

**CHHATTISGARH MEDICAL SERVICES CORPORATION
LIMITED,**

(Government of Chhattisgarh)

Tender

For

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

Bill Of Quantities

VOLUME-V

MAY' 2013



**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./2013/18

GENERAL ABSTRACT

Name of Work: Construction of Regional Drug Warehouse Chhattisgarh at Jagdalpur (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	25,605,809.21			
1.2	PLUMBING WORK	965,695.03			
2	Non DSR Items				
2.1	PLUMBING WORK	1,960,585.50			
2.2	ELECTRICAL WORK	4,726,291.20			
2.3	HVAC WORK	245,448.00			
	Grand Total	33,503,828.94			

Sign & Seal

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

ABSTRACT OF COST(Civil Work)

S.No	DESCRIPTION OF WORK	DSR AMOUNT (in Rs.)
1	EARTHWORK	606,609.81
2	CONCRTE WORK	1,092,007.25
3	RCC WORK	13,287,259.50
4	BRICK WORK	2,730,143.65
5	DOORS & WINDOWS	1,070,701.10
6	STEEL WORK	79,816.75
7	FLOORING	535,594.05
8	CEILING & ROOFING	1,508,424.80
9	FINISHING	1,609,498.20
10	ROAD WORK AND DEVELOPMENT	3,085,754.10
	TOTAL	25,605,809.21

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	156.00	cum	129.35	20178.60
b)	Ordinary rock	9.00	cum	197.75	1779.75
c)	Hard rock (blasting prohibited)	9.00	cum	490.10	4410.90
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.	948.00	cum	130.80	123998.40
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.				
		2879.00	cum	83.80	241260.20

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.				
ii)	1.5 to 3.0m	321.00	cum	34.60	11106.60
1.05	Supplying and filling in plinth with jamuna sand under floors including, watering, ramming consolidating and dressing complete.				
		207.00	cum	749.30	155105.10
1.06	Extra for disposal of excavated earth for additional lead beyond 50m or part thereof upto 9 such additional leads				
a)	All kinds of soil	2879.00	cum	16.94	48770.26
	Total				606609.81

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	4514.05	22570.25
b)	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size).	69.00	cum	3593.30	247937.70
c)	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	207.00	cum	3357.40	694981.80
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)	2.00	cum	5272.40	10544.80
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).	169.00	sqm	207.55	35075.95

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
2.04	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer specification .	44.00	per 50 kg cement	35.35	1555.40
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.	169.00	sqm	96.65	16333.85
2.06	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.	186.00	sqm	338.75	63007.50
Total					1092007.25

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	314.00	cum	5242.15	1646035.10
b)	All work above plinth level upto floor V level	475.00	cum	5781.50	2746212.50
3.02	Centering and shuttering including strutting, propping etc. and removal of form for:				
a)	Foundations, footings, bases of columns, etc. for mass concrete.	173.00	sqm	166.90	28873.70
b)	Suspended floors, roofs, landings, balconies and access platform.	1955.00	sqm	311.20	608396.00

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
c)	Shelves (Cast in situ)	3.00	sqm	311.20	933.60
d)	lintels, beams, plinth beams. girders. bressumers and cantilevers.	2399.00	sqm	262.25	629137.75
e)	Columns, Pillars, Piers, Abutments, Posts and Struts.	667.00	sqm	365.60	243855.20
f)	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.	8.00	sqm	166.90	1335.20
g)	Extra for shuttering in circular work for				
i)	columns	10.00	Sqm	73.12	731.20
ii)	Beams	10.00	sqm	52.45	524.50
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).	100.00	sqm	121.65	12165.00
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				

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
i)	At all levels	117431.00	Kg	62.25	7310079.75
3.05	Add for using extra cement in the items of design mix over and above the specified cement content therein.	100.00	Qtl	589.80	58980.00
Total					13287259.50

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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)	242.00	cum	3316.55	802605.10
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)	481.00	cum	3876.15	1864428.15
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	416.95	4169.50
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)	97.00	sqm	476.85	46254.45

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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).	107.00	sqm	63.30	6773.10
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).	227.00	Metre	26.05	5913.35
Total					2730143.65

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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)	790.00	kg	394.90	311971.00
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).				

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
i)	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	247.00	kg	443.80	109618.60
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.	3.00	Sqm	969.95	2909.85
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	42.00	sqm	905.75	38041.50

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	2.00	each	2127.30	4254.60
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.	152.00	sqm	1578.30	239901.60
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).				
		152.00	sqm	325.20	49430.40

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	76.00	sqm	127.75	9709.00
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).				
		1.00	sqm	5.80	5.80
5.09	Providing glass panes, with wooden fillets wherever necessary.				
a)	Float glass panes of thickness 4 mm	5.00	Sqm	724.65	3623.25
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.	304.00	sqm	596.30	181275.20

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	23.00	each	662.80	15244.40
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	10.00	each	203.80	2038.00
b)	250x16 mm	5.00	each	168.95	844.75
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	91.00	each	86.45	7866.95
b)	150x10 mm	192.00	each	59.00	11328.00
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 with necessary screws etc. complete :				
a)	125 mm	181.00	each	62.50	11312.50

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
b)	100 mm	15.00	each	49.55	743.25
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	91.00	each	71.55	6511.05
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.	46.00	each	706.15	32482.90
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	101.00	each	229.80	23209.80
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.				

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
a)	Powder coated minimum thickness 50 micron aluminium tubular handle bar.	4.00	each	544.40	2177.60
5.19	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	2.00	each	356.10	712.20
5.20	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.	101.00	each	51.70	5221.70
5.21	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of Engineer-in-charge				
a)	Powder coated minimum thickness 50 micron aluminium	4.00	each	66.80	267.20
Total					1070701.10

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	689.00	kg	90.75	62526.75
6.02	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer.				
a)	M.S. tube.	100.00	Kg	86.45	8645.00
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	86.45	8645.00
	Total				79816.75

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	329.00	sqm	420.50	138344.50
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.	33.00	sqm	258.20	8520.60
7.03	Providing and fixing glass strips in joints of <i>terrazo</i> / cement concrete floors.				
a)	40 mm wide and 4 mm thick.	500.00	Metre	29.40	14700.00

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	142.00	sqm	945.70	134289.40
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.				
		15.00	sqm	954.10	14311.50
7.06	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.				
		55.00	sqm	724.25	39833.75

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	961.25	19225.00
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	93.00	sqm	1337.10	124350.30

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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	10.00	sqm	1339.20	13392.00
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, including 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	3041.15	6082.30
ii)	Area of slab over 0.50 sqm.	3.00	sqm	3083.40	9250.20

