

BHARAT HEAVY ELECTRICALS LIMITED					
RAMACHNADRAPURAM UNIT, HYDERABAD					
(Township Administration Department)					
Price Bid Scheduled-A HY/TA/OT-15/2020-21, Date: 15.12.2020					
Name of Work:- Emergency Short Term Rate contract for Three Months carrying out Routine Annual Civil Maintenance works like Masonry, Flooring, Plumbing, Fabrication, Carpentry, Painting, and Horticulture works.etc. in Township for year 2020-2021.					
BHEL Item No	Description	Qty .	Unit	Rate	Amount
<b>EARTH WORK</b>					
1	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.				
1.1	All kinds of soil	1000	cum	89.82	89820
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	Ordinary rock	1	cum	137.3	137.3
2.2	Hard rock ( blasting prohibited)	1	cum	340.29	340.29
3	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.	200	cum	58.19	11638
4	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				
4.1	All kinds of soil	1	One Sqm	649.34	649.34
7	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.				
7.1	Beyond 30cm girth upto and including 60cm girth	5	each	102.89	514.45
7.2	Beyond 60cm girth upto and including 120cm girth	5	each	454.74	2273.7
7.3	Beyond 120cm girth upto and including 240cm girth	5	each	2101.18	10505.9
7.4	Above 240cm girth	5	each	4215.33	21076.65
<b>CEMENT CONCRETE WORKS</b>					
25	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering- All work upto plinth level				
25.2	1:2:4 (1cement 2:coares sand 4 grade stone aggregate 20mm nominal size)	1	cum	1794.09	1794.09
25.3	1:2:4 (1cement 2:coares sand 4 grade stone aggregate 40mm nominal size)	1	cum	1720.98	1720.98
<b>REINFORCED CEMENT CONCRETE WORKS</b>					
29	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				
29.1	1:1.5:3(1cement 1.5 coarse sand 3 grade stone aggrigate 20mm nominal size)	1	cum	1877	1877
29.2	1:2:4( 1cement 2 coarse sand 4 grade stone aggrigate 20mm nominal size)	20	cum	1925.91	38518.2
30	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				
30.1	1:1.5:3(1cement 1.5 coarse sand 3 grade stone aggrigate 20mm nominal size)	1	cum	2321.98	2321.98
30.2	1:2:4( 1cement 2 coarse sand 4 grade stone aggrigate 20mm nominal size)	3	cum	2370.89	7112.67
32	Centering and shuttering including strutting propping etc. and removal of form work for :				
32.1	Foundations , Footings, bases for columns	33	sqm	115.87	3823.71
32.2	walls (any thickness) including attached pilasters, butteresses plinth and string courses etc.	1	sqm	289.7	289.7
32.3	Suspended floors roofs, landing balconies and acceess platform	3	sqm	216.07	648.21
32.5	Lintels, beams, plinth beams, girderss, bressumenrs and cantilevers.	1	sqm	182.08	182.08
<b>BRICK MASONRY</b>					

BHEL Item No	Description	Qty .	Unit	Rate	Amount
39	Brick work with FPS bricks of class designation 75 in foundation and plinth in:				
39.1	cement mortar 1:4( 1cement :4 coarse sand)	17	cum	1992.61	33874.37
39.2	cement mortar 1:6( 1cement :6 coarse sand)	3	cum	1990.56	5971.68
40	Brick work FPS brick of class designation 75 in superstructure above plinth level up to floor V level in all shapes and sizes in				
40.1	cement mortar 1:4( 1cement :4 coarse sand)	1	cum	2381.14	2381.14
40.2	cement mortar 1:6( 1cement :6 coarse sand)	1	cum	2379.08	2379.08
41	Half brick masonry with FPS brick of class designation 75 in superstructure above plinth level upto floor V level.				
41.1	cement mortar 1:3( 1cement :3 coarse sand)	3	sqm	219.92	659.76
41.2	cement mortar 1:4( 1cement :4 coarse sand)	3	sqm	219.67	659.01
61	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.	1	One Sqm	1755.51	1755.51
62	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.	1	One Sqm	1680.47	1680.47
63	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.	3	One Sqm	1546.52	4639.56
65	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.	3	One Sqm	1567.42	4702.26
74	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.	1	One Rmt	55.57	55.57
75	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.	1	One Sqm	1021.06	1021.06
77	<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.	3	One Sqm	140.16	420.48
78	Conveying from the stores of wooden / PVC - single / double leaf door shutters and fixing in position at places as directed with all required fittings etc (Door will be free issue from BHEL store)	1	One Sqm	125.97	125.97
80	Supplying and fixing <b>M.S aldrop</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.	1	Each	138.71	138.71
81	Supplying and fixing <b>M.S aldrop</b> powder coated of 12 mm dia 200 mm long heavy type with required nuts and bolts as directed by the Engineer-in-charge.	1	Each	88.26	88.26
<b>STEEL WORK*</b>					
108	Fabrication & erection of Structural steel sections including angles, channels, beams, rods or any other structural steel section forming an integral part and erecting the same as directed.( <b>Raw steel will be issued by BHEL free of cost at stores</b> )	3	kgs	12.22	36.66
109	Labour charges only--Repair of Entrance Gates & Grill gates etc., including tack welding, providing aldrop/ tower bolt, repairing /replacing hinges as per site condition.	3	Each	94.8	284.4
<b>FLOORING/TILE WORK</b>					
118	Cement concrete flooring 1:2:4 (1 cement 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.				
118.1	40mm thick with 20mm nominal size stone aggregate	3	sqm	123.9	371.7
119	Cement plaster skirting (upto 30cm height) with cement mortar 1:3 ( 1cement 3 coarse sand ) finished with a floating coat of neat cement				
119.1	18mm thick	1	sqm	121.84	121.84

