



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM::HYDERABAD::32
FACTORY CIVIL ENGINEERING DEPARTMENT

SCHEDULE- A

Tender Notice No:

HY/FCD/OT-19/2015-16, Dt: 11.08.2015

PRICE BID

Item no.:2

Name of work: Miscellaneous machine foundation and misc. masonry works in Factory area & Admn. Building 2015-16 and Dismantling of cracked brick wall and renovation of carmas room in LIG gate.

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
	Part-I: Misc.Machine foundations and other concrete works in Factory area				
1	Dismantling of M15, M20 or M25 grade concrete including cutting of reinforcement steel bars & removal by mechanical means and disposing the debris within a lead of 2 Km within the factory area as directed by Engineer-In-Charge. The cost includes the Hire charges of all machinery/equipment, labour charges, cutting of steel, conveyance all complete	40.00	Cu.M	3,072.60	1,22,904.00
2	Extra for cutting of reinforcement bars manually/mechanical means in R.C.C work or R.B work (payment shall be made on the cross sectional area of RCC or RB work) as per directions of engineer in charge for pockets and laying cable lines.	150.00	Sqm	325.15	48,772.50
3.a	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50m.	200.00	Cu.m	103.40	20,680.00
3b	----do---- up to First additional depth of 1.50 M to 3.00 M.	50.00	Cu.M	122.30	6,115.00
3 C	----do---- up to second additional depth of 3.01 M to 4.00 M.	50.00	Cu.M	141.20	7,060.00
4	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means over areas (exceeding 30 cm in depth , 1.5 m in width as well as 10 Sq.m on plan) including disposal of excavated earth , lead upto 50 m and lift upto 1.5 m, disposing earth to be levelled and neatly dressed for Hard Rock (Blasting prohibited).	12.10	Cu.M	325.25	3,935.53

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
5	Filling available excavated earth (excluding rock) in trenches , plinth , sides of foundations etc. in layers not exceeding 20 cm in depth , consolidation each deposited layer by ramming and watering , lead upto 50 m lift upto 1.5 m .	50.00	Cu.M	45.70	2,285.00
6	Conveyance of excavated spoil up to a lead of 2 Kms, including loading , unloading and spreading etc. complete as directed by Engineer- in- charge.	300.00	Cu.M	56.41	16,923.00
7a	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering ,including consolidation by vibrations for all works up to plinth level with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) . **	30.00	Cu.M	1,585.00	47,550.00
7b	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) . **	50.00	Cu.M	1,560.50	78,025.00
8	Reinforced cement concrete work in walls (any thickness) including consolidation by vibrations for all works attached pilasters , buttersses, plinth and string courses , fillets , columns, pillars,piers,abutments, machine foundations, Posts and struts etc. up to floor five level excluding cost of centering , shuttering, finishing and reinforcement : with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).**	30.00	Cu.M	2,047.50	61,425.00
9 a	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works (machine foundations) up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size).**	100.00	Cu.M	1,641.30	1,64,130.00
9 b	Reinforced cement concrete work in walls (any thickness) including consolidation by vibrations for all works attached pilasters, buttersses, plinth and string courses, fillets, columns, pillars, piers, abutments, machine foundations, Posts and struts etc. up to floor five level excluding cost of centering , shuttering, finishing and reinforcement : with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20 mm nominal size).**	50.00	Cu.M	2,002.00	1,00,100.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
10	Reinforcement for R.C.C. work including straightening , cutting , bending , placing in position and binding all complete by cold twisted bars (BHEL will issue Tor Steel at their stores on free of cost).	15.00	M.T	4,003.00	60,045.00
11	Brick work with FPS bricks of Ground moulded in superstructure above plinth level up to floor V level in all shapes and sizes in cement mortar 1:6.**	40.00	Cu.M	2,104.00	84,160.00
b	Supply of FPS bricks of ground moulded class designation 7.5 for Dept. use.	3.00	1000 nos	2,900.00	8,700.00
12	Plastering in CM 1:6 , 20 mm thick to internal and external surfaces of walls including the cost of all materials , labour , curing etc, complete - Upto 10.00 m height **	700.00	Sq.m	65.80	46,060.00
13	Centering and shuttering including strutting, propping etc; and removal of form for walls(any thickness) including attached pillasters, buttresses, plinth and string courses etc.,.	600.00	Sq.M	119.25	71,550.00
b	-----do----- for pockets	50.00	Sq.M	180.40	9,020.00
14	Finishing with Epoxy paint (two or more coats) of ASIAN or BERGER make at all locations prepared and applied as per manufactures specifications including appropriate priming coat , preparation of surface , cost of all materials etc; complete on concrete work.	350.00	Sq.M	77.75	27,212.50
15	Fabrication and fixing inserts in concrete wall with lugs of required dia welded to the insert plates.(St. Steel,electrodes and gas required for work will be issued on free of cost by BHEL at their stores)Scrap material can be used.	5.00	MT	3,386.80	16,934.00
16	Providing structural steel works 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 and dismantling steel work in single sections including dismembering and stacking within 50 m lead in channels, angles, tees and flats. (For temporary barricade/enclosure) (Only Raw structural steel , electrodes, gases will be issued by BHEL at their stores)Scrap material can be used	4.00	MT	4,922.50	19,690.00
17	Fixing the old/ used A.C. sheets for barricading the foundation works and removing the same after the work is over for side walls in the Factory blocks and sheds and at all height including transportation of A.C. sheets and disposing off old sheets to a lead of 2 K.Ms. Etc., complete as directed. (Required consumable materials will be supplied by BHEL free of cost at their stores).	247.00	Sq.M	38.82	9,588.54