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BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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-				
a)	Granite work.	6.00	metre	178.75	1072.50
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.	6.00	metre	185.80	1114.80
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.	12.00	Nos	281.10	3373.20
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	773.40	7734.00
Total					535594.05

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Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
8.00	CEILING & ROOFING				
8.01	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	2192.00	sqm	311.50	682808.00

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
8.02	Providing & fixing on roof pressed clay tile (Mangalore tile) of 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately).	2192.00	sqm	249.65	547232.80
8.03	Providing & laying on roof pressed clay tile ridge (Mangalore tile) of 20mm thickness and of approved pattern on steel frame work complete (steel frame work to be paid separately).	2192.00	sqm	127.00	278384.00
Total					1508424.80

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
9.00	Finishing				
9.01	12 mm cement plaster of mix:				
a)	1:6 (1 cement: 6 fine sand)	1406.00	sqm	112.50	158175.00
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)	1719.00	sqm	130.20	223813.80
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).	1011.00	sqm	182.90	184911.90
9.04	6 mm cement plaster of mix:				
a)	1:3 (1 cement: 3 fine sand)	2072.00	sqm	101.00	209272.00
9.05	Finishing walls with Acrylic Smooth exterior paint of required shade:				
a)	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kgl10 sqm).	60.00	sqm	67.50	4050.00
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.	1011.00	sqm	117.70	118994.70

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	46.00	sqm	78.80	3624.80
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 complete.				
		5196.00	sqm	76.05	395155.80
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	5196.00	sqm	34.40	178742.40
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	5196.00	sqm	25.55	132757.80
	Total				1609498.20

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	2000.00	SQM	61.25	122500.00
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).	289.00	Cum	5761.60	1665102.40
10.03	Providing and laying in position bitumen hot sealing compound for expansion joints etc				

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
a)	Using grade 'A' sealing compound.	54000.00	Per cm depth per cm width per m length	1.65	89100.00
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	536.65	107330.00

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	270.00	cum	2899.25	782797.50

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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).	54.00	Cum	5046.80	272527.20
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).	300.00	Cum	30.90	9270.00
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).	100.00	Cum	215.15	21515.00

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	1000.00	Sqm	2.54	2540.00
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).	100.00	Cum	21.00	2100.00
10.11	Fine dressing of the ground	1000.00	Sqm	1.46	1460.00
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	1000.00	Sqm.	5.28	5280.00

Project Name: Construction of Regional Drug Warehouse at Chattisgarh

BOQ for Civil Work					
Item No	Description Of Item	Total Qty	Unit	DSR 12 Rate	Amount DSR
1	2	3	4	5	7
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.	20.00	Each	186.90	3738.00
b)	Holes 60 cm dia, and 60 cm deep.	20.00	Each	24.70	494.00
	Sub Total				3085754.10

ABSTRACT

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM

S.No.	DESCRIPTION	DSR-2012 Amount (Rs)	Market Amount(Rs)
A	PLUMBING WORK		
1.00	SANITARY FIXTURES	115,753.20	58,422.00
2.00	SOIL, WASTE AND VENT PIPES	112,319.30	147,315.00
3.00	WATER SUPPLY	396,699.30	104,474.20
4.00	SEWERAGE AND DRAINAGE	284,435.33	400,500.00
5.00	EARTH WORK	29,422.80	
6.00	RAIN WATER PIPING	27,065.10	87,634.80
7.00	BOREWELL	0.00	806,070.60
8.00	RAIN WATER HARVESTING	0.00	305,200.90
9.00	FIRE FIGHTING	0.00	50,968.00
	TOTAL	965,695.03	1,960,585.50

	Design & Engineering Department						
	Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM						
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	2,964.10	2,964.10		
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	6.00	4,201.05	25,206.30		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	12.00	1,460.50	17,526.00		
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	6,743.55	6,743.55		
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	4.00	2,758.65	11,034.60		
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	5.00	598.30	2,991.50		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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.	2.00			5,000.00	10,000.00
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	2.00	341.25	682.50		
1.08	Providing and fixing toilet paper holder :						
a)	Vitreous china	each	6.00	259.75	1,558.50		
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	12.00	180.10	2,161.20		
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	3.00	14,961.65	44,884.95		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	6.00			1,369.00	8,214.00
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	12.00			990.00	11,880.00
1.15	Providing and fixing brass coat hook of approved quality and make complete with material of fixing	Each	10.00			300.00	3,000.00
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	12.00			1,332.00	15,984.00

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
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	2.00			668.00	1,336.00
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	3.00			2,500.00	7,500.00
SubTotal(Sanitary Fixtures)					115,753.20		58,422.00

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	80.00	857.30	68,584.00		
b)	150 mm dia						
	Centrifugally cast (spun) iron socketed pipe as per IS:3989	Metre	40.00			2,100.00	84,000.00
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	2.00	112.50	225.00		
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	16.00	353.25	5,652.00		
2.04	Providing and fixing plain bend of required degree.						
a)	100 mm						
a i)	Sand cast iron S&S as per IS:3989	Each	22.00	296.35	6,519.70		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	342.80	342.80		
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	579.75	579.75		
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	5.00	469.40	2,347.00		
2.08	Providing and fixing terminal guard.						
a)	100 mm	Each	1.00	244.10	244.10		
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	238.25	476.50		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	75.00	207.85	15,588.75		
2.11	Providing Drip seal joint of approved make for the sand cast iron/centrifugally cast iron pipes where the workability of lead joint can be effected due to space constraints.						
a)	100 mm	Each	32.00			100.00	3,200.00
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	61.70	61.70		
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	801.70	8,017.00		
2.14	Cutting chases in brick masonry 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):						

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a)	100 mm diameter pipe	Metre	5.00	252.10	1,260.50		
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	30.00	28.75	862.50		
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	12.00			739.00	8,868.00
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	8.00			744.00	5,952.00
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	50.00			295.90	14,795.00

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	5.00			200.00	1,000.00
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

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	10.00			574.00	5,740.00
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	12.00			390.00	4,680.00
b)	40 mm dia nominal bore (Sink,Urinal to floor trap)	Metre	8.00			450.00	3,600.00
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	20.00	77.90	1,558.00		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	6.00			350.0	2,100.00
SUB TOTAL(SOIL, WASTE AND VENT PIPES)					112,319.30		147,315.00

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	133.95	669.75		
b)	20 mm nominal outer dia pipes	Metre	100.00	157.15	15,715.00		
c)	25 mm nominal outer dia pipes	Metre	80.00	197.90	15,832.00		
d)	32 mm nominal outer dia pipes	Metre	50.00	252.65	12,632.50		
e)	40 mm nominal outer dia pipes	Metre	20.00	348.25	6,965.00		
f)	50 mm nominal outer dia pipes	Metre	10.00	514.35	5,143.50		
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.							

