

GENERAL ABSTRACT

Jal Jeevan Mission (JJM)-WSS to Arakkulam and Velliyamattom (part) panchayath-Part II-
Package III-Construction of 3.5 MLD water treatment plant and allied works at 12th mile.-
General Civil Work

Sl No	Head Description	Amount	
1	Construction of Aerator	921263.23	
2	Raw water channel	1056420.93	
3	Flash Mixer	388130.29	
4	Clariflocculator	8396854.08	
5	Filter house	18478291.57	
6	Filter media	503357.65	
7	Back wash water tank	1551934.06	
8	Clear water channel	475425.79	
9	Clear water Sump , Pump house	7765420.52	
10	Con. of Transformer room	2768120.45	
11	Mechanical and Electrical works	9897055.84	
12	Construction of retaining wall near river side and compound wall	6565283.92	
13	General ground levelling and Road formation	2350206.18	
14	Installation of Fire Hydrant	49541.58	
15	Wash Water Arrangements to nearest safe drain/source after purification of wash water	317289.42	
16	Water supply and Sanitary Arrangements	571503.17	
17	Providing and setting up Laboratory	2516041.30	
18	Land Scaping, Gardening, Site levelling after construction	1113568.90	
19	External Yard Lighting	1360764.71	
20	Operation and Maintanance charges	1882949.25	
	Total Estimation PAC	68929422.84	
C Extra Charges			
C.001	Provision for GST		
	68929422.84	18.00%	12407296.11
	Grand Total		81336718.95
	Round off		63281.05
	Rounded Total(Rs)		81400000.00
	Rupees Eight Crore Fourteen Lakh		

Approved By

EST No. :WRD/KWA-CEP/EST/177/2022_5_4_3/RC 1 (Edit Id : 6)
(Dsor year : 2018, Cost Index (Place : Idukki, Value : 141.53), GST : 18%

Salim P K
(PEN:G12036), Chief Engineer



DETAILED ESTIMATE

Jal Jeevan Mission (JJM)-WSS to Arakkulam and Velliyamattom (part) panchayath-Part II-
Package III-Construction of 3.5 MLD water treatment plant and allied works at 12th mile.-
General Civil Work

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
1	Construction of Aerator						
1.001	2.31						
	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared						
	Clearing jungle						
	for land clearing	1.0000 0	45.000	37.000			1665.000
	Total						1665.000
	Total Quantity in sqm						1665.000
1.002	OD202402/2023-2024						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles						
	RCC M25 grade pile of 600mm Dia.	5.0000 0	8.500				42.500
	Total						42.500
	Total Quantity in metre						42.500
1.003	20.6.2.1						
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityInitial test						
	Vertical load testing of pile						
	Vertical load testing of pile	1.0000 0					1.000
	Total						1.000
	Total Quantity in per test						1.000
1.004	5.33.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work upto plinth level						
	Design mix M-25 , all work up to plinth level						
	pile cap	5.0000 0	0.900	0.900	0.800		3.240
	Pile connecting beam - ring	1.0000 0	3.14*3.2	0.300	0.450		1.356
	Total						4.596
	Total Quantity in cum						4.596
1.005	5.33.2						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level upto floor V level						
	Design mix M-25 , all work above plinth level						
	column	4.0000 0	0.300	0.300	4.450		1.602
	central column	1.0000 0	3.14*0.45	0.150	5.700		1.208
	brace beam	1.0000 0	3.14*3.2	0.300	0.450		1.356
	collection tray + drain bottom slab-slab	0.2500 0	3.140	(3.5*3.5-0.6*0.6)	0.200		1.867
	collection tray - side wall	1.0000 0	3.14*3.35	0.150	0.450		0.710
	Tray 1 side wall	1.0000 0	3.140*2.35	0.150	0.300		0.332
	Tray 1 slab	0.2500 0	3.140	(2.5*2.5)-(0.6*0.6)	0.150		0.694
	Tray 2 side wall	1.0000 0	3.140*1.75	0.150	0.150		0.124
	Tray 2 slab	0.2500 0	3.140	(1.9*1.9)-(0.6*0.6)	0.150		0.383

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Tray 3 side wall	1.0000 0	3.140*1.15	0.150	0.150		0.081
	Tray 3 slab	0.2500 0	3.140	(1.3*1.3)- (0.6*0.6)	0.150		0.157
	Tray 4 side wall	1.0000 0	3.140*0.55	0.150	0.150		0.039
	Tray 4 slab	0.2500 0	3.140	(0.7*0.7)- (0.6*0.6)	0.150		0.015
	Total						8.568
						Total Quantity in cum	8.568
1.006	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Extra for providing richer mixes						
	Qty same as item no.3&4	1.0000 0	4.596+8.568				13.164
	Total						13.164
						Total Quantity in cum	13.164
1.007	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	for pile cap	5.0000 0	3.600	0.800			14.400
	Total						14.400
						Total Quantity in sqm	14.400
1.008	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.						
	Centering and shuttering						
	Tray -1 side wall	2.0000 0	3.14*2.3500	0.450			6.641
	Tray -2 side wall	2.0000 0	3.14*1.75	0.150			1.649
	Tray -3 side wall	2.0000 0	3.14*1.15	0.150			1.083
	Tray -4 side wall	2.0000 0	3.14*0.55	0.150			0.518
	Collection tray - side wall	2.0000 0	3.14*3.35	0.450			9.467

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Central column (outer)	2.0000 0	3.14*0.45	5.700			16.108
	Total						35.466
						Total Quantity in sqm	35.466
1.009	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
	centering and shuttering						
	bottom of trays and collection channel	0.2500 0	3.140	3.5*3.5			9.616
	Side bottom of trays and collection channel	0.2500 0	3.140	3.500	0.200		0.550
	Side Tray 1 slab	1.0000 0	3.140	2.500	0.200		1.570
	Bottom of tray 1 slab	0.2500 0	3.140	2.5*2.5			4.906
	Side Tray 2 slab	1.0000 0	3.140	1.900	0.150		0.895
	Bottom of tray 2 slab	0.2500 0	3.140	1.9*1.9			2.834
	Side Tray 3 slab	1.0000 0	3.140	1.300	0.150		0.612
	Bottom of tray 3 slab	0.2500 0	3.140	1.3*1.3			1.327
	Side Tray 4 slab	1.0000 0	3.140	0.700	0.150		0.330
	Bottom of tray 4 slab	0.2500 0	3.140	0.7*0.7			0.385
	Total						23.025
						Total Quantity in sqm	23.025
1.010	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	centering and shuttering						
	plinth beam - ring	1.0000 0	3.14*2.87	1.200			10.814
	brace beam	1.0000 0	3.14*3.2	0.45+0.3 +0.45			12.058
	Total						22.872
						Total Quantity in sqm	22.872

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
1.011	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
	centering and shuttering						
	column	4.0000 0	1.200	4.450			21.360
	Total						21.360
	Total Quantity in sqm						21.360
1.012	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement for concrete						
	Steel reinforcement for concrete	1.0000 0	13.710			120.00 0000	1645.200
	Steel reinforcement for pile	5.0000 0	3.140	0.3*0.3	8.500	120.00 0000	1441.260
	Total						3086.460
	Total Quantity in kilogram						3086.460
1.013	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	Plastering 12mm thick 1:4 mix.						
	Tray including collection tray inside & outside	2.0000 0	3.14*(3.5 *3.5- 0.6*0.6)	1/4			18.667
	Tray including collection tray - side wall	2.0000 0	3.14*3.35	0.450			9.467
	Tray 1 - side wall	1.0000 0	3.14*2.5	0.450			3.533
	Tray 1 - slab top	0.2500 0	3.140	(2.5*2.5)- (0.6*0.6)			4.624
	Tray 2 - side wall	1.0000 0	3.14*1.90	0.300			1.790
	Tray 2 - slab top	0.2500 0	3.140	(1.9*1.9)- (0.6*0.6)			2.551
	Tray 3 - side wall	3.1400 0	1.300	0.300			1.225
	Tray 3 - slab top	0.2500 0	3.140	(1.3*1.3)- (0.6*0.6)			1.044

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Tray 4 - side wall	3.1400 0	0.700	0.300			0.659
	Tray 4 - slab top	0.2500 0	3.140	(0.7*0.7)- (0.6*0.6)			0.102
	column pipe	1.0000 0	3.14*0.6	5.700			10.739
	brace beam	1.0000 0	3.14*3.2	1.500			15.072
	column	4.0000 0	1.200		4.450		21.360
	Total						90.833
						Total Quantity in sqm	90.833
1.014	11.37						
	Providing and laying Ceramic glazed floor tiles of size 300x300 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 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.						
	Providing and laying ceramic floor tile						
	For collection tray- slab	1.0000 0	3.140	(3.2*3.2)- (2.5*2.5)		0.2500 00	3.132
	For collection tray side wall	1.0000 0	3.14*3.2	0.450			4.522
	For tray 1 slab	1.0000 0	3.140	(2.5*2.5)- (1.9*1.9)		0.2500 00	2.072
	Tray 1 - side	1.0000 0	3.14*2.5	0.450			3.533
	For tray 2 slab	1.0000 0	3.140	(1.9*1.9)- (1.3*1.3)		0.2500 00	1.507
	Tray 2 - side	1.0000 0	3.14*1.9	0.300			1.790
	For tray 3 slab	1.0000 0	3.140	(1.3*1.3)- (0.7*0.7)		0.2500 00	0.942
	Tray 3 - side	1.0000 0	3.14*1.3	0.300			1.225
	For tray 4 slab	1.0000 0	3.140	(0.7*0.7)- (0.6*0.6)		0.2500 00	0.102
	Tray 4 - side	1.0000 0	3.14*0.6	0.300			0.565
	Total						19.390
						Total Quantity in sqm	19.390
1.015	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Applying water thinnable primer						
	Bottom of Tray including collection tray	1.0000 0	3.14*3.5* 3.5	1/4			9.616
	Collection tray out side wall	1.0000 0	3.14*3.5	0.650			7.144
	column pipe	1.0000 0	3.14*0.6	4.900			9.232
	columns	4.0000 0	1.200	4.900			23.520
	Brace beam	1.0000 0	3.14*3.2	1.500			15.072
	Total						64.584
	Total Quantity in sqm						64.584
1.016	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Painting with acrylic emulsion paint						
	qnty same as item no.15	1.0000 0	64.584				64.584
	Total						64.584
	Total Quantity in sqm						64.584
2	Raw water channel						
2.001	OD202474/2023-2024						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles						
	600 mm dia. pile	5.0000 0	8.500				42.500
	Total						42.500
	Total Quantity in metre						42.500
2.002	5.33.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level						
	Providing and laying design mix M25						
	Pile cap	5.0000 0	0.900	0.900	0.800		3.240
	Pile connecting beam	1.0000 0	15.000	0.300	0.450		2.025
	Total						5.265
	Total Quantity in cum						5.265
2.003	5.33.2						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level						
	Providing and laying design mix M25						
	column	5.0000 0	0.300	0.300	5.200		2.340
	Tie beam & beam under slab	2.0000 0	15.000	0.300	0.450		4.050
	Cantiliver beam	5.0000 0	0.600	0.300	0.300		0.270
	bottom slab	1.0000 0	15.000	0.700	0.200		2.100
	Side wall	2.0000 0	15.000	0.150	0.400		1.800
	cover slab	30.0000 00	0.500	0.700	0.150		1.575
	Total						12.135
	Total Quantity in cum						12.135
2.004	5.34.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Providing and laying design mix M30						
	qnty same as item no.2 & 3	1.0000 0	5.265+12 .135				17.400
	Total						17.400
	Total Quantity in cum						17.400
2.005	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	Pile cap	5.0000 0	4*0.9		0.800		14.400
	plinth beam	1.0000 0	15.000	1.200			18.000
	Total						32.400
	Total Quantity in sqm						32.400
2.006	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, butresses, plinth and string courses etc.						
	centering and shuttering						
	side wall - out side	2.0000 0	15.000	0.600			18.000
	side wall - inside	2.0000 0	15.000	0.400			12.000
	Total						30.000
	Total Quantity in sqm						30.000
2.007	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform						
	centering and shuttering						
	Bottom slab	1.0000 0	15.000	0.700			10.500
	cover slab - sides	30.000 00	2.400	0.150			10.800
	Total						21.300
	Total Quantity in sqm						21.300
2.008	5.9.5						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	centering and shuttering						
	tie beam	1.0000 0	15.000	1.200			18.000
	cantilever beam	5.0000 0	0.600	0.900			2.700
	Total						20.700
	Total Quantity in sqm						20.700
2.009	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
	centering and shuttering						
	column	5.0000 0	1.200	5.200			31.200
	Total						31.200
	Total Quantity in sqm						31.200
2.010	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement for RCC works						
	concrete	1.0000 0	17.400			120.00 0000	2088.000
	Pile	5.0000 0	3.140	0.3*0.3	8.500	120.00 0000	1441.260
	Total						3529.260
	Total Quantity in kilogram						3529.260
2.011	20.6.2.1						
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityInitial test						
	Vertical load testing of piles						
	Vertical load testing of piles	1.0000 0					1.000
	Total						1.000
	Total Quantity in per test						1.000
2.012	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	12mm cement plaster of mix 1:4						
	column	5.0000 0	1.200	5.200			31.200
	Beam	1.0000 0	15.000	1.200			18.000
	Channel- inside slab and sidewall	1.0000 0	15.000	1.200			18.000
	Channel- out side slab and sidewall	1.0000 0	15.000	1.900			28.500
	cover slab -top	30.0000 00	0.500	1.000			15.000
	Total						110.700
	Total Quantity in sqm						110.700
2.013	22.23.1						
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For vertical surface two coats @0.70 kg per sqm</p>						
	Applying integral crystalline slurry						
	Inside wall	2.0000 0	15.000	0.400			12.000
	Total						12.000
	Total Quantity in sqm						12.000
2.014	22.23.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @ 1.10 kg per sqm.</p>						
	Applying integral crystalline slurry						
	bottom slab	1.0000 0	15.000	0.400			6.000
	Total						6.000
	Total Quantity in sqm						6.000
2.015	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer						
	Applying water thinnable cement primer						
	column	5.0000 0	1.200	5.200			31.200
	Beam	1.0000 0	15.000	1.200			18.000
	Channel out side	1.0000 0	15.000	1.900			28.500
	Channel cover slab top	30.0000 00	0.500	1.000			15.000
	Total						92.700
	Total Quantity in sqm						92.700
2.016	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
	Wall painting with acrylic emulsion paint						
	Qty same as item no.15	1.0000 0	92.700				92.700
	Total						92.700
	Total Quantity in sqm						92.700
2.017	10.26.3						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.G.I. pipes						
	Providing and fixing handrails						
	Providing and fixing handrails	1.0000 0	300.000				300.000
	Total						300.000
	Total Quantity in kg						300.000
3	Flash Mixer						
3.001	OD202488/2023-2024						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles						
	600 mm dia.pile	1.0000 0	8.500				8.500
	Total						8.500
	Total Quantity in metre						8.500
3.002	5.33.1						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level						
	Providing and laying design mix M-25						
	Pile cap - Frustum of circular shape	1.0000 0	3.140	(0.9*0.9) +(0.9*0.55) +(0.55*0.55)	0.4/3		0.673
	Pile cap - circular shape	1.0000 0	3.140	0.9*0.9	0.400		1.017
	Total						1.690
	Total Quantity in cum						1.690
3.003	5.33.2						


SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level						
	Providing and laying design mix M-25						
	Bottom slab	1.0000 0	3.140	0.95*0.95	0.200		0.567
	side wall	1.0000 0	3.140*1.5	0.200	2.800		2.638
	walk way	1.0000 0	3.140*2.5	0.800	0.150		0.942
	Total						4.147
	Total Quantity in cum						4.147
3.004	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Providing and laying design mix M-25						
	qnty same as item no.2 & 3	1.0000 0	1.69+4.1 47				5.837
	Total						5.837
	Total Quantity in cum						5.837
3.005	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	providing and laying PCC 1:2:4						
	PCC -inside flash mixer	1.0000 0	3.140	.65*.65	0.500		0.663
	Total						0.663
	Total Quantity in cum						0.663
3.006	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	Pile cap - Frustum of circular cone shape	1.0000 0	3.140*(0.55+0.9)		0.400		1.821	
	Pile cap - circular shape	1.0000 0	3.140*1.8		0.400		2.261	
	Total						4.082	
	Total Quantity in sqm							4.082
3.007	5.9.2							
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.							
	Centering and shuttering							
	Sidewall - inside	1.0000 0	3.140	1.300	2.800		11.430	
	Sidewall - out side	1.0000 0	3.140	1.700	2.800		14.946	
	Total						26.376	
	Total Quantity in sqm							26.376
3.008	5.9.3							
	Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform							
	Centering and shuttering							
	walk way bottom	1.0000 0	3.140	2.500	0.800		6.280	
	walk way side	1.0000 0	3.140	3.300	0.150		1.554	
	Total						7.834	
	Total Quantity in sqm							7.834
3.009	5.22.6							
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more							
	Steel reinforcement for RCC works							
	Reinforcement	1.0000 0	5.837			120.00 0000	700.440	
	for Pile(3.14*0.3*0.3*8.5)	1.0000 0	3.14*0.3*0.3*8.5			120.00 0000	288.252	
	Total						988.692	
	Total Quantity in kilogram							988.692
3.010	20.6.2.1							

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test						
	Vertical load testing of piles						
	Vertical load testing of piles	1.0000 0					1.000
	Total						1.000
	Total Quantity in per test						1.000
3.011	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	12mm Cement plastering 1:4 mix						
	Side wall - inside	1.0000 0	3.140	1.300	2.000		8.164
	Side wall - out side	1.0000 0	3.140	1.700	2.800		14.946
	Walkway - top& bottom	2.0000 0	3.140	2.500	0.800		12.560
	Walkway -side	1.0000 0	3.140	3.300	0.150		1.554
	Total						37.224
	Total Quantity in sqm						37.224
3.012	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	Applying water thinnable cement primer						
	Side wall - out side	1.0000 0	3.140	1.700	2.800		14.946
	Walk way - top and bottom	2.0000 0	3.140	2.500	0.800		12.560
	Walk way -side	1.0000 0	3.140	3.300	0.150		1.554
	Total						29.060
	Total Quantity in sqm						29.060
3.013	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Wall painting with acrylic emulsion paint						
	Qty same as Item no. 12	1.0000 0	29.060				29.060
	Total						29.060

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in sqm							29.060
3.014	22.23.1	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For vertical surface two coats @0.70 kg per sqm</p>					
Providing and applying integral crystalline slurry							
	Side wall inside	1.0000 0	3.140	1.300	2.000		8.164
Total							8.164
Total Quantity in sqm							8.164
3.015	22.23.2	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @1.10 kg per sqm.</p>					
Providing and applying integral crystalline slurry							
		1.0000 0	3.140	0.65*0.65			1.327
Total							1.327
Total Quantity in sqm							1.327
3.016	10.26.3						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.G.I. pipes						
	Providing and fixing hand rail						
	Walkway	1.0000 0	250.000				250.000
	Total						250.000
	Total Quantity in kg						250.000
4	Clariflocculator						
4.001	2.6.1						
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil						
	Earth work excavation						
	for levelling	1.0000 0	18.000	18.000	1.000		324.000
	Total						324.000
	Total Quantity in cum						324.000
4.002	OD203131/2023-2024						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles						
	600 mm dia. pile	26.000 00	8.500				221.000
	Total						221.000
	Total Quantity in metre						221.000
4.003	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	Providing PCC 1:2:4						
	PCC for levelling	0.2500 0	3.140	14.3*14.3	0.200		32.105
	Total						32.105
	Total Quantity in cum						32.105
4.004	5.33.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work upto plinth level						
	Providing RCC design mix M-25						
	Floor slab	0.2500 0	3.140	14.1*14.1	0.300		46.820
	Pile cap	13.0000 00	2.200	2.200	0.800		50.336
	Radial beam	8.0000 0	4.200	0.400	0.320		4.301
	Ring beam	1.0000 0	3.14*13.3	0.400	0.320		5.346
	Ring beam	1.0000 0	3.14*6.15	0.500	0.320		3.090
	Total						109.893
						Total Quantity in cum	109.893
4.005	5.33.2  Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level upto floor V level						
	Providing RCC design mix M-25						
	Side of pit	1.0000 0	3.14*1.10 0	0.300	0.700		0.725
	Side wall of clarifier	1.0000 0	3.140*13.3	0.300	3.600		45.103
	haunch	0.5000 0	3.140*13	0.500	0.700		7.144
	column for supporting flocculator side wall	6.0000 0	0.300	0.300	0.700		0.378
	Beam for supporting flocculator side wall	1.0000 0	3.14*6.15	0.300	0.400		2.317

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	flocculator side wall	1.0000 0	3.14*6.15	0.150	3.200		9.269
	Collecting channel	1.0000 0	3.14*12.4	0.600	0.200		4.672
	Collecting channel side wall	1.0000 0	3.14*11.8	0.150	0.610		3.390
	Central shaft	1.0000 0	3.14*.50	0.150	5.300		1.248
	cover slab of Central shaft	1.0000 0	3.140	.65*.65/4	0.150		0.050
	Walk way	1.0000 0	3.140*14. 3	0.700	0.150		4.715
	Total						79.011
						Total Quantity in cum	79.011
4.006	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Extra Providing RCC design mix M-30						
	qnty same as item no. 4&5	1.0000 0	109.893+ 79.011				188.904
	Total						188.904
						Total Quantity in cum	188.904
4.007	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	base slab sides	1.0000 0	3.14*14.3	0.200			8.980
	Floor slab side	1.0000 0	3.14*14.1	0.320			14.168
	Pile cap	13.000 00	4*2.2	0.800			91.520
	Total						114.668
						Total Quantity in sqm	114.668
4.008	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.						
	centering and shuttering						
	side of pit	1.0000 0	3.14*1.1	0.700			2.418

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Side wall of Clarifier- inside	1.0000 0	3.14*13	3.600			146.952
	Side wall of Clarifier- out side	1.0000 0	3.14*13.6	3.600			153.734
	column for supporting flocculator side wall	6.0000 0	4*.3	0.700			5.040
	Beamfor supporting flocculator side wall	1.0000 0	3.14*6.15	1.100			21.242
	flocculator side wall - in side	1.0000 0	3.14*6	3.200			60.288
	flocculator side wall - out side	3.1400 0	6.300	3.200			63.302
	collecting channel	1.0000 0	3.14*12.4	0.600			23.362
	collecting channel side wall	2.0000 0	3.14*11.8 00	0.610			45.203
	central shaft	2.0000 0	3.14*.5	5.300			16.642
	cover slab of central shaft	3.1400 0	.65*.65	1/4			0.332
	Walk way	1.0000 0	3.14*14.0 00	0.700			30.772
	Walk way - side	1.0000 0	1.34*14.7	0.150			2.955
	Total						572.242
						Total Quantity in sqm	572.242
4.009	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement						
	Steel reinforcement	1.0000 0	188.904			120.00 0000	22668.48 0
	for pile	26.000 00	3.14*0.3* 0.3*8.5			120.00 0000	7494.552
	Total						30163.03 2
						Total Quantity in kilogram	30163.03 2
4.010	20.6.2.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test						
	Vertical load testing of piles						
	Vertical load testing of piles	1.0000 0					1.000
	Total						1.000
	Total Quantity in per test						1.000
4.011	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	Cement plastering 1:4, 12mm thick						
	Floor slab inside	1.0000 0	3.14*13* 13	1/4			132.665
	Side of pit	1.0000 0	3.14*1.1	0.700			2.418
	Side wall of Clarifier- inside	1.0000 0	3.14*13	3.600			146.952
	Side wall of Clarifier-out side	1.0000 0	3.14*13.6	3.600			153.734
	column for supporting flocculator side wall	6.0000 0	4*.3	0.700			5.040
	Beamfor supporting flocculator side wall	1.0000 0	3.14*6.15	1.100			21.242
	flocculator side wall - in side	1.0000 0	3.14*6	3.200			60.288
	flocculator side wall - out side	1.0000 0	3.14*6.3	3.200			63.302
	collecting channel top& bottom	2.0000 0	3.14*12.4	0.600			46.723
	collecting channel side wall	2.0000 0	3.14*11.3 00	0.610			43.288
	central shaft	1.0000 0	3.14*.65	5.300			10.817
	cover slab of central shaft	1.0000 0	3.14*.65* .65	1/4			0.332
	Walkway	2.0000 0	3.14*14.3	0.700			62.863

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Walkway- side	1.0000 0	3.14*15	0.150			7.065
	Total						756.729
						Total Quantity in sqm	756.729
4.012	22.23.1						
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For vertical surface two coats @0.70 kg per sqm</p>						
	Applying integral crystalline slurry						
	Side wall of Clarifier- inside	1.0000 0	3.14*13		3.600		146.952
	flocculator side wall - in side	1.0000 0	3.14*6		3.200		60.288
	flocculator side wall - out side	1.0000 0	3.14*6.30 0		3.200		63.302
	Beam supporting column	6.0000 0	1.200		0.700		5.040
	Beam supporting flocculator wall	1.0000 0	6.150		1.100		6.765
	collecting channel side wall	2.0000 0	3.14*11.8 00		0.610		45.203
	central shaft	1.0000 0	3.14*0.65		5.300		10.817
	Total						338.367
						Total Quantity in sqm	338.367
4.013	22.23.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @ 1.10 kg per sqm.						
	Applying integral crystalline slurry						
	base slab	1.0000 0	3.14*13* 13	1/4			132.665
	collecting channel top & bottom	2.0000 0	3.14*12.4	0.600			46.723
	Total						179.388
						Total Quantity in sqm	179.388
4.014	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer						
	Applying water thinnable cement primer						
	Side wall of Clarifier- inside	1.0000 0	3.14*13	3.600			146.952
	Side wall of Clarifier-out side	1.0000 0	3.14*13.6	3.600			153.734
	column for supporting flocculator side wall	6.0000 0	4*.3	0.700			5.040
	Beamfor supporting flocculator side wall	1.0000 0	3.14*6.15	1.100			21.242
	flocculator side wall	2.0000 0	3.14*6.15	3.120			120.501
	collecting channel top & bottom	2.0000 0	3.14*12.4	0.600			46.723
	collecting channel side wall	2.0000 0	3.14*11.8 00	0.410			30.383

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	central shaft	1.0000 0	3.14*.65	5.300			10.817
	central shaft - cover slab	3.1400 0	.65*.65	1/4			0.332
	Walk way	2.0000 0	3.14*14	0.700			61.544
	Walk way- side	1.0000 0	3.14*14.7 00	0.150			6.924
	Total						604.192
						Total Quantity in sqm	604.192
4.015	13.83.2						
	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile including applying additional coats wherever required to achieve even shade and colour.Two coats						
	Wall painting with acrylic emulsion paint						
	Side wall of Clarifier-out side	1.0000 0	3.14*13.6	3.600			153.734
	central shaft - cover slab	3.1400 0	.65*.65	1/4			0.332
	Walk way	2.0000 0	3.14*14.3	0.700			62.863
	Walk way side	1.0000 0	3.14*15	0.150			7.065
	Total						223.994
						Total Quantity in sqm	223.994
4.016	10.26.3						
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.G.I. pipes						
	Providing hand rails						
	walkway	1000.0 0000					1000.000
	Total						1000.000
						Total Quantity in kg	1000.000
4.017	100.1.1						
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil.						
	Excavating trenches for pipe laying						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	for 250mm DI pipe	1.0000 0	40.000	0.900	1.200		43.200	
	Total						43.200	
	Total Quantity in cum							43.200
4.018	100.14.4							
	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials: 250mm diameter Ductile Iron Class K-9 Pipes.							
	laying of 250mm DI K9							
	250mm DI K9	1.0000 0	40.000				40.000	
	Total						40.000	
	Total Quantity in metre							40.000
4.019	100.98.118							
	Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.							
	Supply 250mm DI K9							
	250mm DI K9	1.0000 0	40.000				40.000	
	Total						40.000	
	Total Quantity in metre							40.000
4.020	100.98.462							
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 250mm.							
	Supply of CI D/F sluice valve 250mm dia							
	for Clariflocculator scour	1.0000 0					1.000	
	for raw water channel scour	1.0000 0					1.000	
	Total						2.000	
	Total Quantity in no							2.000
4.021	100.31.1.6							
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 250mm diameter, Class I.							
	fixing CI sluice valve							
	fixing CI sluice valve	2.0000 0					2.000	
	Total						2.000	
	Total Quantity in no							2.000
4.022	18.68.1							

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upt 600 mm dia						
	Providing and laying DI specials						
	250mm wall casing pipe	2.0000 0				0.8500 00	1.700
	250mm - 90 degree bend	4.0000 0				0.4800 00	1.920
	250mm - 45 degree bend	2.0000 0				0.3600 00	0.720
	250mm - 22.5 degree bend	2.0000 0				0.3200 00	0.640
	250mm - 11.25 degree bend	2.0000 0				0.3000 00	0.600
	250 x 250 mm tee	2.0000 0				0.5700 00	1.140
	Total						6.720
	Total Quantity in quintal						6.720
4.023	18.70.4						
	Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:250 mm dia pipes						
	Providing push on joints						
	250mm pipe	15.000 00					15.000
	Total						15.000
	Total Quantity in joint						15.000
4.024	OD190335/2023-2024						
	Labour for cutting C I/ D I pipe with steel saw. 250mm dia. D I pipe						
	Labour for cutting 250 mm DI pipe						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in Each Cut						4.000
4.025	18.30.6						
	Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:250 mm diameter pipe						
	Providing flanged joints						
	250mm DI pipe	4.0000 0					4.000
	Total						4.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in no							4.000
4.026	100.36.1	Filling water with 5000 litre tankers fitted in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set , hire for tanker lorry, tools and other appliances and cost of water etc. complete.					
	Filling water with 5000 litre tankers fitted in lorry						
		3.1400 0	6.5*6.5	3.400			451.061
Total							451.061
Total Quantity in Kilo litre							451.061
4.027	50.2.25.1	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge					
	Filling with contractor's own earth						
		1.0000 0	84.780				84.780
Total							84.780
Total Quantity in cum							84.780
5	Filter house						
5.001	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil					
	Earth work excavation						
	for filter bed	1.0000 0	13.000	10.000	0.800		104.000
Total							104.000
Total Quantity in cum							104.000
5.002	OD203132/2023-2024						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles						
	600 mm dia. pile	45.000 00	8.500				382.500