BHEL Item No	Description	Qty .	Unit	Rate	Amount
120	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	3	sqm	440.3	1320.9
121	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.	3	sqm	465.91	1397.73
122	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	3	sqm	471.7	1415.1
126	<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.	3	One Sqm	86.81	260.43
129	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.	33	One Sqm	95.36	3146.88
132	<b>Labour charges</b> for fixing tiles (both Vitrified /Ceramic tiles)- with cement mortar as base including pointing the joints with white cement and matching pigment, etc complete.	1	Sqm	152.49	152.49
133	<b>Labour charges</b> Removing and refixing of damaged floor / wall tiles of various sizes with cement motor as base including pointing the joints with white cement and matching pigment, etc complete.	10	sqm	166.58	1665.8
<b>ROOFING</b>					
136	Providing and fixing on wall face unplasticised rigid pvc rain water pipes conforming to IS 13592 type a including jointing with seal ring conforming to IS 5382 leaving 10mm gap for thermal expansion (i) single socketed pipes				
136.1	75mm diameter	3	mtr	83.62	250.86
136.2	110mm diameter	3	mtr	138.99	416.97
139	Providing impervious coat in <b>CM 1:4, 20 mm thick</b> 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.	3	One Sqm	83.19	249.57
140	<b>Labour charges</b> for fixing AC sheet / Galvalumme sheet roofing and ceiling using 'J' bolts, nuts, bitumen / GI washers etc.complete, (only AC sheets/ Galvalume sheets and ridges will be supplied free of cost at BHEL stores) all as directed by Engineer - in - charge.	3	One Sqm	38.87	116.61
<b>FINISHING</b>					
145	12mm cement plaster of mix (In fine sand)				
145.1	1:4( 1 cement 4 fine sand)	33	sqm	61.15	2017.95
145.2	1:6 (1 cement: 6 fine sand)	33	sqm	61.05	2014.65
146	15mm cement plaster on the rough side of single or half brick wall of mix				
146.1	1:4( 1 cement 4 fine sand) (in coarse Sand)	1	sqm	47.65	47.65
146.2	1:6 (1 cement: 6 fine sand)	1	sqm	68.97	68.97
147	20mm cement plaster of mix (In Fine sand)				
147.1	1:4( 1 cement 4 fine sand)	33	sqm	85.76	2830.08
147.2	1:6( 1 cement 6 fine sand)	33	sqm	85.31	2815.23
	<b>CEMENT PLASTER (IN COARSE SAND)</b>				
148	12 mm cement plaster of mix :				
148.1	1:6 (1 cement: 6 coarse sand)	1	sqm	68.93	68.93
149	15 mm cement plaster on rough side of single or half brick wall of mix :				
149.1	1:6 (1 cement: 6 coarse sand)	1	sqm	79.46	79.46
150	20mm cement plaster of mix (In Coarse sand)				
150.1	1:4( 1 cement 4 coarse sand)	33	sqm	94.38	3114.54
150.2	1:6( 1 cement 6 coarse sand)	33	sqm	94.17	3107.61

BHEL Item No	Description	Qty .	Unit	Rate	Amount
153	6mm cement plaster of Mix				
153.1	1:3( 1 cement 3 fine sand)	1	sqm	53.61	53.61
154	Pointing on stone work with cement mortar 1:3 (1 cement 3 fine sand)				
154.1	Flush / Ruled pointing	6	sqm	71.98	431.88
154.2	Raised and cut pointing	17	sqm	129.39	2199.63
155	Raised and cut pointing on stone work in white cement mortar 1:3( 1 white cement 3 marble dust)	1	sqm	141.83	141.83
159	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved manufacture and of required shade and colour complete as per manufacturer specification				
159.1	Two or more coats on new work	2500	sqm	25.65	64125
160	Applying one coat of cement primer of approved brand and manufacture on wall surface				
160.1	Cement primer	33	sqm	18.95	625.35
161	Finishing walls with Acrylic smooth exterior paint of required shade				
161.1	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	33	sqm	45.8	1511.4
162	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 <b>(Only Acrylic paint will be supplied by BHEL)</b> . All the safety precautions would be responsibility of the contractor.	33	Sqm	12.34	407.22
165	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade (Iron work/Plastered surface/Signboards frames/wood work/Road speed breakers etc.)				
165.1	Two or more coats on new work	2000	sqm	36.76	73520
166	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	33	sqm	53.88	1778.04
167	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>	1200	Sqm	27.14	32568
168	Painting with aluminium paint of approved brand and manufacture to give an even shade as directed by Engineer In charge				
168.1	Two or more coats on new work	200	sqm	32.77	6554
169	Varnishing with varnish of approved brand and manufacture				
169.1	Two or more coats of glue sizing with copal varnish over an under coat of flatting varnish	13	sqm	55.25	718.25
169.2	Two or more coats glue sizing with spar varnish or an under coat of flatting varnish	300	sqm	55.94	16782
170	Scrapping the existing paint surface, repairing the wall surface and supply and application of One coats of Altek Superfine lappam, applying one coat of required primer thorough polishing the area using emery papers of appropriate grade to get required level and finish of walls before painting the surfaces, as directed by the Engineer in charge etc complete.	1	sqm	97.71	97.71
171	Scrapping the existing paint surface, repairing the wall surface and supply and application of Two coats of Altek Superfine lappam, applying one coat of required primer thorough polishing the area using emery papers of appropriate grade to get required level and finish of walls before painting the surfaces, as directed by the Engineer in charge etc complete.	1	sqm	108.57	108.57
172	Providing & Applying two or more cots of Tractor emulsion paint of Approved shade including cost of all materials, labour etc, complete.	1	sqm	53.2	53.2
173	Providing and applying atek luppam of 2 mm thickness over plastered surface to prepare the surface even and smooth including thorough scrapping to remove the old paint complete as directed by Engineer in charge.	2	Sqm	29.99	59.98

BHEL Item No	Description	Qty .	Unit	Rate	Amount
<b>REPAIRS TO BUILDINGS</b>					
174	Providing and fixing 25mm thick shutters for cup board etc				
174.1	Panelled or Panelled and glazed shutters				
174.1.1	Superior class teak wood including nickel plated bright finished MS piano hinges with necessary screws				
176	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	7800	sqm	3.96	30888
177	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade				
177.1	old work (two or more coats)	2500	sqm	16.04	40100
178	Removing dry 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	10000	sqm	5.2	52000
179	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade				
179.1	one or more coats on old work	133	sqm	24.08	3202.64
180	Finishing walls with Acrylic smooth exterior paint of required shade				
180.1	old work (two or more coats applied @ 1.67ltr/10sqm ) on exising cement paint surface)	800	sqm	32.76	26208
180.2	old work (one or more coat applied @0.90 ltr/ 10sqm)	500	sqm	21.53	10765
181	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.	1	One Sqm	36.76	36.76
182	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.	3	Nos	1424.93	4274.79
183	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.	110	One Rmt	23.75	2612.5
184	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.	1	One Rmt	23.75	23.75
185	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	1	One Sqm	294.1	294.1
186	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.	1	One Sqm	89.78	89.78
187	Crack filling without pressure grouting: Routing out the cracks with a mechanically operated groove cutter and sealing with expansive crack filling compound - CERA POLY CRACKFFILLER or equivalent and tooling to finish neatly. Providing ,two top coats of CRACKFLEX, single component hinghly flexible membrance 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, toold and all other incidental charges etc complete all as directed by Engineering - in -charge. (local market rate)	1	Rmt	71.25	71.25
<b>DISMANTLING AND DEMOLISHING</b>					
188	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineerin-charge.	5	cum	162.6	813
189	Demolishing concrete manually / by mechanical means including disposal of material within 50mtr lead as per direction of engineer in charge				
189.1	1:3:6 or richer mix	4	cum	465.92	1863.68
189.2	1:4:8 or leaner mix	20	cum	287.2	5744
190	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	1	cum	679.69	679.69