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a)	15 mm nominal outer dia pipes	Metre	80.00	219.55	17,564.00		
b)	20 mm nominal outer dia pipes	Metre	60.00	243.95	14,637.00		
c)	25 mm nominal outer dia pipes	Metre	20.00	298.85	5,977.00		
d)	32 mm nominal outer dia pipes	Metre	10.00	359.80	3,598.00		
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	20.00	475.70	9,514.00		
b)	62.5 mm nominal inner dia pipes	Metre	20.00	1,326.35	26,527.00		
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	630.15	630.15		
3.05	providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)						
a)	25 mm nominal bore	Each	4.00	372.95	1,491.80		
b)	32 mm nominal bore	Each	2.00	450.90	901.80		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
c)	40 mm nominal bore	Each	2.00	546.05	1,092.10		
d)	50 mm nominal bore	Each	2.00	780.60	1,561.20		
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	600.00
3.07	Providing and fixing unplasticised PVC connection pipe with brass unions:						
a)	45 cm length						
a i)	15 mm nominal bore	Each	26.00	61.70	1,604.20		
3.08	Constructing masonry chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement: 4 coarse sand) for stop cock, with C.I. surface box 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 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 F.P.s bricks	Each	2.00	884.70	1,769.40		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.09	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 20 mm nominal size) 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 F.P.s bricks	each	1.00	5,251.80	5,251.80		
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	7.35	36.75		
b)	20 mm nominal outer dia pipes	Metre	100.00	8.65	865.00		
c)	25 mm nominal outer dia pipes	Metre	80.00	11.40	912.00		
d)	32 mm nominal outer dia pipes	Metre	50.00	13.45	672.50		
e)	40 mm nominal outer dia pipes	Metre	20.00	16.00	320.00		
f)	50 mm nominal outer dia pipes	Metre	10.00	18.80	188.00		
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	20.00	10.55	211.00		
b)	65 mm diameter pipe	Metre	20.00	12.95	259.00		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	20.00	61.40	1,228.00		
b)	65 mm diameter pipe	Metre	20.00	96.95	1,939.00		
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	15,000.00	6.10	91,500.00		
3.14	Providing and fixing C.P brass bib cock of approved quality confirming to IS:8931.						
a)	15 mm nominal bore	Each	6.00	397.50	2,385.00		
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	1.00	411.40	411.40		
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	26.00	449.35	11,683.10		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.17	Providing and fixing enclosed type water meter (bulk type) conforming to IS : 2373 and tested by muncipal board complete with bolts,nuts rubber, insersions etc. (the tail plases if required will be paid seperatly)						
a)	80mm dia nominal bore	Each	1.00	2,880.60	2,880.60		
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	961.75	1,923.50		
b)	50 mm nominal bore, 242 mm long weighin not less than 1240 gms	Each	2.00	1,391.50	2,783.00		
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	152.00	1,520.00		
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	143.95	1,439.50		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
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	3.00			44.80	134.40
b)	25 mm diameter	Each	2.00			50.00	100.00
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	4.00			2,525.50	10,102.00
3.24	Providing & fixing water storage cooler of approved make and brand with SS body having minimum flow rate of 40 ltrs. Per hour and storage capacity 80 ltrs. Complete in respects.(VOLTAS/ BLUE-STAR/ USHA SHRIRAM)	Each	1.00			39,150.60	39,150.60

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
3.25	Providing and fixing approved make & suitable model of R.O. plant (fully automatic operation)60ltrs. Per hour flow rate having capacity to treat the raw water and average recovery not less than 35% . The operating voltage to 230 volt AC +/- 10% alongwith required capacity on line SS pump of approved make (3HP minimum) and solenoid valves, dry run protection of pump, automatic tank level control, inbuilt auto flush timer for periodic flushing of membranes, storage tank (3.0 mm (minimum) thick S.S. 304 sheet) 1500 lts of suitable size and ita supporting structure, over voltage and over current protection with switch mode power supply system complete in all respects including installation and fittings with the following provisions: (IONIEXCHANGE/ KENT/AQUAPROCESS,Pantair)						
a)	10 micron polypropylene sediment pre filter						
b)	10 micron bacteriostatic activated carbon block on line micron filter with 5 micron rating						
c)	Required Nos. and size of reverse osmosis memberane with 0.0001 micron pore size energy saving poly amide type						
d)	UV lamp of minimum capacity 60LPH and minimum lamp wattage 15W						

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
e)	MS powder coated frame efficient of TDS removal more than 90%. Antiscalant dosing and acid dosing system for self flushing/cleaning.Pressure switches and gauges, pH correction dosing system, Digital TDS meter, Digital pH meter, electric panel and necessary instrumentation included Rotameter.MS structure and fibre glass sheet weather protection cover as per site condition.	Each	1.00			50,000.00	50,000.00
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	2.00	5251.80	10,503.60		
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	5.15	103.00		
d)	80 mm diameter pipe	metre	150.00	15.00	2,250.00		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	55.50	1,110.00		
b)	80 mm diameter pipe	metre	150.00	99.90	14,985.00		
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	282.9	565.80		
b)	80 mm diameter pipe	each	2.00	847.10	1,694.20		
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	4018.15	4,018.15		
3.31	Providing and fixing garden hydrant of approved quality and make complete in all respect	each	4.00			450.0	1800.0
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	161.25	3,225.00		
b)	80 mm dia nominal bore	Metre	150.00	573.40	86,010.00		
SUB TOTAL(Water Supply)					396,699.30		104,474.20

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	12.00	150.10	1,801.20		
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	12.00	496.90	5,962.80		
b)	150 mm diameter S.W. pipe/RCC NP2	Metre	100.00	607.70	60,770.00		
c)	250 mm diameter S.W. pipe/RCC NP2	Metre	50.00	819.20	40,960.00		
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						
a.i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	6.00	1,280.00	7,680.00		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	100.00	254.50	25,450.00		
b)	250 mm dia R.C.C. pipe	Metre	50.00	342.45	17,122.50		
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	6.00	7,061.70	42,370.20		
4.06	Extra depth for manholes						
a)	Size 90 x 80 cm						

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a i)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	1.00	4,061.70	4,061.70		
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	2.00	7,033.25	14,066.50		
4.08	Extra depth for circular type manhole 0.91m dia (at bottom) with beyond 0.91m to 1.67 m						
a)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	0.50	3,498.25	1,749.13		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	24.00	256.75	6,162.00		
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	275.00	275.00		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
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 :						
a)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	8.00	3,193.50	25,548.00		
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	200.00			1,800.00	360,000.00