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						382.500
						Total Quantity in metre	382.500
5.003	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	Providing PCC 1:2:4						
	levelling filter bed	1.0000 0	11.700	9.000	0.150		15.795
	filling gullet	3.0000 0	3.500	0.750	1.050		8.269
	porch	1.0000 0	8.400	3.300	0.150		4.158
	Lobby	1.0000 0	7.330	3.850	0.150		4.233
	stair room	1.0000 0	4.080	3.580	0.150		2.191
	Chlorine room	1.0000 0	3.950	7.330	0.150		4.343
	Chemical room	1.0000 0	12.720	3.580	0.150		6.831
	Blower	1.0000 0	3.830	3.550	0.150		2.039
	wash & toilet	2.0000 0	3.180	1.690	0.150		1.612
	Provision for unforeseen quantity	2.0000 0					2.000
	Total						51.471
						Total Quantity in cum	51.471
5.004	5.33.1						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work upto plinth level						
	Providing design mix M25						
	pile cap - 600mm dia pile	16.0000 00	2.200	2.200	0.800		61.952

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	pile cap - 600mm dia pile	13.0000	0.900	0.900	0.800		8.424
	Beam under filter bed	1.0000	4.600	0.450	0.600		1.242
	Beam under filter bed	2.0000	6.300	0.400	0.200		1.008
	Beam under filter bed	2.0000	3.950	0.450	0.600		2.133
	Beam under filter bed	2.0000	4.350	0.450	0.600		2.349
	Filter house plinth beam	2.0000	5.550	0.300	0.450		1.499
	Filter house plinth beam	2.0000	9.350	0.300	0.450		2.525
	Filter house Plinth beam	3.0000	1.300	0.300	0.450		0.527
	Filter house plinth beam	1.0000	3.600	0.300	0.450		0.486
	Filter house plinth beam	2.0000	2.050	0.300	0.450		0.554
	Filter house plinth beam	1.0000	1.930	0.300	0.450		0.261
	Filter bed -floor	1.0000	11.500	4.950	0.250		14.231
	clear water channel in pipe gallery bottom slab	1.0000	11.500	0.900	0.200		2.070
	clear water channel side wall	2.0000	11.500	0.150	1.000		3.450
	clear water channel cover slab	1.0000	11.500	0.900	0.150		1.553
	Manifauld side wall	6.0000	3.500	0.200	0.500		2.100
	Total						106.364
						Total Quantity in cum	106.364
5.005	5.33.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level upto floor V level						
	Providing design mix M25						
	column ground floor(C1)	14.000 00	0.600	0.450	3.300		12.474
	column ground floor(C1)	12.000 00	0.600	0.450	4.000		12.960
	column ground floor(C3)	5.0000 0	0.300	0.300	3.300		1.485
	GF roof beam	2.0000 0	18.550	0.300	0.450		5.009
	GF roof beam	2.0000 0	22.200	0.300	0.450		5.994
	GF roof beam	6.0000 0	10.300	0.300	0.450		8.343
	GF roof beam	1.0000 0	3.430	0.300	0.450		0.463
	GF roof beam	1.0000 0	7.800	0.300	0.450		1.053
	GF roof beam	3.0000 0	3.300	0.300	0.450		1.337
	GF LINTEL	1.0000 0	94.270	0.200	0.150		2.828
	Sunshade	1.0000 0	53.500	0.600	0.100		3.210
	GF Roof slab	1.0000 0	21.550	12.100	0.150		39.113
	GF Roof slab	1.0000 0	4.050	4.630	0.150		2.813
	GF Roof slab-porch	1.0000 0	9.600	3.300	0.150		4.752
	Deduction roof slab in filter room	- 3.0000 0	2.200	1.350	0.150		-1.337
	Deduction roof slab in filter room	- 1.0000 0	8.650	1.700	0.150		-2.206
	Stair case to alum lime tank	24.000 00	1.000	0.300	0.150		1.080

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Stair case landing	2.0000 0	1.000	1.000	0.150		0.300
	Stair case slab	1.0000 0	4.470	1.000	0.100		0.447
	Stair case slab	1.0000 0	4.020	1.000	0.100		0.402
	Main Stair case steps	22.000 00	1.200	0.300	0.150	0.5000 00	0.594
	Main Stair case landing	2.0000 0	1.200	1.200	0.150		0.432
	Main Stair case slab	1.0000 0	3.500	1.200	0.100		0.420
	Main Stair case slab	1.0000 0	2.300	1.200	0.100		0.276
	Main Stair case slab	1.0000 0	1.700	1.200	0.100		0.204
	FF column	20.000 00	0.450	0.300	3.000		8.100
	FF column	4.0000 0	0.450	0.300	3.000		1.620
	FF roof beam	5.0000 0	10.300	0.300	0.450		6.953
	FF roof beam	4.0000 0	14.700	0.300	0.450		7.938
	FF roof beam	1.0000 0	4.350	0.300	0.450		0.587
	FF roof beam	1.0000 0	3.300	0.300	0.450		0.446
	Alum , lime tank slab	1.0000 0	4.500	2.500	0.200		2.250
	Alum , lime tank side wall	2.0000 0	4.500	0.150	1.300		1.755
	Alum , lime tank side wall	5.0000 0	1.500	0.150	1.300		1.463
	Alum , lime tank partitian wall	1.0000 0	4.500	0.150	0.500		0.338
	Alum , lime room - landing	1.0000 0	4.830	0.900	0.150		0.652
	Lintel	1.0000 0	87.500	0.200	0.150		2.625
	Sunshade	1.0000 0	65.800	0.600	0.100		3.948
	FF roof slab	1.0000 0	17.500	12.100	0.150		31.763

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF roof slab	1.0000 0	4.950	3.600	0.150		2.673
	Main stair case steps	22.000 00	1.200	0.300	0.150	0.5000 00	0.594
	Main stair case landing	2.0000 0	1.200	1.200	0.100		0.288
	Main stair case slab	1.0000 0	3.500	1.200	0.100		0.420
	Main stair case slab	1.0000 0	2.300	1.200	0.100		0.276
	Main stair case slab	1.0000 0	1.700	1.200	0.100		0.204
	SF column (C2)	8.0000 0	0.300	0.450	3.000		3.240
	SF column (C3)	4.0000 0	0.300	0.300	3.000		1.080
	Second floor-roof beam	2.0000 0	10.300	0.300	0.450		2.781
	Second floor-roof beam	4.0000 0	3.400	0.300	0.450		1.836
	Second floor-roof beam	1.0000 0	6.430	0.300	0.450		0.868
	Second floor-roof beam	1.0000 0	2.600	0.300	0.450		0.351
	Second floor-roof beam	3.0000 0	3.530	0.300	0.450		1.430
	Second F - lintel	1.0000 0	35.340	0.200	0.150		1.060
	Second floor - Sunshade	1.0000 0	48.700	0.600	0.100		2.922
	Second floor - roof slab	1.0000 0	7.930	5.030	0.150		5.983
	floor of Back wash tank	1.0000 0	12.100	4.900	0.100		5.929
	Stair case to B/W tank steps	15.000 00	0.900	0.300	0.200	0.5000 00	0.405
	Stair case to B/W tank landing	1.0000 0	0.900	0.900	0.150		0.122
	Stair case to B/W tank slab	1.0000 0	5.400	0.900	0.100		0.486
	Provision for unforeseen quantity	5.0000 0					5.000
	Total						210.832
						Total Quantity in cum	210.832

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
5.006	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Providing design mix M30						
	Qty same as item No. 4 & 5	1.0000 0	106.364+ 210.832				317.196
	Total						317.196
	Total Quantity in cum						317.196
5.007	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	levelling concrete	2.0000 0	11.7+9	0.150			6.210
	pile cap 600 mm pile	16.0000 00	4*2.2	0.800			112.640
	pile cap 600 mm pile	13.0000 00	4*0.9	0.800			37.440
	Total						156.290
	Total Quantity in sqm						156.290
5.008	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.						
	Centering and shuttering						
	Side wall of bed including pipe gallery	2.0000 0	61.500	4.020			494.460
	gullet wall	2.0000 0	11.100	4.020			89.244
	C/W channel in pipe gallery side wall - inside	2.0000 0	17.500	0.800			28.000
	C/W channel in pipe gallery side wall - out side	2.0000 0	17.500	1.000			35.000
	Manifauld side wall	6.0000 0	3.500	0.500			10.500
	wash water trough -in sideside wall	12.0000 00	3.500	0.350			14.700

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	wash water trough -out sideside wall	12.000 00	3.500	0.500			21.000
	Alum lime tank side wall - inside	4.0000 0	4.500	1.300			23.400
	Alum lime tank side wall - inside	10.000 00	1.500	1.300			19.500
	Alum , lime tank partitian wall	2.0000 0	4.500	0.500			4.500
	Total						740.304
						Total Quantity in sqm	740.304
5.009	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
	Centering and shuttering						
	C/W channel cover slab	1.0000 0	17.500	0.900			15.750
	C/W channel cover slab- side	2.0000 0	17.5+9	0.150			5.520
	Roof slab of GF	1.0000 0	21.550	12.100			260.755
	Roof slab of GF	1.0000 0	4.050	4.630			18.752
	Roof slab of GF	1.0000 0	9.600	3.300			31.680
	Roof slab side of GF	1.0000 0	82.000	0.150			12.300
	Main Stair case - landing	4.0000 0	1.200	1.200			5.760
	Main Stair case - slab	2.0000 0	3.500	1.200			8.400
	Main Stair case - slab	2.0000 0	2.300	1.200			5.520
	Main Stair case - slab	2.0000 0	1.700	1.200			4.080
	Stair case to back wash water tank-landing	1.0000 0	0.900	0.900			0.810
	Stair case to back wash water tank-slab	1.0000 0	5.400	0.900			4.860
	Alum lime tank - landing	1.0000 0	4.830	0.900			4.347
	Stair alum lime tank landing	2.0000 0	1.000	1.000			2.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Stair case to alum lime tank	1.0000 0	4.470	1.000			4.470
	Stair case to alum lime tank	1.0000 0	4.020	1.000			4.020
	FF Roof slab	1.0000 0	17.500	12.100			211.750
	FF Roof slab	1.0000 0	4.950	3.600			17.820
	FF Roof slab side	1.0000 0	65.800	0.150			9.870
	SF - roof slab	1.0000 0	7.930	5.030			39.888
	SF - roof slab and back wsh tank roof slab	2.0000 0	12.100	4.900			118.580
	Stair case to Wash water tank	1.0000 0	5.400	0.900			4.860
	Stair case to Wash water tank	1.0000 0	0.900	0.900			0.810
	Total						792.602
						Total Quantity in sqm	792.602
5.010	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	Centering and shuttering						
	beam under filter bed	4.0000 0	11.500	1.650			75.900
	beam under filter bed	4.0000 0	8.800	1.650			58.080
	GF plinth beam	4.0000 0	12.600	1.200			60.480
	GF plinth beam	3.0000 0	11.500	1.200			41.400
	GF plinth beam	3.0000 0	3.300	1.200			11.880
	GF plinth beam	1.0000 0	8.400	1.200			10.080
	GF plinth beam	1.0000 0	4.050	1.200			4.860
	GF plinth beam	1.0000 0	4.030	1.200			4.836
	GF Lintel	2.0000 0	94.270	0.150			28.281

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	GF sunshade	1.0000 0	53.500	0.700			37.450
	GF roof beam	2.0000 0	20.950	1.200			50.280
	GF roof beam	2.0000 0	25.000	1.200			60.000
	GF roof beam	6.0000 0	11.500	1.200			82.800
	GF roof beam	1.0000 0	4.030	1.200			4.836
	GF roof beam	1.0000 0	8.400	1.200			10.080
	GF roof beam	3.0000 0	3.300	1.200			11.880
	FF- Lintel	2.0000 0	87.500	0.150			26.250
	FF sunshade	1.0000 0	65.800	0.700			46.060
	FF roof beam	5.0000 0	11.500	1.200			69.000
	FF roof beam	4.0000 0	16.900	1.200			81.120
	FF roof beam	1.0000 0	4.350	1.200			5.220
	FF roof beam	1.0000 0	3.300	1.200			3.960
	SF lintel	2.0000 0	35.340	0.150			10.602
	SF sunshade	1.0000 0	48.700	0.700			34.090
	SF roof beam	2.0000 0	11.500	1.200			27.600
	SF roof beam	3.0000 0	4.350	1.200			15.660
	SF roof beam	1.0000 0	7.330	1.200			8.796
	SF roof beam	1.0000 0	3.300	1.200			3.960
	Total						885.441
						Total Quantity in sqm	885.441
5.011	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
	Centering and shuttering						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Column up to filter roof slab	12.000 00	1.600	4.020			77.184
	Column under trough	6.0000 0	1.200	2.170			15.624
	Column GF to FF floor	12.000 00	1.600	4.000			76.800
	Column GF to FF floor	2.0000 0	1.600	3.300			10.560
	Column GF to FF floor	5.0000 0	1.200	3.300			19.800
	Column FF floor to SF roof	20.000 00	1.500	3.000			90.000
	Column FF floor to SF roof	4.0000 0	1.200	3.000			14.400
	Column SF floor	10.000 00	1.500	3.000			45.000
	Column SF floor	4.0000 0	1.200	3.000			14.400
	Total						363.768
						Total Quantity in sqm	363.768
5.012	5.9.7						
	Centering and shuttering including strutting, etc. and removal of form for:Stairs, (excluding landings) except spiral - staircases)						
	Centering and shuttering						
	Stair case to alum lime tank - steps	24.000 00	1.000	0.150			3.600
	Stair case slab side	1.0000 0	4.470	0.100			0.447
	Stair case slab side	1.0000 0	4.020	0.100			0.402
	Stair case landing slab side	2.0000 0	1.000	0.100			0.200
	Main Stair case steps GF	44.000 00	1.200	0.150			7.920
	Main Stair case landing slab side	4.0000 0	1.200	0.100			0.480
	Main Stair case - slab side	2.0000 0	3.500	0.100			0.700
	Main Stair case - slab side	2.0000 0	2.300	0.100			0.460
	Main Stair case - slab	2.0000 0	1.700	0.100			0.340
	Stair case to B/W tank steps	15.000 00	0.900	0.200			2.700

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	Stair case to B/W tank landing slab side	1.0000 0	0.900	0.100			0.090	
	Stair case to B/W tank slab side	1.0000 0	5.400	0.100			0.540	
	Total						17.879	
	Total Quantity in sqm							17.879
5.013	5.22.6							
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more							
	Steel reinforcement							
	Qty same as item no.6	1.0000 0	317.196			120.00 0000	38063.52 0	
	Pile -600mm dia	45.000 00	3.14*.3*. 3*8.5			120.00 0000	12971.34 0	
	Total						51034.86 0	
	Total Quantity in kilogram							51034.86 0
5.014	22.23.1							
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For vertical surface two coats @0.70 kg per sqm							
	Providing Crystalline slurry for water proofing treatment							
	filter bed - side wall	2.0000 0	11.100			3.000	66.600	
	filter bed - side wall	3.0000 0	3.500			3.000	31.500	
	filter bed - gullet wall	2.0000 0	11.100			2.700	59.940	
	WW trough - side wall	24.000 00	3.500			0.350	29.400	

