

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
<b>EARTH WORK</b>						
1	Earth work in surface excavation not exceeding 30cm in depth but exceedign 1.5 m in width as well as 10sqm on plan including disposal of excavation earth upto 50m and lift upto 1.5m, disposal soil to be levelled and neatly dressed:					
1.1	All kinds of soil	40	sqm	20.74	829.60	
2	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 upto 50m and lift upto 1.5m, disposal earth to be levelled and neatly dressed.					
2.1	All kinds of soil	40	cum	101.85	4074.00	
3	Earth work in excavation by mechanical means (hydraulic excavator) manua means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth lead upto 50m and lift upto 1.5m, disposal earth to be levelled and neatly dressed.					
3.1	Ordinary rock	40	cum	152.60	6104.00	
3.2	Hard rock ( requiring blasting)	40	cum	252.20	10088.00	
3.3	Hard rock ( blasting prohibited)	40	cum	325.25	13010.00	
4	Excavation work in foundation trenches or drains not exceedign 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift up to1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m.					
4.1	Ordinary rock	40	cum	162.65	6506.00	
4.2	Hard rock (requiring blasting )	40	cum	272.95	10918.00	
4.3	Hard rock (blasting prohibited)	40	cum	332.45	13298.00	
5	filling available excavated earth (excluding rock) in trenches, plinth sides of founding each deposited layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, lead upto 50m and lift up to 1.5..	40	cum	45.70	1828.00	
6	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15cm deep and disposal of rubbish lead upto 50m and lift upto 1.5m					
6.1	All kinds of soil	40	100 sqm	512.10	20484.00	
7	Clearing jungle including uprooting of rank vegetation, brush wood trees and sapling of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50m outside the periphery of these area cleared.	40	100 sqm	263.90	10556.00	
8	Clearing grass and removal of the rubbish up to a distance of 50m outside the periphery of the area cleared.	40	100 sqm	135.65	5426.00	
9	Felling trees of the girth ( measured at a height of 1m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable material and disposal of unsserviceable material.					
9.1	Beyond 30cm girth upto and including 60cm girth	40	each	81.70	3268.00	
9.2	Beyond 60cm girth upto and including 120cm girth	40	each	359.80	14392.00	
9.3	Beyond 120cm girth upto and including 240cm girth	40	each	1658.85	66354.00	
9.4	Above 240cm girth	40	each	3330.20	133208.00	
10	Diluting and injecting chemical emulsion for POST- CONSTRUCTIONAL anti termite treatment (excluding the cost of chemical emulsion)					
10.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 ltr / sqm of the vertical including excavation channel along the wall and rodding etc. complete					
10.1.1	with chlorpyrifos/ lindane E.C 20% with 1% concentration	40	sqm	6.75	270.00	
10.2	Nil					
10.3	Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 Ltr per linear mtr including drillling and plugging holes etc.					
10.3.1	with chlorpyrifos/ lindane E.C 20% with 1% concentration	40	sqm	10.45	418.00	
10.4	Nil					
10.5	treatment of soil under existing floors using chemical emulsion @ one ltr per hole, 300 mm apart including drilling 12mm diameter holes and plugging with cement mortar 1:2 (1cement 2 coarse sand) to match the existing floor					
10.5.1	with chlorpyrifos/ lindane E.C 20% with 1% concentration	40	sqm	48.70	1948.00	
10.6	Nil					
10.7	Treatment of exisng masonry using chemical emulsion @ one ltr per hole at 300 mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2(1cement 2 coarse sand ) to the full depth of the hole					
10.7.1	with chlorpyrifos/ lindane E.C 20% with 1% concentration	40	mtr	7.60	304.00	
10.8	NIL					
10.9	Treatment at points of contact of wood work by chemical emulsion chlorpyrifos/ Lindane (in oil or kerosene based solution ) @ 0.5 ltr per hole by drilling 6mm dia holes at downward angle of 45 degree at 150mm centre to centre and sealing the same	40	mtr	79.80	3192.00	

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11	<b>Earth work</b> excavation in slushy soils including removing the sewage water and scum from the pit of broken sewer lines,man holes, chambers etc., to enable building new ones (sewage gangman are to be engaged if necessary) etc., complete all as directed by Engineer-in-charge.(while excavating care should be taken about cables and shall intimate to Electrical Department/ Telephones Department to take care of the cables).	40	One Cum	152.77	6110.80	
<b>CEMENT MORTAR WORKS*</b>						
12	Cement mortar 1:1( 1 cement 1 fine sand)	50	cum	414.70	20735.00	Cement / Steel will be issued free of cost from BHEL Stores
13	Cement mortar 1:2( 1 cement 2 fine sand)	50	cum	504.25	25212.50	Cement / Steel will be issued free of cost from BHEL Stores
14	Cement mortar 1:3( 1 cement 3 fine sand)	50	cum	549.50	27475.00	Cement / Steel will be issued free of cost from BHEL Stores
15	Cement mortar 1:4( 1 cement 4 fine sand)	50	cum	549.85	27492.50	Cement / Steel will be issued free of cost from BHEL Stores
16	Cement mortar 1:5( 1 cement 5 fine sand)	50	cum	550.05	27502.50	Cement / Steel will be issued free of cost from BHEL Stores
17	Cement mortar 1:6( 1 cement 6 fine sand)	50	cum	550.20	27510.00	Cement / Steel will be issued free of cost from BHEL Stores
18	Cement mortar 1:2 ( 1 cement 2 coarse sand)	50	cum	770.25	38512.50	Cement / Steel will be issued free of cost from BHEL Stores
19	Cement mortar 1:3 ( 1 cement 3 coarse sand)	50	cum	849.10	42455.00	Cement / Steel will be issued free of cost from BHEL Stores
20	Cement mortar 1:4 ( 1 cement 4 coarse sand)	50	cum	849.45	42472.50	Cement / Steel will be issued free of cost from BHEL Stores
21	Cement mortar 1:5 ( 1 cement 5 coarse sand)	50	cum	849.65	42482.50	Cement / Steel will be issued free of cost from BHEL Stores
22	Cement mortar 1:6 ( 1 cement 6 coarse sand)	50	cum	849.80	42490.00	Cement / Steel will be issued free of cost from BHEL Stores
23	Cement mortar 1:2( 1 cement 2 stone dust)	50	cum	865.25	43262.50	Cement / Steel will be issued free of cost from BHEL Stores
24	Cement mortar 1:2( 1 cement 2 marble dust)	50	cum	960.25	48012.50	Cement / Steel will be issued free of cost from BHEL Stores
25	Cement mortar 1:5( 1 cement 5marble dust)	50	cum	1063.65	53182.50	Cement / Steel will be issued free of cost from BHEL Stores
26	White cement mortar 1:2( 1 white cement 2 marble dust)	50	cum	7590.25	379512.50	
27	White cement mortar 1:3( 1 white cement 3 marble dust)	50	cum	6035.60	301780.00	
28	White cement mortar 1:5( 1 white cement 5 marble dust)	50	cum	4086.15	204307.50	
29	Mud mortar	50	cum	156.85	7842.50	
<b>CEMENT CONCRETE WORKS</b>						
30	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering- All work upto plinth level					
30.1	1:1:2 (1cement 1coarse sand 2 grade stone aggregate 20mm nominal size)	75	cum	1519.37	113952.75	Cement / Steel will be issued free of cost from BHEL Stores
30.2	1:1 1/2:3( 1 cement 1 <sup>1/2</sup> coarse sand :3 graded stone aggregate 20mm nominal size)	75	cum	1518.60	113895.00	Cement / Steel will be issued free of cost from BHEL Stores
30.3	1:2:4 (1cement 2:coares sand 4 grade stone aggregate 20mm nominal size)	75	cum	1568.49	117636.75	Cement / Steel will be issued free of cost from BHEL Stores
30.4	1:2:4 (1cement 2:coares sand 4 grade stone aggregate 40mm nominal size)	75	cum	1505.14	112885.50	Cement / Steel will be issued free of cost from BHEL Stores
30.5	1:3:6 (1cement 3:coares sand 6 grade stone aggregate 20mm nominal size)	75	cum	1629.89	122241.75	Cement / Steel will be issued free of cost from BHEL Stores
30.6	1:3:6 (1cement 3:coares sand 6 grade stone aggregate 40mm nominal size)	75	cum	1551.89	116391.75	Cement / Steel will be issued free of cost from BHEL Stores
30.7	1:3:6 (1cement 3:coarse sand 6 grade stone aggregate 40mm nominal size)	75	cum	1399.04	104928.00	Cement / Steel will be issued free of cost from BHEL Stores
30.8	1:4:8 (1cement 4:coares sand 8 grade stone aggregate 40mm nominal size)	75	cum	1551.74	116380.50	Cement / Steel will be issued free of cost from BHEL Stores
30.9	1:4:8 (1cement 4:coares sand 8 grade stone aggregate 40mm nominal size)	75	cum	1398.89	104916.75	Cement / Steel will be issued free of cost from BHEL Stores
30.1	1:5:10 (1cement 5:coares sand 10 grade stone aggregate 40mm nominal size)	75	cum	1551.61	116370.75	Cement / Steel will be issued free of cost from BHEL Stores
30.11	1:5:10 (1cement 5:fine sand 10 grade stone aggregate 40mm nominal size)	75	cum	1393.46	104509.50	Cement / Steel will be issued free of cost from BHEL Stores
30.12	1:2:3,1/2:4:11(1 ordinary portland cement :2Fly ash :3, 1/2 coarse sand :9 graded stone aggregate 40mm nominal size).	75	cum	1491.19	111839.25	Cement / Steel will be issued free of cost from BHEL Stores
30.13	1:2:3,1/2:4:11(1 ordinary portland cement :2Fly ash :3, 1/2 coarse sand :9 graded stone aggregate 40mm nominal size).	75	cum	1468.31	110123.25	Cement / Steel will be issued free of cost from BHEL Stores
31	Providing and laying cement concrete in retaining walls return 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 sillis fillets etc. upto floor five level excluding the cost of centering shuttering and finishing :					
31.1	1:1:2 (1cement 1coarse sand 2 grade stone aggregate 20mm nominal size)	75	cum	1841.02	138076.50	Cement / Steel will be issued free of cost from BHEL Stores
31.2	1:1 1/2:3( 1 cement 1 <sup>1/2</sup> coarse sand :3 graded stone aggregate 20mm nominal size)	75	cum	1840.25	138018.75	Cement / Steel will be issued free of cost from BHEL Stores

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31.3	1:2:4 (1cement 2:coares sand 4 grade stone aggregate 20mm nominal size)	75	cum	1890.14	141760.50	Cement / Steel will be issued free of cost from BHEL Stores
31.4	1:2:4 (1cement 2:coares sand 4 grade stone aggregate 40mm nominal size)	75	cum	1826.79	137009.25	Cement / Steel will be issued free of cost from BHEL Stores
31.5	1:3:6 (1cement 3:coares sand 6 grade stone aggregate 20mm nominal size)	75	cum	1951.54	146365.50	Cement / Steel will be issued free of cost from BHEL Stores
31.6	1:3:6 (1cement 3:coares sand 6 grade stone aggregate 40mm nominal size)	75	cum	1873.54	140515.50	Cement / Steel will be issued free of cost from BHEL Stores
31.7	1:3:6 (1cement 3:fine sand 6 grade stone aggregate 40mm nominal size)	75	cum	1720.69	129051.75	Cement / Steel will be issued free of cost from BHEL Stores
32	Centering and shuttering including strutting propping etc. and removal of form work for :					
32.1	Foundations , Footings, bases for columns	50	sqm	119.25	5962.50	
32.2	Retaining walls, return walls, walls ( any thickness ) including attached pilasters , buttresses, plinth and string courses fillets etc.	50	sqm	180.40	9020.00	
32.3	Columns piers, abutments, pillars, posts and struts.	50	sqm	238.40	11920.00	
33	Providing and fixing upto floor five level precast concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills, shelves, louvers, steps, stair cases, etc. including hoisting and setting in position with cement mortar 1:3 (1:cement :3 coarse sand ), cost of required centering, shuttering and finishing smoth with 6mm thick cement plaster 1:3 (1cement : 3 fine sand )on exposed surgaces complete.					
33.1	1:2:4(1cement :2 coarse sand :4 graded stone aggrigate 20mm nominal size)	50	cum	2806.61	140330.50	Cement / Steel will be issued free of cost from BHEL Stores
33.2	1:3:6(1cement :3 coarse sand :6 graded stone aggrigate 20mm nominal size)	50	cum	2868.01	143400.50	Cement / Steel will be issued free of cost from BHEL Stores
34	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1cement 3 coarese sand ) including the cost of required centering shuttering and finishing smoth with 6 mm thick cement plaster 1:3 (1 cement :3 fine sand ) on exposed surfaces complete.					
34.1	1:2:4(1cement :2 coarse sand :4 graded stone aggrigate 20mm nominal size)	50	cum	2202.96	110148.20	Cement / Steel will be issued free of cost from BHEL Stores
<b>REINFORCED CEMENT CONCRETE WORKS</b>						
35	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering shuttering finishing and reinforcement All work up to plinth level					
35.1	1:1:2(1cement 1coarse sand 2 grade stone aggrigate 20mm nominal size)	55	cum	1621.57	89186.35	Cement / Steel will be issued free of cost from BHEL Stores
35.2	1:1.5:3(1cement 1.5 coarse sand 3 grade stone aggrigate 20mm nominal size)	55	cum	1620.80	89144.00	Cement / Steel will be issued free of cost from BHEL Stores
35.3	1:2:4( 1cement 2 coarse sand 4 grade stone aggrigate 20mm nominal size)	55	cum	1670.64	91885.20	Cement / Steel will be issued free of cost from BHEL Stores
36	Reinforced cement concrete work in walls (any thickness) including attached pilasters buttresses plinth and string course fillets columns pillars piers abutments posts and struts etc. up to floor five level excluding cost of centering shuttering finishing and reinforcement					
36.1	1:1:2(1cement 1coarse sand 2 grade stone aggrigate 20mm nominal size)	55	cum	1981.92	109005.60	Cement / Steel will be issued free of cost from BHEL Stores
36.2	1:1.5:3(1cement 1.5 coarse sand 3 grade stone aggrigate 20mm nominal size)	55	cum	1981.15	108963.25	Cement / Steel will be issued free of cost from BHEL Stores
36.3	1:2:4( 1cement 2 coarse sand 4 grade stone aggrigate 20mm nominal size)	20	cum	2031.04	40620.80	Cement / Steel will be issued free of cost from BHEL Stores
37	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, intels, bands, plain window sills, staircases and spiral strair cases upto floor five level excluding the cost of centering shuttering finishing and reinforcement with 1:2:4( 1cement 2 coarse sand 4 grade stone aggrigate 20mm nominal size)	55	cum	1984.89	109168.95	Cement / Steel will be issued free of cost from BHEL Stores
38	Providing and laying upto floor five level reinforcement cement concrete in kerbs steps and the like excluding the cost of centering shuttering finishing and reinforcement with 1:2:4( 1cement 2 coares sand 4 grade stone aggrigate 20mm nominal size)	55	cum	1813.89	99763.95	Cement / Steel will be issued free of cost from BHEL Stores
39	Centering and shuttering including strutting propping etc. and removal of form work for :					
39.1	Foundations , Footings, bases for columns	20	sqm	119.25	2385.00	
39.2	walls (any thickness) including attached pilasters, butteresses plinth and string courses etc.	20	sqm	180.40	3608.00	
39.3	Suspended floors roofs, landing balconies and acceess platform	20	sqm	187.35	3747.00	
39.4	Shelves ( cast in situ)	20	sqm	187.35	3747.00	
39.5	Lintels, beams, plinth beams, girderss, bressumenrs and cantilevers.	20	sqm	162.65	3253.00	
39.6	Columns piers, abutments, pillars, posts and struts.	20	sqm	238.40	4768.00	
39.7	Stairs, (excluding landing ) except spiral staircases	20	sqm	204.00	4080.00	
39.8	Spiral staircase ( including landing )	20	sqm	182.70	3654.00	
39.9	Arches, domes, vault up to 6m span	20	sqm	514.70	10294.00	

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BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
39.1	Extra for arches, domes, vault exceeding 6m span	20	sqm	259.60	5192.00	
39.11	Chimneys and shafts	20	sqm	180.40	3608.00	
39.12	Well steining	20	sqm	147.00	2940.00	
39.13	Vertical and horizontal fines individually or forming box louvers band, fascias and eaves boards.	20	sqm	285.55	5711.00	
39.14	NIL					
39.15	Small lintels not exceeding 1.5m clear span, moulding as in cornices, window sills, string courses, bands, coping bed plates, anchor blocks and the like	20	sqm	119.25	2385.00	
39.16	Edges of slabs and breaks in floors and walls					
39.16.1	under 20 cm wide	55	mtr	61.10	3360.50	
39.16.2	Above 20 cm wide	55	sqm	278.25	15303.75	
39.17	Nil					
39.18	Nil					
39.19	Conices and mouldings	55	sqm	323.00	17765.00	
39.2	Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like.	55	sqm	246.95	13582.25	
39.21	Weather shade, chajjas, corbels etc. including edges.	55	sqm	258.60	14223.00	
39.22	Suspended floors roofs, landing balconies and access platform with water proof ply 12mm thick	55	sqm	329.80	18139.00	
39.23	Lintels beams plinth beams girders bressumers and cantilevers with water proof ply 12mm thick	55	sqm	319.10	17550.50	
40	Providing hoisting and fixing upto floor five level precast reinforced cement concrete work in string courses bands coping bed plates anchor blocks, plain window sills and the like including the cost of required centering shuttering finishing smooth with 6mm thick cement plaster 1:3 ( 1cement 3 fine sand ) on exposed surface complete but excluding cost of stone aggregate 20mm nominal size)	55	cum	2874.51	158098.05	Cement / Steel will be issued free of cost from BHEL Stores
41	Providing hoisting and fixing upto floor five level precast reinforced cement concrete in lintels beams and bressumers includign setting in cement mortar 1:3 (1cement 3 coarse sand) cost of required centering and shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1cement 3 fine sand ) on exposed surfaces but excluding the cost of reinforcement with 1:2:4( 1 cement 2 coarse sand 4 graded stone aggregate with 20mm nominal size)	55	cum	3401.23	187067.54	Cement / Steel will be issued free of cost from BHEL Stores
42	Providing hoisting and fixing upto floor five level precast reinforced cement concrete in vertical and horizontal fines individually or forming box louvers setting in cement mortar 1:2 ( 1cement 2 coarse sand) including the cost of required centering shuttering and finishing smooth with 6mm thick cement plaster 1:3( 1cement 3 fine sand ) on exposed surfaces complete but excluding the cost of reinforcement with 1:2:4(1cement 2 coarse sand 4 graded stone aggregate 20mm nominal size)	55	cum	4249.01	233695.33	Cement / Steel will be issued free of cost from BHEL Stores
43	Providing precast cement concrete jali 1:2:4( 1cement 2 coarse sand 4 graded stone aggregate 6mm nominal size) reinforced with 1.6mm dia mild steel wire including centering and shuttering roughening cleaning fixing in cement mortar 1:3 (1cement 3 fine sand )etc. complete excludign plastering of the jambs sills and soffits.					
43.1	50mm thick	55	sqm	350.59	19282.67	Cement / Steel will be issued free of cost from BHEL Stores
43.2	40mm thick	55	sqm	295.39	16246.67	Cement / Steel will be issued free of cost from BHEL Stores
43.3	25mm thick	55	sqm	268.69	14778.17	Cement / Steel will be issued free of cost from BHEL Stores
<b>ENCASING ROLLED STEEL SECTION</b>						
44	Encasing rolled steel section, in beams and columns with cement concrete 1:2:4( 1cement 2 coarse sand 4 graded stone aggregate 12.5mm nominal size) including centering and shuttering complete but excluding cost of reinforcement.	55	cum	3264.44	179544.20	Cement / Steel will be issued free of cost from BHEL Stores
45	Encasing rolled steel sections in beams and columns with cement concrete 1:2:4( 1cement 2 coarse sand 4 graded stone aggregate 12.5mm nominal size) including centering and shuttering complete but excluding cost of expanded metal and hangers.	55	cum	1822.29	100225.95	Cement / Steel will be issued free of cost from BHEL Stores
46	Reinforcement for RCC work including straightening, cutting bending placing in position and binding all complete.					
46.1	Cold twisted bars	55	kg	5.81	319.66	Cement / Steel will be issued free of cost from BHEL Stores
46.2	Hot rolled deformed bars	55	kg	5.81	319.66	Cement / Steel will be issued free of cost from BHEL Stores
47	Extra for rendering smooth the top of suspended floors landings and staircases(treads and risers) with cement mortar 1:2(1cement 2 coarses sand) including a floating cost of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15mm of fine sand in case of suspended floor and bricks laid in mud mortar in case of landing and steel includign subsequent removal and cleaning of the same	55	sqm	25.39	1396.49	Cement / Steel will be issued free of cost from BHEL Stores

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BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
48	Providing and filling in position blown bitumen in expansion joints.	55	per cm depth per cm width per 100m	348.70	19178.50	
49	Providing and filling in position bitumen mix filler of proportion 80 kg of hot bitumen 1kg of cement and 0.25 cubic metre of coarse sand for expansion joints.	55	per cm depth per cm width per 100m	98.68	5427.46	Cement / Steel will be issued free of cost from BHEL Stores
50	Providing and fixing in position 12mm thick bitumen impregnated fibre board conforming to IS: 1838 including cost of primer sealing compound in expansion joints	55	per cm depth per cm width per 100m	334.55	18400.25	
51	Providing and laying in position machine batched machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work 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 with out impairing strength and durability as per direction of Engineer in Charge. M-25 grade reinforced cement concrete by using 410kg of cement per cum of concrete. all work up to floor V level with readymix concrete.	55	cum	3983.75	219106.25	
52	Add or deduct for providing richer or leaner mixes respectively at all floor levels.					
52.1	Providing M-30 grade concrete by using 420kg of cement per cum of concrete instead of M-25 grade B.M.C/ R.M.C.	55	cum	109.90	6044.50	
52.2	Providing M-35 grade concrete by using 428kg of cement per cum of concrete instead of M-25 grade B.M.C/R.M.C.	55	cum	217.30	11951.50	
52.3	Providing M-40 grade concrete by using 435kg of cement per cum of concrete instead of M-40 grade B.M.C/R.M.C.	55	cum	256.45	14104.75	
<b>BRICK MASONRY</b>						
53	Brick work with FPS bricks of class designation 75 in foundation and plinth in:					
53.1	cement mortar 1:4( 1cement :4 coarse sand)	20	cum	1791.99	35839.80	Cement / Steel will be issued free of cost from BHEL Stores
53.2	cement mortar 1:6( 1cement :6 coarse sand)	20	cum	1791.88	35837.50	Cement / Steel will be issued free of cost from BHEL Stores
53.3	Brick work with modular bricks of class designation 75 in foundation and plinth in					
53.3.1	cement mortar 1:4( 1cement :4 coarse sand)	55	cum	1698.84	93436.20	Cement / Steel will be issued free of cost from BHEL Stores
53.3.2	cement mortar 1:6( 1cement :6 coarse sand)	55	cum	1719.33	94562.88	Cement / Steel will be issued free of cost from BHEL Stores
54	Brick work FPS brick of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in					
54.1	cement mortar 1:4( 1cement :4 coarse sand)	55	cum	2100.49	115526.95	Cement / Steel will be issued free of cost from BHEL Stores
54.2	cement mortar 1:6( 1cement :6 coarse sand)	55	cum	2100.38	115520.63	Cement / Steel will be issued free of cost from BHEL Stores
55	Half brick masonry with FPS brick of class designation 75 in foundation and plinth in.					
55.1	cement mortar 1:3( 1cement :3 coarse sand)	55	sqm	214.23	11782.66	Cement / Steel will be issued free of cost from BHEL Stores
55.2	cement mortar 1:4( 1cement :4 coarse sand)	55	sqm	214.19	11780.56	Cement / Steel will be issued free of cost from BHEL Stores
56	Half brick masonry with FPS brick of class designation 75 in superstructure above plinth level upto floor V level.					
56.1	cement mortar 1:3( 1cement :3 coarse sand)	55	sqm	246.63	13564.66	Cement / Steel will be issued free of cost from BHEL Stores
56.2	cement mortar 1:4( 1cement :4 coarse sand)	55	sqm	246.64	13565.31	Cement / Steel will be issued free of cost from BHEL Stores
<b>STONE MASONRY</b>						
57	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12( 1cement 6 coarse sand 12 grade stone aggregate 20mm nominal size) at plinth level with					
57.1	cement mortar 1:6( 1cement :6 coarse sand)	55	cum	1403.47	77190.58	Cement / Steel will be issued free of cost from BHEL Stores
58	Coursed rubble masonry (second sort) with hard stone in foundation and plinth with					
58.1	cement mortar 1:6(1cement 6 coarses sand)	55	cum	1517.25	83448.75	Cement / Steel will be issued free of cost from BHEL Stores

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
59	Stone work ( machine cut edges ) for wall linign upto 10m height etc.(vener work) backing filled with a grout of 12mm thick cement mortar 1:3( 1cement 3 coarse sand ) and jointed with cement mortar 1:2( 1cement 2 stone dust) including rubbing and polishing complete( to be secured to the backing by means of cramps which shall be paid for separately)					
59.1	Kota stone slabs exposed face dressed and rubbed					
59.1.1	25mm thick	55	sqm	652.41	35882.50	Cement / Steel will be issued free of cost from BHEL Stores
60	Stone tile work for wall lining upto 10m height with special adhesive over 12mm thick bed of cement mortar 1:3( 1 white cement 2 coarse sand ) including pointing in white cement with an admixture of pigment to match the stone shade					
60.1	8mm thick (mirror polished and machine cut edge)					
60.1.1	Granite stone of any colour and shade, white cement in contractor scope	55	sqm	988.65	54375.62	Cement / Steel will be issued free of cost from BHEL Stores
60.1.2	Raj nagar plain white marble udaipur green marble / Zebra black marble,white cement in contractor scope.	55	sqm	839.85	46191.62	Cement / Steel will be issued free of cost from BHEL Stores
<b>WOOD/ PVC WORKS</b>						
61	Providing wood work in frames of doors windows, clerestory windows and other frames, wrought framed and fixed in position					
61.1	Second class teak wood	50	cum	52090.00	2604500.00	
61.2	Sal wood	50	cum	30511.95	1525597.50	
61.3	Kiln seasoned and chemically treated Hollock wood	50	cum	31339.45	1566972.50	
61.4	Fixing well seasoned medium Indian teak wood work in frames of doors / Windows / clearstory windows and other frames, wrought framed and fixed in position etc complete all as directed by Engineer-in-charge. (This includes dismantling the existing frames, brick work, PCC,application of primer etc and making good to a neat finish etc complete including disposal of debries, at 2 KM lead.)	50	Cum	6386	319300.00	
62	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI maked black enamelled M.S butt hinges with necessary screws excluding panelling which will be paid for separately.					
62.1	Second class teak wood					
62.1.1	35mm thick shutters	34	sqm	1373.65	46704.10	
62.1.2	30mm thick shutters	34	sqm	1219.10	41449.40	
62.2	Kiln seasoned and chemically treated Hollock wood					
62.2.1	35mm thick shutters	34	sqm	899.70	30589.80	
62.2.2	30mm thick shutters	34	sqm	810.90	27570.60	
63	Providing and fixing 35mm thick factory made laminated veneer lumber door shutter conforming to IS 14616 and TDS 15:2001(part B) including ISI marked black enameled M.S butt hinges with necessary screws as per directions of engineer in charge and panelling with panels of					
63.1	12mm thick plain grade-1, medium density flat pressed three layer particle board FPT-1 or grade wood particle board FPT-1 IS :3087 marked bonded with BWP type synthetic resin adhesive as per IS :848	34	sqm	1877.20	63824.80	
63.2	12mm thick pre laminated particle board ( decorative lamination on both sides) grade- 1, medium density flat pressed three layer particle board FPT-1 or graded wood particle boarde FPT-1, conforming to IS 3087 bonded with BWP type synthetic resin adhesive as per IS 848 and prelaminated conforming to IS 12823 grade 1, type -II marked	34	sqm	2014.25	68484.50	
63.3	12mm thick one side pre- laminated particle board (decorative lamination on one side and other sides balancing lamination) grade-1 medium density flat pressed three layer particle board PFT-1 or graded wood particle board FPT-1 conforming to IS 3087 bonded with BWP type synthetic resin adhesive as per IS 848 and pre- laminated conforming to IS 12823 grade -1, type II marked	34	sqm	1960.80	66667.20	
64	Providing and fixing panelling or panelling and glezing in panelled or panelled and glazed shutters for doors windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured) panelling for panelled or panelled and glazed shutters 25mm to 40mm thick					
64.1	Second class teak wood	34	sqm	1075.60	36570.40	
64.2	Kiln seasoned and chemically treated Hollock wood	34	sqm	711.25	24182.50	
64.3	Ply wood 5 ply,9mm thick					
64.3.1	Decorative plywood both side decorative veneer (Type-1) conforming to IS 1328 BWR type	34	sqm	1121.60	38134.40	
64.3.2	Decorative plywood one side decorative veneer (Type-1) conforming to IS 1328 BWR type	34	sqm	923.30	31392.20	
64.4	Nil					
64.5	Nil					
64.6	Ply wood 7 ply,9mm thick					
64.6.1	Decorative plywood one side decorative veneer (Type-1) conforming to IS 1328 BWR type	34	sqm	971.85	33042.90	
64.7	Nil					
64.8	Particle board 12mm thick					