BHEL Item No	Description	Qty .	Unit	Rate	Amount
191	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	1	sqm	225.75	225.75
193	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				
193.1	In cement mortar	50	cum	393.39	19669.5
194	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				
194.1	In cement mortar	17	cum	469.38	7979.46
195	Dismantling door windows and clerestory windows (steel or wood ) quantity of stacks of cleaned material will be measured)				
195.1	Of area 3sqm and below	11	each	70.61	776.71
195.2	Of area beyond 3sqm	1	each	97.1	97.1
196	Taking out doors windows and clerestory window shutters(steel or wood) including stacking within 50mtr lead				
196.1	Of area 3sqm and below	1	each	27.57	27.57
196.2	Of area beyond 3sqm	1	each	36.42	36.42
197	Dismantling steel work in single sections including dismembering and stacking within 50mtr lead in				
197.1	RS joists	1	kg	0.66	0.66
197.2	Channels angles tees and flats	1	kg	0.45	0.45
198	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	1	kg	1.08	1.08
199	Dismantling steel work manually by mechanical means in built up section without dismembering and stacking within 50mtr lead as per direction of engineer in charge	1	kg	0.73	0.73
200	Demolishing R.B. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in- charge.	1	cum	607.17	607.17
201	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 metres lead				
201.1	Thickness up to 40 mm	1	sqm	55.83	55.83
202	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50mtr lead	1	sqm	11	11
203	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				
203.1	15mm to 40mm nominal bore	20	mtr	30.62	612.4
203.2	Above 40mm nominal bore	1	mtr	34.93	34.93
204	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	350	sqm	10.42	3647
205	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	1	sqm	11.04	11.04
206	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	4	cum	747	2988
<b>SANITARY WORKS</b>					
207	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				
207.1	White vitreous china orissa pattern WC pan of size 580x440mm with integral type four rests	10	each	1978.88	19788.8

BHEL Item No	Description	Qty .	Unit	Rate	Amount
208	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 decice (handle level) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the wall and floors wherever required				
208.1	WC pan with ISI marked white solid plastic seat and lid	10	each	1926.4	19264
208.2	WC pan with ISI marked black solid plastic seat and lid	1	each	1913.27	1913.27
213	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				
213.1	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	8	each	1232.02	9856.16
213.2	white vitreous china wash basin size 630x450mm with a single 15mm CP brass pillar tap	2	each	1085.6	2171.2
213.3	White vitreous china flat back wash basin size 550x400mm with single 15mm CP brass pillar tap	1	each	973.68	973.68
213.4	White Vitreous China Flat back wash basin size 450x 300 mm with single 15 mm C.P. brass pillar tap	1	each	892.65	892.65
213.6	Stainless steel AISI 304(18/8) wash basin size 530x345mm with single 15mm CP brass pillar tap	1	each	1698.47	1698.47
214	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	1	each	596.55	596.55
215	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				
215.1	White glazed fire clay kitchen sink of size 600x450x250mm	1	each	1467.5	1467.5
216	Supply and Fixing kitchen black stone sinks of 1/2" thick, 24" x 18" x 7" with CI brackets CP brass china with CP brass waste complete including painting the fittings and brackets cutting and making good the walls wherever required. (All materials like Black stone sink along with waste water pipe,waste coupling and brackets are under contractors scope).	20.00	each	544.82	10896.4
217	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				
217.2	Size 600x450x200mm	1	each	1834.1	1834.1
218	Dismantling, Providing and fixing white vitreous china water closet squatting pan (indian type)				
218.1	Long pattern WC pan of size 580mm	1	each	504.89	504.89
220	Providing and fixing white vitreous china pedestal type (european type/ wash down type ) water closet pan	1	each	767.29	767.29
223	Providing and fixing PVC low level flushing cistern with manually controlled device (handle level) conforming to IS 7231 with all fittings and fixtures complete				
223.1	10 Ltr capacity white	20	each	555.38	11107.6
224	Providing and fixing controlled flush low level cistern made of vitreous china with all fitting complete				
224.1	10 Ltr (full flush ) capacity white	3	each	989.63	2968.89
225	Providing and fixing solid plastic seat with lid for pedestal type WC pan complete				
225.1	white solid plastic seat with lid	8	each	255.33	2042.64
225.2	black solid plastic seat with lid	1	each	242.21	242.21
226	Providing and fixing GI inlet connection for flush pipe connecting with WC pan	3	each	63.15	189.45
227	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively.	1	each	530.31	530.31
228	Providing and fixing white vitreous china squatting plate urinal with integral rim longitudinal flush pipe	1	each	1033.43	1033.43
229	Providing and fixing white vitreous china wash basin including making all connectons but excluding the cost of fitting				
229.1	Flat back wash basin of size 630x450mm	2	each	590.92	1181.84
229.2	Flat back wash basin of size 550x400mm	1	each	479.03	479.03
229.3	Angle back wash basin of size 600x480mm	1	each	517.63	517.63