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
18	Supplying and filling in plinth with river sand under floors including, watering, ramming consolidating and dressing complete.	12.10	Cu.M	968.28	11,716.19
19	Grouting of bolt pockets in Cement Mortar 1:1 including the cost of all materials, labour, curing etc., complete. **	6.05	Cu.M	412.00	2,492.60
20	Grouting of bolt pockets with grout mix of specified proportion by the manufacturer, including cost of labour and incidentals etc. (The grout mix will be supplied free of cost by BHEL at BHEL stores)	16.00	Cu.M	1,318.60	21,097.60
21	Granolithic topping of 25 mm thick using 1 cement 1 granite chips of 10mm down graded laid over base concrete when it is green conditions and ironite finishing 12mm thick using a mix of 50Kg of ironite , 200 Kg of cement and 0.30 Cu.m of granite metal 6mm down graded including cost of form work , curing etc. complete. **	30.00	Sq.m	270.11	8,103.30
22a	Supplying and fixing position 40 mm thick fibre glass covered by cotton cloth (netted) fixed in position and covered with aluminium perforated sheet above the insulation for the foundation including fixtures and accessories and cost of all materials, labour etc., complete. Rock wool shall be of standard quality.	38.50	Sq.M	570.15	21,950.78
b	Supply and fixing in position 60 mm thick / 30 mm thick in two layers thermocoal including cost of materials, labour etc., complete.	38.50	Sq.M	418.76	16,122.26
23	Concrete Drilling for Bolts:- Drilling of holes with electrical drilling machines in RCC / PCC, in various sizes as follows, including drilling of holes, cleaning of holes, removal and disposal of debris from site. The rate includes machinery, labour, tools and tackles, transportation etc complete.				
a)	20 mm drilling in 500 mm depth	10.00	Each	704.82	7,048.20
b)	30 mm drilling in 500 mm depth	5.00	Each	845.80	4,229.00
c)	40 mm drilling in 500 mm depth	20.00	Each	1,057.20	21,144.00
24	Core Cutting of pockets in concrete of size 250 mm or Dia : Core cutting of pockets with electrical core cutting equipment in RCC / PCC, in various depths as follows, including core cutting pockets, cleaning of area, removal and disposal of debris from site. The rate includes hire charges of machinery, labour, tools and tackles, transportation etc complete.				
a)	250 Dia Core Cutting 300 mm depth	6.00	Each	3,876.60	23,259.60
b)	250 Dia Core Cutting 500 mm depth	6.00	Each	5,286.20	31,717.20