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
64.8.1	Plain particle board flat pressed, 3 layer or grade wood particle board medium density grade I, IS: 3087 marked	34	sqm	518.35	17623.90	
64.8.2	Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS 3097, grade I.	34	sqm	740.20	25166.80	
64.8.3	Pre-lamination particle board with decorative lamination on one side and balancing lamination on other side, grade I, type II IS 12823 marked.	34	sqm	985.70	33513.80	
64.8.4	Pre-lamination particle board with decorative lamination on both side and balancing lamination on other side, grade I, type II IS 12823 marked.	34	sqm	1027.30	34928.20	
65	Providing and fixing panelling or panelling and glezing in panelled or panelled and glazed shutters for doors windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured) panelling for panelled or panelled and glazed shutters 25mm to 40mm thick. coir veneer board( conforming to IS 14842-2000)					
65.1	12 mm thick	34	sqm	920.50	31297.00	
66	Providing and fixing glazed shutters for doors windows and clerestory windows using 4mm thick float glass panes including black enamelled ISI marked MS butt hinges with necessary screws.					
66.1	Second class teak wood					
66.1.1	35mm thick	34	sqm	1718.30	58422.20	
66.1.2	30mm thick	34	sqm	1541.65	52416.10	
66.2	Nil					
66.3	Nil					
66.4	Klin seasoned and chemically treated Hollock wood					
66.4.1	35mm thick	34	sqm	1178.60	40072.40	
66.4.2	30mm thick	34	sqm	1077.05	36619.70	
67	Providing and fixing factory made lamination veneer lumber glazed shutter conforming to IS14616 and TADS 15:2001( part B) using 4mm thick float glass panes for doors windows and clerestory windows including ISI marked black enamelled MS butt hinges with necessary screws as per directions of Engineer in charge					
67.1	30mm thick shutters	34	sqm	1633.25	55530.50	
68	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors windows and clerestory window shutters(area of opening for glass panes excluding portion inside rebate shall be measured)					
68.1	5.5mm thick instead of 4mm thick	34	sqm	106.85	3632.90	
69	Extra for providing frosted glass panes 4mm thick instead of ordinary float glass panes 4mm thick in doors windows and clerestory window shutters( area of opening for glass panes excluding portion inside rebate shall be measured)	34	sqm	10.45	355.30	
70	Providing and fixing 25mm thick shutters for cup board etc.					
70.1	Panelled or Panelled and glazed shutters					
70.1.1	Second class teak wood including ISI marked anodised aluminium butt hings with necessary screws	34	sqm	1360.90	46270.60	
70.2	Nil					
70.3	Glazed shutters					
70.3.1	Second class teak wood including ISI marked anodised aluminium butt hings with necessary screws	34	sqm	1393.75	47387.50	
71	Providing and fixing pre-laminated flat pressed 3 layer (medium density) particle board or grded wood particle board IS 3087 marked with one side decorative and other side balancing lamination grade I, type II exterior grade IS 12823 marked in shelves with screws and fitting wherever required edges to be painted with polyurethane prime fitting to be separately)					
71.1	18mm thick	34	sqm	935.95	31822.30	
71.2	25mm thick	34	sqm	1009.70	34329.80	
72	Providing and fixing 25mm thick shutters for cup board etc. including ISI marked black enamelled MS butt hinges with necessary screws:					
72.1	Panelled or Panelled and glazed shutters					
72.1.1	Second class teak wood	34	sqm	1312.95	44640.30	
72.2	Nil					
72.3	Glazed shutters					
72.3.1	Second class teak wood	34	sqm	1387.10	47161.40	
73	Providing and fixing ISI marked flush door shutters conforming to IS 2202 (part I) decorative type core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross band and face veneers on both faces of shutters					
73.1	35mm thick including ISI marked stainless steel butt hinges with necessary screws	34	sqm	1473.50	50099.00	
73.2	30mm thick including ISI marked stainless steel butt hinges with necessary screws	34	sqm	1415.45	48125.30	
73.3	25mm thick (for cupboard) including ISI marked nickel plated bright finished MS piano hinges IS 3818 marked with necessary screws	34	sqm	1317.65	44800.10	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
74	Providing 50x50x50mm 2nd class teak wood plug including cutting brick work and fixing in cement mortar 1:3(1cement 3 fine sand) and making good the walls etc.	34	each	10.10	343.31	Cement / Steel will be issued free of cost from BHEL Stores
75	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised MS screws including drilling holes in masonry work/CC/RCC and making good etc, complete					
75.1	25mm long	34	each	9.40	319.60	
75.2	32mm long	34	each	11.15	379.10	
75.3	40mm long	34	each	13.45	457.30	
75.4	50mm long	34	each	15.80	537.20	
76	Providing and fixing 2nd class teak wood plain lining tongued and grooved on and including wooden plugs complete with necessary screws and priming coat on unexposed surface.					
76.1	40mm thick	34	sqm	2608.01	88672.33	Cement / Steel will be issued free of cost from BHEL Stores
76.2	25mm thick	34	sqm	1683.11	57225.73	Cement / Steel will be issued free of cost from BHEL Stores
76.3	20mm thick	34	sqm	1360.66	46262.43	Cement / Steel will be issued free of cost from BHEL Stores
76.4	12mm thick	34	sqm	867.41	29491.93	Cement / Steel will be issued free of cost from BHEL Stores
77	Providing and fixing MS grills of required pattern in frames of windows etc. with MS flats, square or round bars etc. all complete					
77.1	Fixed to steel windows by welding	34	kg	59.25	2014.50	
77.2	Fixed to opening / wooden frames with rawl plugs screws etc	34	kg	64.40	2189.60	
78	Providing and fixing ISI marked MS pressed butt hinges bright finished with necessary screws etc. complete					
78.1	125x65x2.12mm	34	each	16.80	571.20	
78.2	100x58x1.90mm	34	each	13.10	445.40	
78.3	75x60x3.10mm	34	each	9.55	324.70	
78.4	50x37x1.50mm	34	each	5.35	181.90	
79	Providing and fixing IS 1341 marked MS heavy weight butt hinges with necessary screws etc. complete					
79.1	125x90x4.00mm	34	each	37.50	1275.00	
79.2	100x75x3.50mm	34	each	22.25	756.50	
79.3	75x60x3.10mm	34	each	13.40	455.60	
79.4	50x40x2.50mm	34	each	8.15	277.10	
80	Providing and fixing partition upto ceiling height consisting of G.I frame and required board including providing and fixing of frame work made of special section power / roll form G.I sheet with Zinc coating of grade 175 in consisting of floor and ceiling channel 50mm wide having equal flanges of 32mm and .5mm thick fixed to the floor and ceiling at the spacing of 610mm centre to centre with dash fastener of 12.5mm dia meter 40mm length and the studs 48mm wide having one flange of 43mm and other flanges 36mm and 0.50mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610mm centre to centre by 6mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing of 450mm centre to centre and fixing of boards to either side of frame work by 20mm long drive wall screws on studs floor and ceiling channels at the spacing of 300mm centre to centre including jointing and finishing to a flush with recommended jointing compound jointing tape joint finisher and two coats of primer suitable for board as per manufacture specification all complete.					
80.1	67mm overall thickness partition with 8.5mm thick double skin glass reinforced Gypsum (GRG) board conforming to IS 2095 part III	34	sqm	813.80	27669.20	
80.2	75mm overall thickness partition with 12.5mm thick double skin plain Gypsum board conforming to IS 2095 part I	34	sqm	674.45	22931.30	
80.3	66mm overall thickness partition with 8mm thick double skin calcium silicate board made with calcareous and siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with compressive strength 225kg/sqcm bending strength 100kg / sq.cm	34	sqm	823.10	27985.40	
80.4	66mm overall thickness partition using 8mm thick double skin non-asbestos multipurpose cement board reinforced with cellulose fibre manufactured through autoclaving process (high pressure steam cured ) as per IS 14862 with suitable fibre cement screws	34	sqm	927.65	31540.10	
81	Providing and fixing factory made UPVC door frame made of UPVC extruded section having an overall dimensions as below (tolerance - 1mm ) with wall thickness 2.0mm - 0.2mm, corners of the door frame to be mitred and welded of pastic, galvanized brackets and stainless steel screws . the hinges side vertical of the frames reinforced by galvanized stainless steel hinges fixed to the frame complete as per manufactures specification and direction of engineer in charge					
81.1	Extruded section profile size 48x40mm	34	mtr	141.00	4794.00	
81.2	Extruded Section Profile size 42x50mm	34	mtr	146.80	4991.20	

Contractor



**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
81.3	Providing and fixing to existing door frames					
81.3.1	24mm thick factory made PVC door shutters made of styles and rails of a UPVC hollow section of size 59x24mm and wall thickness 2mm +- 0.2mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of MS galvanised / plastic brackets of size 75x220 mm having wall thickness 1.0mm and stainless steel screws. the styles of the shutter reinforced by inserting galvanised MS tube of size 20x20mm and 1mm +- 0.1mm wall thickness. the lock rail made up of H section a UPVC hollow section of size 100x24 mm and 2 mm +- 0.2mm wall thickness fixed to the shutter styles by means of plastic/ galvanised MS.U cleats. the shutter frame filled with a UPVC multi chambered single panel of size not less than 620 mm having over all thickness of 20mm and 1mm +- 0.1mm wall thickness. the panels filled vertically and tie bar at two places by inserting horizontally 6mm galvanised MS rod and fastened with nuts and washers, complete as per manufacture's specification and washers complete as per manufacture's specification and direction of engineer in charge. (for W.C and bathroom door shutter)	34	sqm	2190.50	74477.00	
81.3.2	30mm thick factory made polyvinyl chloride (PVC) door shutter made of styles and rails of a UPVC hollow section of size 60x30mm and wall thickness 2mm +- 0.2mm with inbuilt decorative moulding edging on one side. The styles and rails mitred and joined at the corners by means of MS galvanised/ plastic brackets of size 75x220mm having wall thickness 1.0mm and stainless steel screws. the styles of the shutter reinforced by inserting galvanised MS tube of size 25x20mm and 1mm +- 0.1mm wall thickness.the lock rail made up of H section a UPVC hollow section of size 100x30mm and 2mm +- 0.2mm wall thickness fixed to the shutter styles by means of plastic galvanised MS U cleats. the shutter styles by means of plastic / galvanised MS U cleats. the shutter frame filled with a UPVC multi chambered single panel of size not less than 620mm having over all thickness of 20mm and 1mm +- 0.1mm wall thickness. the panels filled vertically and tie bar at two places by inserting horizontally 6mm galvanised MS rod and fastened with nuts and washers, complete as per manufacture's specification and direction of engineer in charge	34	sqm	2271.80	77241.20	
81.3.3	25mm thick PVC flush door shutters made out of a one piece multi chamber extruded PVC section of the size of 762 mm x 25mm or less as per requirement with an average wall thickness of 1mm +- 0.3mm. PVC foam end cap of size 23x10mm are provided on both vertical edges to ensure the overall thickness of 25mm. an MS tube having dimensions 19mmx19mm is inserted along the hinges side of the door. core of the door shutter should be filled with high density polyurethane foam. the top and bottom edges of the shutter are covered with an end cap of the size 25mm x 11mm. door shutter shall be reinforced with special polymeric reinforcements as per manufacture specification and direction of Engineer in charges to take up necessary hardware and fixtures. stickers indicating the locations of hardware will be pasted at appropriate places	34	sqm	2358.90	80202.60	
82	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foamsheet mitred at corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weatherseal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and direction of Engineer-in-Charge.	34	mtr	353.10	12005.40	
83	Providing and fixing to existing door frames					

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
83.1	30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45 degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2 ) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge. Manufacturer's specification & drawing (for W.C. and bathroom door shutter).	34	sqm	2109.95	71738.30	
83.2	30mm thick factory made solid both side Pre-laminated panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5mm thick heat moulded Pre-laminated PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45 degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rail shall be provided either side of the panel. 10mm (5mm x 2 ) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side Pre-laminated PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge	34	sqm	2580.35	87731.90	
84	Supplying and fixing of <b>medium Indian teakwood window shutters 30 mm thick</b> fully glazed with 3 mm thick glass of approved quality including cost and fixing of MS fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	1848.00	62832.00	
85	Supplying and fixing of <b>medium Indian teak wood window shutters 30 mm thick</b> fully panelled including fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	1769.00	60146.00	
86	Supplying and fixing of <b>medium Indian teak wood window shutters 30 mm thick</b> partly panelled and partly glazed with 3 mm thick glass of approved quality including cost and fixing of MS fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	1628.00	55352.00	
87	Supply and fixing well seasoned medium Indian teak wood window / <b>ventilator frames made out of scantling of size 75x75 mm</b> including fixing of M.S. hold fasts 16 mm dia MS rounds spaced at not more than 10.5cm centre to centre, cost of all materials etc., complete as directed by the Engineer-in-charge. (This includes dismantling the existing frames, brick work, P.C.C etc., and making good to a neat finish etc., complete wherever necessary).	34	One Sqm	1650.00	56100.00	
88	Supply and fixing well seasoned medium Indian teak wood <b>ventilator shutter 30 mm thick</b> fully glazed top/side hung type, glazing with 3mm thick glass of approved quality.	34	One Sqm	1650.00	56100.00	
89	Supplying and fixing <b>weldmesh door partly panelled and partly weldmesh double leaf shutters 30 mm thick</b> using medium Indian teakwood and weldmesh of size 75x25 mm, 10x8 gauge including supplying and fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete as directed by the Engineer-in-charge.	34	One Sqm	1628.00	55352.00	
90	Supply and fixing <b>weldmesh door double leaf shutter 30 mm thick using best Indian teakwood and weldmesh of size 75 x 25mm, 10 x 8 gauge</b> including supplying and fixing of MS fixtures, fittings and furniture of superior quality etc., complete as directed by Engineer-in-charge.	34	One Sqm	1463.00	49742.00	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
91	Supplying and fixing of <b>weldmesh of size 75x25mm, 10x8 guage with 75 x 25 mm seasoned medium Indian teakwood reapers</b> to the existing windows including 2 coats of painting with synthetic enamel paint of approved shade and brand over a coat of primer, making holes wherever necessary for operating the fixtures, furniture, cost of all materials etc., complete.	34	One Sqm	750.00	25500.00	
92	Supplying and fixing of M.S <b>flymesh</b> of an approved quality to the existing door and window shutters with necessary wooden beeding wherever necessary, including removing the existing flymesh, cost of all materials etc., complete.	34	One Sqm	370.00	12580.00	
93	Supplying and fixing of <b>medium Indian teak wood door shutters 30 mm thick</b> partly panelled and partly flymesh of approved quality including cost and fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete.	50	One Sqm	1897.00	94850.00	
94	Supplying and fixing of medium <b>Indian teak wood door shutters 30 mm thick</b> with fully flymesh of approved quality including cost and fixing of M.S. fixtures, fittings and furniture of superior quality etc., complete.	50	One Sqm	1638.00	81900.00	
95	Supplying and fixing of best approved quality <b>aluminium sheeting 24 guage</b> to the faces and edge of door shutters including fixing with best quality GI screws and cup washers, cost of all materials etc., complete as directed by the Engineer-in-charge. (The measurement shall be made for both sides of door only).	50	One Sqm	218.00	10900.00	
96	Supplying of medium <b>Indian teak wood planks</b> of 19 mm thick in various sizes as directed upto a length of 2.40 M.	50	One Sqm	1371.00	68550.00	
97	Supplying and fixing of seasoned medium Indian <b>teakwood reapers of size 50 x 25 mm</b> horizontally on the wall surface by providing wooden pegs and fixing with MS screws etc., complete.	50	One Rmt	58.50	2925.00	
98	Supplying and fixing in position medium Indian teakwood <b>cupboard shutters</b> having frame of size 75 x 25 mm scantling and fixing 3 mm thick plywood sheets on both sides including cost of MS hinges, Nickle coated latches and oxidised aluminium fixtures and furniture of approved quality etc., complete as directed by the Engineer-in-charge.	50	One Sqm	1074.86	53743.00	
99	Supply and fixing <b>commercial Plywood sheets 4 mm thick plain</b> lining with necessary screws, priming coat on exposed surface etc complete all as directed by Engineer-in-charge.	50	One Sqm	341.00	17050.00	
100	<b>Repairs to the existing doors, windows,</b> ventilators and cup boards including frame, shutters, fittings, weldmesh, T.W beadings etc., all as directed by the Engineer-in-charge. (Only labour charges).	50	One Sqm	144.20	7210.00	
101	Conveying from the stores of wooden / PVC - single / double leaf door shutters and fixing in position at places as directed with out fittings etc ( <b>Labour charges only</b> )	50	One Sqm	129.60	6480.00	Shutters will be issued free of cost from BHEL Stores
102	Supplying and fixing laminated sheet of thickness not less than 1 mm of required design, brand, quality and size all as directed by the Engineer-in-charge.	50	One Sqm	288.00	14400.00	
103	Supplying and fixing <b>M.S aldrip</b> powder coated of 16 mm dia 300 mm long heavy type with plate folded hooks required nuts and bolts as directed by the Engineer-in-charge.	50	Each	191.00	9550.00	
104	Supplying and fixing <b>M.S aldrip</b> powder coated of 12 mm dia 200 mm long heavy type with required nuts and bolts as directed by the Engineer-in-charge.	50	Each	59.00	2950.00	
105	Supplying and fixing of <b>PVC netlon mesh of approved colour</b> to the existing window mesh shutters with male and female posting arrangements and removing of existing old flymesh etc. complete as directed by the Engineer-in-charge.	50	One Sqm	240.00	12000.00	
106	Supply and fixing of <b>100 mm vertical blinds</b> including imported spare parts and Indian fabric including cost of materials, fixtures and fittings etc., complete as directed by the Engineer-in-charge.	50	One Sqm	1176.00	58800.00	
<b>STEEL WORK*</b>						
107	Structural steel work in single section fixed with or without connecting plate including cutting hoisting fixing in position and applying a priming coat of approved steel primer all complete	34	kg	4.33	147.36	
108	Structural steel work riveted bolted or welded in built up sections, strusses and framed work, hoisting fixing in position and applying a priming coat of approved steel primer all complete	34	kg	8.28	281.67	
109	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size with top and bottom rail of T-Iron 40x40x6mm dia steel pulleys complete with bolts nuts locking arrangement stoppers handles including applying a priming coat of approved steel primer	34	sqm	1372.75	46673.52	
110	Providing and fixing 1mm thick MS sheet sliding shutters with frame and diagonal braces of 40x40x6 mm angle iron 3mm MS gusset plates at the junction and corners 25mm dial pully 40x40x6mm angle and T-iron guide at the top and bottom respectively including applying a priming coat of approved steel primer	34	sqm	627.85	21347.02	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
110	Providing and fixing 1mm thick MS sheet door with frame of 40x40x6mm angle iron and 3mm gusset plates at the junctions and corners all necessary fitting complete including applying a priming coat of approved steel primer					
110.1	Using MS angles 40x40x6mm for diagonal bracing	34	sqm	1693.55	57580.79	
110.2	Using flat 30x6mm for diagonal bracing and central cross piece	34	sqm	1598.25	54340.59	
111	Supplying and fixing rolling shutters of approved make made of required size MS laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets side guides and arrangement for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire spring grade No. 2 and MS top cover of required thickness for rolling shutters					
111.1	80x1.25mm MS laths with 1.25mm thick top cover	34	sqm	1208.45	41087.30	
111.2	80x1.20mm MS laths with 1.20mm thick top cover	34	sqm	965.35	32821.90	
111.3	80x0.90mm MS laths with 0.90mm thick top cover	34	sqm	911.10	30977.40	
112	Providing and fixing mechanical device chain and crank operation for operating rolling shutters	34	each	356.50	12121.00	
113	Extra for providing mechanical device chain and crank operation for operating rolling shutters					
113.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	34	sqm	480.30	16330.20	
113.2	Exceeding 16.80 sqm in area	34	sqm	538.40	18305.60	
114	Extra for providing grilled rolling shutters manufactured out of 8mm dia MS bar instead of laths as per design approved by engineer in charge (area of grill to be measured)	34	sqm	214.90	7306.60	
115	fixing standard steel glazed doors windows and ventilators in walls with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6(1 cement 3 coarse sand 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of float glass panes with glazing clips and special metal sash putty of approved make or metal beading with screws(only steel windows with lugs glass panes cut to size and glazing clips or metal beading with screws shall be supplied by department free of cost)	34	kg	22.51	765.47	Cement / Steel will be issued free of cost from BHEL Stores
116	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side top centre hung with beading and all members such as K11B and K12B etc.complete of standard rolled steel sections joints metres and flash butt welded and sash bars tenoned and riveted with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6(1cement 3 coarse sand 6 grade stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing of hinges, pivots, float, glass panes with glazing clips and special metal sash putty of approved make and a priming coat of approved steel primer excluding the cost of metal beading and other fitting except necessary hinges or pivots complete as per approved design.	34	kg	45.56	1548.90	Cement / Steel will be issued free of cost from BHEL Stores
117	Extra for providing and fixing steel beading of approved shape and section with screw instead of glazing clips and metal sash putty in steel doors, windows ventilators and composite units.	34	mtr	21.45	729.30	
118	Providing and fixing T-iron frames for doors windows and ventilators of mild steel tee- section, joints mitred and welded with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6(1cement 3 coarse sand 6 grade stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with dash fastener or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer	34	kg	11.96	406.68	Cement / Steel will be issued free of cost from BHEL Stores
119	Providing and fixing pressed steel door frames conforming to IS 4351 manufactured from commercial mild steel sheet of 1.25mm thickness including hinges jamb, lock, jamb, bead and if required angle threshold of mild steel angle of section 50x25mm or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means adjustable lugs with split end tail to each jamb including steel butt hinges 2.5mm thick with mortar guards, lock, strikeplate and shock absorbers as specified and applying a coat of approved steel primer after pre treatment of the surface as directed by engineer in charge					
119.1	Profile B	34	mtr	251.90	8564.60	
119.2	Profile C	34	mtr	271.65	9236.10	
119.3	Profile E	34	mtr	303.00	10302.00	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
120	Providing and fixing MS Tubular frames for doors windows ventilators and cupboard with L-Type section made of 1.60mm thick MS sheet joints mitred and welded and grinded finish profiles required size with 15x3m plugs 10cm long embedded in cement concrete blocks 15x10x10 cm of 1:3:6(1 cement 3 coarse sand 6 grade stone aggregate 20mm nominal size ) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.	34	kg	22.21	755.14	Cement / Steel will be issued free of cost from BHEL Stores
121	steel work in built up tubular trusses including cutting hoisting fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc.complete					
121.1	Hot finished welded type tybes	34	kg	61.50	2091.00	
121.2	Hot finished seamless type tubes	34	kg	66.35	2255.90	
121.3	Electric resistance or induction butt welded tubes	34	kg	79.80	2713.20	
122	providing and fixing MS fan clamp type I or II of 16 mm dia MS bar bent to shape with hooked ends in RCC slabs, beams during laying including painting the exposed portion of of loop all as per standard design complete	34	each	15.05	511.84	
123	Providing and fixing circular / Hexagonal cast iron or MS sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick MS sheet with its top surface hacked for proper bonding top lid shall be screws into the cast iron/ MS sheet box by means of 3.3 mm dia. round headed screws , one lock at the corners . clamp shall be made of 12mm dia MS bar bent to shape as per standard drawing.	34	each	52.43	1782.69	
124	Providing and fixing MS round holding down bolts with nuts and washer plates complete	34	kg	4.35	147.73	
125	Providing and fixing bolts including nuts and washers complete	34	kg	12.87	437.58	
126	Providing and fixing MS rivets of sizes in positio.	34	kg	29.30	996.20	
127	Welding by gas or electric plant including transportation of plant at site etc. complete	34	cm	1.45	49.30	
128	Providing and fixing bright finished brass casement window fastener or peg stays to windows/ ventilation with necessary welding and machine screws etc. complete	34	kg	226.05	7685.70	
129	Providing and fixing 14mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and machine screws etc. complete	34	each	27.65	940.10	
130	Steel work welded in built up sections/ frames work including cutting hoisting fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required,					
130.1	In stringers treads landing etc, of stair cases including use of chequered plate wherever required all complete	34	kg	48.95	1664.30	
130.2	In gratings frames guard bar ladder railing brackets gates and similar works	34	kg	51.20	1740.80	
131	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing balcony railling and staircase railing including applying a priming coat of approved steel primer					
131.1	M.S tube	34	kg	62.35	2119.90	
131.2	ERW tubes	34	kg	82.25	2796.50	
131.3	GI pipes	34	kg	68.25	2320.50	
<b>FLOORING/TILE WORK</b>						
132	Cement concrete flooring 1:2:4(1cement 2 coarse sand 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry but excluding the cost of nosing of steps etc. complete.					
132.1	40mm thick with 20mm nominal size stone aggregate	34	sqm	103.22	3509.62	Cement / Steel will be issued free of cost from BHEL Stores
133	Cement plaster skirting (upto 30cm height) with cement mortar 1:3 ( 1cement 3 coarse sand ) finished with a floating coat of neat cement					
133.1	18mm thick	34	sqm	94.61	3216.67	Cement / Steel will be issued free of cost from BHEL Stores
134	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS 15622 (thickness to be specified by the manufacture ) 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 12mm thick bed of cement including pigment of matching shade etc. complete as per drawing specification and direction of engineer in charge	34	sqm	491.05	16695.61	Cement / Steel will be issued free of cost from BHEL Stores
135	Providing and laying ceramic glazed floor tiles 300x300mm ( thickness to be specified by the manufacture) of 1 st quality conforming IS 15622 of approved make in colours such as white Ivory grey fume red brown laid on 20mm thick cement mortar 1:4( 1 cement 4 coarse sand ) including pointing the joints with white cement and matching pigment etc. complete.	34	sqm	533.10	18125.31	Cement / Steel will be issued free of cost from BHEL Stores