BHEL Item No	Description	Qty .	Unit	Rate	Amount
229.4	Angle back wash basin of size 400x400mm	1	each	382.56	382.56
229.5	Flat back wash basin of size 450x300mm	1	each	398	398
230	Providing and fixing kitchen sink including making all connections excluding cost of fittings				
230.1	White glazed fire clay sink of size 600x450x250mm	1	each	1097.31	1097.31
231	Providing and fixing white vitreous china laboratory sink including making all connections excluding excluding cost of fittings				
231.1	Size 450x300x150mm	1	each	688.29	688.29
231.2	Size 600x450x200mm	1	each	1232.39	1232.39
232	Providing and fixing PVC waste pipe for sink or wash basin including PVC waste fitting complete				
232.1	semi rigid pipe				
232.2	32mm dia	65	each	40.58	2637.7
232.3	40mm dia	1	each	45.2	45.2
232.4	Flexible pipe				
232.5	32mm dia	1	each	44.44	44.44
232.6	40mm dia	1	each	45.96	45.96
235	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	3	each	453.76	1361.28
236	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				
236.1	circular shape 450mm dia	1	each	492.15	492.15
236.2	Rectangular shape 453x357mm	5	each	405.15	2025.75
236.3	oval shape 450x350mm (outer dimensions)	1	each	433.33	433.33
273	Dismantling, Providing and fixing PTMT waste coupling for wash basin and sink of approved quality and colour				
273.1	waste coupling 31mm of 79mm length and 62mm breadth weighing not less than 45 grms	1	each	63.73	63.73
273.2	waste coupling 38mm of 83mm length and 77mm breadth weighing not less than 60grms	1	each	73.77	73.77
274	Dismantling, Providing and fixing PTMT bottle trap for wash basin and sink				
274.1	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 weighinng not less than 260 grms	1	each	269.01	269.01
274.2	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 weighinng not less than 263 grms	1	each	290.26	290.26
275	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	1	each	120.01	120.01
276	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	1	each	113.91	113.91
277	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				
277.1	450mm long towel rail with total length of 495mm 78mm wide and effective height of 88mm weighing not less than 170grms	1	each	253.64	253.64
277.2	600mm long towel rail with total length of 645mm width 78mm and effective height of 88mm weighing not less than 190grms	1	each	278.98	278.98
280	Dismantling, Providing and fixing PTMT urinal cock of approved quality and colour				
280.1	15mm nominal bore 80mm long 42mm high and 30mm wide with BSP female threads weighing not less than 48grm	1	each	82.24	82.24
282	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 separaatly)	130	Each	168.66	21925.8



BHEL Item No	Description	Qty .	Unit	Rate	Amount
283	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.				
283.1	Wash hand basins of size 22"x16" (without fittings)	5	Each	434.27	2171.35
283.2	Wash hand basins of size 18"x12" (without fittings).	1	Each	379.98	379.98
283.3	Indian water closet 630 mm / 580 mm	5	Each	461.41	2307.05
283.4	European Water closets complete all as directed by Engineer-in-charge.	10	Each	651.4	6514
283.5	Standing type white glazed flat back urinals.	2	Each	325.7	651.4
283.6	Porcelain 'P' trap of size 4"	10	Each	162.84	1628.4
283.7	Orissa Pan of approved make and size 580 x 440 mm	20	Each	542.83	10856.6
284	SWG gully traps 6"x6" or 4"x4" with CI frame and cover.	10	Each	117.33	1173.3
285	Fixing of white coloured PVC low level flushing cistern 10 lit capacity supplied from BHEL stores complete all as directed by Engineer-in-charge.	1	Each	217.13	217.13
287	Dismantling and replacing with new ones of approved make including cost of all materials etc complete all as directed by Engineer-in-charge.				
287.1	1/2" C.P. pillar taps (500 gms) SEIKO DELUX HEAVY DUTY.	15	Each	192.13	2881.95
287.2	1/2" brass stop cock (400 gms)	40	Each	182.11	7284.4
287.3	3/4" brass stop cock.	20	Each	223.43	4468.6
287.4	1/2" X 18" PVC pipe connections. (Heavy duty).	90	Each	42.52	3826.8
287.5	PVC flexible pipe 32 mm dia.	90	Each	44.46	4001.4
287.6	3/4" polymer ball cock of ISI makes approved brand.	90	Each	183.33	16499.7
287.7	1/2" polymer ball cock of ISI makes approved brand.	20	Each	133.46	2669.2
287.8	E.W.C seat covers (solid) of any shade.	5	Each	290.59	1452.95
287.9	CP consealed stock cock 1/2" dia with internal brass threadings.	20	Each	249.34	4986.8
287.10	Hot and cold mixing vlave of SEIKO DELUX make.	1	Each	784.67	784.67
287.11	C.P. waste coupling 1 1/4" dia (32 mm).	10	Each	120.9	1209
287.12	C.P. Nahani trap jalise 5" dia.	10	Each	13.2	132
287.13	Hot water connections.	10	Each	74.8	748
287.14	C.I. brackets.	40	Each	61.6	2464
287.15	Porcelain foot rests 250 x 125 x 25 mm	2	Each	107.21	214.42
287.16	1/2" C.I bib taps with brass internal, turning (Alto brand or equivalent).	2	Each	60.14	120.28
287.17	1/2" Polymet bib taps (PTMT material) prayag make.	80	Each	112.93	9034.4
287.18	PVC shower swing type for the 1/2" 3/4" pipe (Prayag make).	40	Each	110	4400
287.19	1/2" C.I. stop cock with brass internal turnings (Alto or equivalent brand).	1	Each	98.26	98.26
288	PVC syphon set suitable for PVC/CI law down flush tank of 10 litres capacity with all fittings etc.	10	Each	719.87	7198.7
289	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.	1	Each	20.69	20.69
290	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.	50	Each	189.99	9499.5
291	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.	1000	One Rmt	34	34000
292	Supplying and fixing Telephonic shower including cost of all materials and fixtures and fittings etc complete all as directed by Engineer-in-charge.	2	Each	806.51	1613.02
293	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.	5	Each	57	285
294	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/ cm². etc complete all as directed by Engineer-in-charge.	500	Rmt	79.79	39895