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
25	Core Cutting of pockets in concrete of size 300 mm Dia : Core cutting of pockets with electrical core cutting equipment in RCC / PCC, in various depths as follows, including core cutting pockets, cleaning of area, removal and disposal of debris from site. The rate includes hire charges of machinery, labour, tools and tackles, transportation etc complete.				
a)	300 Dia Core Cutting 200 mm depth	1.00	Each	3,524.16	3,524.16
a)	300 Dia Core Cutting 250 mm depth	2.00	Each	3,876.58	7,753.16
c)	300 Dia Core Cutting 300 mm depth	1.00	Each	4,229.00	4,229.00
e)	300 Dia Core Cutting 400 mm depth	1.00	Each	4,933.82	4,933.82
b)	300 Dia Core Cutting 500 mm depth	2.00	Each	5,638.66	11,277.32
	Total of part-I			₹	12,33,463.25
	Part II: Misc. Masonry, works in Factory area and Admn. Building.				
1	Demolishing brick work manually / by mechanically means including stacking of serviceable material and disposing off unserviceable materials upto a lead of 2.00 KM as per directions of Engineer-in-charge. - in cement mortar	110.00	Cu.M	355.88	39,146.80
2	Demolishing stone rubble masonry manually / by means including stacking of serviceable material and disposing of unserviceable materials upto a lead of 2.00 KM as per directions of Engineer-in-charge. - in cement mortar	6.00	Cu.M	415.88	2,495.28
3	Dismantling doors, windows and clerestory windows (steel & wood) shutters including chowkhats , architrave , holdfasts etc. complete and stacking within 50 meters lead.	28.00	Sq.M	75.35	2,109.80
4	Dismantling of M15, M20 or M25 grade concrete including cutting of reinforcement steel bars & removal by mechanical means and disposing the debris within a lead of 2 Km within the factory area as directed by Engineer-In-Charge. The cost includes the Hire charges of all machinery/equipment, labour charges, cutting of steel, conveyance all complete	100.00	Cu.M	3,072.60	3,07,260.00
5a	Earth work in excavation by mechanical means (Hydraulic Excavtors) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50m.	200.00	Cu.m	103.40	20,680.00
5b	-----do----- up to First additional depth of 1.50 M to 3.00 M.	20.00	Cu.M	122.30	2,446.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
6	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sq.m on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposing earth to be levelled and neatly dressed for Hard Rock (Blasting prohibited).	6.00	Cu.M	325.25	1,951.50
7	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidation each deposited layer by ramming and watering, lead upto 50 m lift upto 1.5 m.	50.00	Cu.M	45.70	2,285.00
8	Conveyance of excavated soil up to a lead of 2 Kms, including loading, unloading and spreading etc. complete as directed by Engineer- in- charge.	180.00	Cu.M	56.41	10,153.80
9	Providing and laying in position plain cement concrete of specified grade, consolidation excluding the cost of centering and shuttering - all work up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size).**	193.00	Cu.M	1,560.50	3,01,176.50
10 a	Providing and laying in position plain cement concrete of specified grade, consolidation by vibration excluding the cost of centering and shuttering - all work up to plinth level with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size).**	85.00	Cu.M	1,585.00	1,34,725.00
10 b	Plain cement concrete work/Reinforced cement concrete work in walls (any thickness) including attached pilasters, buttersses, plinth and string courses, fillets, columns, lintels, beams,pillars, piers,abutments. Posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement : with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size). **	24.00	Cu.M	1,906.50	45,756.00
11.a	Providing and laying in position reinforced cement concrete excluding cost of centering , shuttering, finishing and reinforcement all works upto plinth level : with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size). **	1.70	One Cu.M	1,687.00	2,867.90
11.b	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works up to plinth level with 1:1½ :3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size).	50.00	One Cu.M	1,641.00	82,050.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
12	Coursed rubble masonry (second sort) with hard stone in foundations & plinth with cement mortar 1:6 (1 Cement : 6 Coarse sand).**	50.00	Cu.M	1,521.00	76,050.00
13	Brick work with FPS bricks of Ground moulded in superstructure above plinth level up to floor V level in all shapes and sizes in cement mortar 1:6.**	150.00	Cu.M	2,104.00	3,15,600.00
14	Half brick masnory with FPS bricks of Ground moulded in superstructure above plinth level upto floor V level in cement mortar 1:4 (1cement : 4 Coarse sand) including plastering with cement mortar 1:6 20 mm (1 cement : 6 coarse sand) on both sides.**	22.00	Sq.m	334.00	7,348.00
b	...do.. With reinforcement of 6 mm dia MS rounds at every 4th layer, but excluding cost of steel and its fabrication.**	6.00	Sq.m	334.30	2,005.80
15	Plastering in CM 1:6 , 12 mm thick to internal and external surfaces of walls including the cost of all materials, labour, curing etc., complete.**	150.00	Sq.m	54.00	8,100.00
16a	Plastering in CM 1:6 , 20 mm thick to internal and external surfaces of walls including the cost of all materials , labour , curing etc, complete - Upto 10.00 m height **	700.00	Sq.m	65.80	46,060.00
b	-----do-----for height 10.01 m to 13.00 m height. **	50.00	Sq.m	82.60	4,130.00
c	-----do-----for height 13.01 m to 16.00 m height. **	30.00	Sq.m	99.40	2,982.00
d	-----do-----for height 16.01 m to 19.00 m height. **	30.00	Sq.m	116.20	3,486.00
17	Plastering to the ceiling in CM 1:3, 6mm (1 cement : fine sand).**	17.00	Sq.m	43.00	731.00
18	Finishing the top of the concrete flooring in CM 1:3, 15mm thick including neat finishing, curing etc;complete.**	132.00	Sq.m	66.20	8,738.40
19	Flooring in 25 mm thick using 1:3 (1cement : 3 parts of granite stone chips of 3 to 10 mm guage (no sand) ellies pattern first sort including neat finishing, curing, cost of materials etc; complete. **	550.00	Sq.m	130.40	71,720.00
20	Flooring in 25 mm thick using 1:1 granolithic flooring in 25 mm thick (1 cement : 1 parts of granite stone chips of 3 to 10 mm guage (no sand) ellies pattern first sort including neat finishing, curing, cost of materials etc; complete. **	330.00	Sq.m	42.00	13,860.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
21	Fixing Chowkhat in existing opening in brick / RCC wall with dash fastners of appropriate size / chemical fastener (3No.s on each vertical member of door chowkhat and 2 No.s on each verticle member of window 1.20m height as per CPWD specifications including cost of dash fasteners / chemical fastners.	11.00	Each	81.05	891.55