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
136	Providing and laying ceramic glazed floor tiles 300x300mm ( 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, gume red brown laid on 20mm thick bed of cement mortar 1:4( 1 cement 4 coarse sand ) including pointing the jointing the joints with white cement and matching pigment etc. complete	34	sqm	565.25	19218.41	Cement / Steel will be issued free of cost from BHEL Stores
137	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 colours White, Ivory, Grey, Fume Red Brown, 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.	34	sqm	694.35	23607.81	Cement / Steel will be issued free of cost from BHEL Stores
138	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.	34	sqm	734.85	24984.81	Cement / Steel will be issued free of cost from BHEL Stores
139	Providing and laying polished vitrified floor tiles in different size ( thickness to be specified by the manufacture ) with water absorption's less than 0.08% and conforming to IS 15622 of approved make in all colours and shade, laid on 20mm thick cement mortar 1:4( 1 cement 4 coarse sand ) including grouting the joints with white cement and matching pigment etc. complete					
139.1	Size of tile 50x50cm	34	sqm	966.35	32855.90	
139.2	Size of tile 60x60cm	34	sqm	1031.85	35082.90	
139.3	Size of tile 80x80cm	34	sqm	1478.30	50262.20	
139.4	Size of tile 100x100cm	34	sqm	1733.05	58923.70	
140	Deduct for not using 20mm thick cement mortar 1:4( 1 cement 4 coarse sand ) bending in laying of floor tiles	34	sqm	233.95	7954.30	
141	Fixing glazed / ceramic vitrified floor tiles with cement based high polymer modified quick set tile adhesive (water based ) conforming to IS 15477 using 5 kg adhesive per sqm of tile area in average 3mm thickness	34	sqm	224.70	7639.80	
142	<b>Ellis pattern flooring 20 mm thick cement concrete</b> using one cement and three granite stone metal chippings of 3 to 10mm guage including fine finishing, neat thread lining, curing, cost of all materials etc. complete.	34	One Sqm	78.14	2656.82	Cement / Steel will be issued free of cost from BHEL Stores
143	<b>Flooring with rough shahabad stone slabs of 20 to 30 mm thick</b> and approved quality over a base of cement mortar 1:6 and pointing with CM 1:3 including curing, cost of all materials etc. complete.	34	One Sqm	71.63	2435.51	Cement / Steel will be issued free of cost from BHEL Stores
144	<b>Flooring / dadoing polished shahabad stone slabs of 25 mm thick</b> (Tandur blue) uniform shade and approved quality, over a base of cement mortar 1:6 and pointing with cement paste including curing, cost of all materials etc. complete.	34	One Sqm	291.22	9901.57	Cement / Steel will be issued free of cost from BHEL Stores
145	Removing the existing flooring and redoing the same with <b>Ellis pattern flooring 20 mm thick</b> cement concrete using one cement and three granite stone chippings of 3 to 10 mm gauge including fine finishing, neat thread lining, curing, disposing off the spoils within a lead of 2 km etc. complete as directed by the Engineer- in-charge.	34	One Sqm	87.14	2962.82	Cement / Steel will be issued free of cost from BHEL Stores
146	Removing the existing flooring and supply and fixing of coloured glazed tiles of Kajaria / Johnson or other approved make equivalent in all respects <b>ceramic tiles</b> of commercial grade of approved size, of approved shade and design for flooring and dado over a base of CM 1:4 including neat finishing and jointing with colour cement etc, complete. The rate shall include removing the existing floor and disposing of the debris to specified areas within a lead of 2 km (corners are to be jointed by metering the tiles).	34	One Sqm	477.45	16233.21	Cement / Steel will be issued free of cost from BHEL Stores
147	<b>Polishing</b> to the existing mosaic / polished shahbad stone flooring using necessary / machines/materials such as carborandum stone etc including neat finishing etc complete as directed by Engineering - in - charge..	34	One Sqm	20.00	680.00	
148	Removing the exiting <b>cement flooring</b> , supplying and laying of 25 mm thick ( ± 1 mm) designer floor tiles of approved colour and brand over a base of cement mortar 1:4, 20 mm thick, with required quantity of cement slurry for flooring including colouring pigment to match with tiles, cost of all materials etc complete all as directed by Engineer-in-charge.	34	One Sqm	600.86	20429.27	Cement / Steel will be issued free of cost from BHEL Stores
	<b>ROOFING</b>					
149	Providing and fixing on wall face unplasticised rigid pvc rain water pipes conforming to IS 13592 type a including jointing with seal ring conforming to IS 5382 leaving 10mm gap for thermal expansion (l) single socketed pipes					
149.1	75mm diameter	34	mtr	95.00	3230.00	
149.2	110mm diameter	34	mtr	163.40	5555.60	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
150	Providing impervious coat in CM 1:4, 20 mm thick using approved water proofing compound at one Kg/bag of cement when the roof slab is green including arranging proper slopes, for easy flow of rain water, curing etc complete.	34	One Sqm	77.95	2650.44	
151	Fixing of Roofing Sheets					
151.1	Labour charges for fixing AC sheet roofing and ceiling using 'J' bolts, nuts, bitumen / GI washers etc.complete, (only AC sheets and ridges will be supplied free of cost at BHEL stores) all as directed by Engineer in - charge.	34	One Sqm	40.00	1360.00	AC sheets and ridges will be supplied free of cost at BHEL stores
151.2	Fixing of Hi-rib s galvalume /Zincalume sheets of 0.5 mm tk. 1 mtr width and length upto 12 mts with factory cut and fixing to the roof shall be crest fixed to roofpurlins with number 12-14 x 55 mm polymer coated galvanised hex head self drilling screws with integral washers and EPDM seals (4 fasteners for support) for sheet etc., complete asdirected (Excluding cost of galvalume sheets which will be issued free of cost by BHEL attheir stores) - For roofing, side cladding and louvers with necessary fixtures. All the safety measures should be taken care by the agency itself.	34	One Sqm	75.00	2550.00	Galvalume sheets will be issued free of cost by BHEL attheir stores
151.3	Fixing North Light curves/ Barges in required girth with 0.5 mm galvalume sheets upto a length of 2.5 M having curved width upto 600 mm fixing to the steel members with self drilling / self stitching, fasteners at a maximum of 500 mm c/c along the length of capping,flashing etc.,complete as directed by Engineer-in-charge. including the cost of labouretc.,complete.(North Light Curves / Barges Will beissued free of cost by BHEL at their Stores).All the safety measures should be taken by the agency itself.	34	One Rmt	55.00	1870.00	Barge boards will be issued free of cost by BHEL attheir stores
152	Dismantling the existing garrage structural work, AC sheets and MS angles including stacking & handing over of service cable materials and disposal of debris all as directed by Engineering - in - charge.	34	Each Shed	3705.50	125987.00	
<b>FINISHING</b>						
153	12mm cement plaster of mix					
153.1	1:4( 1 cement 4 fine sand)	34	sqm	48.68	1655.10	Cement / Steel will be issued free of cost from BHEL Stores
153.2	1:6( 1 cement 6 fine sand)	34	sqm	48.65	1654.07	Cement / Steel will be issued free of cost from BHEL Stores
154	15mm cement plaster on the rough side of single or half brick wall of mix					
154.1	1:4( 1 cement 4 fine sand)	34	sqm	55.83	1898.28	Cement / Steel will be issued free of cost from BHEL Stores
154.2	1:6( 1 cement 6 fine sand)	34	sqm	55.85	1899.06	Cement / Steel will be issued free of cost from BHEL Stores
155	20mm cement plaster of mix					
155.1	1:4( 1 cement 4 fine sand)	34	sqm	65.53	2228.16	Cement / Steel will be issued free of cost from BHEL Stores
155.2	1:6( 1 cement 6 fine sand)	34	sqm	65.54	2228.47	Cement / Steel will be issued free of cost from BHEL Stores
156	12mm cement plaster of mix					
156.1	1:4( 1 cement 4 coarse sand)	34	sqm	53.68	1825.10	Cement / Steel will be issued free of cost from BHEL Stores
156.2	1:6( 1 cement 6 fine sand)	34	sqm	53.70	1825.77	Cement / Steel will be issued free of cost from BHEL Stores
157	15mm cement plaster on the rough side of single or half brick wall of mix					
157.1	1:4( 1 cement 4 coarse sand)	34	sqm	61.83	2102.28	Cement / Steel will be issued free of cost from BHEL Stores
157.2	1:6( 1 cement 6 coarse sand)	34	sqm	61.85	2103.06	Cement / Steel will be issued free of cost from BHEL Stores
158	20mm cement plaster of mix					
158.1	1:4( 1 cement 4 coarse sand)	34	sqm	73.33	2493.36	Cement / Steel will be issued free of cost from BHEL Stores
158.2	1:4( 1 cement 4 coarse sand)	34	sqm	73.34	2493.67	Cement / Steel will be issued free of cost from BHEL Stores
159	18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5( 1 cement 5 coarse sand ) finished with a top layer 6mm thick cement plaster 1:6( 1cement 6 fine sand )	34	sqm	78.11	2655.73	Cement / Steel will be issued free of cost from BHEL Stores
160	18mm cement plaster in two coats under layer 12mm thick cement plaster 1:5( 1 cement 5 coarse sand ) finished with a top layer 6mm thick cement plaster 1:3( 1cement 3 coarse sand ) finished rough with sponge.	34	sqm	80.59	2740.06	Cement / Steel will be issued free of cost from BHEL Stores
161	6mm cement plaster of Mix					
161.1	1:3( 1 cement 3 fine sand)	34	sqm	42.78	1454.51	Cement / Steel will be issued free of cost from BHEL Stores
162	12mm thick plain cement mortar bands in cement mortar 1:4( 1 cement 4 fine sand)					
162.1	Flush Band	34	cm per mtr	1.07	36.39	Cement / Steel will be issued free of cost from BHEL Stores
162.2	Sunk Band	34	cm per mtr	1.17	39.79	Cement / Steel will be issued free of cost from BHEL Stores
162.3	Raised Band	34	cm per mtr	1.37	46.59	Cement / Steel will be issued free of cost from BHEL Stores
162.4	Moulded Band	34	cm per mtr	2.32	78.89	Cement / Steel will be issued free of cost from BHEL Stores
163	18mm thick plain cement mortar band in cement mortar 1:4( 1 cement 4 fine sand)					

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
163.1	Flush Band	34	cm per mtr	1.30	44.16	Cement / Steel will be issued free of cost from BHEL Stores
163.2	Sunk Band	34	cm per mtr	1.45	49.26	Cement / Steel will be issued free of cost from BHEL Stores
163.3	Raised Band	34	cm per mtr	1.65	56.06	Cement / Steel will be issued free of cost from BHEL Stores
163.4	Moulded Band	34	cm per mtr	3.15	107.06	Cement / Steel will be issued free of cost from BHEL Stores
164	Pointing on stone work with cement mortar 1:3( 1 cement 3 fine sand)					
164.1	Flush / Ruled pointing	34	sqm	56.32	1915.04	Cement / Steel will be issued free of cost from BHEL Stores
164.2	Raised and cut pointing	34	sqm	99.60	3386.29	Cement / Steel will be issued free of cost from BHEL Stores
165	Raised and cut pointing on stone work in white cement mortar 1:3( 1 white cement 3 marble dust)	34	sqm	125.95	4282.30	
166	White washing with lime to give an even shape					
166.1	New work ( three or more coats)	34	sqm	6.75	229.50	
167	Colour washing such as green , blue or buff to buff to give an even shape					
167.1	New work ( two or more coats ) with a base coat of white washing with lime	34	sqm	9.30	316.20	
167.2	New work ( two or more coats ) with a base coat of whitening	34	sqm	9.10	309.40	
168	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade					
168.1	New work (two or more coats) over and including priming coat with cement primer.	34	sqm	41.55	1412.70	
169	Distempering with 1st quality acrylic washable distemper (ready mixed) of approved manufacture and of required shade and colour complete as per manufacturer specification					
169.1	Two or more coats on new work	34	sqm	23.55	800.70	
170	Applying one coat of cement primer of approved brand and manufacture on wall surface					
170.1	Cement primer	34	sqm	17.20	584.80	
171	Finishing walls with Acrylic smooth exterior paint of required shade					
171.1	New work ( two or more coat applied @ 1.67 ltr/ 10 sqm ) over and including base coat of water proofing cement paint applied @ 2.20kg/ 10sqms	34	sqm	96.25	3272.50	
171.2	Painting the external wall surfaces by applying two or more coats of Acrylic smooth exterior paint (after completion of one coat prior clearance to be taken to apply the second coat with department officials) of BHEL supplied paint on existing old surface, including scrapping, cost of thinner, brushes labour, ladders, scaffolding, tools and other incidentals etc. complete up to 7m height including rectifying the wall cracks, patches etc with Birla wall care putty crack filler etc complete all as directed by Engineer-in-charge (only acrylic paint will be supplied by BHEL, free of cost at Township stores as per norms. Separate payment will be made for Birla wall care putty). All the safety precautions would be responsibility of the contractor.	34	Sqm	12.70	431.80	Paint will be issued free of cost from BHEL stores
172	Painting one thin coat with white lead of approved brand and manufacture on wet or patchy portion of plastered surfaces	34	sqm	22.60	768.40	
173	finishing with epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat preparation fo surface etc. complete					
173.1	on steel work	34	sqm	75.25	2558.50	
173.2	on concrete work	34	sqm	77.75	2643.50	
174	Painting (two or more coats) on rain water soil waste and vent pipes and fitting with black anticorrosive bitumastic paint approved brand and manufacture over and including a priming of ready mixed zinc chromate yellow primer on new work					
174.1	100mm dia meter pipes	34	mtr	15.05	511.70	
174.2	150mm dia meter pipes	34	mtr	22.50	765.00	
175	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade					
175.1	Two or more coats on new work	34	sqm	35.35	1201.90	
175.2	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	34	sqm	51.30	1744.20	
175.3	Applying <b>two or more coats</b> of Synthetic Enamel Paint of given shade to old surfaces including scrapping, cost of thinner, brushes, labour tools, and other incidentals etc. complete up to 7m height. (Only Synthetic Enamel Paint will be supplied by BHEL, free of cost at their stores) etc. complete all as directed by Engineer-in-charge. <b>All the safety precautions would be responsibility of the contractor.</b>	34	Sqm	13.60	462.40	Paint will be issued free of cost from BHEL stores



**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
176	Painting with aluminium paint of approved brand and manufacture to give an even shade					
176.1	Two or more coats on new work	34	sqm	28.60	972.40	
177	Varnishing with varnish of approved brand and manufacture					
177.1	Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish	34	sqm	49.20	1672.80	
177.2	Two or more coats glue sizing with spar varnish or an under coat of flatting varnish	34	sqm	50.80	1727.20	
<b>REPAIRS TO BUILDINGS</b>						
178	Providing and fixing 25mm thick shutters for cup board etc					
178.1	Panelled or Panelled and glazed shutters					
178.1.1	Superior class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	2400.25	81608.50	
178.1.2	1st class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	1563.50	53159.00	
178.2	Nil					
178.3	Nil					
178.4	Glazed shutters					
178.4.1	Superior class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	2538.20	86298.80	
178.4.2	1st class teak wood including nickel plated bright finished MS piano hinges with necessary screws	34	sqm	1638.75	55717.50	
179	White washing with lime to give an even shape					
179.1	old work (two or more coats)	34	sqm	4.10	139.40	
179.2	old work (two or more coats)	34	sqm	2.55	86.70	
180	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	34	sqm	3.20	108.80	
181	Distemping with dry ditemper of approved brand and manufacture ( two or more coats) and of required shade on new work, over and including priming coat of whitening to give an even shade	34	sqm	12.35	419.90	
182	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade					
182.1	old work (two or more coats)	34	sqm	14.90	506.60	
183	Removing dray or oil bound distemper water proofing cement paint and the like by scrapping sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	34	sqm	4.25	144.50	
184	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade					
184.1	one or more coats on old work	34	sqm	22.85	776.90	
185	Finishing walls with Acrylic smooth exterior paint of required shade					
185.1	old work (two or more coats applied @ 1.67ltr/10sqm ) on existing cement paint surface)	34	sqm	36.30	1234.20	
185.2	old work (one or more coat applied @0.90 ltr/ 10sqm)	34	sqm	22.80	775.20	
186	Painting to <b>black boards with one coat</b> of black board paint of approved brand including cost of all materials etc., complete all as directed by Engineer-in-charge.	34	One Sqm	22.85	776.90	
187	Applying golden colour or other approved colour to <b>statues</b> from 3' height to 8' height statue painting including scrapping the old surface and applying one or more coats to give good appearance including cost of scaffolding cost of all material all as directed by Engineer-in-charge.	34	Nos	1500.00	51000.00	
188	Applying <b>one coat of synthetic enamel paint</b> of approved shade and brand to <b>old iron work</b> including scraping, cost of all materials etc., complete all as directed by Engineer-in-charge.	34	One Sqm	22.85	776.90	
189	Applying <b>two coats of synthetic enamel paint</b> of approved shade and brand to <b>old iron work</b> including scraping, cost of all materials etc., complete all as directed by Engineer-in-charge.	34	One Sqm	46.49	1580.66	
190	Providing <b>gultas</b> in traingular shape of base 150 mm and height 150 mm with cement mortar 1:4, including fine finishing, cost of all materials etc complete all as directed by Engineer-in-charge.	34	One Rmt	6.53	221.92	
191	Providing <b>bands</b> to slab / chajja projections in cement mortar 1:4, 20 mm thick and 20 mm wide including cost of all materials, curing etc complete all as directed by Engineer-in-charge.	34	One Rmt	24.43	830.76	
192	Flooring and <b>skirting with 25 mm thick</b> polished shahabad stone slabs (Tandur blue) of required sizes over a base of 20 mm thick cement mortar 1:6 including pointing in CM 1:2, curing, cost of all materials etc complete all as directed by Engineer-in-charge	34	One Sqm	309.59	10526.06	
193	Removing the existing cement / mosaic / floor finishing and redoing the same with <b>20 mm thick ellis pattern flooring</b> in cement concrete using one cement and three granite stone chippings of 3 to 10 mm guage including fine finishing, neat thread lining, curing cost of all materials, disposing off the spoils within a lead of 2 kms etc complete as directed by the Engineer-in-charge.	34	One Sqm	132.57	4507.44	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
194	Rectifying the wall cracks by chipping off the existing plastered surfaces to the required width, depth and applying cement slurry in the cracks to the required depth, making good all damages and finishing to match with the existing one by plastering with CM 1:5: 12/15 mm thick and a coat of white wash / snowcem / distemper etc as the case may be as directed by the Engineer-in-charge.	34	One Sqm	88.39	3005.37	
195	Crack filling without pressure grouting: Routing out the cracks with a mechanically operated groove cutter and sealing with expansive crack filling compound - CERA POLY CRACKFILLER or equivalent and tooling to finish neatly. Providing ,two top coats of CRACKFLEX, single component highly flexible membrane coating (for a width of 10 cms with the crack at the center) or equivalent as per manufacturer's recommendation and curing adequately. Rate quoted includes cost of material, labour charges, conveyance, tool and all other incidental charges etc complete all as directed by Engineering - in -charge. (local market rate)	34	Rmt	75.00	2550.00	
<b>DISMANTLING AND DEMOLISHING</b>						
196	Demolishing lime concrete manually / by mechanical means and disposal of material within 50mtr lead as per direction of engineer in charge	34	cum	128.45	4367.30	
197	Demolishing concrete manually / by mechanical means including disposal of material within 50mtr lead as per direction of engineer in charge					
197.1	1:3:6 or richer mix	34	cum	368.45	12527.30	
197.2	1:4:8 or leaner mix	34	cum	226.90	7714.60	
198	Demolishing RCC work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge	34	cum	537.55	18276.70	
199	Extra for cutting reinforcement bars manually by mechanical means in RCC or RB work (payment shall be made on the cross sectional area of RCC or RB work) as per direction of engineer in charge	34	sqm	176.35	5995.90	
200	Extra for scrapping, cleaning and straightening reinforcement from RCC or RB work	34	kg	1.45	49.30	
201	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge					
201.1	In mud mortar	34	cum	106.45	3619.30	
201.2	In lime mortar with old mughal bricks	34	cum	268.25	9120.50	
201.3	In lime mortar	34	cum	128.45	4367.30	
201.4	In cement mortar	34	cum	310.75	10565.50	
202	Demolishing stone rubble masonry manually by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50mtr lead as per direction of engineer in charge					
202.1	In lime mortar	34	cum	175.05	5951.70	
202.2	In cement mortar	34	cum	370.75	12605.50	
203	Dismantling door windows and clerestory windows (steel or wood ) quantity of stacks of cleaned material will be measured)					
203.1	Of area 3sqm and below	34	each	54.60	1856.40	
203.2	Of area beyond 3sqm	34	each	75.35	2561.90	
204	Taking out doors windows and clerestory window shutters(steel or wood) including stacking within 50mtr lead					
204.1	Of area 3sqm and below	34	each	21.40	727.60	
204.2	Of area beyond 3sqm	34	each	28.25	960.50	
205	Dismantling wood in frames trusses purlins and rafters upto 10mtr span and 5 mtr height including stacking the material within 50mtr lead					
205.1	Of sectional area 40 square centimetres and above	34	cum	658.65	22394.10	
205.2	Of sectional area below 40 square centimetres	34	mtr	2.65	90.10	
206	Dismantling steel work in single sections including dismembering and stacking within 50mtr lead in					
206.1	RS Joists	34	kg	0.50	17.00	
206.2	Channels angles tees and flats	34	kg	0.35	11.90	
207	Dismantling steel work in built up sections in angles tees flats and channels including all gusset plates bolts nuts cutting rivets welding etc. including dismembering and stacking within 50mtr lead	34	kg	0.85	28.90	
208	Dismantlig steel work manually by mechanical means in built up section without dismembering and stacking within 50mtr lead as per direction of engineer in charge	34	kg	0.60	20.40	
209	Extra for dismantling trusses raftes purlins etc. of steel work for every additional span of one meter or part thereof beyond 10mtr	34	kg per mtr span	0.15	5.10	
210	Dismantling precast concrete or stone slabs in walls partition walls etc. including stacking within 50mtr lead					
210.1	Thickness upto 40mm	34	sqm	44.10	1499.40	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
210.2	Thickness above 40mm upto 75mm	34	sqm	66.05	2245.70	
211	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50mtr lead	34	sqm	8.60	292.40	
212	Dismantling G.I pipes ( external work ) including excavation and refilling trenches after taking out the pipes manually by mechanical means including stacking of pipes within 50mtr lead as per direction of engineer in charge					
212.1	15mm to 40mm nominal bore	34	mtr	24.90	846.60	
212.2	Above 40mm nominal bore	34	mtr	29.05	987.70	
213	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50mtr lead	34	sqm	8.20	278.80	
214	Dismantling aluminium / Gypsum partitions doors windows fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50mtr lead as directed by engineer in charge	34	sqm	8.65	294.10	
215	Demolishing C.C/ RCC work by mechanical means and stockpiling at designated locations and disposal of dismantled materials upto a lead of 1000m , stacking serviceable and unserviceable material separately including cutting reinforcement bars	34	cum	731.05	24855.70	
<b>SANITARY WORKS</b>						
216	Dismantling, Providing and fixing water closet squatting pan(indian type WC pan) with 100mm sand cast iron P or S trap 10 ltr low level white PVC flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fitting and fixtures complete including cutting and making good the walls and floors wherever required					
216.1	White vitreous china orissa pattern WC pan of size 580x440mm with integral type foot rests	34	each	2278.26	77460.84	Cement / Steel will be issued free of cost from BHEL Stores
216.2	Stainless steel AISI 304(18/8)orissa pattern WC pan of size 585x480mm with flush pipe and integrated type foot rests	34	each	5356.21	182111.14	Cement / Steel will be issued free of cost from BHEL Stores
217	Nil					
218	Dismantling, Providing and fixing white vitreous china pedestal type water closet (european type WC pan) with seat and lid 10ltr low level white PVC flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the wall and floors wherever required					
218.1	WC pan with ISI marked white solid plastic seat and lid	34	each	2126.11	72287.74	Cement / Steel will be issued free of cost from BHEL Stores
218.2	WC pan with ISI marked black solid plastic seat and lid	34	each	2097.06	71300.04	Cement / Steel will be issued free of cost from BHEL Stores
219	Dismantling, Providing and fixing white vitreous china pedestal type water closet (european type )with seat and lid 10 ltr low level white vitreous china flushing cistern and CP flush bend with fitting and CI brackets 40mm flush bend overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fitting and brackets cutting and making good the walls and floors wherever required					
219.1	WC pan with ISI marked white solid plastic seat and lid	34	each	3256.56	110723.04	Cement / Steel will be issued free of cost from BHEL Stores
219.2	WC pan with ISI marked black solid plastic seat and lid	34	each	3227.56	109737.04	Cement / Steel will be issued free of cost from BHEL Stores
220	Dismantling, Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 430x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and CP brass spreaders with brass unions and GI clamps complete including painting of fitting and brackets cutting and making good the walls and floors wherever required					
220.1	One urinal basin with 5 ltr white PVC automatic flushing cistern	34	each	2005.51	68187.17	Cement / Steel will be issued free of cost from BHEL Stores
220.2	Range of two urinal basins with 5 ltr white PVC automatic flushing cistern	34	each	3372.49	114664.59	Cement / Steel will be issued free of cost from BHEL Stores
220.3	Range of three urinal basins with 10 ltr white PVC automatic flushing cistern	34	each	4456.24	151512.07	Cement / Steel will be issued free of cost from BHEL Stores
220.4	Range of four urinal basins with 10 ltr white PVC automatic flushing cistern	34	each	6012.06	204410.01	Cement / Steel will be issued free of cost from BHEL Stores
221	Dismantling, Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350mm with white PVC automatic flushing cistern with fitting standard size CP brass flush pipe spreaders with unions and clamps (all in CP brass) with waste fitting as per IS 2556 CI trap with outlet grating and other couplings in CP brass including painting of fitting and cutting and making good the walls and floors wherever required					
221.1	Single half stall urinal with 5 ltr PVC automatic flushing cistern	34	each	3693.38	125574.99	Cement / Steel will be issued free of cost from BHEL Stores
221.2	Range of two half stall urinal with 5 ltr white PVC automatic flushing cistern	34	each	5906.91	200835.09	Cement / Steel will be issued free of cost from BHEL Stores

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
221.3	Range of three half urinal with 10 ltr white PVC automatic flushing cistern	34	each	7855.75	267095.38	Cement / Steel will be issued free of cost from BHEL Stores
221.4	Range of four half urinal with 10 ltr white PVC automatic flushing cistern	34	each	9704.26	329944.72	Cement / Steel will be issued free of cost from BHEL Stores
222	Dismantling, Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe white PVC automatic flushing cistern with fitting standard size GI flush pipe for back and front flush with standard spreader pipes with fitting GI clamps and CP brass coupling complete including painting of fitting and cutting and making good the walls and floors etc. wherever required					
222.1	Single squatting plate with 5 ltr PVC automatic flushing cistern	34	each	2365.63	80431.49	Cement / Steel will be issued free of cost from BHEL Stores
222.2	Range of two squatting plates with 5 ltr white PVC automatic flushing cistern	34	each	3494.26	118804.99	Cement / Steel will be issued free of cost from BHEL Stores
222.3	Range of three squatting plates with 10 ltr white PVC automatic flushing cistern	34	each	4651.65	158155.98	Cement / Steel will be issued free of cost from BHEL Stores
222.4	Range of four squatting plates with 10 ltr white PVC automatic flushing cistern	34	each	5682.31	193198.42	Cement / Steel will be issued free of cost from BHEL Stores
223	Dismantling, Providing and fixing wash basin with CI brackets 15mm CP brass pillar taps 32mm CP brass waste of standard pattern including painting of fittings and brackets cutting and making good the walls wherever require					
223.1	White vitreous china wash basin size 630x450mm with a pair of 15 mm CP brass pillar taps	34	each	1319.71	44869.97	Cement / Steel will be issued free of cost from BHEL Stores
223.2	White vitreous china wash basin size 630x450mm with a single 15mm CP brass pillar tap	34	each	1188.51	40409.17	Cement / Steel will be issued free of cost from BHEL Stores
223.3	White vitreous china wash basin size 550x400mm with a pair of 15mm CP brass pillar tap	34	each	1162.91	39538.77	Cement / Steel will be issued free of cost from BHEL Stores
223.4	White vitreous china flat back wash basin size 550x400mm with single 15mm CP brass pillar tap	34	each	1031.71	35077.97	Cement / Steel will be issued free of cost from BHEL Stores
223.5	White vitreous china angle back wash basin size 600x480mm with single 15mm CP brass pillar tap	34	each	1136.26	38632.67	Cement / Steel will be issued free of cost from BHEL Stores
223.6	White vitreous china angle back wash basin size 400x400mm with single 15mm CP brass pillar tap	34	each	912.06	31009.87	Cement / Steel will be issued free of cost from BHEL Stores
223.7	White vitreous china flat back wash basin size 450x300mm with single 15mm CP brass pillar tap	34	each	927.16	31523.27	Cement / Steel will be issued free of cost from BHEL Stores
223.8	White vitreous china surgeon type wash basin of size 660x460mm with a pair of 15mm CP brass pillar tap with elbow operated levers	34	each	2261.66	76896.27	Cement / Steel will be issued free of cost from BHEL Stores
223.9	White vitreous china surgeon type wash basin of size 660x460mm with a pair of 15mm CP brass pillar tap with elbow operated levers ISI marked	34	each	1790.16	60865.27	Cement / Steel will be issued free of cost from BHEL Stores
223.1	Stainless steel AISI 304(18/8)Round basin size 405x345mm with single 15mm CP brass pillar tap	34	each	2251.26	76542.67	Cement / Steel will be issued free of cost from BHEL Stores
223.11	Stainless steel AISI 304(18/8) wash basin size 530x345mm with single 15mm CP brass pillar tap	34	each	2077.06	70619.87	Cement / Steel will be issued free of cost from BHEL Stores
224	Dismantling, Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	34	each	705.90	24000.60	
225	Dismantling, Providing and fixing kitchen sink with CI brackets CP brass china with rubber plug 40mm CP brass waste complete including painting the fittings and brackets cutting and making good the walls wherever required					
225.1	White glazed fire clay kitchen sink of size 600x450x250mm	34	each	1780.16	60525.27	Cement / Steel will be issued free of cost from BHEL Stores
226	Dismantling, Providing and fixing stainless steel AISI 304(18/8) kitchen sink as per IS 13983 with CI brackets and stainless steel plug 40mm including painting of fitting and brackets cutting and making good the walls wherever required					
226.1	Kitchen sink with drain board					
226.2	510x1040mm bowl depth 250mm	34	each	6141.16	208799.27	Cement / Steel will be issued free of cost from BHEL Stores
226.3	510x1040mm bowl depth 225mm	34	each	5792.71	196951.97	Cement / Steel will be issued free of cost from BHEL Stores
226.4	510x1040mm bowl depth 200mm	34	each	5211.96	177206.47	Cement / Steel will be issued free of cost from BHEL Stores
226.5	460x915mm bowl depth 178mm	34	each	3469.71	117969.97	Cement / Steel will be issued free of cost from BHEL Stores
226.6	Kitchen sink without drain board					
226.7	610x510mm bowl depth 200mm	34	each	3426.01	116484.17	Cement / Steel will be issued free of cost from BHEL Stores
226.8	610x460mm bowl depth 200mm	34	each	3193.71	108585.97	Cement / Steel will be issued free of cost from BHEL Stores
226.9	470x420mm bowl depth 178mm	34	each	2148.36	73044.07	Cement / Steel will be issued free of cost from BHEL Stores
227	Dismantling, Providing and fixing white vitreous china laboratory sink with CI brackets CP brass china with rubber plug 40mm CP brass waste and 40mm CP brass trap with necessary CP brass unions complete including painting of fitting and brackets cutting and making good the wall wherever required					