BHEL Item No	Description	Qty .	Unit	Rate	Amount
295	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.	600	Rmt	135.84	81504
296	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.				
296.1	75 mm dia plain bend.	10	Each	62.7	627
296.2	75 mm dia plug bend.	10	Each	75.04	750.4
296.3	75 mm dia off-set.	10	Each	57	570
296.4	75 mm dia Single 'Y' with door.	5	Each	97.71	488.55
296.5	75 mm dia pipe clip.	5	Each	14.25	71.25
296.6	75 mm dia single tee with door.	5	Each	82.64	413.2
296.7	110 mm dia plain bend.	10	Each	65.14	651.4
296.8	110 mm dia plug bend.	10	Each	81.42	814.2
296.9	110 mm dia Single 'Y' with door.	5	Each	108.57	542.85
296.10	110 mm dia Double 'Y' with door.	10	Each	135.71	1357.1
296.11	110 mm dia off-set.	5	Each	88.34	441.7
296.12	110 mm dia vent cowl.	10	Each	31.35	313.5
296.13	110 mm dia pipe clip.	5	Each	17.09	85.45
296.14	110 mm dia single tee with door.	1	Each	81.42	81.42
296.15	110 mm dia coupler.	1	Each	55.1	55.1
<b>WATER SUPPLY WORKS</b>					
297	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 tempreature up to 80 C including all special fittings of composite metrial (engineering plastic bland and brass inserts wherever required) e.g.elbows,tees,reducers, couplers &connectors etc.with clamp at 1.00metre speacing. this includes testing of joint complete as per direction of the Engineer in charge				
	Internal work-Exposed on wall				
297.1	1216(16 mm OD) pipe	5	metre	126.09	630.45
297.2	1620 (20 mm OD) pipe	5	metre	150.66	753.3
297.3	2025 (25 mm OD) pipe	5	metre	186.24	931.2
297.4	2532 (32 mm OD) pipe	1	metre	242.91	242.91
297.5	3240 (40 mm OD) pipe	1	metre	345.2	345.2
297.6	4050 (50 mm OD) pipe	1	metre	399.33	399.33
298	Providing and fixing Polyethelene-Aluminium-Polyethelene (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 includingall special fittings of composite material (engineering plastic blendand brass inserts wherever required) e.g. elbows, tees, reducers,couplers & connectors etc. with clamps at 1.00 metre spacing. Thisincludes the costs of cutting chases and including testing of jointscomplete as per direction of the engineer in charge.				
	Comcealed work including cutting chases and making good the wall etc.				
298.1	1216 (16mm OD )Pipe	1	metre	197.86	197.86
298.2	1620 (20 mm OD) pipe	1	metre	226.19	226.19
298.3	2025(25mm OD) Pipe	1	metre	269.41	269.41
298.4	2532(32mm OD) Pipe	1	metre	336.95	336.95
299	Providing and fixing chlorinted 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				
299.1	15mm nominal outer dia. Pipes	4	mtr	90.5	362
299.2	20mm nominal outer dia. Pipes	4	mtr	106.03	424.12
299.3	25mm nominal outer dia. Pipes	1	mtr	133.06	133.06
299.4	32mm nominal outer dia. Pipes	1	mtr	169.7	169.7
299.5	40mm nominal outer dia. Pipes	1	mtr	233.79	233.79
299.6	50mm nominal outer dia. Pipes	1	mtr	344.16	344.16

BHEL Item No	Description	Qty .	Unit	Rate	Amount
300	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.				
300.1	15mm nominal outer dia. Pipes	40	mtr	145.17	5806.8
300.2	20mm nominal outer dia. Pipes	59	mtr	161.83	9547.97
300.3	25mm nominal outer dia. Pipes	1	mtr	197.86	197.86
300.4	32mm nominal outer dia. Pipes	1	mtr	238.35	238.35
301	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>				
301.1	15mm nominal bore	10.5	mtr	88.76	931.98
301.2	20mm nominal bore	10.5	mtr	102.45	1075.725
301.3	25mm nominal bore	10.5	mtr	135.2	1419.6
301.4	32mm nominal bore	1	mtr	168.91	168.91
301.5	40mm nominal bore	1	mtr	212.41	212.41
301.6	50mm nominal bore	1	mtr	272.5	272.5
302	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :				
302.1	15 mm dia nominal bore	36	mtr	155.79	5608.44
302.2	20 mm dia nominal bore	2	mtr	170.57	341.14
303	Providing and fixing GI pipe complete with GI fitting including trenching and refilling etc. <b>External work</b>				
303.1	15mm nominal bore	100	mtr	95.87	9587
303.2	20mm nominal bore	100	mtr	108.49	10849
303.3	25mm nominal bore	100	mtr	140.61	14061
303.4	32mm nominal bore	1	mtr	166.62	166.62
303.5	40mm nominal bore	7	mtr	197.07	1379.49
303.6	50mm nominal bore	7	mtr	238.1	1666.7
303.7	65mm nominal bore	1	mtr	303.33	303.33
303.8	80mm nominal bore	7	mtr	382.97	2680.79
304	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				
304.1	25 to 40mm nominal bore	2	each	190.83	381.66
304.2	50 to 80mm nominal bore	1	each	427.52	427.52
305	Providing and fixing brass bib cock of approved quality:				
305.1	15 mmnominal bore	1	each	137.02	137.02
305.2	20 mm nominal bore	1	each	177.33	177.33
305.3	Providing and fixing brass stop cock of approved quality :				
305.4	15 mmnominal bore	5	each	137.02	685.1
305.5	20 mm nominal bore	1	each	177.67	177.67
306	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)				
306.1	25 mm nominal bore	7	each	248.36	1738.52
306.2	32 mm nominal bore	5	each	300.22	1501.1
306.3	40 mm nominal bore	1	each	363.51	363.51
306.4	50 mm nominal bore	1	each	519.41	519.41
306.5	65 mm nominal bore	1	each	713.92	713.92
306.6	80 mm nominal bore	1	each	1218.82	1218.82
307	Providingand fixing ball vaive (brass) of approved quality ,High or low pressure ,with plastic floats complete :				
307.1	15 mmnominal bore	1	each	172.57	172.57
307.2	20 mm nominal bore	1	each	240.71	240.71
307.3	25 mm nominal bore	1	each	281.82	281.82
308	Providing and fixing gun metal non return of approved quality (screwed end)				
308.1	25 mm nominal bore				
308.2	Horizontal	1	each	255.48	255.48
308.3	vertical	1	each	263.18	263.18
308.4	32 mm nominal bore				
308.5	Horizontal	1	each	326.5	326.5
308.6	vertical	1	each	395.97	395.97