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Manifauld - side wall	6.0000 0	3.500		0.500		10.500
	Clear water channel in pipe gallery side wall	2.0000 0	17.500		1.000		35.000
	Total						232.940
						Total Quantity in sqm	232.940
5.015	22.23.2						
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @ 1.10 kg per sqm.</p>						
	Providing Crystalline slurry for water proofing treatment						
	Floor slab of filter bed including pipe gallery	1.0000 0	11.500	8.800			101.200
	WW trough slab	6.0000 0	3.500	0.400			8.400
	Clear water channel in pipe gallery	1.0000 0	17.500	0.600			10.500
	Total						120.100
						Total Quantity in sqm	120.100
5.016	20.6.2.1						
	<p>Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test</p>						
	Vertical load testing of pile						
	Vertical load testing of pile	1.0000 0					1.000
	Total						1.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in per test							1.000
5.017	50.6.1.2						
	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.						
	Solid block masonry						
	Ground floor	1.0000 0	82.580	0.200	4.000		66.064
	Parapet wall	1.0000 0	34.530	0.200	0.750		5.180
	First floor	1.0000 0	87.500	0.200	3.000		52.500
	Parapet wall	1.0000 0	44.150	0.200	0.750		6.623
	Second floor	1.0000 0	35.340	0.200	3.000		21.204
	Parapet wall	1.0000 0	18.900	0.200	0.750		2.835
	Deduction - Lintel GF	- 1.0000 0	94.270	0.200	0.150		-2.828
	Deduction - Lintel FF	- 1.0000 0	87.500	0.200	0.150		-2.625
	Deduction - Lintel SF	- 1.0000 0	35.340	0.200	0.150		-1.060
	Deduction - Rolling shutter	- 2.0000 0	3.000	0.200	2.800		-3.360
	Deduction - Rolling shutter	- 1.0000 0	2.000	0.200	2.100		-0.840
	Deduction - Jalli work	- 2.0000 0	3.000	0.200	1.800		-2.160
	Deduction - Opening	- 1.0000 0	1.200	0.200	2.100		-0.504
	Deduction -Door	- 5.0000 0	0.800	0.200	2.100		-1.680
	Deduction -Door	- 7.0000 0	1.000	0.200	2.100		-2.940

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Deduction - Door& window	3.0000 0	2.000	0.200	2.100		-2.520
	Deduction - window	19.0000 00	1.500	0.200	1.400		-7.980
	Deduction - ventilator	5.0000 0	1.500	0.200	1.400		-2.100
	Deduction columnwidth	42.0000 00	0.600	0.200	4.000		-20.160
	Total						103.649
						Total Quantity in cum	103.649
5.018	5.18.2						
	Providing precast cement concrete jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.40 mm thick						
	Providing jali work						
	jali work	2.0000 0	3.000	1.800			10.800
	Total						10.800
						Total Quantity in sqm	10.800
5.019	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	Cement plastering 12mm thick 1:4						
	column - filter bed	12.0000 00	2.100		4.020		101.304
	column - under trough	6.0000 0	1.200		2.170		15.624
	column - GF	5.0000 0	1.200		3.300		19.800
	column - FF	20.0000 00	1.500		3.000		90.000
	column - FF	4.0000 0	1.200		3.000		14.400
	GF - out side wall	1.0000 0	64.600		4.000		258.400
	GF - out side wall	1.0000 0	8.400		3.300		27.720
	GF -wall - lobby	1.0000 0	22.360		3.300		73.788

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	GF -wall - lobby	1.0000 0	15.320		3.300		50.556
	GF -wall -blower	1.0000 0	14.760		3.300		48.708
	GF -wall - Chlorine room	1.0000 0	22.560		4.000		90.240
	GF -wall - Chemical room	1.0000 0	32.580		4.000		130.320
	GF -wall -Toilet & wash	2.0000 0	9.740		4.000		77.920
	filter bed floor slab	1.0000 0	11.500	8.800			101.200
	Clear water channel bottom	1.0000 0	17.500	0.600			10.500
	Clear water channel side	4.0000 0	17.500	1.000			70.000
	filter bed including pipe gallery -side wall	4.0000 0	11.500	4.020			184.920
	filter bed including pipe gallery -side wall	2.0000 0	8.800	4.020			70.752
	filter bed including pipe gallery -side wall	4.0000 0	4.450	2.700			48.060
	gullet wall	2.0000 0	11.500	2.700			62.100
	W/W trough- slab	6.0000 0	3.500	0.400			8.400
	W/W trough- side wall	12.0000 00	3.500	0.500			21.000
	GF - roof beam	2.0000 0	3.930	1.200			9.432
	GF - roof beam	4.0000 0	3.830	1.200			18.384
	GF - roof beam	1.0000 0	4.030	1.200			4.836
	GF - roof beam	1.0000 0	8.400	1.200			10.080
	GF - roof beam	3.0000 0	3.300	1.200			11.880
	GF - Sunshade	2.0000 0	53.500	0.650			69.550
	parapet wall	2.0000 0	34.530	0.800			55.248

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	GF - ceiling	1.0000 0	25.000	4.630			115.750
	GF - ceiling	1.0000 0	21.550	7.480			161.194
	Deduct-top of filter bed	- 1.0000 0	8.750	1.800			-15.750
	Deduct top of filter bed	- 3.0000 0	2.200	1.280			-8.448
	GF - porch ceiling	1.0000 0	9.000	3.300			29.700
	GF - open terrace	1.0000 0	12.100	4.470			54.087
	GF - open terrace	1.0000 0	4.050	4.630			18.752
	FF - column	2.0000 0	1.500	3.000			9.000
	FF - wall - out side	1.0000 0	63.400	3.000			190.200
	FF - wall -filter & pipe gallery	1.0000 0	38.760	3.000			116.280
	FF - wall -stair room	1.0000 0	14.860	3.000			44.580
	FF - wall -office	1.0000 0	14.860	3.000			44.580
	FF - wall -lab	1.0000 0	22.620	3.000			67.860
	FF - wall - alum lime tank	4.0000 0	4.800	3.000			57.600
	FF - wall - alum lime room	1.0000 0	16.800	3.000			50.400
	FF - wall - toilet	1.0000 0	9.780	3.000			29.340
	FF - roof beam	2.0000 0	8.480	1.200			20.352
	FF - roof beam	1.0000 0	11.500	1.200			13.800
	FF - roof beam	1.0000 0	4.350	1.200			5.220
	FF - roof beam	1.0000 0	3.300	1.200			3.960
	FF - sunshade	2.0000 0	65.800	0.700			92.120
	FF - roof ceiling	1.0000 0	17.500	12.100			211.750

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF - roof ceiling	1.0000 0	4.950	3.600			17.820
	Parapet wall	2.0000 0	44.150	0.800			70.640
	SF - column	2.0000 0	1.200	3.000			7.200
	SF - wall - out side	1.0000 0	40.300	3.000			120.900
	SF - wall - stair room	1.0000 0	14.860	3.000			44.580
	SF - wall - room	1.0000 0	22.220	3.000			66.660
	SF - wall - dress & toilet	2.0000 0	10.940	3.000			65.640
	SF - roof beam	2.0000 0	11.500	1.200			27.600
	SF - roof beam	3.0000 0	4.350	1.200			15.660
	SF - roof beam	1.0000 0	7.330	1.200			8.796
	SF - roof beam	1.0000 0	3.330	1.200			3.996
	SF - sunshade	2.0000 0	48.700	0.800			77.920
	SF - roof ceiling	1.0000 0	12.100	4.900			59.290
	SF - roof ceiling	1.0000 0	7.980	4.180			33.356
	parapet wall	1.0000 0	18.900	0.800			15.120
	deduction - Rolling shutter	- 2.0000 0	3.000	2.800			-16.800
	deduction - Rolling shutter	- 1.0000 0	2.000	2.100			-4.200
	deduction - Jalli work	- 2.0000 0	3.000	1.800			-10.800
	deduction - opening	- 1.0000 0	1.200	2.100			-2.520
	deduction - Door& window	- 3.0000 0	2.000	2.100			-12.600

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	deduction - Door	7.0000 0	1.000	2.100			-14.700
	deduction - Door	5.0000 0	0.800	2.100			-8.400
	deduction - window	19.0000 00	1.500	1.400			-39.900
	deduction - ventilators	5.0000 0	1.500	0.600			-4.500
	Total						3588.207
						Total Quantity in sqm	3588.207
5.020	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	Applying one coat of cement primer						
	Qty same as item no.19	1.0000 0	3588.207				3588.207
	Total						3588.207
						Total Quantity in sqm	3588.207
5.021	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Wall painting with acrylic emulsion paint						
	Qty same as item no.22	1.0000 0	3588.207				3588.207
	Total						3588.207
						Total Quantity in sqm	3588.207
5.022	10.6.1						
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover						
	Supplying and fixing rolling shutter						
	Supplying and fixing rolling shutter	2.0000 0	3.000	2.800			16.800

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing rolling shutter	1.0000 0	2.000	2.100			4.200
	Total						21.000
						Total Quantity in sqm	21.000
5.023	13.48.3						
	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture						
	Steel painting						
	Rolling shutter	2.0000 0	3.000	2.500		2.4000 00	36.000
	Rolling shutter	1.0000 0	2.000	2.100		2.4000 00	10.080
	Total						46.080
						Total Quantity in sqm	46.080
5.024	21.1.1.3						
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)						
	providing Aluminium door and windows						
	Door & window-vertical	18.0000 00	2.100			0.5800 00	21.924
	Door & window-horizontal	6.0000 0	2.000			0.5800 00	6.960
	Door - vertical	14.0000 00	2.100			0.5800 00	17.052
	Door - horizontal	14.0000 00	1.000			0.5800 00	8.120
	Door - vertical	10.0000 00	2.100			0.5800 00	12.180
	Door - horizontal	10.0000 00	0.800			0.5800 00	4.640
	window- vertical	76.0000 00	1.400			0.5800 00	61.712

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	window- horizontal	38.000 00	1.500			0.5800 00	33.060
	Ventilator - vertical	15.000 00	0.600			0.5800 00	5.220
	Ventilator- horizontal	10.000 00	1.000			0.5800 00	5.800
	Total						176.668
						Total Quantity in kg	176.668
5.025	21.3.1						
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 4.0 mm thickness						
	Providing glazing aluminium door & window shutter						
	Door & window	3.0000 0	1.000	2.100			6.300
	Door & window	6.0000 0	0.500	2.100			6.300
	Door	7.0000 0	1.000	2.100			14.700
	Door	5.0000 0	0.800	2.100			8.400
	Windows	57.000 00	0.500	1.400			39.900
	Ventilator	10.000 00	0.500	0.600			3.000
	Total						78.600
						Total Quantity in sqm	78.600
5.026	21.17						
	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS : 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P brass/stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge.(Only weight of grill to be measured for payment).						
	Providing Aluminium grill						
	Door & Windows	90.000 00	0.500			0.2500 00	11.250
	Windows	190.00 000	1.500			0.2500 00	71.250

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Ventilator	20.000 00	1.000			0.2500 00	5.000
	Total						87.500
						Total Quantity in kg	87.500
5.027	11.41.4						
	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.Size of Tile 1000x1000 mm						
	Laying vitrified floor tiles						
	G.F. Lobby	1.0000 0	4.050	7.530			30.497
	G.F. Lobby	1.0000 0	4.280	3.780			16.178
	Blower	1.0000 0	4.030	3.750			15.113
	Filter slab	1.0000 0	11.300	8.480			95.824
	Filter slab deduction	1.0000 0	8.750	1.800			-15.750
	Filter slab deduction	3.0000 0	2.200	1.280			-8.448
	Main Stair case - steps	22.000 00	1.300	0.300			8.580
	Main Stair case - steps	23.000 00	1.300	0.150			4.485
	Main Stair case - landing	2.0000 0	1.300	1.300			3.380
	Main Stair case - side	1.0000 0	3.500	0.250			0.875
	Main Stair case - side	1.0000 0	2.300	0.250			0.575
	Main Stair case - side	1.0000 0	1.700	0.250			0.425
	FF -stair room	1.0000 0	7.830	1.500			11.745
	FF -Balcony	1.0000 0	4.550	3.500			15.925
	FF -Office	1.0000 0	4.050	5.640			22.842
	FF -lab	1.0000 0	4.180	7.530			31.475

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF -Alum lime tank landing	1.0000 0	4.030	1.100			4.433
	FF -Alum lime steps landing	2.0000 0	1.100	1.100			2.420
	FF -Alum lime steps	24.000 00	1.100	0.500			13.200
	FF -Alum lime slab side	1.0000 0	4.470	0.250			1.118
	FF -Alum lime slab side	1.0000 0	4.020	0.250			1.005
	FF -Main stair case- steps	22.000 00	1.300	0.500			14.300
	FF -Main stair case- landing	2.0000 0	1.300	1.300			3.380
	FF -Main stair case-side	1.0000 0	3.500	0.250			0.875
	FF -Main stair case-side	1.0000 0	2.300	0.250			0.575
	FF -Main stair case-side	1.0000 0	1.700	0.250			0.425
	SF -stair room	1.0000 0	4.050	1.500			6.075
	SF -balcony	1.0000 0	4.350	3.400			14.790
	SF -Room	1.0000 0	3.980	7.530			29.969
	SF -dress	1.0000 0	3.400	1.890			6.426
	Total						332.712
						Total Quantity in sqm	332.712
5.028	11.39						
	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make in colours White, Ivory, Grey, fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 Coarse sand), including grouting the joints with white cement and matching pigments etc., complete.						
	Laying glazed ceramic floor tiles						
	GF. wash& toilet	2.0000 0	3.200	1.690			10.816
	FF. Toilet	1.0000 0	3.200	1.690			5.408
	SF. Toilet	1.0000 0	3.780	1.690			6.388
	Total						22.612