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
227.1	Size 450x300x150mm	34	each	1432.91	48718.77	Cement / Steel will be issued free of cost from BHEL Stores
227.2	Size 600x450x200mm	34	each	2287.76	77783.67	Cement / Steel will be issued free of cost from BHEL Stores
228	Dismantling, Providing and fixing draining board with CI brackets including painting of brackets cutting and making good the walls wherever required					
228.1	White glazed fire clay draining board of size 600x450x25mm	34	each	631.21	21461.17	Cement / Steel will be issued free of cost from BHEL Stores
229	Dismantling, Providing and fixing white vitreous china water closet squatting pan (indian type)					
229.1	Long pattern WC pan of size 580mm	34	each	521.41	17727.77	Cement / Steel will be issued free of cost from BHEL Stores
229.2	Orissa pattern WC pan of size 580x440mm	34	each	997.66	33920.27	Cement / Steel will be issued free of cost from BHEL Stores
230	Extra for using coloured WC pan instead of white WC pan					
231.1	Orissa pattern WC pan 580x440mm	34	each	385.21	13096.97	
232	Dismantling, Providing and fixing white vitreous china pedestal type (european type/ wash down type ) water closet pan	34	each	828.06	28153.87	
233	Extra for using coloured pedestal type WC pan (european type) with low level cistern of same colour instead of white vitreous china WC pan and cistern	34	each	863.76	29367.67	
234	Dismantling, Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet					
234.1	250x130x30mm	34	pair	98.51	3349.17	Cement / Steel will be issued free of cost from BHEL Stores
234.2	250x125x25mm	34	pair	99.66	3388.27	Cement / Steel will be issued free of cost from BHEL Stores
235	Dismantling, Providing and fixing PVC low level flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fittings and fixtures complete					
235.1	10 Ltr capacity white	34	each	709.75	24131.50	
235.2	10 Ltr capacity coloured	34	each	783.85	26650.90	
236	Dismantling, Providing and fixing controlled flush low level cistern made of vitreous china with all fitting complete					
236.1	10 Ltr (full flush ) capacity white	34	each	1178.80	40079.20	
236.2	10 Ltr (full flush ) capacity coloured	34	each	1665.45	56625.30	
237	Dismantling, Providing and fixing solid plastic seat with lid for pedestal type WC pan complete					
237.1	white solid plastic seat with lid	34	each	334.95	11388.30	
237.2	black solid plastic seat with lid	34	each	305.90	10400.60	
238	Extra for Dismantling, Providing coloured other than black solid PVC plastic seat and cover in european type WC pan instead of white plastic seat and cover	34	Each	121.95	4146.30	
239	Dismantling, Providing and fixing GI inlet connection for flush pipe connecting with WC pan	34	each	73.60	2502.40	
240	Dismantling, Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.	34	each	573.67	19504.85	Cement / Steel will be issued free of cost from BHEL Stores
241	Dismantling, Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe	34	each	1059.09	36009.20	Cement / Steel will be issued free of cost from BHEL Stores
242	Dismantling, Providing and fixing white vitreous china wash basin including making all connectons but excluding the cost of fiting					
242.1	Flat back wash basin of size 630x450mm	34	each	745.08	25332.82	Cement / Steel will be issued free of cost from BHEL Stores
242.2	Flat back wash basin of size 550x400mm	34	each	588.28	20001.62	Cement / Steel will be issued free of cost from BHEL Stores
242.3	Angle back wash basin of size 600x480mm	34	each	692.83	23556.32	Cement / Steel will be issued free of cost from BHEL Stores
242.4	Angle back wash basin of size 400x400mm	34	each	468.63	15933.52	Cement / Steel will be issued free of cost from BHEL Stores
242.5	Flat back wash basin of size 450x300mm	34	each	483.73	16446.92	Cement / Steel will be issued free of cost from BHEL Stores
242.6	Surgeon type wash basin of size 660x460mm	34	each	1006.43	34218.72	Cement / Steel will be issued free of cost from BHEL Stores
243	Dismantling, Providing and fixing kitchen sink including making all connections excluding cost of fittings					
243.1	White glazed fire clay sink of size 600x450x250mm	34	each	1436.08	48826.82	Cement / Steel will be issued free of cost from BHEL Stores
244	Dismantling, Providing and fixing white vitreous china laboratory sink including making all connections excluding excluding cost of fittings					
244.1	Size 450x300x150mm	34	each	822.83	27976.32	Cement / Steel will be issued free of cost from BHEL Stores
244.2	Size 600x450x200mm	34	each	1677.68	57041.22	Cement / Steel will be issued free of cost from BHEL Stores
245	Dismantling, Providing and fixing PVC waste pipe for sink or wash basin including PVC waste fitting complete					
245.1	semi rigid pipe					
245.1.1	32mm dia	34	each	42.15	1433.10	
245.1.2	40mm dia	34	each	47.95	1630.30	
245.2	Nil					

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
245.3	Nil					
245.4	Flexible pipe					
245.4.1	32mm dia	34	each	46.80	1591.20	
245.4.2	40mm dia	34	each	49.10	1669.40	
246	Dismantling, Providing and fixing 100mm sand cast iron grating for gully trap	34	each	16.45	559.30	
247	Dismantling, Providing and fixing in position 25mm dia metre mosquito proof coupling of approved municipal design	34	each	28.85	980.90	
248	Dismantling, Providing and fixing 600x450mm beveled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws and washers complete	34	each	493.65	16784.10	
249	Dismantling, Providing and fixing mirror of superior glass (approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing					
249.1	circular shape 450mm dia	34	each	599.15	20371.10	
249.2	Rectangular shape 453x357mm	34	each	465.10	15813.40	
249.3	oval shape 450x350mm (outer dimensions)	34	each	504.00	17136.00	
249.4	Rectangular shape 1500x450mm	34	each	1034.50	35173.00	
250	Dismantling, Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with CP brass brackets and guard rail complete fixed with 40mm long screws rawl plugs etc. complete	34	each	216.70	7367.80	
251	Dismantling, Providing and fixing toilet paper holder					
251.1	CP brass	34	each	147.10	5001.40	
251.2	Vitreous china	34	each	173.00	5882.00	
252	Dismantling, Providing and fixing soil waste and vent pipes					
252.1	100mm dia					
252.1.1	sand cast iron S&S pipe as per IS 1729	34	mtr	451.00	15334.00	
252.1.2	Centrifugally cast (spun) iron socketed pipe as per IS 3989	34	mtr	730.40	24833.60	
252.2	Nil					
252.3	Nil					
252.4	75mm diameter					
252.5	sand cast iron S&S pipe as per IS 1729	34	mtr	395.45	13445.30	
252.6	Centrifugally cast (spun) iron socketed pipe as per IS 3989	34	mtr	629.85	21414.90	
253	Dismantling, Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2(1 cement 2 fine sand) in SCI/CI pipes					
253.1	75mm dia pipe	34	each	25.30	860.20	
253.2	100mm dia pipe	34	each	29.80	1013.20	
254	Dismantling, Providing and fixing MS holder bat clamps of approved design to sand cast iron/cast iron(spun) pipe embedded in and including cement concrete blocks 10x10x10cm 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.					
254.1	for 100mm dia pipe	34	each	62.71	2132.17	Cement / Steel will be issued free of cost from BHEL Stores
254.2	for 75mm dia pipe	34	each	60.36	2052.27	Cement / Steel will be issued free of cost from BHEL Stores
255	Dismantling, Providing and fixing bend of required degree with access door insertion rubber washer 3mm thick bolt and nuts complete					
255.1	100mm					
255.2	sand cast iron S&S pipe as per IS 1729	34	each	255.00	8670.00	
255.3	sand cast iron S&S pipe as per IS 3989	34	each	291.00	9894.00	
255.4	75mm diameter					
255.4.1	sand cast iron S&S pipe as per IS 1729	34	each	210.00	7140.00	
255.4.2	sand cast iron S&S pipe as per IS 3989	34	each	230.90	7850.60	
256	Dismantling, Providing and fixing plain bend of required degree					
256.1	100mm					
256.1.1	sand cast iron S&S pipe as per IS 1729	34	each	222.45	7563.30	
256.1.2	sand cast iron S&S pipe as per IS 3989	34	each	236.40	8037.60	
256.2	Nil					
256.3	Nil					
256.4	75mm diameter					
256.5	sand cast iron S&S pipe as per IS 1729	34	each	175.15	5955.10	
256.6	sand cast iron S&S pipe as per IS 3989	34	each	178.65	6074.10	
257	Dismantling, Providing and fixing heel rest sanitary bend					
257.1	100mm					
257.2	sand cast iron S&S pipe as per IS 1729	34	each	244.50	8313.00	
257.3	sand cast iron S&S pipe as per IS 3989	34	each	286.35	9735.90	
257.4	75mm diameter					
257.5	sand cast iron S&S pipe as per IS 1729	34	each	204.20	6942.80	
257.6	sand cast iron S&S pipe as per IS 3989	34	each	249.50	8483.00	
258	Dismantling, Providing and fixing double equal junction of required degree with access door insertion rubber washer 3 mm thick bolts and nuts complete					
258.1	100x100x100x100mm					
258.2	sand cast iron S&S aa per IS 1729	34	each	513.85	17470.90	
258.3	sand cast iron S&S as per IS 3989	34	each	612.55	20826.70	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
258.4	75x75x75mm					
258.4.1	sand cast iron S&S aa per IS 1729	34	each	409.75	13931.50	
258.4.2	sand cast iron S&S as per IS 3989	34	each	487.60	16578.40	
259	Dismantling, Providing and fixing double equal plain junction of required degree					
259.1	100x100x100x100mm					
259.1.1	sand cast iron S&S aa per IS 1729	34	each	473.35	16093.90	
259.1.2	sand cast iron S&S as per IS 3989	34	each	558.15	18977.10	
259.2	Nil					
259.3	Nil					
259.4	75x75x75mm					
259.5	sand cast iron S&S aa per IS 1729	34	each	356.35	12115.90	
259.6	sand cast iron S&S as per IS 3989	34	each	445.75	15155.50	
260	Dismantling, Providing and fixing single equal plain junction of required degree with access door insertion rubber washer 3 mm thick bolts and nuts complete					
260.1	100x100x100x100mm					
260.2	sand cast iron S&S aa per IS 1729	34	each	374.60	12736.40	
260.3	sand cast iron S&S as per IS 3989	34	each	489.60	16646.40	
260.4	75x75x75mm					
260.4.1	sand cast iron S&S aa per IS 1729	34	each	283.15	9627.10	
260.4.2	sand cast iron S&S as per IS 3989	34	each	364.45	12391.30	
260.5	Nil					
260.6	Nil					
260.7	Dismantling, Providing and fixing single equal plain junction of required degree					
260.8	100x100x100mm					
260.8.1	sand cast iron S&S aa per IS 1729	34	each	323.50	10999.00	
260.8.2	sand cast iron S&S as per IS 3989	34	each	442.00	15028.00	
260.9	Nil					
260.1	Nil					
260.11	75x75x75mm					
260.12	sand cast iron S&S aa per IS 1729	34	each	250.65	8522.10	
260.13	sand cast iron S&S as per IS 3989	34	each	333.10	11325.40	
261	Dismantling, Providing and fixing double unequal junction of required degree with access door insertion rubber washer 3mm thick bolts and nut complete					
261.1	100x100x75x75mm					
261.1.1	sand cast iron S&S aa per IS 1729	34	each	555.80	18897.20	
261.1.2	sand cast iron S&S as per IS 3989	34	each	842.70	28651.80	
261.2						
261.3						
261.4	Dismantling, Providing and fixing double unequal plain junction of required degree					
261.4.1	100x100x75x75mm					
261.4.1.1	sand cast iron S&S aa per IS 1729	34	each	507.00	17238.00	
261.4.1.2	sand cast iron S&S as per IS 3989	34	each	757.90	25768.60	
262	Dismantling, Providing and fixing single unequal junction of required degree with access door insertion rubber washer 3mm thick bolts and nut complete					
262.1	100x100x75mm					
262.1.1	sand cast iron S&S aa per IS 1729	34	each	402.50	13685.00	
262.1.2	sand cast iron S&S as per IS 3989	34	each	637.10	21661.40	
263	Dismantling, Providing and fixing single unequal junction of required degree					
263.1	100x100x75mm					
263.1.1	sand cast iron S&S aa per IS 1729	34	each	350.20	11906.80	
263.1.2	sand cast iron S&S as per IS 3989	34	each	551.15	18739.10	
264	Dismantling, Providing and fixing double equal plain invert branch of required degree					
264.1	100x100x100x100mm					
264.1.1	sand cast iron S&S aa per IS 1729	34	each	505.85	17198.90	
264.1.2	sand cast iron S&S as per IS 3989	34	each	496.55	16882.70	
264.2	Nil					
264.3	Nil					
264.4	75x75x75x75mm					
264.4.1	sand cast iron S&S aa per IS 1729	34	each	377.25	12826.50	
264.4.2	sand cast iron S&S as per IS 3989	34	each	400.50	13617.00	
265	Dismantling, Providing and fixing single equal plain invert branch of required degree					
265.1	100x100x100mm					
265.1.1	sand cast iron S&S aa per IS 1729	34	each	388.55	13210.70	
265.1.2	sand cast iron S&S as per IS 3989	34	each	393.20	13368.80	
265.2	Nil					
265.3	Nil					
265.4	75x75x75mm					
265.4.1	sand cast iron S&S aa per IS 1729	34	each	290.15	9865.10	
265.4.2	sand cast iron S&S as per IS 3989	34	each	299.45	10181.30	
266	Dismantling, Providing and fixing double unequal invert branch of required degree					
266.1	100x100x75x75mm					
266.2	sand cast iron S&S aa per IS 1729	34	each	547.70	18621.80	
266.3	sand cast iron S&S as per IS 3989	34	each	682.40	23201.60	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
267	Dismantling, Providing and fixing single unequal plain invert branch of required degree					
267.1	100x100x75mm					
267.2	sand cast iron S&S aa per IS 1729	34	each	459.40	15619.60	
267.3	sand cast iron S&S as per IS 3989	34	each	505.85	17198.90	
268	Dismantling, Providing and fixing sand cast iron and S&S off sets as per IS 1729					
268.1	76mm off sets					
268.1.1	with 75mm dia pipe	34	each	158.90	5402.60	
268.1.2	with 100mm dia pipe	34	each	268.05	9113.70	
268.2	Nil					
268.3	Nil					
268.4	114mm off sets					
268.4.1	with 75mm dia pipe	34	each	271.25	9222.50	
268.4.2	with 100mm dia pipe	34	each	351.40	11947.60	
268.5	Nil					
268.6	Nil					
268.7	152mm off sets					
268.7.1	with 75mm dia pipe	34	each	340.25	11568.50	
268.7.2	with 100mm dia pipe	34	each	440.15	14965.10	
269	Dismantling, Providing and fixing sand cast iron S&S off sets as per IS 3989					
269.1	75mm off sets					
269.1.1	with 75mm dia pipe	34	each	220.45	7495.30	
269.3	150mm off sets					
269.3.1	with 75mm dia pipe	34	each	277.75	9443.50	
269.3.2	with 100mm dia pipe	34	each	374.15	12721.10	
270	Dismantling, Providing and fixing door piece insertion rubber washer 3mm thick bolts and nuts complete					
270.1	100mm					
270.1.1	sand cast iron S&S pipe as per IS 1729	34	each	367.65	12500.10	
270.1.2	sand cast iron S&S pipe as per IS 3989	34	each	296.80	10091.20	
270.2	Nil					
270.3	Nil					
270.4	75mm					
270.4.1	sand cast iron S&S pipe as per IS 1729	34	each	268.05	9113.70	
270.4.2	sand cast iron S&S pipe as per IS 3989	34	each	227.40	7731.60	
271	Dismantling, Providing and fixing terminal guard					
271.1	100mm					
271.1.1	sand cast iron S&S pipe as per IS 1729	34	each	192.25	6536.50	
271.1.2	sand cast iron S&S pipe as per IS 3989	34	each	194.60	6616.40	
271.2	Nil					
271.3	Nil					
271.4	75mm					
271.4.1	sand cast iron S&S pipe as per IS 1729	34	each	139.15	4731.10	
271.4.2	sand cast iron S&S pipe as per IS 3989	34	each	177.45	6033.30	
272	Dismantling, Providing and fixing collar					
272.1	100mm					
272.1.1	sand cast iron S&S pipe as per IS 1729	34	each	143.45	4877.30	
272.1.2	sand cast iron S&S pipe as per IS 3989	34	each	202.70	6891.80	
272.2	Nil					
272.3	Nil					
272.4	75mm					
272.5	sand cast iron S&S pipe as per IS 1729	34	each	107.80	3665.20	
272.6	sand cast iron S&S pipe as per IS 3989	34	each	146.10	4967.40	
273	Dismantling, Providing lead caulked joints to sand cast iron rain centrifugally cast (spun) iron pipes and fitting of diameter					
273.1	100mm	34	each	126.50	4301.00	
273.2	75mm	34	each	107.80	3665.20	
273.3	50mm	34	each	86.60	2944.40	
274	Dismantling, Providing and fixing MS stays and clamps for sand cast iron / centrifugally cast (spun) iron pipes of diameter					
274.1	100mm	34	each	45.61	1550.77	Cement / Steel will be issued free of cost from BHEL Stores
274.2	75mm	34	each	38.91	1322.97	Cement / Steel will be issued free of cost from BHEL Stores
274.3	50mm	34	each	31.61	1074.77	Cement / Steel will be issued free of cost from BHEL Stores
275	Dismantling, Providing and fixing trap of self cleansing design with screws down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors					
275.1	100mm inlet and 100mm outlet					
275.1.1	sand cast iron S&S as per IS 3989	34	each	531.11	18057.57	Cement / Steel will be issued free of cost from BHEL Stores
275.1.2	sand cast iron S&S pipe as per IS 1729	34	each	428.91	14582.77	Cement / Steel will be issued free of cost from BHEL Stores
275.2	Nil					
275.3	Nil					
275.4	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved manufacture and of required shade and colour complete as per manufacturer specification					
275.4.1	sand cast iron S&S as per IS 3989	34	each	573.35	19493.90	