22	Providing and fixing 16mm MS Fan Clamps of standard shape and size in exisiting RCC slab including cutting chase and making good and painting exposed portion of the calmps complete.	8.00	Each	113.85	910.80
23	Reinforcment for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete by cold twisted bars (BHEL will issue Tor Steel at their stores on free of cost).	1.10	M.T	4,003.00	4,403.30
24	Dismantling the broken RCC covers and casting and fixing with new cable trench covers with reinforced cement concrete 1:1.5:3 using 20 mm and down graded metal including the cost of cutting, welding of angle iron frame, sprinkling of ironite at 2 Kgs/sq.m. and neat finishing excluding the cost of angle iron and M.S. reinforcement (Angle iron will be supplied by BHEL at their stores and M.S. rounds on cost recovery basis under separate item by BHEL at their stores). Thickness of covers will be varying from 75 mm to 100 mm.	44.00	Sq.m	336.42	14,802.54
25	Plastering over roof slab in CM 1:4, 20mm thick mixed with water proofing compound, Make: "Sika" @ 3% by weight of cement as per manufacturer's specification, curing as directed. Rate quoted shall include finishing, cost of all materials and labour etc., complete. (Cement =7.69 kgs/sq.m x3% WP@ Rs 20.00 per kg=Rs 4.61) upto 10 m height.	550.00	Sq.m	81.30	44,715.00
26.a	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 mortar 1:3 (1cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg per Sq.m including painting in white cement mixed with pigment of matching shade complete.	165.00	Sq.m	502.00	82,830.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
b	Providing and Laying ceramic glazed floor tiles 300 X 300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS:15622 of approved make in colours such as white , Ivory , grey , fume red brown , laid on 20mm thick cement mortar 1:4 (1cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc; complete.	110.00	Sq.m	540.00	59,400.00
27.a	Vitrified flooring : Supply and laying of vitrified tiles/ nano technology of brighter shades and required design of premium quality (1st quality), in required texture and colour for floors/skirting/cladding using vitrified tiles of size 600 X 600 mm(± 5 mm), inclusive of cost of cutting , champering of tiles to reuired size, with base of Conmax C - 500 tile adhesive for fixing tiles on existing mosaic/cement flooring , jointing the tiles with colour tint etc. complete as directed by Engineer-in-charge. The rate quoted shall include cost of all materials, labour, adhesives, colour tint material, leads and lifts etc. complete. Amount will be paid on the basis of measurement of the area of finished work only. It also includes surface preparation of existing ceramic floor giving necessary slopes, cleaning joints and grouting joints with pigmented additives to match shade of the tile, making pockets for electrical, communication, network cables etc. complete as directed by Engineer-in-charge. Amount will be paid on the basis of measurement for finished work only.	55.00	Sq.m	1,022.60	56,243.00
b	Vitrified flooring : Supply and laying of vitrified tiles/ nano technology of brighter shades and required design of premium quality (1st quality), in required texture and colour for floors/skirting/cladding using vitrified tiles of size 600 X 600 mm(± 5 mm), inclusive of cost of cutting , champering of tiles to reuired size, laid on 20mm thick or more as per site requirement to get proper slope cement mortar 1:4 (1 cement : 4 coarse sand) . The rate quoted shall include cost of all materials, labour, colour tint material, leads and lifts etc. complete. Amount will be paid on the basis of measurement of the area of finished work only. It also includes surface preparation of floor giving necessary slopes, cleaning joints and grouting joints with pigmented additives to match shade of the tile. This includes making pockets for electrical, communication, network cables, junction boxes etc. complete in all respects. (The cement will be issued free of cost by BHEL at BHEL stores).	55.00	Sqm	967.00	53,185.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
28	Providing and fixing 10mm thick acid and alkali resisitant tiles of approved make and colour using acid and or aikali reisiting mortar bedding anf joints filled with acid and or alkali resisting cement as per Is:4457 complete as per the directions of Engineer-in-charge in flooring on a bed of 10 mm thick mortar 1:4 (1acid proof cement : 4 coarse sand) with acid and alkali resistant tile.	100.00	Sq.m	873.00	87,300.00
29	Supply & fixing of 18 mm thick best quality Jet Black colour machine cut mirror polished granite slabs in required sizes for counter wash basins, floorings, vanity counter, claddings, facias etc. including cutting, champering, rounding and mirror polishing etc. complete as directed. Cost of granite slabs shall be Rs. 1600/- per Sq. m and granite slabs of required design and colour will be selected by department.	110.00	Sq.m	2,549.50	2,80,445.00
30	Supply of JCB for levelling the surplus earth debris heaps located at various locations in factory area, as directed by Engineer-in-charge.The JCB should work minimum 8 machine hours per day. Rate includes all charges like fuel, hire charges etc; complete.	300.00	One M/c Hour	708.00	2,12,400.00
31	Drilling of 14 mm dia holes up to half the depth of concrete and fixing PVC nozzles in to the holes with a plugging motor, pumping cement slurry with mixed grouting additives with the help of grout pump and removing PVC nozzles and plugging the holes etc complete as directed by Engineer-in-charge. Rtae includes cost of all materials, labours, lead and lift etc complete. Required tools and tackles shall be brought by agency.	250.00	point	89.64	22,410.00
32	Drilling of 14 mm dia holes on the face of the columns to a depth of 75 mm to 100 mm as directed by Engineer-in-charge. and fixing shear connector 10 mm dia using polyster resin grout as specified including cost of all materials, tools and tackels, leads and lifts, labour etc complete as directed by Engineer-in-charge.	50.00	Each	224.10	11,205.00
	Total of part-II			₹	24,47,055.97
	Part-III Dismantling of cracked brick wall and renovation of carmas room in LIG gate.				
1	Centering and shuttering including strutting, propping etc.; and removal of form work, for walls (any thickness) including attached pilasters,butteresses, plinth and string courses etc. above plinth level.	18.00	Sq.M	238.40	4,291.20