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in sqm							22.612
5.029	11.36	Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.					
Laying ceramic glazed wall tiles							
	Alum lime tank - side wall	8.0000 0	1.400	1.300			14.560
	Alum lime tank - side wall	2.0000 0	4.500	1.500			13.500
	W/W trough	6.0000 0	3.500	0.400			8.400
	W/W trough side wall	24.000 00	3.500	0.600			50.400
	Filter - side walls	6.0000 0	3.500	3.000			63.000
	Gullet wall	2.0000 0	11.000	2.700			59.400
	GF. Toilet & wash	2.0000 0	9.780	3.000			58.680
	FF. Toilet	1.0000 0	9.780	3.000			29.340
	SF. Toilet	1.0000 0	10.940	3.000			32.820
Total							330.100
Total Quantity in sqm							330.100
5.030	16.89	Providing and laying matt finished vitrified tile of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi models location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.					
Laying mat finished vitrified tiles							
	Porch	1.0000 0	8.400	3.300			27.720
Total							27.720
Total Quantity in sqm							27.720
5.031	11.26.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1:4 (1 cement : 4 coarse sand)25 mm thick						
	Kota stone slab flooring						
	Chemical room	1.0000 0	12.920	3.770			48.708
	chlorine room	1.0000 0	4.150	7.530			31.250
	Total						79.958
	Total Quantity in sqm						79.958
5.032	10.26.2						
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.E.R.W. tubes						
	Providing and fixing hand rails with E.R.W. tubes for hand rails of filter house, staircase and balcony.						
	40mm dia.	1.0000 0	150.000			3.2500 00	487.500
	15mm dia.	1.0000 0	500.000			0.9520 00	476.000
	Total						963.500
	Total Quantity in kg						963.500
5.033	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Lettering						
	Lettering	300.00 000				15.000	4500.000
	Total						4500.000
	Total Quantity in per Letter per cm height						4500.000
5.034	9.117.1						
	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ±1 mm), with wall thickness 2.0mm (±0.2 mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 x 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-chargeExtruded section profile size 48x40 mm						
	Frame						
		2.0000 0	6.000				12.000
	Total						12.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in metre							12.000
5.035	9.118.2	<p>Providing and fixing to existing door frames 30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (\pm 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (\pm 0.1 mm) wall thickness. The lock rail made up of Φ 39;HΦ 39; section, a uPVC hollow section of size 100x30 mm and 2 mm (\pm 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. Φ 39;UΦ 39; cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (\pm 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.</p>					
	uPVC Door						
		2.0000 0	0.800		2.100		3.360
	Total						3.360
Total Quantity in sqm							3.360
6	Filter media	e-PLATFORM FOR THE MANAGEMENT					
6.001	100.55.1	<p>Supplying of 2 to 6 mm and 6 to 12 mm size fine pebble (pebbles shall be hard, clean, free from clay, dust and other impurities), stacking in standard heaps for measurement including cost, conveyance up to 5 km and labour charges for stacking, spreading, testing and as per the directions of the department officers etc. complete as per CPHEEO specifications.</p>					
	Supplying, stacking and spreading fine pebbles						
	Fine pebbles	3.0000 0	3.500	3.500	0.200		7.350
	Total						7.350
Total Quantity in cum							7.350
6.002	100.55.2	<p>Supplying of 12 to 20mm size pebble (pebbles shall be hard, clean, free from clay, dust and other impurities), stacking in standard heaps for measurement including cost, conveyance up to 5km and labour charges for stacking, spreading, testing and as per the directions of the department officers etc complete and as per CPHEEO specification.</p>					
	Supplying, stacking and spreading 12 to 20mm size pebbles						
	12 to 20mm size pebbles	3.0000 0	3.500	3.500	0.200		7.350
	Total						7.350

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in cum							7.350
6.003	100.55.3	Supplying of 20 to 40 mm pebble (pebbles shall be hard, clean, free from clay, dust and other impurities), stacking in standard heaps for measurement including cost, conveyance up to 5 km and labour charges for stacking, spreading, testing and as per directions of the department officers etc. complete and as per CPHEEO specification.					
Supplying,stacking and spreading 20 to 40mm size pebbles							
	20 to 40mm size pebbles	3.0000 0	3.500	3.500	0.250		9.188
Total							9.188
Total Quantity in cum							9.188
6.004	100.55.4	Supplying and stacking for measurement of filter sand having effective size 0.45 to 0.70 mm and uniformity coefficient 1.30 to 1.7, of specific gravity in the range of 2.55 - 2.65 and hard and clean, free from clay, dust and other impurities including cost of materials, labour charges and conveyance of materials up to 5 km and as per the directions of the department officers etc. complete and as per CPHEEO specification.					
Supplying,stacking and spreading filter sand							
	filter sand	3.0000 0	3.500	3.500	0.750		27.563
Total							27.563
Total Quantity in cum							27.563
7	Back wash water tank						
7.001	5.33.2	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level					
Providing and laying Design mix -M25 cement concrete							
	Side wall	1.0000 0	31.300	0.250	2.650		20.736
	Haunch	1.0000 0	29.300	0.300	0.700		6.153
	Cover slab	1.0000 0	12.100	4.750	0.150		8.621
	Deduct Column width	- 8.0000 0	0.300	0.250	2.650		-1.590

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Column	8.0000 0	0.300	0.300	3.000		2.160
	Beams	4.0000 0	3.550	0.300	0.350		1.491
	Beams	2.0000 0	10.300	0.300	0.350		2.163
	Deduct MH	- 2.0000 0	0.600	0.600	0.150		-0.108
	Total						39.626
						Total Quantity in cum	39.626
7.002	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Providing richer mix-M 30 grade						
	Quantity as per item No.1	1.0000 0	39.626				39.626
	Total						39.626
						Total Quantity in cum	39.626
7.003	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel Reinforcement						
		1.0000 0	39.626			120.00 0000	4755.120
	Total						4755.120
						Total Quantity in kilogram	4755.120
7.004	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.						
	Centering and shuttering						
	Side wall out side	1.0000 0	31.300		3.000		93.900
	Side wall inside	1.0000 0	28.900		3.000		86.700
	haunch	1.0000 0	28.900		0.700		20.230
	Total						200.830
						Total Quantity in sqm	200.830

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
7.005	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
	Centering and shuttering						
	Cover slab	1.0000 0	12.100	4.750			57.475
	Cover slab - sides	1.0000 0	33.700	0.150			5.055
	Total						62.530
	Total Quantity in sqm						62.530
7.006	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
	Centering and shuttering						
	column	8.0000 0	3.000	1.200			28.800
	Total						28.800
	Total Quantity in sqm						28.800
7.007	5.9.21						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders, bressumers and cantilevers with water proof ply 12 mm thick.						
	Centering & shuttering						
	Beams	4.0000 0	3.650		1.000		14.600
	Beams	2.0000 0	10.300		1.000		20.600
	Total						35.200
	Total Quantity in sqm						35.200
7.008	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	Plastering 1:4						
	Side wall out side	1.0000 0	31.300		3.000		93.900
	Side wall inside	1.0000 0	28.900		3.000		86.700
	Haunch	1.0000 0	28.900		0.350		10.115
	Cover slab	1.0000 0	12.100	4.750			57.475
	Cover slab-sides	1.0000 0	33.700		0.150		5.055

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Beams	4.0000 0	3.650	1.000			14.600
	Total						267.845
						Total Quantity in sqm	267.845
7.009	22.23.1	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineerin-charge. The product performance shall carry guarantee for 10 years against any leakage.For vertical surface two coats @0.70 kg per sqm</p>					
	Providing and appying waterproofing						
	Side wall	1.0000 0	28.900		3.000		86.700
	Total						86.700
						Total Quantity in sqm	86.700
7.010	22.23.2	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineerin-charge. The product performance shall carry guarantee for 10 years against any leakage.For horizontal surface one coat @1.10 kg per sqm.</p>					
	Providing and appying waterproofing						
	Floor slab	1.0000 0	10.900	3.650			39.785
	Total						39.785
						Total Quantity in sqm	39.785

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
7.011	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	Applying cement primer						
	Side wall out side	1.0000 0	31.300			3.000	93.900
	Cover slab	1.0000 0	12.100	4.750			57.475
	Cover slab-sides	1.0000 0	33.700			0.150	5.055
	Total						156.430
							Total Quantity in sqm 156.430
7.012	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Wall painting with acrylic emulsion						
	Quantity as per item No11.	1.0000 0	156.430				156.430
	Total						156.430
							Total Quantity in sqm 156.430
7.013	10.25.2						
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works						
	Steel work						
	For Ladder	2.0000 0				50.000 000	100.000
	For hand rail	1.0000 0				150.00 0000	150.000
	Total						250.000
							Total Quantity in kg 250.000
7.014	100.98.460						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 150mm.						
	Supply 150mm valve						
	Supply 150mm valve	1.0000 0					1.000
	Total						1.000
							Total Quantity in no 1.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
7.015	18.66.1						
	Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:Upto 300 mm dia						
	Providing DI specials						
	100 mm dia. wall casting pipe	2.0000 0				0.2800 00	0.560
	150 mm dia. wall casting pipe	2.0000 0				0.4500 00	0.900
	250 mm dia. wall casting pipe	1.0000 0				0.8500 00	0.850
	Total						2.310
	Total Quantity in quintal						2.310
7.016	100.98.458						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 100mm.						
	Supply of 100mm DI sluice valve						
	100mm DI sluice valve	2.0000 0					2.000
	Total						2.000
	Total Quantity in no						2.000
7.017	100.31.1.4						
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 150mm diameter, Class I.						
	fixing 150mm valve						
	fixing 150mm valve	1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
7.018	100.31.1.2						
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 100mm diameter, Class I.						
	Laying of 100mm DI sluice valve						
	Laying of 100mm DI sluice valve	2.0000 0					2.000
	Total						2.000
	Total Quantity in no						2.000
7.019	100.36.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Filling water with 5000 litre tankers fitted in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set , hire for tanker lorry, tools and other appliances and cost of water etc. complete.						
	Filling water						
	Wash water tank	1.0000 0	100.000				100.000
	Total						100.000
	Total Quantity in Kilo litre						100.000
7.020	100.41.33						
	Supplying and fixing 500mm dia C.I. manhole cover with frame (medium duty) charges including all cost, labour charges etc., complete.						
	Supplying and fixing 500 mm dia CI MH cover						
	Man hole cover	2.0000 0					2.000
	Total						2.000
	Total Quantity in no						2.000
7.021	OD190332/2023-2024						
	Supplying and providing water level indicator to the tank using scale fabricated out of 2mm thick MS plate with in the frame work of suitable size MS square tube, 160mm PVC pipe for guiding the float, necessary pullies, suitable nylon thread for connecting float and level indicator, painting the entire structure, lettering etc complete including all charges for material and labour						
	Supplying and providing WL indicator						
	Water level indicator	1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
7.022	OD190333/2023-2024						
	Supply and Fitting 100 mm CI Vent cowl						
	Supplying and fitting Vent cowl-100mm						
	Vent cowl-100mm	4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
8	Clear water channel						
8.001	2.8.1						
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Earth work for foundation						
	Channel	1.0000 0	35.000	1.000	1.500		52.500
	Total						52.500
	Total Quantity in cum						52.500
8.002	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	Providing CC 1:2:4						
	CC 1:2:4	1.0000 0	35.000	1.000	0.200		7.000
	Total						7.000
	Total Quantity in cum						7.000
8.003	5.33.1						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level						
	Providing design mix-M25						
	Floor slab	1.0000 0	35.000	0.800	0.150		4.200
	Side wall	2.0000 0	35.000	0.150	0.500		5.250
	Cover slab	1.0000 0	35.000	0.800	0.150		4.200
	Total						13.650
	Total Quantity in cum						13.650
8.004	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Providing richer mix						
	Quantity as per item No 3	1.0000 0	13.650				13.650
	Total						13.650
	Total Quantity in cum						13.650

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
8.005	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Form work						
	Side wall -inside	2.0000 0	35.000			0.500	35.000
	Side wall - outside	2.0000 0	35.000			0.700	49.000
	Cover slab-sides	70.000 00	2.600			0.200	36.400
	Total						120.400
	Total Quantity in sqm						120.400
8.006	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel Reinforcement						
		1.0000 0	13.650			120.00 0000	1638.000
	Total						1638.000
	Total Quantity in kilogram						1638.000
8.007	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	Plastering 1:4						
	Side wall Inside	2.0000 0	35.000			0.500	35.000
	bottom slab	1.0000 0	35.000	0.500			17.500
	Cover slab top	1.0000 0	35.000	0.800			28.000
	Total						80.500
	Total Quantity in sqm						80.500
8.008	22.23.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For vertical surface two coats @0.70 kg per sqm</p>						
	Water proofing Treatment						
	Side wall inside	2.0000 0	35.000		0.500		35.000
	Total						35.000
	Total Quantity in sqm						35.000
8.009	22.23.2						
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @1.10 kg per sqm.</p>						
	Water proofing Treatment						
	Floor slab	1.0000 0	35.000	0.500			17.500
	Total						17.500
	Total Quantity in sqm						17.500
9	Clear water Sump , Pump house						
9.001	2.6.1						
	<p>Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil</p>						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	EW excavation for foundation						
	For Sump	1.0000 0	11.500	11.500	1.500		198.375
	Total						198.375
	Total Quantity in cum						198.375
9.002	OD190326/2023-2024						
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift from 1.5m to 3.0m, disposed earth to be levelled and neatly dressed. All kinds of soil						
	Additional Earth work in excavation by mechanical means						
	for sump	1.0000 0	11.500	11.500	1.500		198.375
	Total						198.375
	Total Quantity in cum						198.375
9.003	OD190327/2023-2024						
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift from 3.0m to 4.5m, disposed earth to be levelled and neatly dressed. All kinds of soil.						
	Additional Earth work in excavation by mechanical means						
	for sump	1.0000 0	11.500	11.500	1.500		198.375
	Total						198.375
	Total Quantity in cum						198.375
9.004	100.7.1						
	Bailing out water with 5HP engine and pump set including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with 5HP						
	Bailing out water with 5HP	10.000 00	60*10			0.7460 00	4476.000
	Total						4476.000
	Total Quantity in Kwh						4476.000
9.005	100.7.2						
	Bailing out water with engine and pump set above 5HP up to 10HP including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with 10HP						
	Bailing out water with 10HP	20.000 00	60*10			0.7460 00	8952.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						8952.000
						Total Quantity in Kwh	8952.000
9.006	OD203286/2023-2024						
	Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing driving and installing driven cast in situ RCC piles-600mm						
		16.000 00	8.500				136.000
	Total						136.000
						Total Quantity in metre	136.000
9.007	20.6.2.1						
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test						
	Vertical load testing of pile						
	Vertical load testing of pile	1.0000 0					1.000
	Total						1.000
						Total Quantity in per test	1.000
9.008	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	CC 1:2:4 for levelling						
	for levelling	1.0000 0	10.300	10.300	0.150		15.914
	Total						15.914
						Total Quantity in cum	15.914
9.009	5.33.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade						
	Floor slab	1.0000 0	10.100	10.100	0.250		25.503
	Pile cap	16.0000 00	0.900	0.900	0.800		10.368
	Pile connecting beam	8.0000 0	6.800	0.300	0.450		7.344
	Floor slab	1.0000 0	10.100	10.100	0.250		25.503
	side wall	1.0000 0	33.200	0.250	3.600		29.880
	Haunch	0.5000 0	36.000	0.300	0.700		3.780
	Vertical Haunch	4.0000 0	0.500	0.500	3.600		3.600
	columns	16.0000 00	0.300	0.300	3.850		5.544
	roof beams	8.0000 0	6.800	0.300	0.250		4.080
	cover slab	1.0000 0	10.100	10.100	0.150		15.302
	Total						130.904
						Total Quantity in cum	130.904
9.010	5.33.2						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Pump house- Lintel	1.0000 0	36.800	0.200	0.150		1.104
	columns	16.000 00	0.300	0.300	3.700		5.328
	Roof beams	8.0000 0	6.800	0.300	0.300		4.896
	Corbel	8.0000 0	0.500	0.300	0.300		0.360
	Sunshade	1.0000 0	40.400	0.600	0.100		2.424
	Roof slab	1.0000 0	10.100	10.100	0.150		15.302
	Total						29.414
						Total Quantity in cum	29.414
9.011	5.34.1						
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).						
	Extra for providing richer mixes at all floor levels.						
	Floor slab	1.0000 0	10.100	10.100	0.250		25.503
	side wall	1.0000 0	33.200	0.250	3.600		29.880
	Haunch	0.5000 0	36.000	0.300	0.700		3.780
	columns	16.000 00	0.300	0.300	3.850		5.544
	roof beams	8.0000 0	6.800	0.300	0.250		4.080
	cover slab	1.0000 0	10.100	10.100	0.150		15.302
	Total						84.089
						Total Quantity in cum	84.089
9.012	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	PCC Levelling	1.0000 0	41.200		0.150		6.180
	Bottom slab	1.0000 0	40.400		0.300		12.120