Contractor



**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
275.4.2	sand cast iron S&S pipe as per IS 1729	34	each	375.90	12780.60	
276	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 grade stone aggregate 12.5 mm nominal size) including necessary plaster and painting in cement mortar 1:4( 1 cement 4 coarse sand )					
276.1	100mm	34	mtr	123.95	4214.26	Cement / Steel will be issued free of cost from BHEL Stores
276.2	75mm	34	mtr	89.32	3036.93	Cement / Steel will be issued free of cost from BHEL Stores
276.3	50mm	34	mtr	58.53	1990.02	Cement / Steel will be issued free of cost from BHEL Stores
277	painting CI cistern with bitumastic or any other anti corrosive paint inside and white paint over a coat of zinc chromate yellow primer (of approved quality) on the outside surface of the cistern flush pipe other fitting etc. complete for new work	34	each	212.30	7218.20	
278	Re-painting CI cistern with bitumastic or any other anti corrosive paint inside and white paint on the outside surface of the cistern flush pipe other fitting etc. complete including polishing of wooden seat and lid and cleaning of WC pan with acid wherever necessary	34	each	146.25	4972.50	
279	Repainting CI cistern with synthetic enamel paint of approved colour brand and manufacture on the outside surface fo cistern flush pipe other fitting etc. complete	34	each	65.75	2235.50	
280	painting sand cast iron / centrifugally cast (spun) iron soil waste vent pipes and fitting with paint of any colour such as chocolate grey or buff etc, over a coat of primer(of approved quality) for new work					
280.1	100mm dia meter pipes	34	mtr	18.60	632.40	
280.2	75mm dia metre pipe	34	mtr	14.25	484.50	
281	Repainting sand cast iron / centrifugally cast iron (spun) iron soil waste vent pipes and fitting with paint of any colour such as chocolate grey or buff etc.					
281.1	100mm dia meter pipes	34	mtr	9.30	316.20	
281.2	75mm dia metre pipe	34	mtr	7.00	238.00	
282	Repainting bath tub of size 1700x730x430mm with enamel paint	34	each	208.45	7087.30	
283	Dismantling, Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or european type water closet (angle indian WC pan ) with seat lid with CP brass hinges and rubbers buffers 10ltr low level flushing cistern with fitting and brackets 40mm flush bend 20mm over flow pipe with specials of standard make and mosquito proof coupling of approved municippal design complete, including painting of fitting and brackets cutting and making good the walls and floors wherever required					
283.1	white vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and CP flush bend	34	each	4142.20	140834.80	
284	Dismantling, Providing and fixing PTMT waste coupling for wash basin and sink of approved quality and colour					
284.1	waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45 grms	34	each	75.80	2577.20	
284.2	waste coupling 38mm of 83mm length and 77mm breadth weighing not less than 60grms	34	each	100.20	3406.80	
285	Dismantling, Providing and fixing PTMT bottle trap for wash basin and sink					
285.1	Bottle trap 31mm single piece moulded with height of 270mm effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal weighingng not less than 260 grms	34	each	366.20	12450.80	
285.2	Bottle trap 38mm single piece moulded with height of 270mm effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal weighingng not less than 263 grms	34	each	395.25	13438.50	
286	Dismantling, Providing and fixing PTMT liquid soap container 109mm wide 125mm high and 112mm distance from wall of standard shape with bracket of the same material with snap fitting of approved quality and colour weighing not less than 105grms	34	each	164.65	5598.10	
287	Dismantling, Providing and fixing PTMT towel ring trapezoidal shape 215mm long 200mm wide with a minimum distances of 37mm from wall face with concealed fitting arrangement of approved quality and colour weighing not less than 88 grms	34	each	149.00	5066.00	
288	Dismantling, Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour					
288.1	450mm long towel rail with total length of 495mm 78mm wide and effective height of 88mm weighing not less than 170grms	34	each	294.65	10018.10	
288.2	600mm long towel rail with total length of 645mm width 78mm and effective height of 88mm weighing not less than 190grms	34	each	329.50	11203.00	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
289	Dismantling, Providing and fixing PTMT shelf 440mm long 124mm width and 36 mm height of approved quality and colour weighing not less than 300 grams	34	each	370.15	12585.10	
290	Dismantling, Providing and fixing PTMT 15mm urinal spreader size 95x69x100mm with 1/2" BSP thread and shapes weighing not less than 60 grms	34	each	147.25	5006.50	
291	Dismantling, Providing and fixing PTMT urinal cock of approved quality and colour					
291.1	15mm nominal bore 80mm long 42mm high and 30mm wide with BSP female threads weighing not less than 48grm	34	each	113.90	3872.60	
292	Dismantling, Providing and fixing MS holder bat clamp of approved design to sand cast iron cast iron (spun) pipes comprising of MS flat brackets made of 50x5mm flat of specified shape projecting 75mm outside the wall surface and fixed on wall with 4nos 6mm dia expansion hold fasteners including drilling necessary holes in brick wall CC/RCC surface and the cost of bolts etc. the pipe shall be fixed to the already fixed brackets with the help of 30mm x 1.6mm galvanised MS flats of specified shape and of total length 420mm and shall be fixed with MS nuts bolts and washers of size of size 25x6mm , one bolts on each side of the pipe					
292.1	total bracket length 580mm of approved shape and design (for single 100mm dia pipe)	34	each	121.70	4137.80	
292.2	total bracket length 810mm of approved shape and design (for two 100mm dia pipes)	34	each	148.05	5033.70	
292.3	total bracket length 1040mm of approved shape and design (for three 100mm dia pipes)	34	each	174.35	5927.90	
293	Dismantling the spoiled AC specials and replacing with approved quality new ones in CM 1:1 including chasing brick masonry / concrete, making good in CM including cost of all materials etc complete for all specials for 100 mm (4") dia all as directed by Engineer in-charge.	34	Each	168.29	5721.86	
294	Dismantling the spoiled AC specials and replacing with approved quality new ones in CM 1:1 including chasing brick masonry / concrete, making good in CM including cost of all materials etc complete for all specials for 75 mm (3") dia all as directed by Engineer-in-charge. ( Nahany trap and PVC Pipe if replaced will be measured separately)	34	Each	153.66	5224.44	
295	Rectifying the dampness due to leaking joints of Nahany traps alkathin / lead pipe connections to W.C's joints in AC pipes embedded in flooring including chasing brick work / concrete and making good after repairs in cement mortar including cost of all materials, curing etc complete for all specials all as directed by Engineer-in-charge.( trap and PVC Pipe if replaced will be measured separately)	34	Each	177.55	6036.70	
296	Dismantling and replacing with new ones of approved make including chasing of brick work / concrete, making good in CM cost of all materials, curing for the following items etc complete all as directed by Engineer-In-charge.		Admn. approval2 010-11			
297	Wash hand basins of size 22"x16" (without fittings) ( Material will be free issue by BHEL)	34	Each		0.00	
298	Wash hand basins of size 18"x12" (without fittings).	34	Each		0.00	
299	Indian water closet 630 mm / 580 mm ( Material will be free issue by BHEL)	34	Each		0.00	
300	fixing European Water closets complete all as directed by Engineer-in-charge. ( Material will be free issue by BHEL)	34	Each		0.00	
301	Standing type white glazed flat back urinals.	34	Each		0.00	
302	Porcelain "P" trap of size 4"	34	Each		0.00	
303	Orissa Pan of approved make and size 580 x 440 mm ( Material will be free issue by BHEL)	34	Each		0.00	
304	SWG gully traps 6"x6" or 4"x4" with CI frame and cover.	34	Each		0.00	
305	Fixing of white coloured PVC low level flushing cistern 10 lit capacity supplied from BHEL stores complete all as directed by Engineer-In-charge.	34	Each		0.00	Flush Tanks will be issued free of cost from BHEL stores
306	Fixing of coloured PVC low level flushing cistern 10 lit capacity supplied from BHEL stores complete all as directed by Engineer-in-charge.	34	Each		0.00	Flush Tanks will be issued free of cost from BHEL stores
307	Polished shahabad stone sinks of 1/2" tick, 24" x 18" x 7" including proper fixing (without fittings).	34	Each		0.00	
308	Dismantling and replacing with new ones of approved make including cost of all materials etc complete all as directed by Engineer-in-charge.					
308.1	1/2" C.P. pillar taps (500 gms) SEIKO DELUX HEAVY DUTY.	34	Each		0.00	
308.2	1/2" brass stop cock (400 gms)	34	Each		0.00	
308.3	3/4" brass stop cock.	34	Each		0.00	
308.4	1/2" X 18" PVC pipe connections. (Heavy duty).	34	Each		0.00	
308.5	PVC flexible pipe 32 mm dia.	34	Each		0.00	
308.6	3/4" polymer ball cock of ISI makes approved brand.	34	Each		0.00	
308.7	1/2" polymer ball cock of ISI makes approved brand.	34	Each		0.00	
308.8	E.W.C seat covers (solid) of any shade.	34	Each		0.00	
308.9	CP consealed stock cock 1/2" dia with internal brass threadings.	34	Each		0.00	
308.1	Hot and cold mixing vlave of SEIKO DELUX make.	34	Each		0.00	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
308.11	C.P. waste coupling 1 1/4" dia (32 mm).	34	Each		0.00	
308.12	C.P. Nahani trap jalise 5" dia.	34	Each		0.00	
308.13	Hot water connections.	34	Each		0.00	
308.14	C.I. brackets.	34	Each		0.00	
308.15	Porcelain foot rests 250 x 125 x 25 mm	34	Each		0.00	
308.16	1/2" C.I bib taps with brass internal, turning (Alto brand or equivalent).	34	Each		0.00	
308.17	1/2" Polymet bib taps (PTMT material) prayag make.	34	Each		0.00	
308.18	PVC shower swing type for the 1/2" 3/4" pipe (Prayag make).	34	Each		0.00	
308.19	1/2" C.I. stop cock with brass internal turnings (Alto or equivalent brand).	34	Each		0.00	
308.2	PVC syphon set suitable for PVC/CI law down flush tank of 10 litres capacity with all fittings etc.	34	Each		0.00	
309	Supplying and fixing of PVC balls ISI marked for ball cocks in over head tanks and flush tanks for 20 mm dia.etc. complete all as directed by Engineer-in-charge.	34	Each		0.00	
310	Supplying and fixing CI Nahany trap 76 mm (3") dia in cement concrete 1:2:4 and 12.7 mm (5") dia CI grating hinged to Nahany trap including breaking of the flooring and redoing the same wherever necessary etc complete all as directed by Engineer-in-charge.	34	Each		0.00	
311	Removing and refixing GI pipe 13 to 40 mm dia including cost of jointing materials such as specials like collars, elbows, bends etc complete all as directed by Engineer-in-charge.	34	One Rmt		0.00	
312	Supplying and fixing Telephonic shower including cost of all materials and fixtures and fittings etc complete all as directed by Engineer-In-charge.	34	Each		0.00	
313	Providing PVC storage tank covers located over the buildings to suit existing PVC storage tanks with nut and bolts etc complete all as directed by Engineer-in-charge.	34	Each		0.00	
314	Dismantling of the existing AC/PVC Pipe (old pipes are to be handed over to department as per instructions of the Engineer-in-charge) and <b>supplying &amp; fixing</b> of 75 mm dia Prince/ Sudhakar make or equivalent quality as approved by Engineer-in-charge of PVC / SWR pipes (as per ISI standards) 4 kgs/ cm <sup>2</sup> . etc complete all as directed by Engineer-in-charge.	34	Rmt		0.00	
315	Dismantling of the existing AC /PVC Pipes (the pipes are to be returned to department as per instructions of the Engineer-in-charge) and <b>Supply &amp; Fixing</b> Prince / Sudhakar make or equivalent approved quality PVC / SWR pipes (as per ISI standards) 4 kg / cm <sup>2</sup> .... <b>110 mm</b> dia etc complete all as directed by Engineer-in-charge.	34	Rmt		0.00	
316	Dismantling of the existing specials and <b>Supplying &amp; Fixing</b> Prince / Sudhakar make or equivalent approved quality (U.V. resistant UPVC) SWR pipe fittings (as per ISI standards) etc complete all as directed by Engineer-In-charge.					
316.1	75 mm dia plain bend.	34	Each		0.00	
316.2	75 mm dia plug bend.	34	Each		0.00	
316.3	75 mm dia off-set.	34	Each		0.00	
316.4	75 mm dia Single 'Y' with door.	34	Each		0.00	
316.5	75 mm dia pipe clip.	34	Each		0.00	
316.6	75 mm dia single tee with door.	34	Each		0.00	
316.7	110 mm dia plain bend.	34	Each		0.00	
316.8	110 mm dia plug bend.	34	Each		0.00	
316.9	110 mm dia Single 'Y' with door.	34	Each		0.00	
316.1	110 mm dia Double 'Y' with door.	34	Each		0.00	
316.11	110 mm dia off-set.	34	Each		0.00	
316.12	110 mm dia vent cowl.	34	Each		0.00	
316.13	110 mm dia pipe clip.	34	Each		0.00	
316.14	110 mm dia single tee with door.	34	Each		0.00	
316.15	110 mm dia coupler.	34	Each		0.00	
<b>WATER SUPPLY WORKS</b>						
317	Providing and fixing Polyethene -Aluminium-Polythelene(PE-AL-PE) Complete Pressure Pipe conforming to IS -15450 U.V.stabilized for hot & cold water supply, capable to withstand temperature up to 80 C including all special fittings of composite material (engineering plastic bland and brass Inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamp at 1.00 metre spacing. this includes testing of joint complete as per direction of the Engineer in charge					
	Internal work-Exposed on wall					
317.1	1216 (16mm OD) pipe	34	metre	146.65	4986.10	
317.2	1620 (20 mm OD) pipe	34	metre	176.45	5999.30	
317.3	2025 (25 mm OD) pipe	34	metre	222.85	7576.90	
317.4	2532 (32 mm OD) pipe	34	metre	297.50	10115.00	
317.5	3240 (40 mm OD) pipe	34	metre	391.30	13304.20	
317.6	4050 (50 mm OD) pipe	34	metre	507.60	17258.40	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
318	Providing and fixing Polyethylene-Aluminium-Polyethylene (PE-AL-PE) Composite Pressure Pipes conforming to IS - 15450 U.V.stabilized with carbon black having thermal stability for hot & cold water supply, capable to withstand temperature up to 80 C including all special fittings of composite material (engineering plastic blend and brass inserts wherever required) e.g. elbows, tees, reducers, couplers & connectors etc. with clamps at 1.00 metre spacing. This includes the costs of cutting chases and including testing of joints complete as per direction of the engineer in charge.					
	Concealed work including cutting chases and making good the wall etc.					
318.1	1216 (16mm OD) Pipe	34	metre	219.61	7466.58	Cement / Steel will be issued free of cost from BHEL Stores
318.2	1620 (20 mm OD) pipe	34	metre	256.21	8710.98	Cement / Steel will be issued free of cost from BHEL Stores
318.3	2025 (25mm OD) Pipe	34	metre	315.16	10715.28	Cement / Steel will be issued free of cost from BHEL Stores
318.4	2532 (32mm OD) Pipe	34	metre	408.66	13894.28	Cement / Steel will be issued free of cost from BHEL Stores
319	Providing and fixing Polyethylene -Aluminium-Polyethylene (PE-AL-PE) Complete Pressure Pipe conforming to IS -15450 U.V.stabilized with carbon black having thermal stability for hot and cold water supply capable to withstand temperature upto 80°C including all special fitting of composite material (engineering plastic blend and brass inserts wherever required.) e.g elbows tees reducers couplers and connectors etc. with trenching refilling and testing of joints complete as per direction of the engineer in charge					
	External work					
319.1	1216 (16mm OD) pipe	34	mtr	143.95	4894.30	
319.2	1620 (20 mm OD) pipe	34	mtr	171.10	5817.40	
319.3	2025 (25 mm OD) pipe	34	mtr	214.90	7306.60	
319.4	2532 (32 mm OD) pipe	34	mtr	284.35	9667.90	
319.5	3240 (40 mm OD) pipe	34	mtr	371.50	12631.00	
319.6	4050 (50 mm OD) pipe	34	mtr	487.75	16583.50	
320	providing and fixing 3 layer PP-R (poly propylene Random copolymer ) pipes SDR 7.4 U V stabilized and anti - microbial fusion welded having thermal stability for hot and cold water supply including all PP-R plain and brass threaded polypropylene random fitting i/c fixing the pipe with clamps at 1.00 m spacing, this including testing of joints complete as per direction of engineer in charge					
	Internal work-Exposed on wall					
320.1	PP--16 pipe, 16mm OD	34	mtr	71.15	2419.10	
320.2	PP--16 pipe, 20mm OD	34	mtr	96.40	3277.60	
320.3	PP--16 pipe, 25mm OD	34	mtr	135.30	4600.20	
320.4	PP--16 pipe, 32mm OD	34	mtr	205.40	6983.60	
320.5	PP--16 pipe, 40mm OD	34	mtr	314.30	10686.20	
320.6	PP--16 pipe, 50mm OD	34	mtr	436.60	14844.40	
321	providing and fixing 3 layer PP-R (poly propylene Random copolymer ) pipes SDR 7.4 U V stabilized and anti - microbial fusion welded having thermal stability for hot and cold water supply including all PP-R plain and brass threaded polypropylene random fitting i/c fixing the pipe with clamps at 1.00 m spacing, this including testing of joints complete as per direction of engineer in charge <b>Concealed work including cutting chases and making good the walls etc.</b>					
321.1	PP--16 pipe, 16mm OD	34	mtr	118.01	4012.18	Cement / Steel will be issued free of cost from BHEL Stores
321.2	PP--16 pipe, 20mm OD	34	mtr	148.46	5047.48	Cement / Steel will be issued free of cost from BHEL Stores
321.3	PP--16 pipe, 25mm OD	34	mtr	197.26	6706.68	Cement / Steel will be issued free of cost from BHEL Stores
321.4	PP--16 pipe, 32mm OD	34	mtr	284.66	9678.28	Cement / Steel will be issued free of cost from BHEL Stores
322	Providing and fixing 3 layer PP-R (poly propylene Random copolymer ) pipes UV stabilized and anti - microbial fusion welded having thermal stability for hot and cold water supply including all PP-R plain and brass threaded polypropylene random fitting including trenching refilling and testing of joints complete as per direction of engineer in charge					
322.1	PN - 16 pipe, 16mm OD (SDR-7.4)	34	mtr	68.45	2327.30	
322.2	PN - 16 pipe, 20mm OD (SDR-7.4)	34	mtr	91.10	3097.40	
322.3	PN - 16 pipe, 25mm OD (SDR-7.4)	34	mtr	129.45	4401.30	
322.4	PN - 16 pipe, 32mm OD (SDR-7.4)	34	mtr	194.40	6609.60	
322.5	PN - 16 pipe, 40mm OD (SDR-7.4)	34	mtr	294.50	10013.00	
322.6	PN - 16 pipe, 50mm OD (SDR-7.4)	34	mtr	416.80	14171.20	
322.7	PN - 16 pipe, 63mm OD (SDR-7.4)	34	mtr	639.50	21743.00	
322.8	PN - 16 pipe, 75mm OD (SDR-7.4)	34	mtr	903.70	30725.80	
322.9	PN - 16 pipe, 90mm OD (SDR-7.4)	34	mtr	1431.50	48671.00	
322.1	PN - 10 pipe, 110mm OD (SDR-11)	34	mtr	1499.45	50981.30	
322.11	PN - 10 pipe, 160mm OD (SDR-11)	34	mtr	3134.30	106566.20	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
	C.P.V.C Pipes					
323	Providing and fixing chlorinated polyvinyl chloride (CVCV) pipes , having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fitting including of pipes with clamps at 1.00m spacing. This including jointing of pipes and fitting with one step CPVC solvent cement and testing of joints completes as per direction of engineer in charge					
	Internal work-Exposed on wall					
323.1	15mm nominal outer dia. Pipes	34	mtr	97.95	3330.30	
323.2	20mm nominal outer dia. Pipes	34	mtr	115.65	3932.10	
323.3	25mm nominal outer dia. Pipes	34	mtr	150.40	5113.60	
323.4	32mm nominal outer dia. Pipes	34	mtr	196.35	6675.90	
323.5	40mm nominal outer dia. Pipes	34	mtr	275.05	9351.70	
323.6	50mm nominal outer dia. Pipes	34	mtr	418.50	14229.00	
324	providing and fixing chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain and brass threaded fitting i/c fixing the pipe with clamps at 1.00m spacing. This including jointing of pipes and fitting 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.					
324.1	15mm nominal outer dia. Pipes	34	mtr	150.51	5117.18	Cement / Steel will be issued free of cost from BHEL Stores
324.2	20mm nominal outer dia. Pipes	34	mtr	170.86	5809.08	Cement / Steel will be issued free of cost from BHEL Stores
324.3	25mm nominal outer dia. Pipes	34	mtr	217.61	7398.58	Cement / Steel will be issued free of cost from BHEL Stores
324.4	32mm nominal outer dia. Pipes	34	mtr	272.46	9263.48	Cement / Steel will be issued free of cost from BHEL Stores
325	Providing and fixing chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain and brass threaded fitting this including jointing of pipes and fitting with one step CPVC solvent cement trenching refilling and testing of joints complete as per direction of engineer in charge.					
325.1	15mm nominal outer dia. Pipes	34	mtr	92.60	3148.40	
325.2	20mm nominal outer dia. Pipes	34		107.70	3661.80	
325.3	25mm nominal outer dia. Pipes	34		144.55	4914.70	
325.4	32mm nominal outer dia. Pipes	34		185.30	6300.20	
325.5	40mm nominal outer dia. Pipes	34		255.25	8678.50	
325.6	50mm nominal outer dia. Pipes	34		398.65	13554.10	
325.7	62.50mm nominal outer dia. Pipes	34		1217.80	41405.20	
325.8	75mm nominal outer dia. Pipes	34		1590.75	54085.50	
325.9	100mm nominal outer dia. Pipes	34		2206.10	75007.40	
325.1	150mm nominal outer dia. Pipes	34		3831.90	130284.60	
326	Providing and fixing GI pipes complete with GI fitting and clamps including cutting and making good the walls etc. <b>Internal work-Exposed on wall</b>					
326.1	15mm nominal bore	34	mtr	79.46	2701.64	Cement / Steel will be issued free of cost from BHEL Stores
326.2	20mm nominal bore	34	mtr	102.18	3474.19	Cement / Steel will be issued free of cost from BHEL Stores
326.3	25mm nominal bore	34	mtr	142.70	4851.94	Cement / Steel will be issued free of cost from BHEL Stores
326.4	32mm nominal bore	34	mtr	186.52	6341.51	Cement / Steel will be issued free of cost from BHEL Stores
326.5	40mm nominal bore	34	mtr	221.83	7542.08	Cement / Steel will be issued free of cost from BHEL Stores
326.6	50mm nominal bore	34	mtr	300.68	10222.98	Cement / Steel will be issued free of cost from BHEL Stores
327	Concealed pipe including painting with anti corrosive bitumstic paint cutting chases and making good the wall					
327.1	15mm dia nominal bore	34	mtr	144.75	4921.50	
327.2	20mm dia nominal bore	34	mtr	170.60	5800.40	
328	Providing and fixing GI pipe complete with GI fitting including trenching and refilling etc. <b>External work</b>					
328.1	15mm nominal bore	34	mtr	94.05	3197.70	
328.2	20mm nominal bore	34	mtr	116.60	3964.40	
328.3	25mm nominal bore	34	mtr	156.85	5332.90	
328.4	32mm nominal bore	34	mtr	193.60	6582.40	
328.5	40mm nominal bore	34	mtr	219.60	7466.40	
328.6	50mm nominal bore	34	mtr	280.10	9523.40	
328.7	65mm nominal bore	34	mtr	356.15	12109.10	
328.8	80mm nominal bore	34	mtr	458.15	15577.10	
329	Making connection of GI distribution branch with GI main of following sizes by providing and fixing tee including cutting and threading the pipe ect complete					
329.1	25 to 40mm nominal bore	34	each	166.05	5645.70	
329.2	50 to 80mm nominal bore	34	each	423.20	14388.80	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
330	Fixing water and stop cock in GI pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately)	34	each	121.90	4144.60	
331	Providing and fixing brass bib cock of approved quality:					
331.1	15 mm nominal bore	34	each	191.70	6517.80	
331.2	20 mm nominal bore	34	each	235.20	7996.80	
332	Providing and fixing brass stop cock of approved quality :					
332.1	15 mm nominal bore	34	each	191.70	6517.80	
332.2	20 mm nominal bore	34	each	235.20	7996.80	
333	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)					
333.1	25 mm nominal bore	34	each	285.50	9707.00	
333.2	32 mm nominal bore	34	each	358.00	12172.00	
333.3	40 mm nominal bore	34	each	399.00	13566.00	
333.4	50 mm nominal bore	34	each	578.20	19658.80	
333.5	65 mm nominal bore	34	each	831.75	28279.50	
333.6	80 mm nominal bore	34	each	1369.25	46554.50	
334	Providing and fixing ball valve (brass) of approved quality ,High or low pressure ,with plastic floats complete :					
334.1	15 mm nominal bore	34	each	228.35	7763.90	
334.2	20 mm nominal bore	34	each	333.25	11330.50	
334.3	25 mm nominal bore	34	each	385.90	13120.60	
335	Providing and fixing gun metal non return of approved quality (screwed end)					
335.1	25 mm nominal bore					
335.1.1	Horizontal	34	each	292.15	9933.10	
335.1.2	vertical	34	each	317.70	10801.80	
335.2	Nil					
335.3	Nil					
335.4	32 mm nominal bore					
335.4.1	Horizontal	34	each	371.45	12629.30	
335.4.2	vertical	34	each	464.40	15789.60	
335.5	Nil					
335.6	Nil					
335.7	40 mm nominal bore					
335.7.1	Horizontal	34	each	494.95	16828.30	
335.7.2	vertical	34	each	605.30	20580.20	
335.8	Nil					
335.9	Nil					
335.10	50 mm nominal bore					
335.10.1	Horizontal	34	each	738.20	25098.80	
335.10.2	vertical	34	each	847.40	28811.60	
335.11	Nil					
335.12	Nil					
335.13	65 mm nominal bore					
335.13.1	Horizontal	34	each	1282.10	43591.40	
335.13.2	vertical	34	each	1467.95	49910.30	
335.14	Nil					
335.15	Nil					
335.16	80 mm nominal bore					
335.16.1	Horizontal	34	each	1812.25	61616.50	
335.16.2	vertical	34	each	2390.70	81283.80	
336	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main					
336.1	15 mm nominal bore	34	each	139.75	4751.50	
336.2	20 mm nominal bore	34	each	187.20	6364.80	
336.3	25 mm nominal bore	34	each	243.70	8285.80	
337	Providing and fixing uplasticised PVC connection pipe with brass unions					
337.1	30 cm length					
337.2	15 mm nominal bore	34	each	35.10	1193.40	
337.3	20 mm nominal bore	34	each	43.25	1470.50	
337.4	45 cm length					
337.5	15 mm nominal bore	34	each	44.75	1521.50	
337.6	20 mm nominal bore	34	each	56.35	1915.90	
338	Providing and fixing CP brass shower rose with 15 or 20mm inlet					
338.1	100 mm dia meter	34	each	40.40	1373.60	
338.2	150 mm dia meter	34	each	55.80	1897.20	
339	laying in position centrifugally cast spun iron S&S or flanged pipes(excluding cost of pipe)	34	quintal	55.55	1888.70	
340	Laying in position S&S or flanged CI special such as tees bends collars tapers and caps etc. (excluding cost fo specials)	34	quintal	100.25	3408.50	
341	Providing and laying S&S CI standard specials such as tees bends collars tapers caps etc., (Heavy class)					
341.1	Upto 300mm dia	34	quintal	2893.35	98373.90	
341.2	over 300mm dia	34	quintal	3119.85	106074.90	
343	Providing and laying flanged CI standard specials such as tees bends collars tapers caps etc. suitable for flanges jointing as per IS 1538					
343.1	Upto 300mm dia	34	quintal	5123.45	174197.30	
343.2	over 300mm dia	34	quintal	5648.45	192047.30	
344	Providing and laying S&S centrifugally cast (spun) iron pipes (class LA) conforming to IS 1536					

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
344.1	100 mm dia pipe	34	mtr	737.15	25063.10	
344.2	125 mm dia pipe	34	mtr	902.35	30679.90	
344.3	150 mm dia pipe	34	mtr	1066.65	36266.10	
344.4	200 mm dia pipe	34	mtr	1484.00	50456.00	
344.5	250 mm dia pipe	34	mtr	2106.80	71631.20	
344.6	300 mm dia pipe	34	mtr	2800.00	95200.00	
344.7	350 mm dia pipe	34	mtr	3455.55	117488.70	
344.8	400 mm dia pipe	34	mtr	4233.20	143928.80	
344.9	450 mm dia pipe	34	mtr	5065.65	172232.10	
344.1	500 mm dia pipe	34	mtr	6165.95	209642.30	
344.11	600 mm dia pipe	34	mtr	8149.40	277079.60	
345	Providing lead caulked joints to spun iron or CI pipes and specials including testing of joints but excluding the cost of pig lead					
345.1	100 mm diameter pipe	34	each	82.25	2796.50	
345.2	125 mm diameter pipe	34	each	120.45	4095.30	
345.3	150 mm diameter pipe	34	each	123.30	4192.20	
345.4	200 mm diameter pipe	34	each	163.45	5557.30	
345.5	250 mm diameter pipe	34	each	204.20	6942.80	
345.6	300 mm diameter pipe	34	each	246.35	8375.90	
345.7	350 mm diameter pipe	34	each	256.00	8704.00	
345.8	400 mm dia meterpipe	34	each	332.10	11291.40	
345.9	450 mm diameter pipe	34	each	371.60	12634.40	
345.1	500 mm dia meterpipe	34	each	393.70	13385.80	
345.11	600 mm diameter pipe	34	each	528.40	17965.60	
346	Supplying pig lead at site of work	34	quintal	6742.20	229234.80	
347	Providing flanged joints to double flanged CI / DI pipes and specials including testing of joints					
347.1	80 mm diameter pipe	34	each	65.60	2230.40	
347.2	100 mm diameter pipe	34	each	113.00	3842.00	
347.3	125 mm diameter pipe	34	each	114.15	3881.10	
347.4	150 mm diameter pipe	34	each	156.90	5334.60	
347.5	200 mm diameter pipe	34	each	162.70	5531.80	
347.6	250 mm diameter pipe	34	each	236.75	8049.50	
347.7	300 mm diameter pipe	34	each	246.05	8365.70	
347.8	350 mm diameter pipe	34	each	335.05	11391.70	
347.9	400 mm dia meterpipe	34	each	564.20	19182.80	
347.1	450 mm diameter pipe	34	each	702.00	23868.00	
347.11	500 mm dia meterpipe	34	each	778.45	26467.30	
347.12	600 mm diameter pipe	34	each	892.00	30328.00	
348	Providing and fixing CI sluice valves (with cap ) complete with bolts nuts rubber insertions etc. (the tail pieces if required will be paid separately)					
348.1	100 mm dia pipe					
348.1.1	Class I	34	each	2468.05	83913.70	
348.1.2	Class II	34	each	2550.45	86715.30	
348.2	Nil					
348.3	Nil					
348.4	125 mm dia pipe					
348.4.1	Class I	34	each	3034.75	103181.50	
348.4.2	Class II	34	each	3163.60	107562.40	
348.5	Nil					
348.6	Nil					
348.7	150 mm dia pipe					
348.7.1	Class I	34	each	3689.10	125429.40	
348.7.2	Class II	34	each	3889.75	132251.50	
348.8	Nil					
348.9	Nil					
348.1	200 mm dia pipe					
348.10.1	Class I	34	each	6731.80	228881.20	
348.10.2	Class II	34	each	7221.20	245520.80	
348.11	Nil					
348.12	Nil					
348.13	250 mm dia pipe					
348.13.1	Class I	34	each	10013.80	340469.20	
348.13.2	Class II	34	each	10240.90	348190.60	
348.14	Nil					
348.15	Nil					
348.16	300 mm dia pipe					
348.16.1	Class I	34	each	12270.50	417197.00	
348.16.2	Class II	34	each	12718.30	432422.20	
349	Constructing masonry chamber 30x30x50 cm inside with 75 class designation brick work in cement mortar 1:4( 1 cement 4 coarse sand ) for stop cock with CI surface box 100x100x75mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix ( 1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and 12mm thick finished with a floating coat of neat cement complete as per standard design					
349.1	With FPS bricks	34	each	462.57	15727.45	Cement / Steel will be issued free of cost from BHEL Stores

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
350	Constructing masonry chamber 60x60x75 cm inside with 75 class designation brick work in cement mortar 1:4 ( 1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm 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) necessary excavation foundation concrete 1:5:10( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3(1 cement 3 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					
350.1	With FPS bricks	34	each	2835.27	96399.11	Cement / Steel will be issued free of cost from BHEL Stores
351	Constructing masonry chamber 90x90x100 cm inside with 75 class designation brick work in cement mortar 1:4 ( 1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm 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) necessary excavation foundation concrete 1:5:10( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3(1 cement 3 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					
351.1	With FPS bricks	34	each	4839.01	164526.20	Cement / Steel will be issued free of cost from BHEL Stores
352	Constructing masonry chamber 120x120x100 cm inside with 75 class designation brick work in cement mortar 1:4 ( 1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm 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) necessary excavation foundation concrete 1:5:10( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3(1 cement 3 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					
352.1	With FPS bricks	34	each	6681.45	227169.30	Cement / Steel will be issued free of cost from BHEL Stores
353	Constructing masonry chamber 60x60x75 cm inside with 75 class designation brick work in cement mortar 1:4 ( 1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm 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) necessary excavation foundation concrete 1:5:10( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3(1 cement 3 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					
353.1	With FPS bricks	34	each	2702.51	91885.34	Cement / Steel will be issued free of cost from BHEL Stores
354	Constructing masonry chamber 60x45x50 cm inside with 75 class designation brick work in cement mortar 1:4 ( 1 cement 4 coarse sand) for sluice valve with CI surface box 100mm top diameter 160mm bottom diameter and 180mm 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) necessary excavation foundation concrete 1:5:10( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3(1 cement 3 coarsed sand) 12mm thick finished with a floating coat of neat cement complete as per standard design					
354.1	With FPS bricks	34	each	2658.75	90397.43	Cement / Steel will be issued free of cost from BHEL Stores
355	Painting GI pipes and fitting with synthetic enamel white paint over a ready mixed priming coat both of approved quality for new work					
355.1	15 mm diameter pipe	34	mtr	4.80	163.20	
355.2	20 mm diameter pipe	34	mtr	5.45	185.30	
355.3	25 mm diameter pipe	34	mtr	7.45	253.30	
355.4	32 mm diameter pipe	34	mtr	8.75	297.50	
355.5	40 mm diameter pipe	34	mtr	10.40	353.60	
355.6	50 mm diameter pipe	34	mtr	12.20	414.80	
356	Repainting GI pipes and fitting with synthetic enamel white paint of approved quality					
355.1	15 mm diameter pipe	34	mtr	2.45	83.30	
355.2	20 mm diameter pipe	34	mtr	2.85	96.90	
355.3	25 mm diameter pipe	34	mtr	3.70	125.80	
355.4	32 mm diameter pipe	34	mtr	4.30	146.20	
355.5	40 mm diameter pipe	34	mtr	5.05	171.70	
355.6	50 mm diameter pipe	34	mtr	5.90	200.60	

