling, fresh air intake arrangement and drain piping as required.				
	d) Safety and operational controls				
	 e) The unit shall have advanced microcomputer controller with run time equalization, auto restart after power failure, fuzzy logic, self fault diagnostics. The controller shall have LED display, LED indicators and touch key pad. The controller shall have faults and alarm dispay and it shall be mounted in fire retardant box. 				
1.1	Capacity : 8.5 TR	4	Nos.	185736	742944
2.0	SPLIT AIR CONDITIONERS Supply , installation , testing and commisioning of voltas/ Bluestar/equivalent make HI wall split air conditioner comprising of the following.				
	a) Outdoor condensing Units				
	b) Indoor Evaporative Units with cordless remote.				
	c)Interconnecting Refrigerant and drain piping with insulation wherever required, refrigerant and oil. The unit shall include refrigerant piping, power cabling and drain piping.				

	Quantity	UNIT	RATE IN FIGURES (in RS)	AMOUNT (Rs.)
c) Safety and operational controls.				
e) Hiwall splits shall be suitable for single phase power supply and complete with suitable rating voltage stablizer.				
f) Mounting arrangement and structural supports for outdoor unit are included.				
g) The units should have 3 star rating from BEE.				
Capacity : 2.0 TR	5	Nos.	53292	266460
Extra for Supply & installation of Copper piping with fittings complete with nitrile Rubber Insulation for connecting Indoor & Outdoor Units.	30	Rm	1220	36600
Extra for Supply & Installation of drain water PVC Pipe from Indoor Unit to Outside Drain Point.	30	Rm	203	6090
Window Air Conditioner				
Supply , installation , testing and commisioning of voltas/ Bluestar/equivalent make Window Acs complete with electrical cabling as required along with mounting arrangement and Voltage stablizer. The units should have 3 star rating from BEE.				
Capacity : 1.5 TR	1	Nos	36961	36961
Capacity : 2.0 TR	1	Nos	38879	38879
Sub Head -B, Air Distribution				
GSS DUCTING				
Supply, installation, balancing and commissioning of factory				
fabricated GSS sheet metal rectangular/round ducting complete				
with neoprene rubber gaskets, elbows, splitter dampers, vanes,				
hangers, supports etc. as per approved drawings and specifications				
of following sheet thickness complete as required.				
	e) Hiwall splits shall be suitable for single phase power supply and complete with suitable rating voltage stablizer. f) Mounting arrangement and structural supports for outdoor unit are included. g) The units should have 3 star rating from BEE. Capacity : 2.0 TR Extra for Supply & installation of Copper piping with fittings complete with nitrile Rubber Insulation for connecting Indoor & Outdoor Units. Extra for Supply & Installation of drain water PVC Pipe from Indoor Unit to Outside Drain Point. Window Air Conditioner Supply , installation , testing and commisioning of voltas/ Bluestar/equivalent make Window Acs complete with electrical cabling as required along with mounting arrangement and Voltage stablizer. The units should have 3 star rating from BEE. Capacity : 1.5 TR Capacity : 2.0 TR Supply , installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications	e) Hiwall splits shall be suitable for single phase power supply and complete with suitable rating voltage stablizer. f) Mounting arrangement and structural supports for outdoor unit are included. g) The units should have 3 star rating from BEE. Capacity : 2.0 TR 5 Extra for Supply & installation of Copper piping with fittings complete with nitrile Rubber Insulation for connecting Indoor & Outdoor Units. Extra for Supply & Installation of drain water PVC Pipe from Indoor Unit to Outside Drain Point. Window Air Conditioner Supply , installation , testing and commisioning of voltas/ Bluestar/equivalent make Window Acs complete with electrical cabling as required along with mounting arrangement and Voltage stablizer. The units should have 3 star rating from BEE. Capacity : 1.5 TR 1 Capacity : 2.0 TR 1 Sup Head -B, Air Distribution GSS DUCTING Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications	e) Hiwall splits shall be suitable for single phase power supply and complete with suitable rating voltage stablizer. f) Mounting arrangement and structural supports for outdoor unit are included. g) The units should have 3 star rating from BEE. Capacity : 2.0 TR 5 Nos. Extra for Supply & installation of Copper piping with fittings complete with nitrile Rubber Insulation for connecting Indoor & Outdoor Units. Extra for Supply & Installation of drain water PVC Pipe from Indoor Unit to Outside Drain Point. Window Air Conditioner Supply , installation , testing and commissioning of voltas/ Bluestar/equivalent make Window Acs complete with electrical cabling as required along with mounting arrangement and Voltage stablizer. The units should have 3 star rating from BEE. Capacity : 1.5 TR 1 Nos Sub Head -B, Air Distribution GSS DUCTING Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications	e) Hiwall splits shall be suitable for single phase power supply and complete with suitable rating voltage stablizer. f) Mounting arrangement and structural supports for outdoor unit are included. g) The units should have 3 star rating from BEE. Capacity : 2.0 TR 5 Nos. 53292 Extra for Supply & installation of Copper piping with fittings complete with nitrile Rubber Insulation for connecting Indoor & Outdoor Units. Extra for Supply & Installation of drain water PVC Pipe from Indoor Unit to Outside Drain Point. Window Air Conditioner Supply , installation , testing and commissioning of voltas/ Bluestar/equivalent make Window Acs complete with electrical capacity : 1.5 TR 1 Nos 36961 Capacity : 2.0 TR 1 Nos 38879 Sub Head -B, Air Distribution GSS DUCTING Supply, installation, balancing and commissioning of factory fabricated CSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per approved drawings and specifications