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
4.13	Constructing septic tank, of size 2.0mx1.2mx2.5m 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			40500.0	40,500.00
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	15,228.15	30,456.30		
SUB TOTAL(SEWERAGE AND DRAINAGE)						284,435.33	400,500.00

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	16.00	130.80	2,092.80		
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	162.00	165.60	26,827.20		
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	6.00	83.80	502.80		
SUB TOTAL(EARTH WORK)					29,422.80		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	32.75	327.50		
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	20.00	857.30	17,146.00		
b)	150 mm dia pipe as per IS:3989	Metre	25.00			2,100.00	52500.0
6.03	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	12.00	112.50	1,350.00		
b)	for 150 mm dia pipe	Each	18.00			131.6	2368.8
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	4.00	296.35	1,185.40		
b)	150 mm	Each	6.00			1065.0	6390.0
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	4.00	342.80	1,371.20		

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
b)	150 mm dia	Each	6.00			1211.0	7266.0
6.06	Providing and fixing collar						
a)	100 mm						
a.ii)	Sand cast iron S&S as per IS-3989	Each	4.00	238.25	953.00		
c)	150 mm	Each	6.00			930.0	5580.0
6.07	Providing lead caulked joints to sand cast iron /centrifugally cast (spun) iron pipes and fittings of diameter:						
a)	100 mm	Each	20.00	207.85	4,157.00		
b)	150 mm	Each	30.00			401.0	12030.0
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	20.00	28.75	575.00		
c)	150 mm diameter pipe	Metre	25.00			60.0	1500.0
	SUB TOTAL(Rain Water pipe & fitting)					27,065.10	87,634.80

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
7.00	BOREWELL(1 No)						
7.01	Drilling by suitable rig as per IS : 2800-1979 (percussion or combination rig) or Reverse Rotary to suit site condition from ground level in all kind of soils and weathered rock including boulders (excluding rock) diameter of bore 300mm 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			300.0	9000.0
b)	30-60m	metre	30.00			400.0	12000.0
c)	60-90m	metre	30.00			550.0	16500.0
d)	90-120 m	metre	30.00			700.0	21000.0
7.02	Extra additional for drilling in Ordinary Rock if any found	metre	25.00			1200.0	30000.0
7.03	Extra additional for drilling in Hard Rock if any found	metre	25.00			1500.0	37500.0
7.04	Providing and lowering uPVC casing/housing pipe 150mm dia. with wall thickness 10 mm conforming to IS :12818 including sockets of standard design.	metre	70.00			1200.0	84000.0
7.05	Providing & fixing uPVC screen/slotted pipe with 1.5 mm to 3mm (slots as per strata condition) including sockets of standard design as per IS: 12818/1992.						
a)	150 mm dia uPVC socketed pipe with wall thickness 10.0 mm	metre	80.00			1500.0	120000.0
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

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
7.07	Providing and laying rounded pea gravel washed & served 3 to 6 mm nominal boreas per relevant ISI code.	Cum	16.00			2000.0	32000.0
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
7.09	Supplying, lowering and fixing in position reducer ,PVC bail plug with "U" hooks as per IS:2800-1964.	Each	1.00			1500.0	1500.0
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	80.00			300.0	24000.0
b)	Additional development of Tube well by high an over pumping unit till complete development of tube well does not clear by maximum 100 hours air compressor	per hour	50.00			450.0	22500.0
7.11	Tranportation, mobilisation and demobilisation or drilling equipment and ancillary equipment to site including clearing and cleaning the site after completion of work.	set	1.00			7000.0	7000.0
7.12	Providing and fixing brass full way valve with C.I. wheel of approved make, tested to a pressure of 21 kg/sqcm.						

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
a)	80 mm dia	Each	1.00			1106.3	1106.3
7.13	Providing and fixing gunmetal non return valve of approved make tested to a pressure of 21kg/sqcm.						
a)	80 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.						
	80 mm dia	Metre	100.00			1334.0	133400.0
7.15	Providing & filling sand of grading zone V or coarser grade all around G.I pipe in external work						
	80 mm dia	Metre	100.00			110.0	11000.0
7.16	Submersible pumps						

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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 impeller, high tensile SS 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 250-500 litre per minute at 50-120 m head along with a directly coupled submersible type squirrel cage electric induction 5 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 electrical panel from the same manufacturer, complete with all accessories in all respects. The contractor to obtain approval for model and make of pumpset & suitable Electrical panel after having yield report of fully developed tube well and submit actual bore strata chart.						
	including supplying laying and fixing water proof PVC insulated flat submersible cable 3x10 sqmm with end termination with its accessories. complete in all respect as required. 1 No. 3 Phase, fully automatic star-delta starter, type - II of 15 HP with thermal overload relay, contactor, Timer, Push Buttons and Auto-manual selector switch etc complete as required.	set	1.00			223458.0	223458.0

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
7.17	Carrying out Electrical logging of Borewell before lowering of pipe for analysiing of water quality including Electrical logging report, calculation etc.	Job	1.00			10000.0	10000.0
SUBTOTAL (BOREWELL)							806070.6

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
8.00	RAIN WATER HARVESTING(1NO.)						
8.01	Designing and Constructing of percolation pit cum perforated well 3000mm. dia upto 4000mm deep, 230 mm thick brick masonry work around upto 1.5 m deep with 75 class brick in cement mortar 1:4, 200 mm foundation concrete in 1:4:8 mix below brick work only, 150 mm thick precast removable RCC top slab with required steel reinforcement in cement concrete 1:2:4 mix, filled with coarse aggregate, SFRC covers, river pebbles of requisite size stone as shown in the drawing including centering and shuttering, as shown complete as per detailed drawings complete.	Each	1.00			98048.6	98048.6
8.02	Drilling as per IS : 2800-1964 (with percussion or combination rig) from ground level in all kind of soils including boulders (excluding rock) diameter of bore 450mm.						
a)	0-50m	Metre	30.00			700.0	21000.0
8.03	Extra for drilling in Ordinary Rock	Metre	5.00			1200.0	6000.0
8.04	Extra for drilling in Hard Rock	Metre	5.00			1500.0	7500.0
8.05	Providing and lowering of 200 mm dia uPVC blank/ slotted pipe with ribs, special fittings, jointing conforming to IS 12818 - 1992.	Metre	30.00			1200.0	36000.0