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
2	Dismantling brick masonry walls for all heights, removing and clearing the debris and carting away upto to lead of 2 KM including loading, unloading and spreading segregating useful materials as directed by Engineer-in-charge including the cost of all labour scaffolding etc., complete.	27.00	Cu.m	355.88	9,608.76
3	Fixing the old/ used A.C. sheets for barricading the present carmas room from car /cycle shed to outside and removing the same after the work is over and at all height including transportation of A.C. sheets and disposing off old sheets to a lead of 2 K.Ms. Etc., complete as directed. (Required consumable materials will be supplied by BHEL free of cost at BHEL stores).	45.00	Sq.m	36.10	1,624.50
4a	Earth work in excavation in all soils by mechanical means (Hydraulic Excavators) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50M.	5.00	Cu.m	103.40	517.00
b	----do---- up to First additional depth of 1.50 M to 3.00 M.	3.00	Cu.m	122.30	366.90
5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size) - The cement will be issued free of cost by BHEL at BHEL stores.	2.00	Cu.M	1,560.50	3,121.00
6	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering ,shuttering, finishing and reinforcement ,including consolidation by vibrations for all works up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size) - The cement and steel will be issued free of cost by BHEL at BHEL stores.	4.00	Cu.M	1,641.30	6,565.20
7	Reinforcement for R.C.C. work including straightening , cutting , bending , placing in position and binding grills with binding wire all complete by cold twisted bars. - The steel will be issued free of cost by BHEL at their Stores.	0.32	M.T	4,003.00	1,280.96
8	Centering and shuttering including strutting, propping etc.; and removal of form work, for walls (any thickness) including attached pilasters,butteresses, plinth and string courses etc. above plinth level.	27.00	Sq.M	180.40	4,870.80