Contractor



**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
356.7	Painting GI pipes and fitting two coats of anti corrosive bitumastic paint of approved quality					
356.7.1	15 mm diameter pipe	34	mtr	2.60	88.40	
356.7.2	20 mm diameter pipe	34	mtr	3.05	103.70	
356.7.3	25 mm diameter pipe	34	mtr	3.90	132.60	
356.7.4	32 mm diameter pipe	34	mtr	4.55	154.70	
356.7.5	40 mm diameter pipe	34	mtr	5.20	176.80	
356.7.6	50 mm diameter pipe	34	mtr	6.10	207.40	
356.7.7	40 mm diameter pipe	34	mtr	7.50	255.00	
356.7.8	50 mm diameter pipe	34	mtr	8.65	294.10	
357	Providing and filling sand of grading Zone V or coarse grade all round the GI pipes in external work					
357.1	15 mm diameter pipe	34	mtr	21.95	746.30	
357.2	20 mm diameter pipe	34	mtr	22.25	756.50	
357.3	25 mm diameter pipe	34	mtr	22.85	776.90	
357.4	32 mm diameter pipe	34	mtr	23.40	795.60	
357.5	40 mm diameter pipe	34	mtr	23.70	805.80	
357.6	50 mm diameter pipe	34	mtr	24.60	836.40	
357.7	65 mm diameter pipe	34	mtr	38.85	1320.90	
357.8	80 mm diameter pipe	34	mtr	40.00	1360.00	
357.9	100 mm diameter pipe	34	mtr	42.40	1441.60	
357.1	150 mm diameter pipe	34	mtr	63.15	2147.10	
358	Boring with 100mm diametre casting pipe for hand pump/ tube well in all soils except ordinary hard rocks requiring blasting including removing the casting pipe after the hand pipe / tube well is lowered and tested					
358.1	Upto 6mtr depth	34	mtr	151.00	5134.00	
358.2	Beyond 6m and upto 12m depth	34	mtr	179.25	6094.50	
358.3	Beyond 12m and upto 18m depth	34	mtr	208.70	7095.80	
359	Providing and placing in position filters of 40mm diameter GI pipe with brass strainer of approved quality	34	mtr	367.35	12489.90	
360	Providing and fixing to filler and lowering to proper levels 40mm GI pipe for tube well including clearing and priming the tube well	34	mtr	209.00	7106.00	
361	Providing and placing in position hand pump of approved quality for 40mm diameter GI pipe complete with all accessories	34	each	576.80	19611.20	
362	Providing and fixing GI union in GI pipe including cutting and threading the pipe and making long screws etc, complete (new work)					
362.1	15 mm nominal bore	34	each	75.90	2580.60	
362.2	20 mm nominal bore	34	each	96.80	3291.20	
362.3	25 mm nominal bore	34	each	107.25	3646.50	
362.4	32 mm nominal bore	34	each	123.55	4200.70	
362.5	40 mm nominal bore	34	each	164.20	5582.80	
362.6	50 mm nominal bore	34	each	235.60	8010.40	
362.7	65 mm nominal bore	34	each	428.40	14565.60	
362.8	80 mm nominal bore	34	each	507.40	17251.60	
362.9	Providing and fixing GI union in existing GI 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					
362.9.1	15 mm nominal bore	34	each	149.20	5072.80	
362.9.2	20 mm nominal bore	34	each	170.10	5783.40	
362.9.3	25 mm nominal bore	34	each	180.55	6138.70	
362.9.4	32 mm nominal bore	34	each	196.80	6691.20	
362.9.5	40 mm nominal bore	34	each	237.45	8073.30	
362.9.6	50 mm nominal bore	34	each	335.50	11407.00	
362.9.7	65 mm nominal bore	34	each	528.30	17962.20	
362.9.8	80 mm nominal bore	34	each	607.30	20648.20	
363	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 fitting and the base support for tank	34	per litre	5.25	178.50	
364	Providing and fixing CP brass bib cock of approved quality conforming to IS 8931					
364.1	15 mm nominal bore	34	each	207.00	7038.00	
365	Providing and fixing CP brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810grms					
365.1	15 mm nominal bore	34	each	262.05	8909.70	
366	Providing and fixing CP brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms					
366.1	15 mm nominal bore	34	each	253.95	8634.30	
367	Providing and fixing CP brass stop cock (concealed) of standard design and of approved make conforming to IS 8931					
367.1	15 mm nominal bore	34	each	262.55	8926.70	
368	Providing and fixing CP brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931a) 15mm nominal bore					
368.1	15mm nominal bore	34	each	347.65	11820.10	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
369	Providing and fixing PTMT bib cock of approved quality and colour					
369.1	15mm nominal bore, 86mm long weighing not less than 88gms	34	each	120.85	4108.90	
369.2	15mm nominal bore, 122mm long weighing not less than 99gms	34	each	264.90	9006.60	
369.3	15mm nominal bore, 165mm long weighing not less than 110gms	34	each	189.40	6439.60	
369.4	15mm nominal bore, 90mm long weighing not less than 93gms	34	each	137.15	4663.10	
369.5	Providing and fixing PTMT stop cock of approved quality and colour					
369.5.1	15mm nominal bore, 86mm long weighing not less than 88gms	34	each	120.85	4108.90	
369.5.2	20mm nominal bore, 89mm long weighing not less than 88gms	34	each	148.75	5057.50	
369.6	concealed stop cock, 15mm nominal bore, 108mm long weighing not less than 108gms	34	each	195.20	6636.80	
370	Providing and fixing PTMT pillar cock of approved quality and colour					
370.1	15mm nominal bore, 107mm long weighing not less than 110gms	34	each	185.25	6298.50	
370.2	15mm nominal bore, 125mm long weighing not less than 120gms	34	each	266.55	9062.70	
371	Providing and fixing PTMT push cock of approved quality and colour					
371.1	15mm nominal bore, 98mm long weighing not less than 75gms	34	each	113.90	3872.60	
371.2	15mm nominal bore, 80mm long weighing not less than 46gms	34	each	96.45	3279.30	
372	Providing and fixing PTMT grating of approved quality and colour .					
372.1	Circular type					
372.1.1	100 mm nominal dia .	34	each	39.70	1349.80	
372.1.2	125 mm nominal dia with 25mm waste hole	34	each	46.65	1586.10	
372.2	Nil					
372.3	Nil					
372.4	Rectangular type with openable circular lid .					
372.4.1	150 mm nominal size square 100 mm diameter of the inner hinged round grating	34	each	109.35	3717.90	
373	Providing and fixing CI double acting air valve of approved quality with bolts nuts rubber insertions ect complete ( the tail pieces tapers etc, if required will be paid separately)					
373.1	50mm dia	34	each	3615.70	122933.80	
373.2	80mm dia	34	each	5276.65	179406.10	
373.3	100mm dia	34	each	6858.75	233197.50	
374	Providing and fixing enclosed type water meter (bulk type) conforming to IS 2373 and tested by municipal board complete with bolts nuts rubber insertions etc. ( the tail pieces if required will be paid separately)					
374.1	80 mm nominal bore	34	each	2448.40	83245.60	
374.2	100 mm nominal bore	34	each	3719.80	126473.20	
374.3	150 mm nominal bore	34	each	5261.80	178901.20	
374.4	200 mm nominal bore	34	each	5914.55	201094.70	
375	Providing and fixing CI dirt box stairner for bulk type water meter with nuts bolts rubber insertions ect complete conforming to IS 2373					
375.1	80mm dia	34	each	3110.45	105755.30	
375.2	100mm dia	34	each	4672.20	158854.80	
375.3	150mm dia	34	each	6067.85	206306.90	
375.4	200mm dia	34	each	8404.80	285763.20	
376	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					
376.1	15mm nominal bore, 105mm long weighing not less than 138gms	34	each	165.60	5630.40	
376.2	20mm nominal bore, 120mm long weighing not less than 198gms	34	each	234.50	7973.00	
376.3	25mm nominal bore, 152mm long weighing not less than 440gms	34	each	497.40	16911.60	
376.4	40mm nominal bore, 206mm long weighing not less than 690gms	34	each	902.75	30693.50	
376.5	50mm nominal bore, 242mm long weighing not less than 1240gms	34	each	1338.30	45502.20	
377	Providing and fixing PTMT angle stop cock 15mm nominal bore weighing not less than 85 gms	34	each	148.75	5057.50	
378	Providing and fixing PTMT swivelling shower 15mm nominal bore weighing not less than 40 gms	34	each	101.95	3466.30	
379	Providing and fixing PTMT soap Dish holder having length of 138mm breadth 102mm height of 75mm with concealed fitting arrangement. Weighing not less than 106gms	34	each	133.30	4532.20	
380	Providing and laying S&S CI standard specials such as tees bends collars tapers and caps etc suitable for flanged jointing as per IS 1538					
380.1	Upto 300mm dia	34	quintal	4205.85	142998.90	
380.2	Above 300mm dia	34	quintal	4737.80	161085.20	
381	Providing and laying S&S CI standard specials suitable for mechanical jointing as per IS 13382					
381.1	Upto 300mm dia	34	quintal	6305.85	214398.90	
381.2	Above 300mm dia	34	quintal	6586.90	223954.60	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
382	Providing and laying DI special of class K- 12 suitable for mechanical joints as per IS 9523					
382.1	Upto 600mm dia	34	quintal	10487.25	356566.50	
382.2	Above 600mm dia	34	quintal	15685.00	533290.00	
383	Providing and laying DI special of class K- 12 suitable for mechanical joints as per IS 9523					
383.1	Upto 600mm dia	34	quintal	11023.85	374810.90	
383.2	Above 600mm dia	34	quintal	16644.40	565909.60	
384	Providing push on joints to centrifugally (spun) cast iron pipes or ductile iron pipes including testing of joints and including the cost of rubber gasket					
384.1	100mm dia pips	34	joint	39.00	1326.00	
384.2	150mm dia pips	34	joint	60.30	2050.20	
384.3	200mm dia pips	34	joint	98.20	3338.80	
384.4	250mm dia pips	34	joint	111.70	3797.80	
384.5	300mm dia pips	34	joint	153.10	5205.40	
384.6	350mm dia pips	34	joint	182.15	6193.10	
384.7	400mm dia pips	34	joint	340.40	11573.60	
384.8	450mm dia pips	34	joint	378.35	12863.90	
384.9	500mm dia pips	34	joint	393.20	13368.80	
384.1	600mm dia pips	34	joint	489.30	16636.20	
384.11	650mm dia pips	34	joint	739.65	25148.10	
384.12	700mm dia pips	34	joint	853.45	29017.30	
384.13	800mm dia pips	34	joint	953.35	32413.90	
384.14	900mm dia pips	34	joint	1255.25	42678.50	
384.15	1000mm dia pips	34	joint	1523.90	51812.60	
385	Providing and laying double flanged (screws / welded) centrifugally (spun) cast iron, class B( IS: 1536)					
385.1	100mm dia CI Double Flanged Pipe	34	mtr	1151.15	39139.10	
385.2	150mm dia pips CI Double Flanged Pipe	34	mtr	1781.85	60582.90	
385.3	200mm dia pips CI Double Flanged Pipe	34	mtr	2468.85	83940.90	
385.4	250mm dia pips CI Double Flanged Pipe	34	mtr	3304.85	112364.90	
385.5	300mm dia pips CI Double Flanged Pipe	34	mtr	4201.30	142844.20	
385.6	350mm dia pips CI Double Flanged Pipe	34	mtr	5372.75	182673.50	
385.7	400mm dia pips CI Double Flanged Pipe	34	mtr	6940.35	235971.90	
385.8	450mm dia pips CI Double Flanged Pipe	34	mtr	8985.75	305515.50	
385.9	500mm dia pips CI Double Flanged Pipe	34	mtr	11716.30	398354.20	
386.1	600mm dia pips CI Double Flanged Pipe	34	mtr	15287.90	519788.60	
387	Providing and laying S&S centrifugally cast (spun) / Ductile iron pipes conforming to IS 8329					
387.1	100mm dia pips Ductile iron class K-7 pipes	34	mtr	703.30	23912.20	
387.2	150mm dia pips Ductile iron class K-7 pipes	34	mtr	1025.40	34863.60	
387.3	200mm dia pips Ductile iron class K-7 pipes	34	mtr	1457.15	49543.10	
387.4	250mm dia pips Ductile iron class K-7 pipes	34	mtr	1972.55	67066.70	
387.5	300mm dia pips Ductile iron class K-7 pipes	34	mtr	2784.90	94686.60	
387.6	350mm dia pips Ductile iron class K-7 pipes	34	mtr	3214.25	109284.50	
387.7	400mm dia pips Ductile iron class K-7 pipes	34	mtr	3837.60	130478.40	
387.8	450mm dia pips Ductile iron class K-7 pipes	34	mtr	4550.35	154711.90	
387.9	500mm dia pips Ductile iron class K-7 pipes	34	mtr	5367.20	182484.80	
387.1	600mm dia pips Ductile iron class K-7 pipes	34	mtr	7081.30	240764.20	
387.11	700mm dia pips Ductile iron class K-7 pipes	34	mtr	8795.70	299053.80	
387.12	800mm dia pips Ductile iron class K-7 pipes	34	mtr	12243.20	416268.80	
387.13	900mm dia pips Ductile iron class K-7 pipes	34	mtr	15055.70	511893.80	
387.14	1000mm dia pips Ductile iron class K-7 pipes	34	mtr	18247.50	620415.00	
387.15	100mm dia pips Ductile iron class K-9 pipes	34	mtr	775.50	26367.00	
387.16	150mm dia pips Ductile iron class K-9 pipes	34	mtr	1152.80	39195.20	
387.17	200mm dia pips Ductile iron class K-9 pipes	34	mtr	1589.45	54041.30	
387.18	250mm dia pips Ductile iron class K-9 pipes	34	mtr	2056.35	69915.90	
387.19	300mm dia pips Ductile iron class K-9 pipes	34	mtr	2639.45	89741.30	
387.2	350mm dia pips Ductile iron class K-9 pipes	34	mtr	3102.25	105476.50	
387.21	400mm dia pips Ductile iron class K-9 pipes	34	mtr	4435.65	150812.10	
387.22	450mm dia pips Ductile iron class K-9 pipes	34	mtr	4925.90	167480.60	
387.23	500mm dia pips Ductile iron class K-9 pipes	34	mtr	6591.35	224105.90	
387.24	600mm dia pips Ductile iron class K-9 pipes	34	mtr	7404.65	251758.10	
387.25	700mm dia pips Ductile iron class K-9 pipes	34	mtr	10052.75	341793.50	
387.26	750mm dia pips Ductile iron class K-9 pipes	34	mtr	11464.10	389779.40	
387.27	800mm dia pips Ductile iron class K-9 pipes	34	mtr	11808.40	401485.60	
387.28	900mm dia pips Ductile iron class K-9 pipes	34	mtr	13770.10	468183.40	
387.29	1000mm dia pips Ductile iron class K-9 pipes	34	mtr	15500.90	527030.60	
388	Providing and laying double flanged (screws / welded) centrifugally (spun) ductile pipes of class K-9 conforming to IS 8329					
388.1	100mm dia pips Ductile iron Double Flanged	34	mtr	2206.35	75015.90	
388.2	150mm dia pips Ductile iron Double Flanged	34	mtr	3055.35	103881.90	
388.3	200mm dia pips Ductile iron Double Flanged	34	mtr	3963.40	134755.60	
388.4	250mm dia pips Ductile iron Double Flanged	34	mtr	5262.65	178930.10	
388.5	300mm dia pips Ductile iron Double Flanged	34	mtr	6771.65	230236.10	
388.6	350mm dia pips Ductile iron Double Flanged	34	mtr	8434.20	286762.80	
388.7	400mm dia pips Ductile iron Double Flanged	34	mtr	10076.25	342592.50	
388.8	450mm dia pips Ductile iron Double Flanged	34	mtr	12180.70	414143.80	
388.9	500mm dia pips Ductile iron Double Flanged	34	mtr	14761.20	501880.80	
388.1	600mm dia pips Ductile iron Double Flanged	34	mtr	20023.70	680805.80	
388.11	700mm dia pips Ductile iron Double Flanged	34	mtr	24693.40	839575.60	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
389	Providing and fixing unplasticised PVC connection pipe with PTMT nuts collar and bush of approved quality and colour					
389.1	15mm nominal bore with 30cm length	34	each	45.55	1548.70	
389.2	15mm nominal bore with 45 cm length	34	each	52.90	1798.60	
390	Providing and fixing PTMT extension nipple for water tank pipe fitting of approved quality and colour					
390.1	15mm nominal bore. weighing not less than 32gms	34	each	38.75	1317.50	
390.2	20mm nominal bore. weighing not less than 40gms	34	each	45.75	1555.50	
390.3	25mm nominal bore. weighing not less than 62gms	34	each	66.65	2266.10	
391	Cutting holes up to 30x 30 cm in walls including making good the same					
391.1	with FPS bricks	34	each	75.49	2566.60	Cement / Steel will be issued free of cost from BHEL Stores
392	Cutting holes up to 15 x 15 cm in RCC floors and roofs for passing drain pipe etc, and repairing the holes after insertion of drain pipe etc. with cement concrete 1:2:4( 1 cement 2 coarse sand 4 grade stone aggregate 20mm nominal size) including finishing complete so as to make it leak proof	34	each	78.56	2670.88	Cement / Steel will be issued free of cost from BHEL Stores
393	Making chases up to 7.5 x 7.5 cm in walls including making good and finishing with matching surface after housing GI pipe etc.	34	mtr	32.01	1088.18	Cement / Steel will be issued free of cost from BHEL Stores
394	Making hole up to 20x20cm and embedding pipes up to 150mm diameter in masonry and filling with cement concrete 1:3:6( 1 cement 3 coarse sand 6 graded stone aggregate 20mm nominal size) including disposal of malba	34	mtr	44.19	1502.39	Cement / Steel will be issued free of cost from BHEL Stores
395	Disinfecting CI water mains by flushing with water containing bleaching power at 0.5 gms per litre of water and cleaning the same with fresh water operation to be repeated three times including getting the sample of water from the disinfected main tested in the municipal laboratory					
395.1	80 mm dia meter C.I pipe	34	mtr	2.90	98.52	
395.2	100 mm dia meter C.I pipe	34	mtr	3.81	129.59	
395.3	125 mm dia meter C.I pipe	34	mtr	4.79	162.81	
395.4	150 mm dia meter C.I pipe	34	mtr	5.81	197.47	
395.5	200 mm dia meter C.I pipe	34	mtr	7.87	267.56	
395.6	250 mm dia meter C.I pipe	34	mtr	10.08	342.57	
395.7	300 mm dia meter C.I pipe	34	mtr	11.50	391.00	
395.8	350 mm dia meter C.I pipe	34	mtr	13.03	443.00	
395.9	400 mm dia meter C.I pipe	34	mtr	14.71	499.97	
395.1	450 mm dia meter C.I pipe	34	mtr	16.46	559.52	
395.11	500 mm dia meter C.I pipe	34	mtr	18.35	623.75	
395.12	600 mm dia meter C.I pipe	34	mtr	22.36	760.14	
396	Extra for every operation disinfecting the CI main by flusing with water containing bleaching powder at 0.5 gms per litre of water and cleaning the same with fresh water including getting the samples of water tested in the municipal laboratory					
396.1	80 mm dia meter C.I pipe	34	mtr	1.07	36.33	
396.2	100 mm dia meter C.I pipe	34	mtr	1.30	44.22	
396.3	125 mm dia meter C.I pipe	34	mtr	1.60	54.25	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
396.4	150 mm dia meter C.I pipe	34	mtr	1.88	64.01	
396.5	200 mm dia meter C.I pipe	34	mtr	2.84	96.46	
396.6	250 mm dia meter C.I pipe	34	mtr	3.36	114.22	
396.7	300 mm dia meter C.I pipe	34	mtr	3.89	132.09	
396.8	350 mm dia meter C.I pipe	34	mtr	4.64	157.74	
396.9	400 mm dia meter C.I pipe	34	mtr	5.42	184.31	
396.1	450 mm dia meter C.I pipe	34	mtr	6.25	212.47	
396.11	500 mm dia meter C.I pipe	34	mtr	7.09	241.18	
396.12	600 mm dia meter C.I pipe	34	mtr	8.88	301.90	
397	Dismantling old CI pipes incliding excavation and refilling trenches after taking out the pipes breaking lead caulked joints melting of lead and making into blockes including stacking of pipes at site lead up to 50 mtr					
397.1	80 mm dia meter C.I pipe	25	mtr	0.83	20.66	
397.2	100 mm dia meter C.I pipe	25	mtr	0.85	21.34	
397.3	125 mm dia meter C.I pipe	25	mtr	0.88	21.95	
397.4	150 mm dia meter C.I pipe	25	mtr	0.90	22.61	
397.5	200 mm dia meter C.I pipe	25	mtr	1.00	24.99	
397.6	250 mm dia meter C.I pipe	25	mtr	1.09	27.33	
397.7	300 mm dia meter C.I pipe	25	mtr	1.17	29.33	
397.8	350 mm dia meter C.I pipe	25	mtr	1.25	31.15	
397.9	400 mm dia meter C.I pipe	25	mtr	1.31	32.79	
379.1	450 mm dia meter C.I pipe	25	mtr	1.38	34.49	
379.11	500 mm dia meter C.I pipe	25	mtr	1.46	36.41	
379.12	600 mm dia meter C.I pipe	25	mtr	1.53	38.30	
380	Labour for cutting CI pipe with steel saw					
380.1	80 mm dia meter C.I pipe	25	each cut	22.10	552.50	
380.2	100 mm dia meter C.I pipe	25	each cut	29.80	745.00	
380.3	125 mm dia meter C.I pipe	25	each cut	41.75	1043.75	
380.4	150 mm dia meter C.I pipe	25	each cut	56.15	1403.75	
380.5	200 mm dia meter C.I pipe	25	each cut	74.90	1872.50	
380.6	250 mm dia meter C.I pipe	25	each cut	92.65	2316.25	
380.7	300 mm dia meter C.I pipe	25	each cut	111.40	2785.00	
380.8	350 mm dia meter C.I pipe	25	each cut	129.10	3227.50	
380.9	400 mm dia meter C.I pipe	25	each cut	147.70	3692.50	
380.1	450 mm dia meter C.I pipe	25	each cut	165.60	4140.00	
380.11	500 mm dia meter C.I pipe	25	each cut	184.20	4605.00	
380.12	600 mm dia meter C.I pipe	25	each cut	218.55	5463.75	
381	NIL					
to						
411						
<b>DRAINAGE WORKS</b>						
412	Providing and laying and jointing glazed stoneware pipes grade "A" with stiff mixture of cement mortar in the proportion of 1:1 ( 1 cement 1 fine sand ) including testing of joints etc. complete					
412.1	100 mm diameter	34	mtr	94.45	3211.19	Cement / Steel will be issued free of cost from BHEL Stores
412.2	150 mm diameter	34	mtr	134.60	4576.47	Cement / Steel will be issued free of cost from BHEL Stores
412.3	200 mm diameter	34	mtr	224.30	7626.07	Cement / Steel will be issued free of cost from BHEL Stores
412.4	230 mm diameter	34	mtr	244.20	8302.67	Cement / Steel will be issued free of cost from BHEL Stores
412.5	250 mm diameter	34	mtr	314.35	10687.86	Cement / Steel will be issued free of cost from BHEL Stores
412.6	300 mm diameter	34	mtr	435.50	14807.05	Cement / Steel will be issued free of cost from BHEL Stores
413	Providing and fixing square mouth SW gully trap grade :A: complete with CI grating brick masonry chamber with water tight CI cover with frame of 300x300mm size(inside) the weighing of cover to be not less than 4.50kg and frame to be not less than 2.70kg as per standard design					
413.1	100x100mm size P type					
414.1.1	With FPS bricks class designation 75	34	each	792.64	26949.90	
415.1.2	with sewer bricks conforming to IS 4885	34	each	890.84	30288.70	
415.2	Nil					
415.3	Nil					
415.4	150x100mm size P type					
415.4.1	With FPS bricks class designation 75	34	each	824.72	28040.55	
415.4.2	with sewer bricks conforming to IS 4885	34	each	922.92	31379.35	
415.5	Nil					
415.6	Nil					
415.7	180x150mm size P type					
415.7.1	With FPS bricks class designation 75	34	each	904.80	30763.20	
415.7.2	with sewer bricks conforming to IS 4885	34	each	1003.00	34102.00	
416	Dismantling of old SW pipe including breaking of joints and bed concrete stacking of useful materials near the site within 50m lead and disposal of unservicable materials into municipal dumps					
416.1	100 mm diameter	34	mtr	13.35	453.90	
416.2	150 mm diameter	34	mtr	14.75	501.50	
416.3	200 mm diameter	34	mtr	15.70	533.80	
416.4	230 mm diameter	34	mtr	16.20	550.80	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
416.5	250 mm diameter	34	mtr	16.65	566.10	
416.6	300 mm diameter	34	mtr	17.60	598.40	
416.7	350 mm diameter	34	mtr	20.25	688.50	
416.8	400 mm diameter	34	mtr	22.15	753.10	
416.9	450 mm diameter	34	mtr	23.10	785.40	
417	Providing and laying non- pressure NP2 class (light duty) RCC pipes with collars joints with stiff mixture of cement mortar in the proportion of 1:2 ( 1 cement 2 fine sand ) including testing of joints etc, complete					
417.1	100 mm dia RCC pipe	34	mtr	171.31	5824.57	Cement / Steel will be issued free of cost from BHEL Stores
417.2	150 mm dia RCC pipe	34	mtr	199.68	6789.23	Cement / Steel will be issued free of cost from BHEL Stores
417.3	250 mm dia RCC pipe	34	mtr	253.45	8617.29	Cement / Steel will be issued free of cost from BHEL Stores
417.4	300 mm dia RCC pipe	34	mtr	332.94	11320.10	Cement / Steel will be issued free of cost from BHEL Stores
417.5	450 mm dia RCC pipe	34	mtr	486.88	16554.02	Cement / Steel will be issued free of cost from BHEL Stores
417.6	500 mm dia RCC pipe	34	mtr	571.13	19418.32	Cement / Steel will be issued free of cost from BHEL Stores
417.7	600 mm dia RCC pipe	34	mtr	878.21	29859.15	Cement / Steel will be issued free of cost from BHEL Stores
417.8	700 mm dia RCC pipe	34	mtr	981.37	33366.63	Cement / Steel will be issued free of cost from BHEL Stores
417.9	800 mm dia RCC pipe	34	mtr	1145.23	38937.90	Cement / Steel will be issued free of cost from BHEL Stores
417.1	900 mm dia RCC pipe	34	mtr	1388.04	47193.29	Cement / Steel will be issued free of cost from BHEL Stores
417.11	1000 mm dia RCC pipe	34	mtr	1711.92	58205.31	Cement / Steel will be issued free of cost from BHEL Stores
417.12	1100 mm dia RCC pipe	34	mtr	2061.50	70091.14	Cement / Steel will be issued free of cost from BHEL Stores
417.13	1200 mm dia RCC pipe	34	mtr	2172.41	73861.93	Cement / Steel will be issued free of cost from BHEL Stores
418	Constructing brick masonry manhole in cement mortar 1:4( 1 cement 4 coarse sand ) RCC top slab with 1:2:4 mix ( 1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) foundation concrete 1:4:8 mix (1 cement 4 coarse sand 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3( 1 cement 3 coarse sand ) finished with floating coat of neat cement and making channels in cement concrete 1:2:4( 1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design					
418.1	Inside size 90x80 cm and 45cm deep including CI cover with frame (light duty) 455x610mm internal dimensions total weight of cover and frame to be not less than 38 kg ( weight to cover 23 kg and weight of frame 15 kg					
418.1.1	With FPS bricks with class designation 75	34	each	3842.52	130645.82	Cement / Steel will be issued free of cost from BHEL Stores
418.1.2	with sewer bricks conforming to IS 4885	34	each	4099.32	139377.02	Cement / Steel will be issued free of cost from BHEL Stores
418.2	Nil					
418.3	Nil					
418.4	Inside size 102x90 cm and 90cm deep including CI cover with frame (medium duty) 500mm internal dimensions total weight of cover and frame to be not less than 116 kg ( weight to cover 58 kg and weight of frame 58 kg					
418.4.1	With FPS bricks with class designation 75	34	each	9385.71	319114.00	Cement / Steel will be issued free of cost from BHEL Stores
418.4.2	with sewer bricks conforming to IS 4885	34	each	10088.16	342997.30	Cement / Steel will be issued free of cost from BHEL Stores
418.5	Nil					
418.6	Nil					
418.7	Inside size 102x90 cm and 90cm deep including CI cover with frame (heavy duty) 560mm internal dimensions total weight of cover and frame to be not less than 208 kg ( weight to cover 108 kg and weight of frame 100 kg					
418.7.1	With FPS bricks with class designation 75	34	each	13177.36	448030.10	Cement / Steel will be issued free of cost from BHEL Stores
418.7.2	with sewer bricks conforming to IS 4885	34	each	13781.61	468574.60	Cement / Steel will be issued free of cost from BHEL Stores
419	Extra for depth for manholes					
419.1	Size 90x80cm					
419.1.1	With FPS bricks with class designation 75	34	each	1988.97	67625.05	Cement / Steel will be issued free of cost from BHEL Stores
419.1.2	with sewer bricks conforming to IS 4885	34	each	2736.77	93050.25	Cement / Steel will be issued free of cost from BHEL Stores
419.2	Nil					
419.3	Nil					
419.4	size 120x90cm					