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	Market Rate	Market Amount
1	2	3	4	5	6	7	8
8.06	Constructing bar screen / settling tank, of sizes 4500x2500 with suitable depth up to 2.0 m in 1: 4 Cement Mortar (one cement : 4 coarse sand) height as per site requirement, in brick masonry 350mm thick walls upto water level and 230mm thick walls above water level & upto ground level, including all excavation, 20 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 as inside finish , top slab in RCC 1:2:4, including centring, shuttering and steel work, also providing and fixing D.I. manhole cover & frame of size 605mm x 450mm of weight not less than 38 kg (frame + cover) and cost of 100mm dia C.I. vent pipe with C.I. Ventilating Cowl and suitable wire mesh provision for inlet, 115mm baffle walls extending 2/3 the width spaced@500mm c/c including finishing with 1:3 cement plaster 15mm thick with floating coat of neat cement slurry , all complete in every respect as per drawing and as directed to suit site condition.	Each	1.00			136652.3	136652.3
SUBTOTAL (RAIN WATER HARVESTING)							305200.9

Name of Work:BOQ of Proposed Drugwarehouse at Chattisgarh RMNCH Project under NRHM							
Sl. No.	Description of Item	Unit	Total qty.	DSR 2012 Rate (Rs)	Amount DSR	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	4.00			6,900.00	27,600.00
9.02	Providing and fixing 9 liters capacity fire extinguisher water type gas pressure conforming to IS marking, fixed to wall.IS:15683	each	4.00			1,642.00	6,568.00
9.03	Providing and fixing ABC type fire extinguishers complete in all respects. IS:15683 ISI marked Capacity 6.0 Kg.	each	4.00			2,200.00	8,800.00
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)							50968.0
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							
End of phe BOQ							

SUMMARY OF BILL OF QUANTITY FOR ELECTRICAL WORKS OF REGIONAL DRUG WAREHOUSE AT CHATTSGARH

S.No.	DESCRIPTION	Amount In Figure (In Rs.)	Amount in Words (Rs.)
1	SUBHEAD 1: MAIN LT PANEL.	343000	
2	SUBHEAD 2 : DG SET & ACCESSORIES	962000	
3	SUBHEAD 3: MCB DISTRIBUTION BOARDS.	81045	
4	SUBHEAD 4: WIRING	1772310	
5	SUBHEAD: 5 - LIGHT FIXTURE AND FANS	918882	
6	SUBHEAD 6 : TELEPHONE SYSTEM	38740	
7	SUBHEAD 7: CONDUITING FOR COMPUTER SYSTEM .	18940	
8	SUB HEAD 8: LT CABLES	111968	
9	SUB HEAD :9 EARTHING, SAFETY EQUIPMENTS AND MISC.	131406	
10	SUB HEAD 10: OUT DOOR LIGHTING	348000	
	GRAND TOTAL FOR ALL ELECTRICAL WORKS	4726291	
	Quoted Rate in percentage above or below (in figure)		
	Quoted Rate in percentage above or below (in words)		

BILL OF QUANTITY FOR ELECTRICAL WORKS OF REGIONAL DRUG WAREHOUSE AT CHATTISGARH

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
1.00	SUBHEAD 1: MAIN LT PANEL.				
1.01	MAIN ELCTRICAL PANEL cum AMF panel				
	Supply, installation, testing and commissioning of LT Panel, cubicle type, totally enclosed, free standing type, dust ,damp and vermin proof panel , powder coated, made up of CRCA sheet, complete with aluminum busbars, danger notice plate, interconnections with suitable capacity aluminum leads/solid aluminum strips/rods, necessary interlocking, and having incoming and outgoing switchgears with cable alley in front as mentioned below and complete as per technical specifications and as required. The size of cable alley shall be sufficient enough to accommodate the cable sizes as mentioned in the SLD/ specifications/ drawings etc.				
	Note :				
	i Digital Multifunction metre should be suitable for true RMS metering.Metre should measure line and phase voltage , current of all three phases and neutral, HZ, PF, KW, KWH, including one set of CT.				
A.	INCOMER: 1 nos.				
	i 2 Nos. MCCB FEEDER as per following details/ specifications:				
	160 Amp 415 volts, 35 KA (lcs) TPN MCCB with variable current settings and having microprocessor based O/L, S/C & E/F protection release.				
	Extended rotary operating mechanism with door interlock with defeat feature and padlock facility. MCCB should be with spreader link and phase barriers.				
	Indicating lamps (LED Type) with 2A protection MCBs to indicate OPEN, CLOSE, TRIP .				
	Digital Ampere Metre of suitable range with suitable set of CT's and ASS.				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	Digital multi function meter with one set of suitable CTs, CT shorting links, R/Y/B LED indicating lamps and 2A control SP MCBs				
ii	AMF panel for 82.5 KVA DG Set				
	AMF relay with selector switch and its all the essential component / switchgears for AMF.				
a)	PROTECTION AND AMF COMPONENTS 82.5 KVA DG set.				
	Auto/manual/test/off selector switch				
	Suitable AMF Relay, 02 Nos. Four Pole Contractor one for Mains and other for DG set of suitable rating for 82.5 KVA DG set				
	MCCB for short circuit protection on both mains and for alternator				
	2 Nos over voltage relay, 2 nos. reverse power relay and 2 nos. under voltage relay.				
	3 sets of current transformers 15 P 10 accuracy for protection and 15 VA class - I for metering				
	Indicating lamps for load on mains and load on set.				
	Fuse for instruments.				
	Battery charger, complete with transformer/rectifier, DC voltmeter and ammeter, selector switch for trickle, off and boost the current adjustment.				
	Main supply failure monitor.				
	Supply failure timer				
	Restoration timer.				
	Control unit with three impulse automatic engine start / stop and failure to start lockout.				
	Impulse counter with locking and reset facility.				
	On/Off/ Control circuit switch with indicator.				
	Indicating lamp for shut down				
	High stator temperature.				
	Low lubricating oil pressure				
	Engine over speed				
	Engine fails to start				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	Full load/ maximum load warning.				
	One hour meter to indicate the number of hours set has operated				
	8 window alarm annunciator panel with hooter, push buttons, aux contactors etc. as required as per specification.				
	Mains supply voltage sensing relay				
	Emergency stop push button.				
	Selector switch for engine control ON/OFF				
	Instantaneous Earth Fault Relay Through Neutral.				
	Digital electronic KWH meter with metering Class-I CT's				
	Digital Electronics Frequency meter				
	Digital Electronic KW meter with metering class-I CT's				
	b 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.				
	Suitable rating of control wire from Mail panel to D.G set including glanding and termination at both ends with suitable lugs.				
B.	BUSBARS :				
	300 Amps Phase Four Pole busbars of aluminum.				
C	OUTGOING.				
	i) 7 Nos. MCCB as per following specifications:				
	63 Amp 415 volts, 25 KA (Isc), TP+NL MCCB with thermal magnetic release having variable current settings .				
	Extended rotary operating mechanism with door interlock with defeat feature and padlock facility. MCCB should be with spreader link and phase barriers.				
	Indicating lamps (LED Type) with 2A protection MCBs to indicate OPEN, CLOSE, TRIP .				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	Digital Ampere Metre of suitable range with suitable set of CT's and ASS.				
	ii) 2 Nos. MCCB as per following specifications:				
	32 Amp 415 volts,25 KA (Isc), TP+NL MCCB with thermal magnetic release having variable current settings .				
	Extended rotary operating mechanism with door interlock with defeat feature and padlock facility. MCCB should be with spreader link and phase barriers.				
	Indicating lamps (LED Type) with 2A protection MCBs to indicate OPEN, CLOSE, TRIP .				
	Digital Ampere Metre of suitable range with suitable set of CT's and ASS.				
	iii) 6 no. 63 Amps , 415 volts, 9 KA ,Four Pole, Miniature Circuit Breaker, with ON/ OFF indication.				
	iv) 2 no. 32 Amps , 240 volts, Double Pole, Miniature Circuit Breaker,				
	Total SubHead 1: Main LT Panel Cum AMF Panel as mentioned above.	Set	1	343000	343000