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
9	Brick work with Ground moulded clay FPS brick in super structure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 Coarse sand). - The cement will be issued free of cost by BHEL at BHEL Stores.	18.00	Cu.M	2,104.00	37,872.00
10	Plastering in CM 1:6 , 20 mm thick to internal and external surfaces of walls including the cost of all materials, labour, curing etc., complete -Upto 10.00 M level. - The cement will be issued free of cost by BHEL at BHEL Stores.	160.00	Sq.m	65.80	10,528.00
11	Applying exterior emulsion paint 2 coats over one coat of primer to external old surfaces including cost of all labour and other incidentals.(Only exterior paint will be issued by BHEL on free of cost).	500.00	Sq.m	20.55	10,275.00
12	Supply and fixing in position medium teak wood door frame along with single leaf shutters solid core non - decorative type 30 mm thick of approved quality and brand including 3 No.s MS hinges 10 cm long and 1 no. mortise lock (Godrej make) , using scantling of size 100 mm X 75 mm (including with MS holdfasts of size 230 X 50 X 4 mm - 6 No.s and painting with coal tar to the faces coming in contact with masonry / concrete, including cost of all materials, labour etc. complete as directed by Engineer - in - charge.	4.00	Sq.M	3,180.00	12,720.00
13a	Supply and fixing of top fixed, side hung of NCL Seccolor windows & Ventilators of make shakthi/Ajantha/Finesta ,fabricated from Roll formed section made of pre painted steel (Base steel as per IS 513 of 0.6 mm thick, 'D' quality, galvanized as per IS 277 with zinc 120 GSM / Sq. Mtr). Section for shutter should be of 46 x 46 mm, external frame should be of 46 x 52 mm, section for glass beading should be of 18 x 25 mm & center mullion should be 46 x 70 mm. The sections to be cut to length, meter joined with corner bracket. Centre mullions are to be fixed using mullion cap. Handle made of high grade aluminium powder coated & with nylon receiver & glazed with 5 mm thick, Modi/Saint Gobain float glass. Gasket made of E.P.D.M. Corner brackets made of C.R.C.A with zinc phosphating. Million caps made of glass filled nylon. The above frames should be fixed to the concrete / masonry walls by means of self expanding screws. Approximate size of windows 1.30mx0.9m and 3.00mx2.10m -Double shutter without guard bars(grills)... Excise duty/VAT inclusive .Service tax extra as applicable.	11.00	Sq.m	3,000.00	33,000.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
b	Supply and fixing of aluminum window grills of size 1.50 Mx1.80M approx. and 1.20 mx1.80M approx. along with aluminium frame consisting aluminium 'F' (solid) 0.80kg/12' supply and fixing of design of 4" aperture aluminium grill to the above frame work with necessary fixtures. It includes fixing of total frame to the existing brick work, finishing etc. complete. (The material shall be aluminium alloy :6063, thick 7 mm, ultimate tensile strength more than 19 kgs/sq.mm)	11.00	Sq.m	1,540.00	16,940.00
14	Dismantling the existing wooden / aluminium partitions into small units including removing doors, glass panes, etc., transporting and stacking carefully for reuse, in the departmental stores complete. All as directed by the Engineer-in-charge.	9.00	Sq.m	113.28	1,019.52
15	Erecting dismantled wooden partitions /aluminium partitions in new locations including transporting from BHEL stores, making necessary modifications by planing, cutting etc., to suit new place, fixing of doors, glass panes etc., complete (Dismantled wooden / aluminium partitions will be made available at BHEL stores at free of cost). Rate shall include cost of all hardware materials like nails, screws, Fevicol etc., complete.	9.00	Sq.m	51.51	463.59
16	Providing and fixing MS grills of required pattern in frames of windows etc.; with MS flats, square or round bars etc. all complete - fixed to openings / wooden frames with rawl plugs screws etc.	110.00	Kg	64.40	7,084.00
17	Filling with available excavated earth (excluding rock) in trenches , plinth , sides of foundations etc. in layers not exceeding 20 cm in depth , consolidation each deposited layer by ramming and watering , lead upto 50.00 m and lift upto 1.50 m.	4.00	Cu.M	45.70	182.80
18	Conveyance of excavated spoil up to a lead of 2 Kms, including loading, unloading and spreading etc. complete as directed by Engineer- in- charge.	4.00	Cu.M	56.41	225.64