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	Pile cap	16.000 00	3.600		0.800		46.080	
	Total						64.380	
	Total Quantity in sqm							64.380
9.013	5.9.2							
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.							
	Centering and shuttering							
	Side wall inside	1.0000 0	36.000		3.600		129.600	
	Side wall outside	1.0000 0	38.000		3.600		136.800	
	Haunch	1.0000 0	36.000		0.700		25.200	
	Total						291.600	
	Total Quantity in sqm							291.600
9.014	5.9.6							
	Centering and shuttering including strutting, etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts							
	Centering and shuttering							
	Sump -Columns	16.000 00	1.200		3.850		73.920	
	Pump house - Columns	16.000 00	1.200		4.000		76.800	
	Total						150.720	
	Total Quantity in sqm							150.720
9.015	5.9.3							
	Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform							
	Centering and shuttering							
	floor slab	1.0000 0	10.100	10.100			102.010	
	floor slab - sides	1.0000 0	40.400		0.200		8.080	
	Roof slab - sides	1.0000 0	10.100	10.100			102.010	
	Roof slab - sides	1.0000 0	40.400		0.150		6.060	
	Sunshade	1.0000 0	40.400	0.600			24.240	
	Sunshade - sides	1.0000 0	40.400		0.100		4.040	

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						246.440
						Total Quantity in sqm	246.440
9.016	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for: Lintels, beams, plinth beams, girders bressumers and cantilevers						
	Centering and shuttering						
	Sump roof beam	8.0000 0	6.800	0.800			43.520
	Pump house lintel	2.0000 0	37.200	0.150			11.160
	Pump house Roof beam	8.0000 0	6.800	0.900			48.960
	Pile connecting beam	8.0000 0	6.800		0.900		48.960
	Corbel	8.0000 0	1.100		0.300		2.640
	Total						155.240
						Total Quantity in sqm	155.240
9.017	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Reinforcement						
	Qty same as item no. 9&10	1.0000 0	130.904+ 29.414			120.00 0000	19238.16 0
	600 mm pile	16.000 00	2.402			120.00 0000	4611.840
	Total						23850.00 0
						Total Quantity in kilogram	23850.00 0
9.018	50.6.1.2						
	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.						
	Solid block masonry size 40x20x20						
	For pump house wall	1.0000 0	36.800	0.200	3.700		27.232
	For pump house parapet wall	1.0000 0	36.800	0.200	0.750		5.520

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	Deduction- Rolling shutter	1.0000 0	3.000	0.200	2.500		-1.500	
	Lintel	1.0000 0	36.800	0.200	0.150		1.104	
	Deduction- Windows	9.0000 0	1.500	0.200	1.400		-3.780	
	Deduct Column portion	16.0000 00	0.300	0.300	4.000		-5.760	
	Total						22.816	
	Total Quantity in cum							22.816
9.019	13.1.1							
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)							
	12mm thick Plastering							
	sump bottom slab	1.0000 0	9.000	9.000			81.000	
	Haunch	1.0000 0	36.000		0.700		25.200	
	Side wall - inside	1.0000 0	36.000		3.600		129.600	
	Side wall - outside	1.0000 0	38.000		3.850		146.300	
	Column	16.0000 00	1.200		3.600		69.120	
	Sump roof beam	8.0000 0	9.500	0.800			60.800	
	Floor slab of PH	1.0000 0	9.100	9.100			82.810	
	Corbel	8.0000 0	1.100		0.300		2.640	
	PH wall inside	1.0000 0	36.400		3.700		134.680	
	PH wall outside	1.0000 0	38.000		4.000		152.000	
	PH column	16.0000 00	1.200		3.700		71.040	
	PH roof slab top and ceiling	1.0000 0	10.100	10.100			102.010	
	Roof slab side	1.0000 0	40.400	0.150			6.060	
	PH roof beam	8.0000 0	9.500	0.900			68.400	

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Sunshade	2.0000 0	40.400	0.600			48.480
	Sunshade-side	1.0000 0	40.400	0.100			4.040
	Parapet wall	2.0000 0	40.400	0.800			64.640
	Deduction- window	- 9.0000 0	1.500	1.400			-18.900
	Deduction- Rolling shutter	- 1.0000 0	3.000	2.500			-7.500
	Deduction- Ventilator	- 11.0000 00	1.000	0.600			-6.600
	Total						1215.820
						Total Quantity in sqm	1215.820
9.020	22.23.1						
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.For vertical surface two coats @0.70 kg per sqm</p>						
	<p>Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures</p>						
	side wall	1.0000 0	36.000			3.850	138.600
	Haunch	1.0000 0	36.000			0.700	25.200
	column	4.0000 0	1.200			4.000	19.200
	Total						183.000
						Total Quantity in sqm	183.000
9.021	22.23.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @ 1.10 kg per sqm.						
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures						
	floor slab	1.0000 0	9.000	9.000			81.000
	Total						81.000
	Total Quantity in sqm						81.000
9.022	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer						
	Applying one coat cement primer						
	Quantity same as item no 19	1.0000 0	1215.820				1215.820
	Deduction sump inside	- 1.0000 0	129.600				-129.600
	Deduction sump floor	- 1.0000 0	81.000				-81.000
	Deduction sump haunch	- 1.0000 0	25.200				-25.200
	Deduction sump column	- 1.0000 0	69.120				-69.120
	Total						910.900
	Total Quantity in sqm						910.900
9.023	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
	Wall painting with acrylic emulsion paint						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Qty same as item no. 22	1.0000 0	910.900				910.900
	Total						910.900
						Total Quantity in sqm	910.900
9.024	10.6.1						
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover						
	fixing rolling shutter						
	fixing rolling shutter	1.0000 0	3.000	2.500			7.500
	Total						7.500
						Total Quantity in sqm	7.500
9.025	13.48.3						
	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture						
	Painting with deluxe multi surface paint						
	rolling shutter	1.0000 0	3.000	2.500		2.4000 00	18.000
	Total						18.000
						Total Quantity in sqm	18.000
9.026	21.1.1.3						
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)						
	Aluminium works for windows						
	Windows - V	36.000 00	1.400			0.5800 00	29.232

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Windows - H	18.000 00	1.500			0.5800 00	15.660
	Ventilator - V	33.000 00	0.600			0.5800 00	11.484
	Ventilator - H	22.000 00	1.000			0.5800 00	12.760
	Total						69.136
						Total Quantity in kg	69.136
9.027	21.3.1						
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 4.0 mm thickness						
	Fixing window shutter						
	window shutter	27.000 00	0.500	1.400			18.900
	Ventilator shutter	22.000 00	0.300	0.600			3.960
	Total						22.860
						Total Quantity in sqm	22.860
9.028	21.17						
	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS : 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P brass/stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge.(Only weight of grill to be measured for payment).						
	Fixing aluminium grill						
	Windows	9.0000 0	1.500	1.400		0.2500 00	4.725
	Ventilators	11.000 00	1.000	0.600		0.2500 00	1.650
	Total						6.375
						Total Quantity in kg	6.375
9.029	10.25.2						
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Steel work						
	Ladder	1.0000 0				100.00 0000	100.000
	Total						100.000
	Total Quantity in kg						100.000
9.030	100.36.1						
	Filling water with 5000 litre tankers fitted in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set , hire for tanker lorry, tools and other appliances and cost of water etc. complete.						
	Filling water						
	Filling water	1.0000 0	270.000				270.000
	Total						270.000
	Total Quantity in Kilo litre						270.000
9.031	18.66.1						
	Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:UPto 300 mm dia						
	providing wall casting pipe						
	250mm wall casting pipe	1.0000 0				0.8400 00	0.840
	Total						0.840
	Total Quantity in quintal						0.840
9.032	100.41.33						
	Supplying and fixing 500mm dia C.I. manhole cover with frame (medium duty) charges including all cost, labour charges etc., complete.						
	Man hole cover						
	Man hole cover	4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
9.033	OD190329/2023-2024						
	Supplying and providing water level indicator to the tank using scale fabricated out of 2mm thick MS plate with in the frame work of suitable size MS square tube, 160mm PVC pipe for guiding the float, necessary pullies, suitable nylon thread for connecting float and level indicator, painting the entire structure, lettering etc complete including all charges for material and labour						
	fixing water level indicator						
	fixing water level indicator	1.0000 0					1.000
	Total						1.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in no						1.000
9.034	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Lettering						
	Lettering	100.00 000				15.000 000	1500.000
	Total						1500.000
	Total Quantity in per Letter per cm height						1500.000
9.035	10.1						
	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.						
	Structural steel work						
		1.0000 0	750.000				750.000
	Total						750.000
	Total Quantity in kilogram						750.000
9.036	OD190330/2023-2024						
	Supply , delivery and fixing of 5 T or suitable capacity Electrically and manually working on single girder with overhead travelling trolley and clear lift as per site conditions for lifting the chemicals, Chlorine, pumps etc.. and fitting as required, supplied with one set of crane slings with GI D shackle and clamps etc. complete as per the instruction of the Engineer in charge.
						
	Supply delivery and fixing of 5T Crain and trolley						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
10	Con. of Transformer room						
10.00 1	2.6.1						
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil						
	Earth work in excavation by mechanical means						
	For levelling	1.0000 0	12.000	8.000	0.500		48.000
	Total						48.000
	Total Quantity in cum						48.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
10.00 2	OD203319/2023-2024 Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):600 mm dia piles						
	Providing,driving & installing-600mm dia Pile	12.000 00	8.500				102.000
	Total						102.000
						Total Quantity in metre	102.000
10.00 3	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:						
	Flooring	1.0000 0	10.000	7.000	0.150		10.500
	Total						10.500
						Total Quantity in cum	10.500
10.00 4	5.33.1 Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level						
	Providing and laying Design mix -M25 cement concrete						
	Pile connecting beam	9.0000 0	2.460	0.300	0.450		2.989
	Pile connecting beam	8.0000 0	2.650	0.300	0.450		2.862
	Pile cap	12.000 00	0.900	0.900	0.800		7.776
	Total						13.627
						Total Quantity in cum	13.627
10.00 5	5.33.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level upto floor V level						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix,						
	Column	12.000 00	0.300	0.300	4.000		4.320
	Beams	9.0000 0	3.050	0.300	0.450		3.706
	Beams	8.0000 0	3.250	0.300	0.450		3.510
	Lintel	1.0000 0	34.800	0.200	0.150		1.044
	Roof slab	1.0000 0	10.700	7.700	0.120		9.887
	Sunshade	1.0000 0	38.000	0.600	0.100		2.280
	Total						24.747
	Total Quantity in cum						24.747
10.00 6	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	columns	12.000 00	1.200		4.000		57.600
	Pile cap	12.000 00	3.600		0.800		34.560
	Total						92.160
	Total Quantity in sqm						92.160
10.00 7	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform						
	Centering and shuttering for roof slab, sunshade						
	Roof slab	1.0000 0	10.700	7.700			82.390

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Roof slab-projection	1.0000 0	36.800		0.120		4.416
	Sunshade	1.0000 0	36.800	0.600			22.080
	Total						108.886
						Total Quantity in sqm	108.886
10.00 8	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for: Lintels, beams, plinth beams, girders bressumers and cantilevers						
	Centering and shuttering including strutting, etc. and removal of form for: Lintels, beams, plinth beams, girders bressumers and cantilever						
	Pile connecting Beam	9.0000 0	3.367-0.9		1.200		26.644
	Pile connecting Beam	8.0000 0	3.55-0.9		1.200		25.440
	Beams	9.0000 0	3.370		1.200		36.396
	Beams	8.0000 0	3.550		1.200		34.080
	Lintel	2.0000 0	34.800		0.150		10.440
	Total						133.000
						Total Quantity in sqm	133.000
10.00 9	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level						
	RCC	1.0000 0	13.627+2 4.747			120.00 0000	4604.880
	Pile	12.000 00	3.14*0.3* 0.3*8.5			120.00 0000	3459.024
	Total						8063.904
						Total Quantity in kilogram	8063.904
10.01 0	50.6.1.2						
	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.						
	Solid block masonry using pre cast solid blocks						
	Walls	1.0000 0	34.800	0.200	4.000		27.840

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Parapet	1.0000 0	36.800	0.200	0.750		5.520
	Deduction- Windows	- 9.0000 0	1.400	0.200	1.500		-3.780
	Rolling shutter	- 1.0000 0	3.000	0.200	2.500		-1.500
	Lintel	- 1.0000 0	34.800	0.200	0.150		-1.044
	Column width	- 10.0000 00	0.300	0.200	3.750		-2.250
	Total						24.786
						Total Quantity in cum	24.786
10.01 1	20.6.2.1 Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test						
	vertical load testing						
		1.0000 0					1.000
	Total						1.000
						Total Quantity in per test	1.000
10.01 2	13.1.1 12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	12 mm cement plaster of mix						
	Beams	9.0000 0	3.050	1.200			32.940
	Beams	8.0000 0	3.250	1.200			31.200
	Column	2.0000 0	1.200		4.000		9.600
	Roof slab	1.0000 0	10.700	7.700			82.390
	Roof slab- Projection	1.0000 0	36.800		0.270		9.936
	Sunshade	2.0000 0	36.800	0.700			51.520
	Walls -inside	1.0000 0	34.000		4.000		136.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Walls-outside	1.0000 0	35.600		4.000		142.400
	Parapet	1.0000 0	36.200		1.600		57.920
	Over flooring&ceiling	2.0000 0	10.000	7.000			140.000
	Rolling shutter	- 1.0000 0	3.000		2.500		-7.500
	Window	- 9.0000 0	1.400		1.500		-18.900
	Total						667.506
						Total Quantity in sqm	667.506
10.01 3	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer						
	Quantity same as item no:12	1.0000 0	667.506				667.506
	Deduction-Flooring	- 1.0000 0	70.000				-70.000
	Total						597.506
						Total Quantity in sqm	597.506
10.01 4	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
	Quantity same as item no:13	1.0000 0	597.506				597.506
	Total						597.506
						Total Quantity in sqm	597.506
10.01 5	10.6.1						
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing rolling shutters						
		1.0000 0	3.000		2.500		7.500
	Total						7.500
	Total Quantity in sqm						7.500
10.01 6	21.3.1 Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of special primer applied @ 0.75 ltr /10 sqm						
	Painting with deluxe multi surface paint						
	Rolling shutter	1.0000 0	3.000	2.500		2.4000 00	18.000
	Total						18.000
	Total Quantity in sqm						18.000
10.01 7	21.1.1.3 Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portionPolyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)						
	Fixing aluminium windows						
	Windows -H	18.000 00	1.500			0.5800 00	15.660
	Windows -V	36.000 00	1.400			0.5800 00	29.232
	Total						44.892
	Total Quantity in kg						44.892
10.01 8	21.3.1 Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 4.0 mm thickness						
	Providing window shutters						
	Providing window shutters	9.0000 0	1.500	1.400			18.900
	Total						18.900