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
2.00	SUBHEAD 2 : DG SET & ACCESSORIES				
	SOUND PROOF DG SETS OF 82.5 KVA.				
2.01	DG SET OF 82.5 KVA.				
	Supply, installation, testing and commissioning of sound proof (silent type) Diesel Generating set having 82.5KVA Prime Power Ratings , 415 volt at 1500 RPM, suitable for 50 Hz, 3 phase system , suitable bhp, 0.85 load factor(Alternator should be such that it will give 82.5KVA output power at unity power factor) , water cooled type diesel engine- alternator set mounted on common base frame, return fuel cooler, battery & battery charger,Fuel tank, Anti Vibration mounting pads, Engine alternator safeties, electronic governor including all accessories & their wiring as per technical specification. This includes the following:				
	- Supplying and fixing of suitable sizes High class MS pipe for DG exhaust complete with bends, elbow, flanges etc including silencer and catalytic convertor exhaust pipe for exhaust of DG sets including pollution control board norms and as required.				
	- Supply and fixing of 50mm thick compressed mineral wool insulation (Rock wool) for D.G. exhaust pipe with 22 gauge aluminum sheet cladding etc. as required for the under mentioned dia pipe.				
	- Fabrication of supports for exhaust pipe, 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.				
	- 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, light fixtures for illumination with switch, wiring for light fixtures and power sockets, etc.				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	Supply of sutibale hand manual pump with 20 Meter Hard PVC pipe for filling the Oil from drum in D.G set				
	First filling of Full capacity of Diesel in D.G set after complete testing of D.G set at site. For commissioning of D.G set Diesel will provided by the contractor.				
	- Any other item required for completion of system above (D.G. set)				
	TOTAL SUBHEAD 2: DG SETS	set	1	962000	962000
	SUBHEAD 3: MCB DISTRIBUTION BOARDS.				
3.00	MCB DISTRIBUTION BOARD				
	Supplying & fixing following way, three pole and neutral, supply distribution with(PPI) Per Phase Isolation Horizontal DB with CRCA sheet steel, Powdwer cated, provision to mount 2P RCCB in each phase as subincomers equipped with colour coded wires, MCB distribution board, 415 volts,on recess/surface complete , terminal blocks, tinned copper busbar, neutral link, earth bar, Glazed Door, Door earthing , Insulated neutarl bar, Cable Ties , Blank Plate & Ckt. identification levels,din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc.Before procurement of DB the contractor has to take approval of DB schedule/ drawing of each DB from the Electrical Engineer, HSCC, as per technical specifications and as required.(but without MCB & RCCB),				
	i Note: I/c - Four Pole MCB with RCCB, Sub I/C- 2Pole RCCB, O/G- SP MCB				
	ii 6 +2 way (8+6+18), Double door	Each	4	4613	18452
3.01	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, B /C/D curve, miniature circuit breaker suitable for inductive load and lighting load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	i Single pole	Each	72	187	13464

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
3.02	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	i) 25 amps-40amp (100-300 MA)	Each	12	1619	19428
3.03	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32amps 240 volts "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	each	6	629	3775
3.04	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) (40-63)Amps	Each	6	2095	12570
3.05	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.				
	i) 40-63 Amps	Each	6	2216	13296
3.06	Supplying and fixing Single pole Blanking plate in the existing MCB DB complete as required.	Each	10	6	60
	TOTAL SUB HEAD-3: MCB DISTRIBUTION BOARDS AS MENTION ABOVE .				81045
4.00	SUBHEAD 4: WIRING				
	WIRING				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	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 & 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	230	1316	302680
	iv) Wiring for secondary light point(Group point wiring / fan point/ exhaust fan point/ call bell point with 3x1.5 sq.mm FR PVC insulated, fire retardant low smoke (FRLS) copper conductor single core cable in surface / recessed steel conduit, (looped from above primary point wiring and controlled by same modular switch .)etc as required.				
	Point wiring as mentioned above	Point	40	1010	40400
4.01	Wiring for 5A light plugs with 1.5 sq.mm. PVC insulated, FRLS copper conductor cable including one number 1.5 sq.mm. PVC insulated, copper conductor cable for earthing in surface/recessed ISI marked MS conduit (including supply and recess laying of ISI marked MS conduit) as per technical specifications and as required.	meter	250	241	60250

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
4.02	Wiring for (Three sockets 5A & one switch 10Amp) with 2.5 sq.mm. PVC insulated, FRLS copper conductor cable including one number 2.5 sq.mm. PVC insulated, copper conductor cable for earthing in surface/recessed MS conduit (including supply and recess laying of conduit) as per technical specifications and as required.(For Computer)	meter	400	273	109200
4.03	Wiring for 16 amp power plug with 2X4 sqmm PVC insulated, FRLS copper conductor, single core/multi strand cable in surface/recessed MS conduit (including supply and recess laying of MS conduit with all accessories) along with 4 sqmm PVC insulated, copper conductor, single core/multi strand cable for loop earthing etc per technical specifications & as required.				
	i) Directly from MCB-Distribution Board to the Socket Outlets	Meter	700	311	217700
4.04	Wiring for 20 Amp /32 Amp power plug with 2X6 sq.mm. PVC insulated, FRLS copper conductor multi strand cable in surface/recessed in MS conduit (including supply and recess laying of MS conduit with all accessories) along with 1X6 sqmm PVC insulated FRLS copper conductor for loop earthing, as per technical specifications & as required.(AC Point)	Meter	200	418	83600
4.05	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) 2X2.5 Sqmm with 1 No. 2.5 sqmm PVC insulated FRLS copper conductor for earthing.	Metre	3000	237	711000
	ii) 4X6 Sqmm with 2 No. 6 sqmm PVC insulated FRLS copper conductor for earthing	Metre	30	587	17610