BHEL Item No	Description	Qty .	Unit	Rate	Amount
308.7	40 mm nominal bore				
308.8	Horizontal	1	each	412.94	412.94
308.9	vertical	1	each	544.13	544.13
308.10	50 mm nominal bore				
308.11	Horizontal	1	each	623.04	623.04
308.12	vertical	1	each	738.77	738.77
308.13	65 mm nominal bore				
308.14	Horizontal	1	each	1118.49	1118.49
308.15	vertical	1	each	1295.99	1295.99
308.16	80 mm nominal bore				
308.17	Horizontal	1	each	1590.96	1590.96
308.18	vertical	1	each	2054	2054
309	Providing and fixing uplasticised PVC connection pipe with brass unions				
309.1	30 cm length				
309.2	15 mm nominal bore	40	each	34.75	1390
309.3	20 mm nominal bore	1	each	40.16	40.16
309.4	45 cm length				
309.5	15 mm nominal bore	1	each	41.69	41.69
309.6	20 mm nominal bore	1	each	49.43	49.43
310	Providing and fixing CP brass shower rose with 15 or 20mm inlet				
310.1	100 mm dia meter	1	each	38.98	38.98
310.2	150 mm dia meter	1	each	52.14	52.14
311	laying in position centrifugally cast spun iron S&S or flanged pipes(excluding cost of pipe)	1	quintal	70.61	70.61
312	Laying in position S&S or flanged CI special such as tees bends collars tapers and caps etc. (excluding cost fo specials)	1	quintal	129.21	129.21
313	Providing and laying S&S CI standard specials such as tees bends collars tapers caps etc., (Heavy class)				
313.1	Upto 300mm dia	1	quintal	2797.95	2797.95
313.2	over 300mm dia	1	quintal	2875.11	2875.11
314	Providing and laying flanged CI standard specials such as tees bends collars tapers caps etc. suitable for flanges jointing as per IS 1538				
314.1	Upto 300mm dia	1	quintal	4225.61	4225.61
314.2	over 300mm dia	1	quintal	4457.12	4457.12
315	Providing and laying S&S centrifuglly cast (spun) iron pipes (class LA) conforming to IS 1536				
315.1	100 mm dia pipe	1	mtr	656.05	656.05
315.2	125 mm dia pipe	1	mtr	822.86	822.86
315.3	150 mm dia pipe	1	mtr	982.23	982.23
315.4	200 mm dia pipe	1	mtr	1673.49	1673.49
315.5	250 mm dia pipe	1	mtr	2234.76	2234.76
315.6	300 mm dia pipe	1	mtr	2951.36	2951.36
316	Providing lead caulked joints to spun iron or CI pipes and specials including testing of joints but excluding the cost of pig lead				
316.1	100 mm diameter pipe	1	each	103.4	103.4
316.2	125 mm diameter pipe	1	each	152.22	152.22
316.3	150 mm diameter pipe	1	each	154.86	154.86
316.4	200 mm diameter pipe	4	each	205.7	822.8
316.5	250 mm diameter pipe	6	each	256.99	1541.94
316.6	300 mm diameter pipe	4	each	309.39	1237.56
316.7	350 mm diameter pipe	1	each	319.44	319.44
317	Supplying pig lead at site of work	1	quintal	6951.77	6951.77
318	Providing flanged joints to double flanged CI / DI pipes and specials including testing of joints				
318.1	80 mm diameter pipe	1	each	62.56	62.56
318.2	100 mm diameter pipe	1	each	104.53	104.53
318.3	125 mm diameter pipe	1	each	111.47	111.47
318.4	150 mm diameter pipe	1	each	129.66	129.66
318.5	200 mm diameter pipe	1	each	133.55	133.55
318.6	250 mm diameter pipe	1	each	199.41	199.41
318.7	300 mm diameter pipe	1	each	205.58	205.58
318.8	350 mm diameter pipe	1	each	274.98	274.98
319	Providing and fixing CI sluice valves (with cap ) complete with bolts nuts rubber insertions etc. (the tail pieces if required will be paid separately)				
319.1	100 mm dia pipe				
319.2	Class I	1	each	2036.88	2036.88
319.3	Class II	1	each	2322.47	2322.47

BHEL Item No	Description	Qty .	Unit	Rate	Amount
319.4	125 mm dia pipe				
319.5	Class I	1	each	2297.69	2297.69
319.6	Class II	1	each	2776.97	2776.97
319.7	150 mm dia pipe				
319.8	Class I	1	each	2979.42	2979.42
319.9	Class II	1	each	3453.74	3453.74
319.10	200 mm dia pipe				
319.11	Class I	1	each	5473.61	5473.61
319.12	Class II	1	each	7478.87	7478.87
319.13	250 mm dia pipe				
319.14	Class I	1	each	7994.12	7994.12
319.15	Class II	1	each	11106.93	11106.93
319.16	300 mm dia pipe				
319.17	Class I	1	each	11135.3	11135.3
319.18	Class II	1	each	13915.08	13915.08
326	Providing and fixing GI union in GI pipe including cutting and threading the pipe and making long screws etc, complete (new work)				
326.1	15 mmnominal bore	1	each	81.65	81.65
326.2	20 mm nominal bore	1	each	97.1	97.1
326.3	25 mm nominal bore	2	each	104.81	209.62
326.4	32 mm nominal bore	1	each	127.96	127.96
326.5	40 mm nominal bore	1	each	154.97	154.97
326.6	50 mm nominal bore	1	each	207.39	207.39
326.7	65 mm nominal bore	1	each	369.44	369.44
326.8	80 mm nominal bore	1	each	438.9	438.9
327	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				
327.1	15 mmnominal bore	23	each	178.89	4114.47
327.2	20 mm nominal bore	52	each	194.34	10105.68
327.3	25 mm nominal bore	12	each	202.05	2424.6
327.4	32 mm nominal bore	1	each	225.2	225.2
327.5	40 mm nominal bore	1	each	252.21	252.21
327.6	50 mm nominal bore	1	each	339.97	339.97
327.7	65 mm nominal bore	1	each	502.02	502.02
327.8	80 mm nominal bore	1	each	571.48	571.48
328	Providing and fixing CP brass bib cock of approved quality conforming to IS 8931				
328.1	15 mmnominal bore	10	each	264.7	2647
329	Providing and fixing CP brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810grms				
329.1	15 mmnominal bore	10	each	274.19	2741.9
330	Providing and fixing CP brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms				
330.1	15 mmnominal bore	10	each	286.81	2868.1
331	Providing and fixing CP brass stop cock (concealed) of standard design and of approved make conforming to IS 8931				
331.1	15 mmnominal bore	4	each	284.01	1136.04
332	Providing and fixing CP brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931a) 15mm nominal bore				
332.1	15mm nominal bore	32	each	299.15	9572.8
333	Providing and fixing PTMT bib cock of approved quality and colour				
333.1	15mm nominal bore, 86mm long weighing not less than 88gms	46	each	86.86	3995.56
333.2	15mm nominal bore, 122mm long weighing not less than 99gms	1	each	117.72	117.72
333.3	15mm nominal bore, 165mm long weighing not less than 110gms	1	each	133.17	133.17
333.4	15mm nominal bore, 90mm long weighing not less than 93gms	1	each	112.34	112.34
334	Providing and fixing PTMT stop cock of approved quality and colour				
334.1	15mm nominal bore, 86mm long weighing not less than 88gms	1	each	86.86	86.86
334.2	20mm nominal bore, 89mm long weighing not less than 88gms	2	each	110.01	220.02
334.3	concealed stop cock, 15mm nominal bore, 108mm long weighing not less than 108gms	1	each	143.2	143.2
335	Providing and fixing PTMT pillar cock of approved quality and colour				
335.1	15mm nominal bore, 107mm long weighing not less than 110gms	20	each	134.87	2697.4
335.2	15mm nominal bore, 125mm long weighing not less than 120gms	1	each	184.69	184.69
336	Providing and fixing PTMT push cock of approved quality and colour				
336.1	15mm nominal bore, 98mm long weighing not less than 75gms	1	each	79.16	79.16