BOQ ITEM NO.	DESCRIPTION OF ITEM	TOTAL Quantity	UNIT	RATE IN FIGURES (in RS)	AMOUNT (Rs.)
4.1	1.25mm (18 G) GSS	10	Sqm	1257	12570
4.2	1.0 mm (20 G) GSS	20	Sqm	1004	20080
4.3	0.80 mm (22 G) GSS	170	Sqm	890	151300
4.4	0.63 mm (24 G) GSS	200	Sqm	725	145000
5.0	VOLUME CONTROL DAMPERS Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc, as per specifications.	2	Sqm	5413	10826
6.0	GRILLES WITH DAMPERS Supplying & fixing of powder coated extruded aluminium Supply Air Grills with aluminium volume control dampers as per specifications.	8	Sqm.	7107	56856
7.0	DUCT INSULATION Supplying and fixing of following thickness duly laminated aluminum foil of mat finish closed cell Nitrile rubber (class "O") insulation on existing duct after applying two coats of cold setting adhesive (CPRX compound). The joints shall sealed with 50 mm wide and 3 mm thick self adhesive nitrile rubber tape insulation complete as per specifications and as required.				
7.1	19 mm	360	Sqm.	816	293760
8.0	DUCT LINING				

BOQ ITEM NO.	DESCRIPTION OF ITEM	TOTAL Quantity	UNIT	RATE IN FIGURES (in RS)	AMOUNT (Rs.)
	Supply and fixing of acoustic lining of supply air duct and plenum with 25 mm thick resin bonded glass wool having density of 32 kg/m ³ , with 25 mm X 25 mm GI section of 1.25 mm thick, at 600 mm centre to centre covered with Reinforced Plastic tissue paper and 0.5 mm thick perforated aluminum sheet fixed to inside surface of ducts with cadmium plated nuts, bolts, stick pins, CPRX compound etc. complete as required and as per specifications.	35	Sqm.	543	19005
9.0	UNDER DECK INSULATION FOR ROOF				
	Providing and fixing thermal insulation of ceiling (under deck insulation) with Resin Bonded Rockwool conforming to IS:8183,density 48kg/m3, 50 mm thick ,wrapped in 200 G Virgin Polythene bags fixed to ceiling with metalic cleats (50x50x3 mm) @ 60 cm and wire mesh of 12.5mm x 24 guage wire mesh , for top most ceiling of building.	730	sqm	490.60	358138
	TOTAL FOR HVAC WORKS				2195469