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
419.4.1	With FPS bricks with class designation 75	34	each	2377.69	80841.60	Cement / Steel will be issued free of cost from BHEL Stores
419.4.2	with sewer bricks conforming to IS 4885	34	each	3269.04	111147.50	Cement / Steel will be issued free of cost from BHEL Stores
420	Constructing brick masonry circular type manhole 0.91mm internal dia at bottom and 0.56m dia at top in cement mortar 1:4( 1 cement 4 coarse sand ) in side cement plaster 12mm thick with cement mortar 1:3( 1 cement 3 coarse sand ) finished with a floating coat of neat cement foundation concrete 1:3:6( 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					
420.1	0.91m deep with SFRC cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to IS 12592 total weight of cover and frame to be not less than 182 kg, fixed in cement concrete 1:2:4( 1 cement 2 coarse sand 4 graded stones aggregate 20mm nominal size) including centering shuttering all complete at the external surface shall be paid for separately)					
420.1.1	With FPS bricks with class designation 75	34	each	3482.05	118389.70	Cement / Steel will be issued free of cost from BHEL Stores
420.1.2	with sewer bricks conforming to IS 4885	34	each	3896.45	132479.30	Cement / Steel will be issued free of cost from BHEL Stores
421	Extra depth for circular type manhole 0.91m internal dia(at bottom) with beyond 0.91m to 1.67m					
421.1	with F.P.S bricks class designation 75	34	mtr	384.39	13069.33	Cement / Steel will be issued free of cost from BHEL Stores
421.2	with sewer bricks conforming to IS 4885	34	mtr	1010.54	34358.43	Cement / Steel will be issued free of cost from BHEL Stores
422	Providing NS foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6( 1cement 3 coarse sand 6 graded stone aggregate 20mm nominal size) as per standards design					
422.2	with 20x20mm square bar	34	each	145.21	4936.98	Cement / Steel will be issued free of cost from BHEL Stores
422.3	with 20mm dia meter round bar	34	each	120.51	4097.18	Cement / Steel will be issued free of cost from BHEL Stores
423	Providing and fixing in position pre cast RCC manholescover and frame of required shape and approved quality					
423.1	LD-2.5					
423.1.1	Rectangular shape 600x450mm internal diamensions	34	each	815.69	27733.51	Cement / Steel will be issued free of cost from BHEL Stores
423.1.2	square shape 450mm internal diamensions	34	each	697.83	23726.26	Cement / Steel will be issued free of cost from BHEL Stores
423.1.3	Circular shape 450mm internal diameter	34	each	621.13	21118.46	Cement / Steel will be issued free of cost from BHEL Stores
423.2	Nil					
423.4	Nil					
423.5	MD-10					
423.5.1	square shape 450mm internal diamensions	34	each	757.79	25764.91	Cement / Steel will be issued free of cost from BHEL Stores
423.5.2	Circular shape500mm internal diameter	34	each	742.08	25230.76	Cement / Steel will be issued free of cost from BHEL Stores
423.6	Nil					
423.7	Nil					
423.8	HD-20					
423.8.1	Circular shape560mm internal diameter	34	each	1059.63	36027.46	Cement / Steel will be issued free of cost from BHEL Stores
423.9	EHD-35					
423.9.1	Circular shape560mm internal diameter	34	each	1172.33	39859.26	Cement / Steel will be issued free of cost from BHEL Stores
424	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 grades stone aggregate 20mm nominal size) cement plastered on both sides with cement mortar 1:3( 1 cement 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete					
424.1	For pipes 100 to 230mm diameter	34	each	134.74	4581.27	Cement / Steel will be issued free of cost from BHEL Stores
424.2	for pipes 250 to 300mm diameter	34	each	155.26	5278.81	Cement / Steel will be issued free of cost from BHEL Stores
424.3	for pipes 350 to 450mm diameter	34	each	222.20	7554.68	Cement / Steel will be issued free of cost from BHEL Stores

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
425	Dismantling of manhole including RCC top slab CI cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50m lead					
425.1	Rectangular manhole 90x80cm and 45cm deep	34	each	388.75	13217.50	
425.2	Rectangular manhole 120x90cm and 90cm deep	34	each	680.85	23148.90	
425.3	Rectangular arch type manhole 140x90cm and 2.45m deep	34	each	1277.35	43429.90	
425.4	Circular manhole 122cm diameter and 1.68m deep	34	each	988.45	33607.30	
425	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately)					
425.1	Rectangular manhole 90x80cm with rectangular cover 600x450mm of grade LD-2.5	34	each	824.25	28024.50	
425.2	Rectangular manhole 120x90cm with circular cover 500mm dia of grade MD-10	34	each	1287.45	43773.30	
425.3	Rectangular manhole 120x90cm with circular cover 560mm dia of grade HD-20	34	each	1198.10	40735.40	
425.4	Circular manhole 140cm dia with circular cover 600mm dia of grade EHD-35	34	each	115.25	3918.50	
426	Constructing brick masonry chamber for underground CI inspection chamber and bends with 75 class designation bricks in cement mortar 1:4( 1 cement 4 coarse sand) CI cover with frame (light duty) 455x610mm internal dimensions total weight of cover with frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg ) RCC top slab with 1:2:4 mix( 1 cement 2 coarse sand 4 graded stone aggregate 20mm nominal size) foundation concrete 1:5:10 ( 1 cement 5 fine sand 10 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3( 1cement 3 coarse sand ) finished smooth with a floating coat of neat cement on walls and bed concrete etc, complete as per standard design					
426.1	Inside dimensions 455x610mm and 45 cm deep for single pipe line					
426.1.1	with FPS bricks	34	each	2671.38	90826.92	Cement / Steel will be issued free of cost from BHEL Stores
426.2	Nil					
426.3	inside dimensions 500x700mm and 45cm deep for pipe line with one or two inlets					
426.3.1	with FPS bricks	34	each	3052.59	103788.20	Cement / Steel will be issued free of cost from BHEL Stores
426.4	Nil					
426.5	inside dimensions 600x850mm and 45cm deep for pipe line with three or more inlets					
426.5.1	with FPS bricks	34	each	3398.19	115538.60	Cement / Steel will be issued free of cost from BHEL Stores
427	Extra for depth beyond 45 cm of brick masonry chamber					
427.1	For 455x610mm size					
427.1.1	with FPS bricks	34	mtr	1386.46	47139.78	Cement / Steel will be issued free of cost from BHEL Stores
427.2	Nil					
427.3	For 500x700 mm size					
427.3.1	with FPS bricks	34	mtr	1512.29	51417.86	Cement / Steel will be issued free of cost from BHEL Stores
427.4	Nil					
427.5	For 600x 850 mm size					
427.5.1	with FPS bricks	34	mtr	1754.16	59641.58	Cement / Steel will be issued free of cost from BHEL Stores
428	<b>Cleaning of Inspection Chamber / Manholes</b> of different sizes, and diameters, silt, sand, root from Chambers and waste materials to be removed and disposal upto 10 Meters etc complete as directed by the Engineer-In-charge.					
428.1	<b>For Inspection Chambers</b>	34	Nos	241.00	8194.00	
428.2	For main <b>Man holes</b> upto any depth existing in township.	34	Nos	527.00	17918.00	
429	Cleaning of external Sewerlines <b>SWG/RCC Line</b> of different Diameters.With bamboos / roding by using rope with knots, the line should be clear with all organic materials etc including roots, removal of silt, obstructed sludge with required tools, removal of silt sand, material came from the manholes, disposal upto lift upon a distance of 2 KM or suitable place as directed by the Engineer-In-charge.					
429.1	4" Dia SWG Line Cleaning	34	One Rmt	9.80	333.20	
429.2	6" Dia SWG Line Cleaning	34	One Rmt	18.20	618.80	
429.3	9" Dia SWG Line Cleaning	34	One Rmt	24.80	843.20	
429.4	12" Dia SWG Line Cleaning	34	One Rmt	40.00	1360.00	
430	Providing and fixing in position <b>pre-cast R.C.C. SFRC</b> or other approved brand light duty rectangular shape man hole covers of <b>900 x 450 mm</b> internal dimensions or suitable to present inspection chamber covers, of approved quality including transporting to each quarter and placing in position etc complete all as directed by Engineer-In-charge.	34	Each	584.00	19856.00	
<b>ROAD WORKS</b>						



**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
431	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonnes capacity after excavating earth to an average of 22.5cm depth dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surface earth lead upto 50mtr	34	sqm	33.90	1152.60	
432	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density)	34	cum	4.50	153.00	
433	Supplying and stacking at site					
433.1	90mm to 45mm size stone aggregate	34	cum	742.30	25238.20	
433.2	63mm to 45mm size stone aggregate	34	cum	768.45	26127.30	
433.3	53mm to 22.4mm size stone aggregate	34	cum	810.55	27558.70	
433.4	over burnt (Jhama) brick aggregate 120mm to 40mm	34	cum	398.20	13538.80	
433.5	over burnt (Jhama) brick aggregate 90mm to 45mm	34	cum	438.85	14920.90	
433.6	stone screening 13.2mm nominal size (Type A)	34	cum	892.25	30336.50	
433.7	stone screening 11.2mm nominal size (Type B)	34	cum	979.40	33299.60	
433.8	Red bajri	34	cum	654.15	22241.10	
433.9	Good earth	34	cum	144.05	4897.70	
433.10	moorum	34	cum	421.85	14342.90	
434	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness hand picking rolling with 3 wheeled road/ vibratory roller 8-10 tonnes in stages to proper grade and camber applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate watering and compacting to the required density.	34	cum	192.55	6546.70	
435	Laying water bound macadam sub base with brick aggregate and blinding material earth etc. including screening sorting and spreading to template and consolidation with light power road roller etc.(payment for brick aggregate and moorum etc to be made separately)					
435.1	over burnt (Jhama) brick aggregate 120mm to 40mm	34	cum	136.20	4630.80	
435.5	over burnt (Jhama) brick aggregate 90mm to 45mm	34	cum	136.20	4630.80	
436	Supplying stacking and spreading 6mm thick red bajri watering and rolling complete including preparation of the surface and rolling					
436.1	With road roller / hand roller	34	sqm	6.70	227.80	
437	Brick edging in full brick width and half brick depth including excavation. Refilling and disposal of surplus earth lead upto 50mtr					
437.1	With FPS bricks of class designation 75	34	mtr	52.35	1779.90	
438	Brick edging laid lengthwise with half brick depth including excavation, refilling and disposal of surplus earth lead upto 50mtr					
438.1	With FPS bricks of class designation 75	34	mtr	14.90	506.60	
439	Scarifying metalled (water bound) road surface including disposal of rubbish lead upto 50m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 tonnes capacity	34	sqm	6.45	219.30	
440	Making bajri path including preparation of subgrade supplying and laying brick aggregate of 50mm nominal size 7.5cm deep with blinding material consisting of 12mm moorum and 12mm red bajri consolidated with road roller	34	sqm	69.95	2378.30	
441	Dry stone pitching 22.5cm thick including supply of stones and preparing surface completes	34	sqm	211.10	7177.40	
441	Dry brick pitching half brick thick in drains including supply of bricks and preparing the surface complete					
441.1	With FPS bricks of class designation 75	34	sqm	183.55	6240.70	
441.2	Cutting road and making good the same including supply of extra quantities of material ie aggregate moorum screening red bajri and labour required					
441.2.1	water bound macadam	34	cum	572.45	19463.30	
442	Cutting bajri paths and making good the same including supply of extra quantities of brick aggregate moorum and red bajri required	34	sqm	53.25	1810.50	
443	Supplying at site					
443.1	RCC standard post/ struts/ rails/ pales of mix 1:1.5:3( 1cement 1.5coarse sand 3 graded stone aggregate 12.5mm nominal size) with wooden plugs or 6mm bar ribs wherever required as per direction of engineer In charge including fixing (cost of earth works in excavation, concrete works in foundation to be paid separately)	34	cum	10361.90	352304.60	Cement / Steel will be issued free of cost from BHEL Stores
443.2	Welded steel wire fabric of required width rectangular mesh painted with two or more coats of enamel paint of approved shade over a coat of primer (painting to be paid for separately)	34	kg	46.50	1581.00	
444	Supplying and fixing turn buckles and straining bolts for barbed wire fencing	34	each set	88.15	2997.10	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
445	Fencing with RCC post placed at required distance embedded in cement concrete blocks every 15th post last but one end post and corner post shall be studded on both sides and end post one side only, provided with horizontal lines and two diagonal of barbed wire 9.38kg per 100mtr (min) between the two posts fitted and fixed with GI staples on wooden plugs or GI binding wire tied to 6mm bar ribs fixed while casting the post (cost of RCC posts struts earth work and concrete to be paid for separately) payment to be made per metre cost of total length of barbed wire used					
445.1	With GI barbed wire	34	mtr	5.85	198.90	
446	Fencing with angle iron post placed at required distance embeded in cement concrete blocks every 15th post last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires of barbed wire 9.38kg per 100m (min) between the two posts fitted and fixed with GI staples turn buckles etc. complete (cost of posts struts earth work and concrete work to be paid for separately) payment to be made per metre cost of total length of barbed wire used					
446.1	With GI barbed wire	34	mtr	8.45	287.30	
447	Supplying at site angle iron post and strut of required size including bottom to be split and bent at right angle in opposite direction for 10cm length and drilling holes upto 10mm dia etc. complete	34	kg	43.35	1473.90	
448	welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x60cm of mix 1:5:10( 1cement 5 fine sand 10 graded stone aggregate 40mm nominal size) every 15th post last but one end post and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50cm of the same mix provided with welded steel wire fabric fixed between the posts fitted and fixing with GI staples on wooden plugs or tied between the posts fitted and fixed with GI binding wire (cost of posts welded steel wire fabric painting earth work in excavation and concrete to be paid for separately)	34	sqm	11.50	391.00	
449	Engraving letters in hard stone	34	per letter per cm height	1.55	52.70	
450	Providing and fixing 15x15x90cm boundary stone of hard stone with top 30cm chisel dressed on all four sides and on top (cost of excavation refilling and concrete etc. to be paid for separately)	34	each	77.10	2621.40	
451	Providing and fixing 15cm dia at top 20cm at bottom and 90cm high precast reinforced cement concrete 1:1.5:3(1 cement 1.5 coarse sand 3 graded stone aggregate 20mm nominal size) boundary stone as per standard design including finishing smooth with cement mortar 1:3( 1 cement 3 fine sand ) (cost of excavation refilling and concreting to be paid for separately)	34	each	214.87	7305.59	Cement / Steel will be issued free of cost from BHEL Stores
452	Providing and fixing precast reinforced cement concrete 1:1.5:3( 1cement 1.5 coarse sand 3 graded stone aggregate 20mm nominal size) kilometres stones as per standard design including finishing smooth in 1:3 cement mortar (1cement fine sand) but excluding the cost of earth work concrete in foundation painting and lettering etc. which shall be paid for separately					
452.1	35x111x25cm size	34	each	899.16	30571.58	Cement / Steel will be issued free of cost from BHEL Stores
452.2	50x152.5x25cm size	34	each	1197.10	40701.25	Cement / Steel will be issued free of cost from BHEL Stores
452.3	35x93.5x18cm size	34	each	618.81	21039.40	Cement / Steel will be issued free of cost from BHEL Stores
453	Cement concrete 1:2:4( 1cement 2 coarse sand 4 grade stone aggregate 40mm nominal size) in pavements laid to required slope and camber in panels as required including consolidation finishing and tamping complete	34	cum	1949.59	66286.06	Cement / Steel will be issued free of cost from BHEL Stores
454	Providing and laying desing mix cement concrete in raods taxi tracks and runways having a minimum works test beam flexural strength of 30 kg per cm2 at 28days using not less than 430kg. Of cement per cum of finished concrete coarse sand and grade stone aggregate of 40mm nominal size in appropriate proportions as per specified design criteria approved by engineer in charge mechanically vibrated using needle and surface vibrators including steel form work with sturdy MS channel sections including curing and approved joint filler and filling construction joints and dummy joints with approved joint filler and primer including rouding of the edges and filling the grooves10x25mm deep at top for construction joints and 10mmx50mm deep at top for dummy joints with joint sealing compound (conforming to grade B of IS 1834) including making necessary arrangements for expansion joints etc. all complete with readymix concrete.	34	cum	3692.40	125541.60	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
455	Extra for providing and mixing hard crete of approved quality as per manufactures specification in cement concrete	34	litr	33.70	1145.80	
456	providing and fixing in position pre moulded joint filler in expansion joints	34	per cm depth cm width per in length	2.00	68.00	
457	Providing and laying in position bitumen hot sealing compoud for expansion joints etc					
457.1	Using grade A sealing compound	34	per cm depth cm width per in length	1.10	37.40	
458	Painting runway/ taxi track/ apron marking with adequate no of coats to give uniform finish with road marking paint of superior make as approved by the engineer in charge i/c cleaning the surface of all dirt scales oil grease and other foreign material etc., and lining out complete					
458.1	New work (two or more coats)	34	sqm	70.15	2385.10	
458.2	Old work( one or more coats)	34	sqm	43.10	1465.40	
459	Painting raod surface marking with adequate no of coats to give uniform finish with ready mixed road marking paint conforming to IS 164 on bitumious surface in white / yellow shade including cleaning the surface of all dirt scales oil grease and foreign material etc. complete					
459.1	New work (two or more coats)	34	sqm	58.10	1975.40	
459.2	Old work( one or more coats)	34	sqm	37.40	1271.60	
460	making bell mouth opening/ entrance of size 100x50x50cm for drainage pipe under footpath including providing cement concrete 1:3:6( 1cement 3 coarse sand 6 grade stone aggregate 20mm nominal size) for shape of bell mouth including plastering providing and fixing precast RCC/SFRC slab including plastering with cement mortar 1:3( 1 cement 3 fine sand ) of 6 mm thickness on exposed surface of the slab and bell mouth including centring shuttering and neat cement punnig inside the bell mouth etc. all completee	34	each	695.15	23635.17	Cement / Steel will be issued free of cost from BHEL Stores
461	Providing and fixing glow studs of size 100x20mm made of heavy duty body shall be mouled ASA (acrylic styrene acryloretrite) or HIP (high impact polystyrene ) or ABC having electronically welded micro prismatic lens with abrasion resistant coating as approved by engineer in charge. the cats eye shall support a load of 13635kg tested in accordance with ASTM D 4280. the slope of retro- reflective surface shall be 35 +/-5 degress to base. the reflective panels on both sides with at least 12cm of reflective area up each side. the luminance intensity should be as per the specification and shall be tested as described in ASTM I:809 as recommended in BS 873 part 4 :1973. the studs shall be fixed to the road surface using the adhesive conforming to IS as per procedure recommended by the manufacturer complete and as per direction of engineer in charge	34	each	536.60	18244.40	
462	preparation of sub base road pavement with commerlial dry lime (slaked) fly ash stabilised soil with a mix of 3% lime 12% fly ash and 85% local suitable soil by weight so as to achieve minimum field CBR of 20 including mixing rolling with road rolling with road roller curring etc. all complete					
462.1	minimum thickness 15cm	34	cum	323.20	10988.80	
463	Providing and fixing precast lime fly ash concrete blocks 1:2:6( 1 lime 2 fly ash 3 coarse sand 6 grade stone aggregate 20mm nominal size) including finishing with 10mm thick cement mortar 1:3( 1cement 3 coarse sand ) in foot paths including preparation of sub grade with a hand rammer laying 10mm thick leveling course of fine sand (jamuna sand) and filling the joints with fine sand	34	cum	3112.16	105813.44	Cement / Steel will be issued free of cost from BHEL Stores
464	Providing and fixing concertina coil fencing with required dia 610mm(having 15nos round per 6metre length ) up to 3m height of wall with existing angle iron Y shape placed 2.4m or 3.00m apart and with 9 horizontal RBT stud tied with GI staples and GI clips to retain horizontal including necessary bolts or GI barbed wire tied to angle iron all complete as per direction of engineer in charge with reinforced barbed tape(RBT) / spring core (2.5mm thick) wire of high tensile strength of 165kg/ sqmm with tape (0.52mm thick ) and weight 43.478gm / metre (cost of MS angle CC blocks shall be paid separately)	34	mtr	180.25	6128.50	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
465	Manufacturing supplying and fixing retro reflective sign boards made up of 2mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bilingual), symbols and borders etc. as per IRC : 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours). Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc. complete as per drawing, specification and direction of Engineer-in-charge					
465.1	Mandatory / Regulatory sign boards of 900mm dia metre with part as length of 3750mm	34	sqm	3776.45	128399.30	
465.2	cautionary / warning sign boards of equilateral triangular shape having each side of 900mm with support length of 3650mm	34	sqm	2616.55	88962.70	
466	Manufacturing supplying and fixing retro reflective overhead sign boards made up of 2mm thick aluminium sheet face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge letters, borders etc. as per IRC : 67:2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge. (Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment).	34	sqm	4017.75	136603.50	
467	Providing Retro-reflective regulatory sign board of size 900mm dia metre made out of 2mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro -reflective sheeting as approved by Engineer-in-charge. Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4mm. The boards will be fixed to 1 No. 50x50mm square post made of M.S. angle 50x50x4mm, 4m long welded to the frame with adequate anti-theft arrangement. Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	34	sqm	4117.10	139981.40	
468	Providing and applying 2.5mm thick road marking strips (retro reflective) of specified shade / colour using hot thermoplastic material by fully / semi automatic thermoplastic paint applicator machine fitted with profile shoe glass beads dispenser propane tank heater and profile shoe heater driven by experienced operator on road surface including cost of material labour T & P cleaning the road surface of all dirt seals oil grease and foreign material etc. complete as per direction of engineer in charge and accordance with applicable specification	34	sqm	497.30	16908.20	
469	Providing and laying and making kerb channel 30cm wide and 50mm thick of cement concrete 1:3:6 (1 cement 3 coarse sand 6 grade stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth etc. complete as per direction of engineer in charge	34	mtr	127.54	4336.43	Cement / Steel will be issued free of cost from BHEL Stores
470	providing and laying 75mm thick compacted bed of dry brick aggregate of 40mm thick nominal size including spreading well ramming consolidating and grouting with jamuna sand including finishing smooth etc. complete as per direction of engineer in charge	34	sqm	63.15	2147.10	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
471	providing and fixing post delineators (made of ABS body fitted with 2 nos 100mm dia) reflective and reflectors are mounted on MS pipe of 65mm dia dully power coated anti rust and theft steel not to be installed as per direction of engineer in charge	34	each	786.35	26735.90	
472	Excavating holes upto 0.10 cum including getting out the excavated soil then returning the soil as deported in layers not exceeding 20cm in depth including consolidating and deposited layer by ramming watering etc. disposing of surplus excavated soil as directed with in a lead of 50mm and lift upto 1.5m					
472.1	all kinds of soil	34	each	10.85	368.90	
473	Providing and fixing at or near ground level factory made RCC pavement slab of M-30 grade of size 450x450x50mm (HPL or equivalent ) including reinforcement with 6mm dia MS bars 4nos each side including setting in position in footpath to the required level and line over a bed of 20mm average thick cement mortar ( 1cement 3 coarse sand) having thickness not more than 5mm except on curve including filling of joints with same cement mortar and making grooves etc. complete as per direction of engineer in charge	34	sqm	304.45	10351.15	Cement / Steel will be issued free of cost from BHEL Stores
474	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 as per the direction of engineer in charge	34	sqm	345.45	11745.30	
475	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 expect at sharp curve shall not to more than 5mm ) including making drainage opening wherever required complete etc. as per direction of engineer incharge(lenght of finished kerb edging shall be measured for payment ) precast CC kerb stone shall be approved by engineer in charge	34	cum	4221.31	143524.54	Cement / Steel will be issued free of cost from BHEL Stores
476	Providing and fixing GI chain link fabric fencing of required width in mesh size 50x50mm including strengthening with 2mm dia wire or nuts bolts and washers as required complete as per the direction of engineer in charge					
476.1	made of GI wire of dia 4mm	34	sqm	373.45	12697.30	
476.2	made of GI wire of dia 4mm PVC coated to achieve outer dia not less than 5mm in required colour and shade	34	sqm	403.95	13734.30	
477	Providing and fixing GI chain link fabric fencing of required width in mesh size 25x25mm including strengthening with 2mm dia wire or nuts bolts and washers as required complete as per the direction of engineer in charge	34	sqm	464.95	15808.30	
478	Supplying and stacking of hard stone (for stone pitching ) 22.5cm thick at site	34	cum	458.35	15583.90	
479	Dry stone pitching 22.5mm thick laid in courses and required profile with hammer dressed stones having no side less than 15cm with minimum depth of 20cm including preparing the bedding surfaces ect, all complete(payment for stone to be made separately)	34	sqm	96.60	3284.40	
480	75mm thick back filling for pitching including supplying of required materials and consolidation etc. complete with					
480.1	moorum	34	sqm	34.45	1171.30	
480.2	stone aggregate 20mm nominal size	34	sqm	69.05	2347.70	
480.3	Stone aggregate 40mm nominal size	34	sqm	65.10	2213.40	
481	Providing and laying CC 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 specification and directions of engineer in charge (the panel shuttering work shall be paid for separately)	34	cum	4471.25	152022.50	
481.1	Deduct for using of M20 grade concrete instead of M25 grade concrete in CC pavement	34	cum	147.30	5008.20	
482	Scarifying the existing bitumen road surface to a depth of 50mm and disposal of scarified material within all lifts and lead upto 1000mtr (by mechanical means)	34	sqm	2.60	88.40	
483.1	Providing and laying Bituminous Macadam on prepared suface with specified graded crushed stone aggregate for profile corrective base/ binder course including loading of agregate with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixed material by tippers to paver and laying the mixed material with paver finisher fitted with electronic sensing device to the required level and grade and rolling with road rollers, as per MORTH specification to achieve the desired density and compaction ( but excluding the cost of primer/ tack coat) for an average thickness of 50mm/ 75mm average compacted thickness with bitumen of 60/70 grade @ 3.5% (Percentage by weight of total mix) etc. complete all as directed by Engineer-in-charge.	34	cum	5779.81	196513.54	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
483.2	2.5cm premix carpet surfacing with 2.25 cu.m and 1.12cu.m of stone chippings of 13.2mm and 11.2mm size respectively per 100 sq.m and 52 kg and 56kg of hot bitumen per cu.m of stone chippings of 13.2mm and 11.2mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc complete (tack coat to be paid for separately) with paving Asphalt 80/100 heated and then mixed with solvent at the rate of 70 grams per kg of asphalt.	34	sqm	135.80	4617.20	
483.3	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887-1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications. On bituminous surface @ 0.25 kg/sqm.	34	sqm	13.22	449.48	
<b>HORTICULTURE WORKS</b>						
484	Trenching in ordinary soil up to a depth of 6cm including removal and stacking of serviceable materials and then disposing of by spreading and neatly leveling with in a lead of 50m and making up the trenched area to proper levels by filling with earth mixed with sludge or / and manure before and after flooring trench with water (excluding cost of imported earth sludge or manure)	34	cum	16.95	576.30	
485	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment)	34	cum	144.05	4897.70	
486	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 8% for payment)	34	cum	136.85	4652.90	
487	Supplying and stacking at site dump manure from approved source including carriage up to 1 km (earth measured in stacks will be reduced by 8% for payment)					
487.1	Screemed through sieves of IS designation 20mm	34	cum	82.90	2818.60	
487.2	Screemed through sieves of IS designation 16mm	34	cum	90.75	3085.50	
487.3	Screemed through sieves of IS designation 4.75mm	34	cum	97.05	3299.70	
488	Rough dressing the trenched ground including breaking clods	34	100sqm	33.05	1123.70	
489	Uprooting weeds from the trenched area after 10 to 15 days of its flooring with water including disposal of uprooted vegetation	34	100sqm	106.85	3632.90	
490	Fine dressing the ground	34	100sqm	80.20	2726.80	
491	Spreading of sludge, dump manure or / and good earth in required thickness (cost of sludge, dump manure or / and good earth to be paid separately)	34	cum	11.60	394.40	
492	Mixing earth and sludge or manure in proportion specified or directed.	34	cum	7.85	266.90	
493	Grassing with doob 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)					
493.1	In rows 15cm apart in either direction	34	100sqm	121.00	4114.00	
493.2	In rows 7.5cm apart in either direction	34	100sqm	251.25	8542.50	
493.3	In rows 5cm apart in either direction	34	100sqm	384.85	13084.90	
494	Renovating lawns including weeding cheeling the grass forking the ground top dressing with sludge or manure mixing the same with forked soil watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed including supplying good earth if needed but excluding the cost of sludge or manure( the good earth shall be paid for separately)	34	100sqm	741.50	25211.00	
495	Uprooting rank vegetation and weeds by digging the area to a depth of 60cm removing all weeds and other growth with roots by forking repeatedly breaking clods, rough dressing flooring with water uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass including disposal of all rubbish with all leads and lifts.	34	100sqm	1318.20	44818.80	
496	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1( 8 parts of stacked volume of earth after reduction by 20% one part of stacked volume of sludge or manure after reduction by 8%), flooring with water filling with earth if necessary watering and finally fine dressing leveling ect. including stacking and disposal of material declared unserviceable and surplus earth by spreading and leveling as directed within a lead of 50m lift upto 1.5m complete (cost of sludge, manure or extra earth to be paid for separately)	34	cum	47.90	1628.60	
497	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% :1 part of stacked volume of manure after reduction by 8% ) flooring 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)					
497.1	Holes 1.2 m dia and 1.2m deep	34	each	146.65	4986.10	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
497.2	Holes 60cm dia and 60cm deep	34	each	19.25	654.50	
498	Half brick circular tree guard in 50 class designation bricks internal diameter 1.25meter and height 1.2 meter above ground and 0.20m below ground bottom two course laid dry and top three courses in cement mortar 1:6( 1 cement 6 fine sand ) and the intermediate courses being in dry honey comb masonry as per design complete					
498.1	with FPS bricks	34	each	146.16	4969.42	
499	Providing and fixing MS flat iron tree guard 60cm dia. And 2 m height above ground level formed of 4 nos. 25x6mm and 8 nos. 25x3mm vertical MS flats rivetted to 3 nos. 25x6mm MS flat iron rings in two halves bolted together with 8mm dia. And 30mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of priming complete in all respects	34	each	1592.10	54131.40	
500	Making tree guard 53cm dia and 1.3m high as per design from empty coal tar drums supplied free by the department including providing and fixing 2nos MS sheet rings 50x0.5mm with rivets complete in all respects including painting insides and outside of tree guard with					
500.1	A coat of coal tar	34	each	104.00	3536.00	
500.2	Two or more coats of synthetic enamel paint of approved quality shade over a priming coat	34	each	187.15	6363.10	
501	Making tree guard 53cm dia and 2 m high as per design from empty coal tar drums supplied free by the department including providing and fixing four legs 40cm long of 30x3mm MS flat riveted to tree guard and providing and fixing 2 nos MS sheet rings 50x0.5mm with rivets complete in all respects including painting inside and outside of tree guard with					
501.1	A coat of coal tar	34	each	220.15	7485.10	
501.2	Two or more coats of synthetic enamel paint of approved quality shade over a priming coat	34	each	348.85	11860.90	
502	Edging with bricks laid dry length wise including excavation refilling consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m					
502.1	75 class designation					
502.2	FPS bricks	34	mtr	15.05	511.70	
502.3	50 class designation					
502.4	FPS bricks	34	mtr	13.85	470.90	
503	Filling mixture of earth and sludge or manure in the desired proportion in trenches, flooring with water and leveling (cost of supplying earth and sludge or manure and mixing excluded)	34	cum	3.95	134.30	
504	Excavation in dumped stones or malba including stacking of serviceable and material separately and disposal of unseviceable material lead up to 50m and lift up to 1.5m disposed material to be neatly dressed.	34	cum	109.95	3738.30	
505	Excavation in bajri path including stacking of serviceable and unseviceable material lead up to 50m and lift up to 1.5 m disposed material to be neatly dressed	34	cum	122.55	4166.70	
506	Excavation in water bound macadam road including stacking the serviceable material lead up to 50m and lift up to 1.5m disposed material to be neatly dressed	34	cum	150.80	5127.20	
507	Flooding the ground with water including making kiaries and dismantling the same	34	100sqm	68.40	2325.60	
508	Grass cutting including light jungle, collection of stones, disposing, the cut grass and light jungle to places as directed by the Engineer-in-charge. The rate quoted shall include the cost of cutting, cleaning, loading, conveyance within a lead of 2 KM to places as directed and spreading etc complete.	34	SQM	0.75	25.50	
509	Cutting the hedges around the quarters and public buildings with big scissors, knives etc including clearing and disposing the cut waste within a lead of 2 km all as directed by the Engineer-in-charge. The waste materials shall be cleared on the same day and the rate shall include all tools, transport etc.	34	One Cum	3.00	102.00	
510	Uprooting and clearing parthinium and other weeds with big scissors, knives etc including clearing and disposing the cut waste within a lead of 2 km all as directed by the Engineer-in-charge. The waste materials shall be cleared on the same day and the rate shall include all tools, transport etc.	34	One Sqm	1.16	39.44	
511	Cleaning jungle including uprooting of rank vegetation, grass brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 5 Km outside the periphery of the area cleared etc complete all as directed by Engineer-in-charge.	34	one cum	2.64	89.76	
512	Arresting the growth of trees along the walls of the buildings in Township by applying gylcil with ammonia od required quantity till tree is dried and removing the dried tree along with roots and disposing off, upto 2 KM lead etc complete as directed by Engineering - in - charge.	34	each	200.00	6800.00	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
513	Cutting of tree branches over buildings at more than 6 meters height and removing other kind of branches from the cut branch and stocking as directed by the Engineer-in-charge within a lead of 3 kms (separate payment will be made for transporting the tree branches from site to BHEL Nursery stockyard).					
513.1	100 to 200 mm girth with its braches.	34	Each	34.20	1162.80	
513.2	above 200 mm girth with its braches.	34	Each	56.60	1924.40	
<b>PROVIDING MACHINARY</b>						
514	Supply of JCB	55	Per Hour	750.00	41250.00	
515	Supply of Tractor with ripper / Trolley	55	Per Day	1000.00	55000.00	
516	Supply of Tractor with hydraulic Lift with 4 USW	55	Per Day	2672.00	146960.00	
517	Supply of water Tanker	55	Per Day	800.00	44000.00	
518	Supply of Kambl Series/ Machine for de-silting or De-choking or Removal of silt	55	Per Day	15000.00	825000.00	
<b>MISCELANEOUS WORKS</b>						
519	<b>Cleaning and removing all un wanted things from the roof terrace of various buildings</b> at an elevated level of 12 to 20 metre from FFL. Rate includes labour, tools, wire brush, brooms, baskets etc., sweeping and clearing off all dirt, silt, dust, leaves and other foreign matters etc, with out damaging the terrace treatment and thereby collecting all the wastes in bags / casketc, lowering to ground floor with out affecting the working environment and dumping the same in the near by dust bins / earmarked areas / low lying areas etc complete. Sweeping has to be done only as and when necessary. Payment will be made only for the areas where actually the job was carried out.	40	One Sqm	1.15	46.00	
520	Cleaning of water tanks of various sizes using minimum 150 gms cleaching powder for each tank of any number of parts including cost of bleaching powder. (The agency shall make his own arrangements for tools required and shall repair and replace the ball cocks damaged while cleaning).	40	Each Tank	33.00	1320.00	
521	<b>Fixing barbed</b> wire fencing to the RCC poles / MS angles horizontally and diagonally with GI binding wire including cost of fixing materials. The payment shall be mad for running length of each row of fencing and including tightening the loose barbed wire wherever necessary. The barbed wire shall be supplied free of cost at BHEL stores.	40	One Rmt	3.73	149.28	Barbed wire is issued free of cost from BHEL Stores
522	<b>Erection RCC poles/MS</b> angles posts in position by coveying the same to the places as directed.	40	Each	32.98	1319.20	
523	<b>Upkeeping</b> of play fields by sweeping the areas neatly, watering, spreading screened murram, rolling with hand driven roller etc complete as instructed	40	One Sqm	0.35	14.00	
524	<b>Carrying the earth / gravel</b> from stacks to the areas of filling, spreading in layers of 150 mm thick watering, ramming and consolidation with power roller of required capacity so as to bring the surface to proper line, level camber and grade etc complete as directed by Engineer-in-charge	40	One Cum	18.00	720.00	
525	<b>Labour charges</b> for fixing of chain link mesh with a required tools etc complete all as directed by Engineer-in-charge. The required binding wire or any materials will be arranged by the BHEL.	40	Sqm	20.00	800.00	Chain link mesh will be free supply by BHEL.
526	<b>Larvacidal</b> treatment at all the breeding places with required periodicity covering areas as per Annexure-I atleast once in a week, in and around the township and with in the period of mosquito life cycle to arrest the reoccurrence of breeding using specified chemicals such as Baytex 1000 / M.L. Oil / Pyrethurm emulsion in a proper effective dosage for knock down and preventive treatments all as directed.	40	one month	6600.00	264000.00	
527	<b>Fogging</b> the entire township with diesel mixed pyrethurn 2% extract during the mosquito density season for the destruction of adult mosquitoes during the migration time at the open areas around the residential and non-residential buildings checking the entry into the houses and functional buildings all as directed (Van foggers / approved movable foggers, four numbers must be used during operation to cover the entire township in four days).	40	One operation	7700.00	308000.00	
528	<b>Fogging in General Hospital</b> premises in township with diesel mixed pyrethurn 2% extract during the mosquito density season for the destruction of adult mosquitoes during the migration time at the open areas around the residential and non-residential buildings checking the entry into the houses and functional buildings all as directed (Van foggers / approved movable foggers, four numbers must be used during operation to cover the entire township in four days).	40	One operation	2000.00	80000.00	
529	<b>General anti-mosquito / insecticidal</b> spray for destruction of all kinds of insects such as mosquitoes, cockroaches, bed bugs, caterpillars and lizards etc, with alternate usage of safe chemicals formulations of Baygon concentrate, Malathion, Nuvan, Cypermachine, Feneveirate, Deltamethrine and Pyrethrine basing on the immunity level of the pest all as directed for residential buildings.	40	nos	1.00	40.00	