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in sqm							18.900
10.01 9	21.17 Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS : 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P brass/stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge.(Only weight of grill to be measured for payment).						
	Providing aluminium grill						
	for windows	9.0000 0	1.500	10.000		0.2500 00	33.750
	Total						33.750
Total Quantity in kg							33.750
10.02 0	13.71 Lettering with black Japan pint of approved brand and manufacture						
	Lettering with black Japan pint of approved brand and manufacture						
		1.0000 0	100.000			20.000 000	2000.000
	Total						2000.000
Total Quantity in per Letter per cm height							2000.000
11	Mechanical and Electrical works						
11.00 1	OD190336/2023-2024 Mechanical items and Electrification works - 25% of total amount. Supply and installation of clarifier bridge , Alum lime agitator motors, Blower pump set, Loss of head gauges, water level indicator, Flow meters including pipes , valves and specials in pipe gallery including all items etc as per direction of department officers						
	Mechanical and Electrical works						
		1.0000 0					1.000
	Total						1.000
Total Quantity in L.S							1.000
12	Construction of retaining wall near river side and compound wall						
12.00 1	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil						
	Earth work excavation						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	for retaining wall	1.0000 0	62.000	2.000	1.500		186.000
	for compound wall	1.0000 0	180.000	0.600	0.600		64.800
	Total						250.800
						Total Quantity in cum	250.800
12.00 2	OD190320/2023-2024 Extra earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 3 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil - initial depth 1.50m to 3.00m						
	Earth work excavation						
	for retaining wall	1.0000 0	62.000	2.000	1.500		186.000
	Total						186.000
						Total Quantity in cum	186.000
12.00 3	OD190322/2023-2024 Providing ring bund (62x1x1.5) using earth filled cement bags, polythene sheets and bamboo including cutting of the Earth, filling, conveying and placing in position and dismantling & removing the same after completion of works properly as per the direction of the department officers including all cost of materials, labor charges etc complete.						
	Providing ring bund						
		1.0000 0					1.000
	Total						1.000
						Total Quantity in L.S	1.000
12.00 4	100.7.1 Bailing out water with 5HP engine and pump set including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with 5HP engine and pump set						
		10.000 00	300.000			0.7500 00	2250.000
	Total						2250.000
						Total Quantity in Kwh	2250.000
12.00 5	100.7.2 Bailing out water with engine and pump set above 5HP up to 10HP including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with 10 HP engine and pump set						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
		10.000 00	300.000			0.7500 00	2250.000
	Total						2250.000
						Total Quantity in Kwh	2250.000
12.00 6	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	PCC 1:2:4 for levelling						
		1.0000 0	62.000	2.000	0.100		12.400
	Total						12.400
						Total Quantity in cum	12.400
12.00 7	5.33.1 Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level						
	Providing M25 design mix						
	for foundation	1.0000 0	62.000	2.000	0.300		37.200
	Total						37.200
						Total Quantity in cum	37.200
12.00 8	5.33.2 Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level						
	Providing M25 design mix						
	retaining wall	1.0000 0	62.000	(0.40+0.20)/2	5.000		93.000
	retaining wall - buttress	20.000 00	(1.60+0.20)/2	0.300	5.000		27.000
	Total						120.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in cum						120.000
12.009	5.9.1 Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	PCC for levelling	1.0000 0	62.000			0.100	6.200
	PCC for levelling	2.0000 0	2.700			0.100	0.540
	RCC foundation	2.0000 0	62.000			0.300	37.200
	RCC foundation	2.0000 0	2.500			0.300	1.500
	Total						45.440
	Total Quantity in sqm						45.440
12.010	5.9.2 Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.						
	Centering and shuttering						
	for retaining wall	2.0000 0	62.000			5.000	620.000
	for retaining wall buttress	20.000 00	2*((1.6+.2)/2)+0.3			5.000	210.000
	Total						830.000
	Total Quantity in sqm						830.000
12.011	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement for RCC work						
		1.0000 0	37.2+120			120.00 0000	18864.00 0
	Total						18864.00 0
	Total Quantity in kilogram						18864.00 0
12.012	10.26.3 Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. G.I. pipes						
	Providing and fixing hand rails using 40mm dia GI pipes						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0	250.000			3.7200 00	930.000
	Total						930.000
						Total Quantity in kg	930.000
12.01 3	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)						
	RR masonry for compound wall						
	for compound wall	1.0000 0	180.000	0.600	0.600		64.800
	Total						64.800
						Total Quantity in cum	64.800
12.01 4	50.6.1.2 Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.						
	Solid Block Masonry						
	Compound wall	1.0000 0	180.000	0.200	1.500		54.000
	Total						54.000
						Total Quantity in cum	54.000
12.01 5	13.1.2 12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).						
	Plastering						
	for compound wall	2.0000 0	180.000		1.600		576.000
	Total						576.000
						Total Quantity in sqm	576.000
12.01 6	10.25.2 Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works						
	Steel work for gate						
	for gate	1.0000 0				200.00 0000	200.000
	Total						200.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in kg						200.000
12.01 7	13.48.3	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture					
	Painting with deluxe multi surface paint						
	for gate	2.0000 0	5.000	2.000			20.000
	Total						20.000
	Total Quantity in sqm						20.000
12.01 8	13.43.1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer					
	Applying one coat of water thinnable cement primer						
	Qty same as item no.16	1.0000 0	576.000				576.000
	Total						576.000
	Total Quantity in sqm						576.000
12.01 9	13.60.1	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work					
	Wall painting with acrylic emulsion paint						
	Qty same as item no.19	1.0000 0	576.000				576.000
	Total						576.000
	Total Quantity in sqm						576.000
13	General ground levelling and Road formation						
13.00 1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared					
	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings						
		1.0000 0	70.000	20.000			1400.000
	Total						1400.000
	Total Quantity in sqm						1400.000
13.00 2	2.33.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 30 cm girth up to and including 60 cm girth						
	Felling trees of the girth						
		5.0000 0					5.000
	Total						5.000
	Total Quantity in each						5.000
13.00 3	2.33.2						
	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 60 cm girth up to and including 120 cm girth						
	Felling trees of the girth						
		3.0000 0					3.000
	Total						3.000
	Total Quantity in each						3.000
13.00 4	2.33.3						
	Felling trees of the girth (measured at a height of 1 m above ground level) including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 120 cm girth up to and including 240 cm girth						
	Felling trees of the girth						
		3.0000 0					3.000
	Total						3.000
	Total Quantity in each						3.000
13.00 5	50.2.26.1						
	Filling with contractor own earth (excluding rock) in open areas in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge.						
	Earth filling						
		1.0000 0	60.000	12.000	1.000		720.000
	Total						720.000
	Total Quantity in cum						720.000
13.00 6	2.6.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil						
	Earth work in excavation by mechanical means						
	for approach road	1.0000 0	200.000	4.000	0.550		440.000
	Total						440.000
	Total Quantity in cum						440.000
13.00 7	16.78.3						
	Construction of granular sub- base by Providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, Carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in- Charge.With material conforming to Grade - III (size range 26.5 mm to 0.075 mm) having CBR Value - 20						
	Construction of granular sub- base						
	for approach road	1.0000 0	200.000	4.000	0.400		320.000
	Total						320.000
	Total Quantity in cum						320.000
13.00 8	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	CC 1:2:4						
	for approach road	1.0000 0	200.000	4.000	0.150		120.000
	Total						120.000
	Total Quantity in cum						120.000
14	Installation of Fire Hydrant						
14.00 1	2.8.1						
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	Fire hydrant						
	Fire hydrant	1.0000 0	1.500	1.500	1.500		3.375
	Total						3.375
	Total Quantity in cum						3.375

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
14.00 2	100.8.2						
	Fencing 1.50m high with two rows of casuarina poles (girth 15cm to 24cm) tied with coir yarn on vertical casuarina pole (girth 15cm to 24cm) fixed at 1.5m intervals.						
	Fencing 1.50m high with two rows of casuarina poles (girth 15cm to 24cm) tied with coir yarn on vertical casuarina pole (girth 15cm to 24cm) fixed at 1.5m intervals.						
		1.0000 0	6.000				6.000
	Total						6.000
						Total Quantity in metre	6.000
14.00 3	2.16.1						
	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete (Measurements to be taken of the face area timbered).Depth not exceeding 1.5m						
	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete						
		1.0000 0	6.000		1.500		9.000
	Total						9.000
						Total Quantity in sqm	9.000
14.00 4	7.1.1						
	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)						
	RR						
		1.0000 0	1.000	1.000	0.700		0.700
	Total						0.700
						Total Quantity in cum	0.700
14.00 5	6.3.1						
	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarse sand):With F.P.S. (non modular) bricks						
	Brick work with common burnt clay machine						
		1.0000 0	2.800	0.120	0.600		0.202
	Total						0.202
						Total Quantity in cum	0.202
14.00 6	4.2.3						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)						
	providing and laying cement concrete	1.0000 0	1.000	1.000	0.100		0.100
	Total						0.100
						Total Quantity in cum	0.100
14.00 7	5.9.15 Centering and shuttering including strutting, etc. and removal of form for: Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like						
	Centering and shuttering including strutting, etc. and removal of form	2.0000 0	4.000		0.100		0.800
	Total						0.800
						Total Quantity in sqm	0.800
14.00 8	100.12.9 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc., but excluding cost of pipes and fittings for External work: 100mm diameter nominal bore.						
	Conveying and fixing G.I. pipes	1.0000 0	6.000				6.000
	Total						6.000
						Total Quantity in metre	6.000
14.00 9	OD190319/2023-2024 Supply of 100mm GI pipe						
	Supply of 100 mm GI pipe	1.0000 0	6.000				6.000
	Total						6.000
						Total Quantity in metre	6.000
14.01 0	100.31.1.2 Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 100mm diameter, Class I.						
	Conveying and fixing C.I. sluice valves						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0					1.000
	Total						1.000
						Total Quantity in no	1.000
14.01 1	13.1.1 12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand) 12 mm cement plaster mix						
	Fire hydrant brick box-inner	1.0000 0	1.440		0.600		0.864
	outer	1.0000 0	3.360		0.600		2.016
		1.0000 0	3.360	0.120			0.403
	Total						3.283
						Total Quantity in sqm	3.283
14.01 2	100.98.458 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 100mm. Supply of CI Double Flanged Sluice Valve						
		1.0000 0					1.000
	Total						1.000
						Total Quantity in no	1.000
14.01 3	OD205414/2023-2024 Supplying and fixing Pillar Hydrant Unit Pillar hydrant						
		1.0000 0					1.000
	Total						1.000
						Total Quantity in each	1.000
15	Wash Water Arrangements to nearest safe drain/source after purification of wash water						
15.00 1	100.1.1 Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil. EW excavation in all classes of soil						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	For drain	1.0000 0	60.000	0.900	1.200		64.800	
	Total						64.800	
	Total Quantity in cum							64.800
15.00 2	18.72.4							
	Providing and laying S & S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS : 8329:250 mm dia Ductile Iron Class K - 7 pipes							
	Providing and laying D.I pipe							
	250mm DI pipe	1.0000 0	60.000				60.000	
	Total						60.000	
	Total Quantity in metre							60.000
15.00 3	18.70.4							
	Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:250 mm dia pipes							
	Providing push on joints							
	250mm	15.0000 00					15.000	
	Total						15.000	
	Total Quantity in joint							15.000
15.00 4	OD190325/2023-2024							
	Labour for cutting C I/ D I pipe with steel saw. 250mm dia. D I pipe							
	Cutting D.I pipe							
	Cutting D.I pipe	4.0000 0					4.000	
	Total						4.000	
	Total Quantity in Each Cut							4.000
15.00 5	18.68.1							
	Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upt 600 mm dia							
	DI specials							
	250mm 90 degree	2.0000 0			0.480		0.960	
	250mm TP	2.0000 0			0.320		0.640	
	250x 250 tee	1.0000 0			0.570		0.570	
	Total						2.170	
	Total Quantity in quintal							2.170

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
15.00 6	100.98.486						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Hand Wheel PN 1.6, Size 250mm.						
	Supply of D/F sluice valve						
		1.0000 0					1.000
	Total						1.000
							Total Quantity in no
							1.000
15.00 7	100.31.2.6						
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 250mm diameter, Class II.						
	Conveying and fixing CI D/F sluice valve-250mm Dia						
		1.0000 0					1.000
	Total						1.000
							Total Quantity in no
							1.000
15.00 8	100.35.4						
	Testing 250mm DI/CI pipeline with potable water to the required test pressure . 250 mm dia Observed Data derived from item no.1022 of PHED DATA						
	Testing 250 mm dia pipe						
		1.0000 0	60.000				60.000
	Total						60.000
							Total Quantity in metre
							60.000
16	Water supply and Sanitary Arrangements						
16.00 1	50.18.7.1.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 15mm dia 12kgf/cm2 -Internal work- Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps						
		1.0000 0	50.000				50.000
	Total						50.000
							Total Quantity in metre
							50.000
16.00 2	50.18.7.2.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 metre spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 20 mm dia 12Kgf/cm ² - Internal work - Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 metre spacing						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.00 3	50.18.7.3.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer- in- Charge 25 mm dia 12 Kgf/cm ² - Internal work - Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 m spacing.						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.00 4	50.18.7.4.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 32 mm dia 10Kgf/cm ² - Internal work - Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 m spacing.						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.00 5	50.18.7.5.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 40 mm dia 10 Kgf/cm ² - Internal work- exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 m spacing.						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
16.00 6	50.18.7.6.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kgf/cm - Internal work- Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.00 7	50.18.8.1.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer- in- Charge. Concealed work, including cutting chases and making good the wall etc. 15 mm pipe 12 Kgf/ cm2						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.00 8	50.18.8.2.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chased and making good the wall etc. 20 mm pipe 12 Kgf/cm2						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.00 9	50.18.8.3.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 25 mm pipe 12 kgf/cm2						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
		1.0000 0	50.000				50.000	
	Total						50.000	
		Total Quantity in metre						50.000
16.01 0	18.57.1							
	Providing and fixing PTMT, push cock of approved quality and colour.15 mm nominal bore, 98 mm long, weighing not less than 75 gms							
	Providing and fixing PTMT, push cock							
		4.0000 0					4.000	
	Total						4.000	
		Total Quantity in each						4.000
16.01 1	18.64							
	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms.							
	Providing and fixing PTMT swivelling shower,							
		4.0000 0					4.000	
	Total						4.000	
		Total Quantity in no						4.000
16.01 2	100.1.1							
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil.							
	Excavating trenches of required width for pipes, cables,							
	laying 20mm dia. pipe	1.0000 0	30.000	0.300	0.600		5.400	
	laying 25mm dia. pipe	1.0000 0	30.000	0.300	0.600		5.400	
	laying waste pipe	2.0000 0	30.000	0.300	0.600		10.800	
	Total						21.600	
		Total Quantity in cum						21.600
16.01 3	100.9.1							
	Laying uPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipeline to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipeline with water to the required test pressure (excluding cost of pipes and specials): 20 mm nominal outside diameter pipes.							