BHEL Item No	Description	Qty .	Unit	Rate	Amount
336.2	15mm nominal bore, 80mm long weighing not less than 46gms	1	each	71.41	71.41
337	Providing and fixing PTMT grating of approved quality and colour .				
337.1	Circular type				
337.2	100 mm nominal dia .	1	each	28.92	28.92
337.3	125 mm nominal dia with 25mm waste hole	1	each	33.54	33.54
337.4	Rectangular type with openable circular lid .				
337.5	150 mm nominal size square 100 mm diameter of the inner hinged round grating	1	each	82.94	82.94
338	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)				
338.1	80 mm nominal bore	1	each	1919.64	1919.64
338.2	100 mm nominal bore	1	each	2882.2	2882.2
339	Providing and fixing CI dirt box stairner for bulk type water meter with nuts bolts rubber insertions ect complete conforming to IS 2373				
339.1	80mm dia	1	each	2218.76	2218.76
339.2	100mm dia	1	each	3525.19	3525.19
340	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				
340.1	15mm nominal bore, 105mm long weighing not less than 138gms	3	each	129.35	388.05
340.2	20mm nominal bore, 120mm long weighing not less than 198gms	50	each	182.81	9140.5
341	Providing and fixing PTMT swivelling shower 15mm nominal bore weighing not less than 40 gms	1	each	75.26	75.26
342	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	1	each	100.75	100.75
343	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				
343.1	Upto 300mm dia	1	quintal	4643.13	4643.13
343.2	Above 300mm dia	1	quintal	5892.15	5892.15
344	Providing and fixing unplasticised PVC connection pipe with PTMT nuts collar and bush of approved quality and colour				
344.1	15mm nominal bore with 30cm length	1	each	40.16	40.16
244.2	15mm nominal bore with 45 cm length	1	each	45.58	45.58
345	Providing and fixing PTMT extension nipple for water tank pipe fitting of approved quality and colour				
345.1	15mm nominal bore. weighing not less than 32gms	1	each	28.74	28.74
345.2	20mm nominal bore. weighing not less than 40gms	1	each	33.4	33.4
345.3	25mm nominal bore. weighing not less than 62gms	1	each	48.05	48.05
346	Cutting holes up to 30x 30 cm in walls including making good the same				
346.1	with FPS bricks	1	each	82.07	82.07
347	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( 1cement 2 coarse sand 4 grade stone aggregate 20mm nominal size) including finishing complete so as to make it leak proof	1	each	90.53	90.53
348	Labour for cutting CI pipe with steel saw				
348.1	80 mm dia meter C.I pipe	1	each cut	28.71	28.71
348.2	100 mm dia meter C.I pipe	1	each cut	38.64	38.64
348.3	125 mm dia meter C.I pipe	1	each cut	53.91	53.91
348.4	150 mm dia meter C.I pipe	1	each cut	72.7	72.7
348.5	200 mm dia meter C.I pipe	1	each cut	96.97	96.97
348.6	250 mm dia meter C.I pipe	1	each cut	120.19	120.19
348.7	300 mm dia meter C.I pipe	1	each cut	144.45	144.45
348.8	350 mm dia meter C.I pipe	1	each cut	167.64	167.64
349	Labour charges for erection PVC tanks-1000Lts including transportation from Dept stores to work spot (including all necessary fittings and specials like ball cock, nipples..etc).	10	Each	515.69	5156.9
350	Only Labour charges for ertion & commissioning og PVC flush tanks. (Flush tank & all required materials will be issued by BHEL at their stores).	1	Each	61.09	61.09
351	Supply & fixing of brass spindle rods for 3" to 14" valves, inclduing machine threading and finishng and with check nut as per site requiremet.( Finished item weight will be measured for payment)	1	kg	597.11	597.11
352	Supply & Fixing of 114mm Alkthene pipes	5	Rmt	260.56	1302.8
<b>PROVIDING MACHINERY</b>					

BHEL Item No	Description	Qty .	Unit	Rate	Amount
376	Supply of JCB	10	Per Hour	555.45	5554.5
377	Supply of Tractor with ripper / Trolley	3	Per Day	1110.89	3332.67
378	Supply of Tractor with hydraulic Lift with 4 USW	10	Per Day	2221.78	22217.8
381	Supply of tractor with levelling blade & Plough equipment	1	Per Day	2888.31	2888.31
383	Providing a Mobile crane for lifting of trunk tree mains at road sides, electrical poles, placing of transformers whenever needed as directed by Engineer-in-charge, including cost of services of operating staff and supply of lubricant oil etc complete all as directed by Engineer-in-charge.	1	perday	2666.14	2666.14
<b>MISCELLANEOUS WORKS</b>					
384	<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.	1500	One Sqm	1.12	1680
386	<b>Erection RCC poles/M.S angles</b> posts in position by coveying the same to the places as directed.	100	Each	32.05	3205
387	<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	70	One Cum	17.49	1224.3
388	<b>Labour charges</b> for fixing of chain link mesh to the existintg poles with a required tools, material etc complete all as directed by Engineer-in-charge.	1000	Sqm	17.78	17780
389	<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.	1000	One Rmt	5.17	5170
390	<b>Removal of silt</b> , debris and vegetation growth from the nallahs including loading, unloading and conveyance to a distance of 2 kms and spreading at the places as directed by the Engineer-in-charge.				
390.1	Bed width upto 5M	20	One Rmt	69.98	1399.6
390.2	Bed width upto 10M	20	One Rmt	139.98	2799.6
391	<b>Removing</b> silt 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.,	1	One Rmt	33.01	33.01
392	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.				
392.1	Size 1000 x 600 x 60 mm	10	No	882.88	8828.8
392.2	Size 1200 x 600 x 60 mm	5	No	1056.99	5284.95
395	Supply & fixing precast RCC fencing poles of size of size 150mm square at bottom of the pole & 100mm square at top of the pole and length of the pole should be minimum 1800 length. (Specification should be checked for standard size) as directed by Engineer In charges.	1	each	217.13	217.13
<b>Conveyance</b>					
396	Conveyance by Manual or Mechanical means of Lime, Murram, building Rubbish including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge				
396.1	1 Km	50	Cum	45.98	2299
396.2	2 Km	50	Cum	52.17	2608.5
396.3	3 Km	1	Cum	58.31	58.31
397	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				
397.1	1 Km	80	Cum	57.48	4598.4
397.2	2 Km	1	Cum	65.22	65.22
398.3	3 Km	5	Cum	72.89	364.45