**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
530	General anti-mosquito / <b>insecticidal spray</b> for destruction of all kinds of insects such as mosquitoes, cockroaches, bed bugs, caterpillars and lizards etc, with alternate usage of safe chemicals formulations of Baygon concentrate, Malathion, Nuvan, Cypermachine, Feneveirate, Deltamethrine and Pyrethrine basing on the immunity level of the pest all as directed for non-residential buildings.	40	each	5.00	200.00	
531	General anti-mosquito / <b>insecticidal spray</b> for destruction of all kinds of insects such as mosquitoes, cockroaches, bed bugs, caterpillars and lizards etc, with alternate usage of safe chemicals formulations of Feneveirate, Deltamethrine and Pyrethrine basing on the immunity level of the pest covering General Hospital Male ward, Female ward, Surgical ward, Gynac ward, All special rooms 12 nos, New OPD 1st floor and ground floor, Old OPD, Isolation ward, Labs, Operation threator, children ward, Stores area, open pockets with in the premises and all office rooms etc complete, all as directed by Engineer-in-charge.	40	each	750.00	30000.00	
531.1	Antitermite treatment to the <b>infected wooden items</b> such as doors, windows, ventilators, ward robes etc in residential buildings.	40	one sqm	1.50	60.00	
531.2	Antitermite treatment to <b>infected walls and floor joints</b> in residential and non-residential buildings.	40	one sqm	1.50	60.00	
531.3	Antitermite treatment to <b>infected open areas</b> around trees and plants.	40	one sqm	1.50	60.00	
352	Treatment and <b>destruction of white ants</b> , nest hills built in the open areas of the township including the disposal of excavated earth to the places and filling with the other pit to be made to the extent for removal of queen nest shown to the department for a check.	40	nos	2.00	80.00	
533	Treatment to the <b>bandicoot holes</b> and destruction of bandicoots by applying radent treatment and eradicating the bandicoot menance completely.	40	nos	2.00	80.00	
534	<b>Removing beehive</b> of any size carefully in all levels at stage beams, columns, slabs, ladders etc., in the over head tank or other buildings / structures etc. While removing beehive, the contractor should follow all safety rules & regulations, all as per instructions of Engineer-in-charge.	40	nos	390.00	15600.00	
535	Treatment for eradication of <b>rat menance</b> in buildings by applying radent treatment and providing trapes if necessary.	40	each	4.00	160.00	
536	Destruction of <b>stray dogs</b> found in the township area by applying poisons as prescribed and explained by the department supervisor concerned including the dispisal of dead animal by way of collection, carrying and burying them in a scientific way at the places as directed by the department including cost of materials and machinery required etc for stray dogs.	40	nos	10.00	400.00	
537	<b>Removing of silt</b> and debris from the open drains and removing and replacing of approach paths wherever required to remove the silt underneath the approach paths, including loading, unloading and conveyance to a distance of 2 kms and spreading at the places as directed by the Engineer-in-charge.	40	One Rmt	5.32	212.80	
538	<b>Removal of silt</b> , debris and vegetation growth from the nallaahs including loading, unloading and conveyance to a distance of 2 kms and spreading at the places as directed by the Engineer-in-charge.					
538.1	Bed width upto 5M	40	One Rmt	72.00	2880.00	
538.2	Bed width upto 10M	40	One Rmt	144.00	5760.00	
539	<b>Removing silt</b> and debris from the <b>R.C.C hume pipes</b> of all dia. Provided at the approaches to residential and non-residential buildings, etc.,	40	One Rmt	33.96	1358.40	
540	Supply of SFRC Medium Duty Approach Slabs for open drains including transportation and placing at one location etc complete all as directed by Engineer-in-charge.					
540.1	Size 1000 x 600 x 60 mm	40	No	933.00	37320.00	
540.2	Size 1200 x 600 x 60 mm	40	No	1117.00	44680.00	
<b>REPAIRS TO FURNITURE</b>						
541	<b>Recaning of chairs.</b>					
541.1	Recaning of ordinary chair back rest	20	Each	140.00	2800.00	
541.2	Recaning of ordinary chair seat	20	Each	140.00	2800.00	
541.3	Revolving chair back rest.	20	Each	188.33	3766.67	
541.4	Revolving chair seat.	20	Each	190.00	3800.00	
541.5	On bed support back rest.	20	Each	100.00	2000.00	
542	<b>Repairs to steel tubular chairs.</b>					
542.1	Re-fitting with new screws, bolt & nuts.	20	Each	66.67	1333.33	
542.2	Supply and fixing of new back rest.	20	Each	266.67	5333.33	
542.3	Supply and fixing of new seats	20	Each	266.67	5333.33	
542.4	Supply and fixing of chair wooden arm rest.	20	Each	66.67	1333.33	
542.5	Supply and fixing of rubber shoes.	20	Each	8.33	166.67	
542.6	Supply and fixing of chair end caps	20	Each	4.00	80.00	
543	<b>Revolving, High back, Cushion chairs.</b>					
543.1	Servicing / Repairing of revolving chairs.	20	Each	56.67	1133.33	
543.2	Re-fitting with new screws, bolt & nuts.	20	Each	56.67	1133.33	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
543.3	Welding of revolving / High back chair	20	Each	166.67	3333.33	
543.4	Supply and fixing of revolving chair castor wheels.	20	Each	100.00	2000.00	
543.5	Supply and fixing of High back chair gas lift.	20	Each	1000.00	20000.00	
543.6	Supply and fixing of High back chair bush	20	Each	150.00	3000.00	
544	<b>Steel table</b>					
544.1	Servicing / Repairing of table.	20	Each	100.00	2000.00	
544.2	Supply and fixing of table locks.	20	Each	375.00	7500.00	
544.3	Supply and fixing of table handle.	20	Each	50.00	1000.00	
544.4	Supply and fixing of rubber shoes.	20	Each	8.33	166.67	
545	<b>Steel Alamarahs</b>					
545.1	Servicing / repairing of alamarah	20	Each	100.00	2000.00	
545.2	Supply and fixing of alamarah locks.	20	Each	350.00	7000.00	
545.3	Supply and fixing of alamarah handles.	20	Each	196.67	3933.40	
545.4	Supply and fixing of almarah shelf hooks	20	Each	20.00	400.00	
545.5	Minot denting and welding of alamarah	20	Each	100.00	2000.00	
545.6	Supply and fixing of licking rod and lever set	20	Each	150.00	3000.00	
545.7	Supply and fixing of alamarah floor legs 450 x 125 mm height x 100 mm width.	20	Sets	350.25	7005.00	
546	Opening of Locked steel furniture a such as tables, alamarah etc. without damaging the furniture.	20	Each	200.00	4000.00	
547	Manufacturing and supplying duplicate keys 2 Nos. suitable to existing locks (as per measurements to a obtained form the lock)	20	Pairs	130.00	2600.00	
548	Repairing of bed side lockers and welding.	20	Each	50.00	1000.00	
549	Supply and fixing of bed side locker and handles.	20	Each	150.00	3000.00	
550	Repairing and welding of steel cots.	20	Each	250.00	5000.00	
551	Cutting of hospital bed legs x uniform height and providing shoes to legs of various sizes.	20	Each	50.00	1000.00	
552	Supply and fixing of steel cot nut and bolt fixing.	20	Each	20.00	400.00	
553	Servicing / Repairing flower bed cot / decolum flower cot.	20	Each	350.00	7000.00	
554	Supply & fixing Rubber Shoes / of asptic furniture, cots etc.					
554.1	1/2" to 3/4" dia pipe shoes.	20	Each	10.00	200.00	
554.2	3/4" to 1" dia pipe shoes.	20	Each	15.00	300.00	
554.3	1" to 1 1/2" dia pipe shoes.	20	Each	21.33	426.67	
555	Reparing the teak wood furniture and making them good to use including cost of all materials etc., complete as directed.					
555.1	Teak wood armless chairs.	20	Each	15.00	300.00	
555.2	Teak wood chairs with arms.	20	Each	20.00	400.00	
555.3	Teak wood sitting benches.	20	Each	30.00	600.00	
555.4	Teak wood stools.	20	Each	20.00	400.00	
555.5	Teak wood single desk with benches.	20	Each	25.00	500.00	
555.6	Teak wood double desk with benches.	20	Each	25.00	500.00	
555.7	Teak wood writing tables of all sizes.	20	Each	30.00	600.00	
556	Tightening the joints of wooden furniture items by nails / screws etc. including making good for reuse as directed by Engineer-in-charge.	20	Each	2.00	40.00	
557	Supply and fixing of best teak wood required size (planks, scantling and reapers).	20	One Cum	50000.00	1000000.00	
558	Applying two coats of spray painting to all steel asptic furniture with synthetic enamel paint of an approved coloured brand including scraping surface, cost of all materials etc., complete.					
558.1	Almerah (large)	40	Each	1800.00	72000.00	
558.2	Almerah (small)	40	Each	1500.00	60000.00	
558.3	Office table (Clerk table)	40	Each	638.33	25533.33	
558.4	Office table (Jr. Executive table)	40	Each	715.00	28600.00	
558.5	Office table (Sr. Executive table)	40	Each	831.67	33266.67	
558.6	Steel racks upto 3 feet.	40	Each	331.67	13266.67	
558.7	Steel racks upto 8 feet.	40	Each	966.67	38666.67	
558.8	Filing cabinet (4 draws)	40	Each	931.67	37266.67	
558.9	Filing cabinet (2 draws)	40	Each	400.00	16000.00	
558.1	Revolving chair	40	Each	245.00	9800.00	
558.11	Tubular chairs	40	Each	125.00	5000.00	
558.12	Dining chairs	40	Each	133.33	5333.33	
558.13	3 seater PVC tubular guest chair / for pipe only.	40	Each	90.00	3600.00	
558.14	Dining table (8 seater for canteen).	40	Each	200.00	8000.00	
558.15	Bed side lockers.	40	Each	208.33	8333.33	
558.16	Cots (Big)	40	Each	473.33	18933.33	
558.17	Cots for children	40	Each	300.00	12000.00	
558.18	Cots with decolum flower steel	40	Each	633.33	25333.33	

Contractor

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
558.19	Flower cots	40	Each	483.33	19333.33	
558.2	Cot with cradle	40	Each	525.00	21000.00	
558.21	Cradles	40	Each	150.00	6000.00	
558.22	Table for Dispensary / Stecture	40	Each	400.00	16000.00	
558.23	Examination couch tables	40	Each	358.33	14333.33	
558.24	Laboratory table (big)	40	Each	250.00	10000.00	
558.25	Dispensary wheel chair	40	Each	100.00	4000.00	
558.26	Instrumental cabinet (big)	40	Each	483.33	19333.33	
559						
559.1	Instrumental cabinet (small)	40	Each	300.00	12000.00	
559.2	Bed side screens	40	Each	75.00	3000.00	
559.3	I.V stands	40	Each	71.67	2866.67	
559.4	Foot steps	40	Each	56.67	2266.67	
559.5	Back rest	40	Each	25.00	1000.00	
559.6	Walker stand	40	Each	25.00	1000.00	
559.7	Wash basin stand	40	Each	25.00	1000.00	
559.8	Oxygen cylinderstand	40	Each	75.00	3000.00	
559.9	Medicine trolley	40	Each	133.33	5333.33	
559.1	Dressing trolley	40	Each	133.33	5333.33	
559.11	Baby trolley	40	Each	100.00	4000.00	
559.12	Dental eash chairs	40	Each	100.00	4000.00	
559.13	Revolving stools	40	Each	66.67	2666.67	
559.14	Canteen big trolley	40	Each	500.25	20010.00	
560	Apply two coats of synthetic enamel paint to old wood work and furniture.					
560.1	Tables / Dining tables	35	Each	216.67	7583.33	
560.2	Table / Dining table (big)	35	Each	250.00	8750.00	
560.3	Bench with wooden back	35	Each	283.33	9916.67	
560.4	Foot steps	35	Each	75.00	2625.00	
560.5	Stools	35	Each	75.00	2625.00	
560.6	Physiotherapy table	35	Each	200.00	7000.00	
560.7	Long benches (Big)	35	Each	216.67	7583.33	
560.8	Cane easy chairs.	35	Each	100.00	3500.00	
560.9	Wooden alamaraih	35	Each	500.00	17500.00	
561	Apply two coats of polishing with shillack or other equivalent brand on old wood work furniture items including sand papering, finishing etc complete all as directed by Engineer-in-charge.					
561.1	Tables / Dining tables	40	Each	100.00	4000.00	
561.2	Wooden long bench	40	Each	100.00	4000.00	
561.3	Wooden long bench with back.	40	Each	400.00	16000.00	
561.4	Stools	40	Each	75.00	3000.00	
561.5	Wooden alamaraih	40	Each	50.00	2000.00	
561.6	Foot steps.	40	Each	50.00	2000.00	
562	Removing the existing tapestry and restiching the same with new tapestry of approved colour and quality including attending to repairs, providing walling, polishing, buffers etc complete including cost of all materials, cost of 'U' foam, tapestry. The rate shall include the transportation charges of the furniture.					
562.1	Three seater sofa.	25	Each	6436.67	160916.67	
562.2	Two seater sofa.	25	Each	4646.67	116166.67	
562.3	Single seater sofa.	25	Each	2595.00	64875.00	
562.4	Wooden guest cushioned chairs.	25	Each	1750.00	43750.00	
562.5	Steel tubular guest cushioned chairs.	25	Each	1300.00	32500.00	
562.6	Revolving high back chair (cushioned).	25	Each	1341.67	33541.67	
562.7	Revolving low back chair (cushioned).	25	Each	1208.33	30208.33	
562.8	Revolving computer chairs (cushioned)	25	Each	1000.00	25000.00	

**Lettering of Boards and Banners**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
563	Applying <b>one coat of synthetic enamel paint</b> of an approved brand and shade to road surface / kerb stones including cleaning the stones properly, cost of all materials and labour etc complete synthetic enamel paint of approved shade and brand to kerb stones etc complete all as directed by Engineer-in-charge..	30	Sqm	37.40	1122.00	
564	Applying <b>one coat of synthetic enamel paint</b> of approved brand and shade to road sign boards including cost of all materials, labour etc complete all as directed by Engineer-in-charge.	30	Sqm	18.45	553.50	
565	Painting the township layout on supplied boards approximate Size 3.00x1.50 M, as per the layout with different shades indicating the functional and residential buildings separately and in different colours for various types, bordering, index preparations, key plan etc, complete as per the instructions (The paints shall be of synthetic enamel for G.P of approved make). The rate quoted shall include rubbing the existing painting surface and cost of all the materials like brushes and paintsetc complete all as directed by Engineer-in-charge.	30	Sqm	70.15	2104.50	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
566	Preparing the supplied boards of different sizes to receive the painting as per the drawing and painting the letters of different sizes in different shapes with synthetic enamel paint of approved make in different shades as per the instructions. The quoted rate shall include rubbing of the existing painted surface to receive the new painting and cost of all materials like brushes, paints etc directed by Engineering - in charge.	30	Sqm	628.00	18840.00	
567	Providing <b>radium sticker letters</b> and arrow marks of approved colour and design and size. The base board will be supplied by the department and as directed by the Engineer-in-charge.	30	Sqm	301.07	9032.10	
568	Supply and fixing of multi colour digital printing on paper with lamination on 10 mm M.D.F.Board Supporting with Iron Frame including all incidental charges etc complete as directed by Engineer-in-charge etc directed by Engineering - in charge.	30	Sqm	2105.40	63162.00	
569	Supply and fixing of <b>satın cloth flags</b> of 1 mtr x 3 mtrs in size and providing BHEL monogram on the flag including stitching charges, cost of all materials etc complete all as directed by Engineer-in-charge.	30	Nos	21.37	641.10	
<b>Conveyance</b>						
570	Conveyance by Manual or Mechanical means of <b>Lime, Murram, building Rubbish</b> including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge					
570.1	1 Km	45	Cum	39.53	1778.85	
570.2	2 Km	45	Cum	45.13	2030.85	
570.3	3 Km	45	Cum	50.66	2279.70	
570.4	4 Km	45	Cum	55.99	2519.55	
570.5	5 Km	45	Cum	61.19	2753.55	
570.6	5.1 Km to 10 Km	45	Cum per Km above 5 Km	4.67	210.15	
570.7	10.1 Km to 20 Km	45	Cum per Km above 10 Km	3.90	175.50	
570.8	Above 20 Km	45	Cum per Km above 20 km	3.24	145.80	
571	Conveyance by Manual or Mechanical means of Earth including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge					
571.1	1 Km	25	Cum	49.42	1235.50	
571.2	2 Km	25	Cum	56.41	1410.25	
571.3	3 Km	25	Cum	63.32	1583.00	
571.4	4 Km	25	Cum	69.99	1749.75	
571.5	5 Km	25	Cum	76.48	1912.00	
571.6	5.1 Km to 10 Km	25	Cum per Km above 5 Km	5.84	146.00	
571.7	10.1 Km to 20 Km	25	Cum per Km above 10 Km	4.88	122.00	
571.8	Above 20 Km	30	Cum per Km above 20 km	4.05	121.50	
572	Conveyance by Manual or Mechanical means of Manure or sludge including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge					
572.1	1 Km	20	Cum	42.97	859.40	
572.2	2 Km	20	Cum	49.05	981.00	
572.3	3 Km	20	Cum	55.07	1101.40	
572.4	4 Km	20	Cum	60.86	1217.20	
572.5	5 Km	20	Cum	66.51	1330.20	
572.6	5.1 Km to 10 Km	20	Cum per Km above 5 Km	5.08	101.60	
572.7	10.1 Km to 20 Km	20	Cum per Km above 10 Km	4.24	84.80	
572.8	Above 20 Km	20	Cum per Km above 20 km	3.52	70.40	

**SCHEDULE OF RATES**

BHEL ITEM NO	DESCRIPTION	QUANTITY***	UNIT	Contractors Rate( Rs)	AMOUNT	Remarks
573	Conveyance by Manual or Mechanical means of Excavated rock including loading un-loading with lift of 50 m upto lead mentioned below all complete all as directed by Engineer in charge					
573.1	1 Km	30	Cum	79.07	2372.10	
573.2	2 Km	30	Cum	90.25	2707.50	
573.3	3 Km	21	Cum	101.32	2127.72	
573.4	4 Km	20	Cum	111.99	2239.80	
573.5	5 Km	20	Cum	122.37	2447.40	
573.6	5.1 Km to 10 Km	20	Cum per Km above 5 Km	9.35	187.00	
573.7	10.1 Km to 20 Km	40	Cum per Km above 10 Km	7.80	312.00	
573.8	Above 20 Km	43	Cum per Km above 20 km	6.48	278.64	
	TOTAL	43			60000004.62	
*** NOTE: ALL THE QUANTITIES MENTIONED ARE INDICATIVE. THE QUANTITIES IN INDIVIDUAL ITEMS WILL BE OPERATED AS PER THE DISCRETION OF ENGINEER - IN- CHARGE						