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
19	Vitrified flooring : Supply and laying of vitrified tiles of brighter shades and required design of premium quality (1st quality), in required texture and colour for floors/skirting/cladding using vitrified tiles of size 600 X 600 mm(± 5 mm), inclusive of cost of cutting , champering of tiles to required size, laid on 20mm thick or more as per site requirement to get proper slope cement mortar 1:4 (1 cement : 4 coarse sand) . The cost of the tile shall be Rs.65/- per Sft. (inclusive of all taxes and duties) and tiles of required make will be selected by department within the above specified cost. The rate quoted shall include cost of all materials, labour, colour tint material, leads and lifts etc. complete. Amount will be paid on the basis of measurement of the area of finished work only. It also includes surface preparation of floor giving necessary slopes, cleaning joints and grouting joints with pigmented additives to match shade of the tile. This includes making pockets for electrical, communication, network cables, junction boxes etc. complete in all respects. (The cement will be issued free of cost by BHEL at BHEL stores).	20.00	Sqm	967.00	19,340.00
20	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 mortar 1:3 (1cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg per Sq.m including painting in white cement mixed with pigment of matching shade complete.	20.00	Sq.m	502.00	10,040.00
21	Supply and fixing of new "Parry ware" make Indian Water Closet, Orissa pan of size 580 mm x 410 mm - Open rim (Code No. C0109) including PVC Slimline Dual Flush tank (Cistern) of size 475 mm x 318 mm (Code No. C8109) with all accessories like Parryware flush kit suitable for the above flush tank with all required accessories etc., complete. Colour: Silky Off - White.	1.00	Each	3,000.00	3,000.00
22	Supply & fixing "Marc" make oyster series brass bib cocks. With all accessories / Cat: MOY 1030.	2.00	Each	506.00	1,012.00
23	Supply & fixing 20 mm dia (3/4") Nominal Bore GI pipe, Class B medium Grade properties and weight as per IS 1239 ISI mark with GI fittings including the cost of GI pipe & its fittings, chasing brick work/concrete and making good the same, cost of labour, all materials etc. complete. Make: Tata / Jindal / Zenith	10.00	R M	179.00	1,790.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
24	Removing & Fixing of new wash hand basin below counter, which will be issued free of cost at BHEL stores including necessary repairs. The rate quoted shall include with all accessories like brackets, screws, PVC connections etc., complete .	1.00	Each	128.00	128.00
	Total of Part-III			₹	1,97,866.87
	Total value of work (Part-I+Part-II+Part-III)			₹	38,78,386.08
Total : ₹ Thrity eight lakhs eighty four thousand five hundred four and twenty eight paise only					

Note: ** For Cement consuming items other than RMC , BHEL will issue cement on free of cost at their stores.

1	A penalty of 0.5% of the gross value of work shall be levied for every weeks or part there of non-execution/delay in the execution of work subjected to maximum penalty of 10% of the gross value of total part executed.
2	The rates are inclusive of all taxes and duties except Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents.

Note : The bidders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value in figures and words.

Tender %	In figure	In words
Excess		
Less		
Estimated value		