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	iii) 4X10 Sqmm with 2 No. 10 sqmm PVC insulated FRLS copper conductor for earthing	Metre	100	1035	103500
	iv) 4X16 Sqmm with 2 nos 16 sq mm PVC insulated FRLS copper conductor for earthing.	Metre	30	1662	49860
4.06	Supplying and fixing suitable Module metal 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, base plate, modular cover plate, connections etc. and all civil works 'complete as required.	Each	15	376	5640
4.07	Supplying and fixing suitable module modular metal 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, base plate, modular cover plate, connections, etc. and all civil works complete as required.	Each	45	452	20340
4.08	Supply, Installation, Testing & Commissioning 63 Amps four pole MCCB in a sheet steel enclosure with extended rotary operating mechanism complete with all accessories as required.	Each	4	7000	28000
4.09	Supplying and fixing suitable Module 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)	Each	8	832	6656
4.10	Supply and fixing following AC Moduler box complete with 20/32 AMP SP MCB with 20/32 AMP socket with plug for 240 volt supply on surface or recess complete with all accessories including connections, testing and commissioning etc. as required.	Each	8	800	6400

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
4.11	Supply and fixing 3phase 20/ 32 amp industrial socket with TPN MCB in sheet metal encloser on surface/ recess complete with all accessories including connection, testing and commissioning etc. as required.	Each	6	1219	7314
4.12	Supplying, providing & fixing musical bell of approved make complete as required.	Each	4	540	2160
	TOTAL SUBHEAD: 4- WIRING				1772310
	SUBHEAD: 5 - LIGHT FIXTURE AND FANS				
5.00	LIGHT FIXTURES AND FANS				
5.01	Supply of following light fixture with high efficiency electronic/ dimmable ballast, starter, tubes/lamps, capacitor, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.				
i	1XTL-5 28 watt box type flourescent light fixture without reflector (Philips TMS 122M 1XTL5 28 W EBT or approved equivalent) (136b/136bw)	Each	80	1870	149600
ii	1X36 watt surface mounted type flourescent light fixture with opal acrylic diffuser (Philips TCS019 1XTL-D36W EBT or approved equivalent) (136AC1)	Each	7	1645	11515
iii	2X36 watt Surface/recessess mounted flourescent light fixture (Philips TCS 306 2XTL-D-36W HF EBT 236 or approved equivalent) 236SMO1	Each	110	2336	256960
iv	2X TL5 28 watt recess mounted mirror optics flourscent light fixture (Philips TBS 869 2XTL528 W EBP D8 or approved equivalent). (236 RMO3)	Each	6	6176	37056

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	v 2X 36 watt recess mounted clean room flourscent light fixture with bottom opening and toughened glass (Philips TBS 670 2X36W TL-D FOP GT or approved equivalent). (236CRF)	Each	20	9050	181000
	vi 2X TL5 28 watt recess mounted mirror optics flourscent Line lux light fixture (Philips RC720B 2XTL528 W EBP 0D or approved equivalent).	Each	6	5500	33000
	vii 2X28 T5 28 watt suitable for weather proof light fixture (Philips TCW450 2XTL5 28W EBT/Crompton T5 PFC11228EB or approved equivalent).	Each	14	4025	56350
5.02	Supply of following compact flourescent 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 ACO or approved equivalent) BH	Each	4	1179	4716
	ii 2X18 watt Mirror top light with frosted glass (Decon 05CA 01 or approved equivalent)	Each	8	1530	12240
	iii Surface mounted Batten holder (Plastic) with 9watt/13 watt CFL	Each	10	200	2000
	ii 2 X 18 watt surface mounted down light (Philips FCS 518 2XPLS/2P 11 W I 240 V or approved equivalent) (211CFLRECT) (TOILETS DL-1)	Each	15	2027	30405
5.03	Supply of following ceiling fans (Crompton Greaves High Breeze or approved equivalent) complete with double ball bearing, motor, blades, downrod, canopies, capacitor, modular type 5 STEP electronic fan regulator, suitable for operation on 230 volts, 50 Hz., 1 phase, AC supply complete as required				
	i 1200 mm sweep	Each	5	2100	10500

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	ii 1400 mm sweep	Each	25	2400	60000
5.04	Supply of 900 RPM, 450 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	4200	8400
5.05	Supply of 900 RPM, 305 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	8	2500	20000
5.06	Supply of 450 mm sweep, crompton greaves model high flow 18" 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	4	4010	16040
5.07	Installation, testing and commissioning of prewired, flourescent 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	243	70	17010
5.08	Installation, testing and commissioning of prewired, compact flourescent lamp fixture (CFL fxtures)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	22	70	1540
5.09	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	30	120	3600

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
5.10	Installation, testing and commissioning of exhaust fan up to 450 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	10	281	2810
5.11	Installation, testing and commissioning of wall mounted fan up to 450 mm sweep including supply and fixing wall bracket arrangement complete as required.	Each	4	60	240
5.12	Supplying and fixing Hexagonal fan Boxes with 3 mm thick hylem sheet covers in case of Fan Points	Each	30	130	3900
TOTAL SUBHEAD 5 : LIGHT FIXTURE & FANS					918882
SUBHEAD 6 : TELEPHONE SYSTEM					
6.00	TELEPHONE SYSTEM				
6.01	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	i 2 Pair	Metre	200	23	4600
6.02	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.				
	i 10 Pair	Each	1	1500	1500
6.03	Supplying and drawing of following pairs .5 mm dia annealed bare copper conductor Polythene insulated, core twisted into pairs armoured telephone cable on surface/tray with saddels etc. complete as required.				
	i 10 Pair	Metre	30	210	6300