BHEL Item No	Description	Qty .	Unit	Rate	Amount
399	Conveyance by Manual or Mechanical means of Excavated rock including loading un-loading with lift of 50 m upto lead mentoned below all complete all as directed by Engineer in charge				
399.1	1 Km	1	Cum	91.96	91.96
399.2	2 Km	1	Cum	104.36	104.36
399.3	3 Km	1	Cum	116.63	116.63
<b>SUPPLY OF BUILDING MATERIALS</b>					
401	Supply and stacking of <b>40 mm machine crushed granite metal</b> including all incidental charges etc complete as directed by Engineer-in-charge.	1	One Cum	794.5	794.5
402	Supply of <b>20 mm guage hard granite stone metal</b> including cost and conveyance to site and stacking as directed by the Engineer-in-charge.	1	One Cum	794.5	794.5
403	Supply of <b>12 mm guage hard granite stone metal</b> including cost and conveyance and stacking as directed etc complete.	1	One Cum	794.5	794.5
404	Supply of <b>ground moulded number bricks</b> of best quality including cost and conveyance to site and stacking neatly as directed by the Engineer-in-charge.	1	Nos	2.79	2.79
405	Supply of <b>good quality course River Sand</b> Bhodan / Karimnagar / Kurnool / Sirisilla quality including cost and conveyance to site and stacking neatly as directed by the Engineer-in-charge.	7	One Cum	901.47	6310.29
406	Supply and spreading quarry <b>stone dust</b> on walking track, stadium etc, complete as directed by Engineer-in-charge.	15	One Cum	953.02	14295.3
<b>Lettering of Boards and Banners</b>					
407	Applying <b>one coat of synthetic enamel paint</b> of Apcolite brand and an approved shade to the speed breakers and road sign boards including cost of all materials, labour etc complete etc complete all as directed by Engineer-in-charge.	380	Sqm	28.23	10727.4
408	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 <b>(The paints shall be of synthetic enamel for G.P of approved make)</b> . 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.	1	Sqm	596.57	596.57
409	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 etc directed by Engineering - in charge.	17	Sqm	286	4862
410	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.	1	Sqm	2000.03	2000.03
411	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.	1	Sqm	6174.7	6174.7
412	Supply and fixing of self glow radium sticker on the radium paper including cutting charges, fixing charges etc complete as directed by Engineer-in-charge.	1	Sqm	6000.09	6000.09
413	Re-lettering with black Japan paint of approved brand and manufacture for numbering to shops with black ground paint and also including cost of all material etc complete all as directed by Engineer-in-charge.	1	per letter per centimeter height	1.17	1.17
414	Supply and fixing of radium plain sheet wherever required etc complete all as directed by Engineer-in-charge.	1	Sqm	949.95	949.95



BHEL Item No	Description	Qty .	Unit	Rate	Amount
423	Providing and laying APP ( Atactic Polypropylene Polymer) modified prefabricated five layer 3mm thick water proofing membrane, black finished reinforced with non-woven polyster matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm, by the same membrane manufacture of density at 25° C, 0.87-0.89 kg/ltr and viscocity 70-160 cps.Over the primer coat the layer of membrane shall be laid using butane Torch and sealing all joints etc, and preparing the surface complete . The vital physical and chemical parameters of the membrane shall be joint strength in longitudinal and transverse direction at 23° C as 350/300N/5cm. Tear strength in longitudinal and transverse direction as 60/80N. softening point of membrane not less than 150° C. Cold flexibility shall be up to -2°C when tested in accordance with ASTM , D-5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane : ( 3mm thick membrane) cost of all materials including scaffolding etc. complete all as directed by Engineer-in-Charge.	1	Sq.m	190.04	190.04
Total Amount Rs.					1,540,174.45
Tender %	In Words		Figures		
Excess					
Less					
Estimate					
Notes:					
1	Agency has to quote his prices by considering consolidated wages /Bonus payable to workers/ BHEL wages (which consists of state Govt. minimum wages and additional payments), allowances, materials involved in agency scope and other statutory dues payable to workers				
2	Agency supervisor shall control the deployed work force. All the complaints shall be attend on priority basis as per the direction of Engineer-in-charge, shall not cause any damage to other areas. It is the agency responsibility to replace any damaged material / equipment with its own cost.				
3	Agency supervisor shall look after the working areas where the work has been carried out.				
4	The Agency supervisor shall do frequent checking.				
5	Agency supervisor is the overall in-charge of the work. Single Point of Contact (SPOC) during the work.				
6	Agency supervisor is to ensure workers are posted in their respective posts as per the directions of BHEL officer in-charge and record to be submitted daily.				
7	To ensure all the communication given by BHEL officer is to be passed to the workers promptly.				
8	To ensure required guidance, training etc. is provided to the workers at their respective works beside the regular briefing etc.				
9	Custodian of the daily attendance.				
10	Supervisor shall stay at the site until he total work is done and ensures the same for the workers too.				
11	Any incidents occurred during the work has to bring it to the notice of the BHEL officer in-charge and if necessary depends on the situation report has to submitted to the police station.				
12	Monitor the performance of the workers and their quality of service.				
13	Report of the daily work done shall be submitted daily with duly signed with stamp.				
14	Workers to alert and inform his superiors about any suspicious materials found within the Township Premises.				
15	Supervisor has to check each work area and alert the workers who are working at their respective place to perform their works as instructed by BHEL Engineer-in-charge.				
16	Supervisor along with supporting workers has to report to BHEL Officer in-charge and they have to follow the instructions given by the BHEL Officer in-charge.				
17	During any public functions / festivals / sports events / school events / BHEL Management events / any VIP visits / any elections etc., Supervisor has to follow the guidelines given by the BHEL Officer In-charge for performing the works.				
18	All group gathering by engaged work force / drunk & drive / accidents / group fighting / rash driving etc., has to be taken monitor by the				
19	Employees who are staying in Township area and given information about their Tanks shall be attend immediately as per the instructions of BHEL Officer In-charge.				
20	Frequent checking of work spot as per the requirement need to done. Proper report need to submit by the supervisor.				
21	As per the time-to-time instructions given by the BHEL management, supervisor along with their staff has to work with the given instructions.				
22	During the execution of contract, if required, agency shall work on Sundays and holidays also as per the direction of Engineer-in-charge.				
23	Penalty as per the NIT clause 2.1.36 shall be applicable.				