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
6.04	Supplying and fixing of following sizes of rigid PVC conduit heavy duty along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	i) 20 mm	Metre	150	110	16500
	ii) 25 mm	Metre	40	126	5040
6.05	Supply, installation, testing and commissioning of following telephone instruments as per technical specification and as required :				
	i) Electronic push button subscriber telephone instruments DOT approved. (To Be approved by HSCC Engineer at the time of supply)	8	Each	600	4800
	TOTAL SUB HEAD 6:TELEPHONE SYSTEM				38740
	SUBHEAD 7: CONDUITING FOR COMPUTER SYSTEM .				
7.00	CONDUITING FOR COMPUTER SYSTEM .				
7.01	Supplying and fixing of following sizes of rigid PVC conduit heavy duty along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	i) 20 mm dia	Metre	120	110	13200
	ii) 25 mm dia	Metre	30	126	3780
7.02	Supplying and fixing two module modular plate (suitable for RJ-45 computer socket) with GI box complete as required.	Each	8	245	1960
	TOTAL SUB HEAD:7 CONDUITING FOR COMPUTER SYSTEM				18940
	SUB HEAD 8: LT CABLES				
8.00	LT CABLES				
8.01	Supply of following sizes of 1.1 kV grade multicore aluminum conductor armoured XLPE cable as per IS 7098.				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	i 3.5C X 120 Sq.mm	Metre	100	611	61100
	ii 3.5C X 35 Sq.mm	Metre	20	217	4340
	iii 3.5C X 25 Sq.mm	Metre	50	179	8950
	iv 2 Core 4 Sq mm	Metre	150	86	12900
8.02	Supply , Laying , termination of cable including lugs and cable gland on surface/ tray/trench of following sizes of 1.1 kV grade XLPE armoured control cable with copper conductor as per IS 7098.				
	i 2x2.5 sq mm	Metre	30	100	3000
	iii 16x 2.5 sqmm	Metre	30	500	15000
8.03	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 Size not exceeding 25 sq.mm	Metre	150	116	
	ii Size exceeding 25 sq.mm but not exceeding 120 sq.mm	Metre	100	124	
8.04	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.				
	i Size not exceeding 25 sq.mm	Metre	10	20	200
	ii Size exceeding 25 sq.mm but not exceeding 120 sq.mm	Metre	10	29	290
8.05	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
	i Size not exceeding 25 sq.mm	Metre	15	42	630
	ii Size exceeding 25 sq.mm but not exceeding 120 sq.mm	Metre	15	70	1050

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
8.06	Supplying and making end termination with suitable size aluminium lugs including double compression glands of following sizes of 1.1. kv grade multicore aluminum conductor PVC insulated and PVC sheathed				
	iv 3.5C X 120 Sq.mm	Each	6	215	1290
	v 3.5C X 35 Sq.mm	Each	6	123	738
	vi 3.5C X 25 Sq.mm	Each	8	110	880
	vii 2 Core 4 Sq mm	Each	40	40	1600
	TOTAL SUB HEAD 8: LT CABLES AS MENTIONED ABOVE				111968
9.00	SUB HEAD :9 EARTHING, SAFETY EQUIPMENTS AND MISC. ITEMS				
9.01	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	4	10000	40000
9.02	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Metre	4	5000	20000
9.03	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	Metre	6	108	648
9.04	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	12	402	4824

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
9.05	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	12	1058	12696
9.06	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Metre	50	132	6600
9.07	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	Metre	50	843	42150
9.08	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	Metre	6	748	4488
	TOTAL SUB HEAD 9: EARTHING, SAFETY EQUIPMENT AND MISC. ITEMS				131406
	SUB HEAD 10: OUT DOOR LIGHTING				
10.00	OUT DOOR LIGHTING				
10.01	Supply, erection, testing and commissioning of external swaged steel tubular pole with following specifications & items :				
	9.0 Mtrs. high swaged steel tubular pole (Single arm of suitable length each around 1.5 Metre), the construction of the pole shall be as per IS 2713 -1980 (410 SP-33) with base plate 450mmX450mmX6mm complete as per requirement with two coats of spray paints (shade as approved)				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	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. with Steet Tubular Poles(9M) Single Arm as mention above description	Set	8	15000	120000
	B. With Steet Tubular Poles (9M) same as above but for Double Arm as mention above description	Set	4	17000	68000
10.02	Supply, installation, testing and commissioning of external post top lantern with following accessories and complete as required :				
	i) 6m high 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.				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	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 outgoing 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 external post top lantern as mentioned above description	Set	10	8000	80000
10.03	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	5	4000	20000
10.04	Road Lighting Panel				
	Supply, installation, testing and commissioning of following outdoor type with canopy, M.V. cubicle type, powder coated totally enclosed, free standing type, dust, damp and vermin proof, MV Panel, bus bars, M.V. danger notice plate, interconnections with suitable capacity aluminum leads/solid aluminum strips/rods, connection of incoming and outgoing cables with thimbles and having following incoming and outgoing switchgears complete as required.				
	INCOMER:				

S.No.	Description.	Unit.	TOTAL QTY	Rate in Figures (in Rs.)	Amount (in Rs)
	1 No. 63 Amp 415 volts, FP MCCB with variable current setting, Extended rotary operating mechanism with door interlock with defeat feature and padlock facility. MCCB should be with spreader link and phase barriers.				
	1 Set of phase indicating lamp with HRC fuses				
	1 Set of timer & 63A TP contactor with neutral link (for street lights control) .				
	BUSBARS:				
	100 Amp TPN Aluminum busbars				
	OUTGOING:				
i	4 nos. 32 Amp TPN MCB with on /off indication				
ii	12 Nos. 16 Amp 415 volts, DP MCB & 2nos. 32A TPN MCB				
	Feeder Pillar as mention above	1	1	60000	60000
	TOTAL SUB HEAD 10: OUTDOOR LIGHTING				348000
	GRAND TOTAL FOR ALL ELECTRICAL WORKS				4726291

BILL OF QUANTITIES (B.O.Q.) FOR HVAC WORKS FOR "REGIONAL DRUG WAREHOUSE, CHHATTISGARH"					
ITEM NO 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE IN FIGURES (in RS) 5	AMOUNT (Rs.) 6
1.0	SPLIT AIR CONDITIONERS				
	Supply , installation , testing and commisioning of HI wall split air conditioner comprising of the following.				
	a) Outdoor condensing Units				
	b) Indoor Evaporative Units				
	c) Interconnecting Refrigerant and drain piping with insulation wherever required, refrigerant and oil. The unit shall include refrigerant piping, power cabling and drain piping.				
	d) 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.				
1.1	Capacity : 2.0 TR	2	Nos.	65092	130184
1.2	Extra Refrigerant Piping	15	Rmt.	350	5250
1.3	Extra drain piping	15	Rmt.	250	3750

ITEM NO 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE IN FIGURES (in RS) 5	AMOUNT (Rs.) 6
2.0	Window Air Conditioner				
	Supply , installation , testing and commisioning of Window Acs complete with transformer, electrical cabling as required along with mounting arrangement and Voltage stablizer. Complete in all respect as per specifications. The units should have 3 star rating from BEE.				
	Capacity				
2.1	2.0 TR	2	Nos.	53132	106264
	TOTAL				245448