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Laying UPVC pipes of 20mm						
		1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
16.01 4	100.9.2 Laying uPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipeline to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipeline with water to the required test pressure (excluding cost of pipes and specials): 25 mm nominal outside diameter pipes.						
	Laying UPVC pipes of class 2 to class 6 and specials,						
	25 mm dia	1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
16.01 5	100.98.229 Supply of PVC Pipe, 10kg/cm ² , 20mm Dia. Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm ² , 20mm.						
		1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
16.01 6	100.98.230 Supply of PVC Pipe, 10kg/cm ² , 25mm Dia. Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm ² , 25mm.						
		1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
16.01 7	17.2.1 Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:W.C. pan with ISI marked white solid plastic seat and lid						
	Providing and fixing European type WC						
	Providing and fixing European type WC	3.0000 0					3.000
	Total						3.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in each						3.000
16.01 8	50.17.1.3 Supplying and fixing CP Towel rod 60cm or nearest available length including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.						
	Supplying and fixing CP towel rod						
	Supplying and fixing CP towel rod	4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
16.01 9	50.17.1.1 Supplying and fixing Stainless steel soap dish including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.						
	Supplying and fixing stainless steel soap dish						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
16.02 0	50.17.1.5 Supplying and fixing CP Health Faucet superior quality (Jagur or equivalent make) including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.						
	Supplying and fixing CP Health Faucet superior quality						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
16.02 1	17.7.11 Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:Stainless Steel AISI - 304 (18/8) Wash basin 530 x 345 mm with single 15mm C.P. brass pillar tap						
	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
16.02 2	17.11.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing white vitreous china laboratory sink with C.I brackets, C.P. brass chain with rubber plug 40 mm C.P brass waste and 40 mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required:Size 600x450x200 mm						
	Providing and fixing white vitreous china laboratory sink with C.I brackets	4.0000 0					4.000
	Total						4.000
						Total Quantity in each	4.000
16.02 3	17.28.1.1 Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC. waste fittings complete. Semi rigid pipe32 mm dia						
	Providing and fixing P.V.C. waste pipe	4.0000 0					4.000
	Total						4.000
						Total Quantity in each	4.000
16.02 4	17.28.1.2 Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC. waste fittings complete. Semi rigid pipe40 mm dia						
	Providing and fixing P.V.C. waste pipe	4.0000 0					4.000
	Total						4.000
						Total Quantity in each	4.000
16.02 5	17.28.2.1 Flexible pipe32 mm dia						
	Flexible pipe32 mm dia	4.0000 0					4.000
	Total						4.000
						Total Quantity in each	4.000
16.02 6	17.28.2.2 Flexible pipe40 mm dia						
	Flexible pipe40 mm dia	4.0000 0					4.000
	Total						4.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in each						4.000
16.02 7	17.34.1						
	Providing and fixing toilet paper holder:C.P. brass						
	Providing and fixing toilet paper holder:C.P. brass						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
16.02 8	17.35.1.1						
	Providing and fixing soil, waste and vent pipes: 100 mm diaSand cast iron S & S pipe as per IS : 1729						
	Providing and fixing soil, waste and vent pipes:100 mm diaSand cast iron S & S pipe						
		1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
16.02 9	17.35.1.2						
	Providing and fixing soil, waste and vent pipes: 100 mm diaCentrifugally cast (spun) iron socket & spigot (S & S) pipe as per IS : 3989						
	Providing and fixing soil, waste and vent pipes:100 mm dia						
		1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
16.03 0	17.60.1.1						
	Providing and fixing trap of self cleansing design with screwed down or hinged grating without vent arm complete, including cost of cutting and making good the walls and floors: 100 mm inlet and 100 mm outletSand cast iron S & S as per IS : 3989						
	Providing and fixing trap of self cleansing design with screwed down or hinged grating without vent arm complete,						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
16.03 1	17.71						
	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing PTMT liquid soap container						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
16.03 2	18.33.1 Constructing masonry chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement:4 coarse sand) for sluice valve, with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand: 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design:With common burnt clay F.P.S (non modular) bricks of class designation 7.5						
	Constructing masonry chamber						
		6.0000 0					6.000
	Total						6.000
	Total Quantity in each						6.000
16.03 3	19.9.1.1 Constructing brick masonry circular type manhole 0.91 m internal dia at bottam and 0.56 m dia at to[in cement mortar 1:4 (1 cement : 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement: 3 coarse sand: 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement:2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design: 0.91 m deep with S.F.R.C cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to IS: 12592, total weight of cover and frame to be not less than 182 kg, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately):With cement burnt clay F.P.S. (non modular) bricks of class designation 7.5						
	Constructing brick masonry circular type manhole						
		6.0000 0					6.000
	Total						6.000
	Total Quantity in each						6.000
16.03 4	18.8.2						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings, with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 20 mm nominal outer dia pipes						
	Supplying, convey ,fitting ,concealed and fixing 20 mm CPVC						
		50.000 00					50.000
	Total						50.000
	Total Quantity in metre						50.000
16.03 5	OD190304/2023-2024						
	Supplying, conveying ,fitting and fixing 15 mm chrome plated angle valve with branch connection of approved make (As per ASTM D 2467, Schedule 80). complete in all respect including cost of all necessary fittings as required, jointing materials in any position as per the direction of Departmental officers. No separate payment will be made for accessories, specials.						
	Supplying, convey ,fitting and fixing 15 mm chrome plated angle valve with branch connection						
		6.0000 0					6.000
	Total						6.000
	Total Quantity in no						6.000
16.03 6	OD190305/2023-2024						
	Supplying, conveying ,fitting and fixing 25 mm 25mm chrome plated angle valve of approved make (As per ASTM D 2467, Schedule 80). complete in all respect including cost of all necessary fittings as required, jointing materials in any position as per the direction of Departmental officers. No separate payment will be made for accessories, specials.						
	Supplying, convey ,fitting and fixing 25 mm 25mm chrome plated angle valve						
		6.0000 0					6.000
	Total						6.000
	Total Quantity in no						6.000
16.03 7	OD190306/2023-2024						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<p>Supplying, conveying ,fitting ,concealed and fixing 25 mm CPVC (Chlorinated Polyvinyl Chloride)&lt;br&gt;pipes of approved make conforming to IS-15778: 2007 . with all necessary accessories, specials viz. Brass socket,&lt;br&gt;Brass bend, MALE BRASS UNION ,TRANSITION COUPLING ,END CAP,REDUCER BUSHING,MALE BRASS&lt;br&gt;TEE,MALE ADAPTOR (BRASS THREADS),MALE ADAPTOR (BRASS THREADS) ,REDUCING MALE ADAPTOR&lt;br&gt;(BRASS THREADS),FEMALE ADAPTOR (BRASS THREADS),REDUCING BRASS COUPLING,MALE BRASS&lt;br&gt;UNION,FEMALE BRASS UNION,COUPLING,all types of bends,Brass tee, union, cross, elbo, nipple, longscrew,&lt;br&gt;reducing socket, reducing tee, short piece ,Brass threaded reducer,Brass threaded tee ,Brass threaded elbow etc.&lt;br&gt;fitted with holder bats clamps, including cutting pipes, fitting, fixing etc. complete in all respect including cost of all&lt;br&gt;necessary fittings as required,jointing materials in any position for connecting the angle valve ,taps,Shower, etc as&lt;br&gt;per the direction of Departmental officers. (Payment will be made on the centre line measurements of total pipe line&lt;br&gt;including all specials. No separate payment will be made for accessories, specials.</p>						
		1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
16.03 8	<p>OD190307/2023-2024 Supplying, conveying ,fitting , and fixing of 15 mm Stainless Steel tap set with all accessories&lt;br&gt;connecting Brass threaded reducer,Brass threaded tee ,Brass threaded elbow etc of approved make with all&lt;br&gt;necessary accessories,including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary&lt;br&gt;fittings as required,jointing materials in any position for connecting the angle valve ,taps ,Shower, etc as per the&lt;br&gt;direction of Departmental officers. (No separate payment will be made for accessories, specials.</p>						
	<p>Supplying, convey ,fitting , and fixing of 15 mm Stainless Steel tap set with all accessories&lt;br&gt;</p>						
		8.0000 0					8.000
	Total						8.000
	Total Quantity in no						8.000
16.03 9	<p>OD190308/2023-2024</p>						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying, conveying ,fitting , and fixing of 200 mm Stainless Steel shower set with all accessories
connecting Brass threaded reducer,Brass threaded tee ,Brass threaded elbow etc of approved make with all
necessary accessories,including cutting pipes, fitting, fixing etc. complete in all respect including cost of all necessary
fittings as required,jointing materials in any position for connecting the angle valve ,taps ,Shower, etc as per the
direction of Departmental officers. (No separate payment will be made for accessories, specials.						
	Supplying, convey ,fitting , and fixing of 200 mm Stainless Steel shower						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
16.04 0	OD190309/2023-2024						
	:Supplying, conveying ,and fixing 50 mm G.M. ball valve with polythene float for 50 mm connection
(heavy quality) including cost of all necessary fittings as required,jointing materials in any position as per the direction
of Departmental officers. No separate payment will be made for accessories, specials.						
	Supplying, convey ,and fixing 50 mm G.M. ball valve with polythene float for 50 mm connection
						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
16.04 1	OD190310/2023-2024						
	:Supplying, conveying ,and fixing 40 mm G.M ball valve with polythene float for 40 mm connection
(heavy quality) including cost of all necessary fittings as required,jointing materials in any position as per the direction
of Departmental officers. No separate payment will be made for accessories, specials.						
	Supplying, convey ,and fixing 40 mm G.M ball valve with polythene float for 40 mm connection
						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
16.04 2	OD190311/2023-2024						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying, conveying ,and fixing 32 mm G.M. ball valve with polythene float for 32 mm
connection(heavy quality including cost of all necessary fittings as required,jointing materials in any position as per
the direction of Departmental officers. No separate payment will be made for accessories, specials.						
	Supplying, covey ,and fixing 32 mm G.M. ball valve with polythene float for 32 mm
						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
16.04 3	18.18.3						
	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:25 mm nominal bore						
	Supplying, covey ,and fixing of 25 mm G.M. ball valve						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
16.04 4	18.18.2						
	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:20 mm nominal bore						
	20mm Ball valve with float						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
16.04 5	OD190312/2023-2024						
	Supply and erection of concrete septic tank						
	providing and fixing concrete septic tank						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in no						1.000
17	Providing and setting up Laboratory						
17.00 1	OD191227/2023-2024						
	Setting up of Lab						
	Setting up of Lab						
		1.0000 0					1.000
	Total						1.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
Total Quantity in job							1.000
18	Land Scaping, Gardening, Site levelling after construction						
18.00	OD191226/2023-2024						
1	Land Scaping, Gardening, Site levelling after construction						
	Land Scaping, Gardening, Site levelling after construction						
		1.0000 0					1.000
	Total						1.000
Total Quantity in L.S							1.000
18.00	50.2.25.1						
2	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge						
	Filling with contractor's own red earth						
		1.0000 0	250.000				250.000
	Total						250.000
Total Quantity in cum							250.000
18.00	16.91.2						
3	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.						
	Providing and laying factory made chamfered edge Cement Concrete paver blocks						
		1.0000 0	50.000	4.000			200.000
		1.0000 0	20.000	6.000			120.000
	Total						320.000
Total Quantity in sqm							320.000
19	External Yard Lighting						
19.00	OD207572/2023-2024						
1							

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Lighting Switch Board (LSB):- Design, engineering, supply, erection, testing and commissioning of medium voltage sheet steel clad, totally enclosed, dust tight & vermin proof, indoor floor mounted cubicle type switchboard fabricated out of 14 swg mild steel sheet and bus duct of high conductivity aluminium bus bars, PVC sleeved, air insulated and of adequate size as mentioned, for operation on 3 phase, 4 wire, 415 volts, 50 Hz. AC supply system. The MCCB/SFUs, all meters and relays etc. should be reputed make and conforming IS specifications and are assembled, interconnected, earthed and the switch board should be painted with anti-rust primer coating followed by two coats of paint of approved shade, by Kerala Electrical Inspectorate and relevant standards 250A TPN bus bars of sizes: Phase : 50 x 8 mm Al-flat Neutral : 50 x 6 mm Al-flat Earthing conductor : 25 x 3 mm copper 1No 250 A TPN Isolator as incomer, 63 A TPN SFU 4 Nos. as outgoing. Metering compartments comprising of voltmeter, ammeter, selector switches, indicating lamps etc. complete as per KEI Standards						
	LIGHTING SWITCH BOARD						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
19.00 2	OD207569/2023-2024						
	Lighting Distribution board (LDB-I & II), Supply, erection, testing and commissioning of MCB distribution board comprising to the following. 40A TPN 4 pole MCB 1 No. as incomer with 40A 30mA ELCB, 18 nos 6 AMPS SP MCB as outgoing,

 With tinned copper busbars/cables, interconnection, housed in a suitable metal enclosure as per KEI standards fixed in open system						
	Lighting DB						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in no						2.000
19.00 3	OD191257/2023-2024						
	Cabling: Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100/11000 Volts grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. - 4 core 16 sqmm PVC/XLPE AL cable (LSB to LDB)						
	Cabling						
	4 core 16 sqmm PVC/XLPE AL cable (LSB to LDB)	150.00 000					150.000
	Total						150.000
	Total Quantity in metre						150.000
19.00 4	OD191258/2023-2024						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Cabling: Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100/11000 Volts grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench.-3 core 6 Sqmm PVC/XLPE AL Cable (LDB to street lights)						
	Cabling						
	3 core 6 sqmm PVC/XLPE AL cable (LDB to street lights)	300.00 000					300.000
	Total						300.000
	Total Quantity in metre						300.000
19.00 5	OD191260/2023-2024						
	Cabling: Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 /11000volts grade) for giving power connections to Transformers, Panel Boards etc. complete as per standards.- 4core 16Sqmm PVC/XLPE AL cable						
	Cabling						
	4 core 16 sqmm PVC/XLPE AL cable	8.0000 0					8.000
	Total						8.000
	Total Quantity in no						8.000
19.00 6	OD191261/2023-2024						
	Cabling: Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 /11000volts grade) for giving power connections to Transformers, Panel Boards etc. complete as per standards.- 3 core 6 Sqmm PVC/XLPE AL Cable						
	Cabling						
	3 core 6 sqmm PVC/XLPE AL cable	40.000 00					40.000
	Total						40.000
	Total Quantity in no						40.000
19.00 7	OD191290/2023-2024						
	External Lighting: Supplying, erection and testing steel tubular swaged poles as per IS 2713 (Part II) - 1980 of height 7.5M above ground level and 1.5M below ground level bottom 139.7 mm dia and 114.3 mm dia for middle and 88.9 mm dia for top including providing base plate providing concreting in foundation, construction of pillar accomodating fuse and switch housed in weather proof box including wiring to the light fitting with 2 runs of 3/20 PVC insulated copper conductor. Supplying and fixing a 4 way 30 A rated terminal block include the weather proof box. The pole shall be painted with one coat of primer and two coats of enamel paint as required by the Engineer in charge. The street pole shall be as per the drawing enclosed.- Single bracket type						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	External Lighting						
	Single bracket type	15.000 00					15.000
	Total						15.000
	Total Quantity in no						15.000
19.00 8	OD191289/2023-2024 External Lighting: Supplying, erection and testing steel tubular swaged poles as per IS 2713 (Part II) - 1980 of height 7.5M above ground level and 1.5M below ground level bottom 139.7 mm dia and 114.3 mm dia for middle and 88.9 mm dia for top including providing base plate providing concreting in foundation, construction of pillar accomodating fuse and switch housed in weather proof box including wiring to the light fitting with 2 runs of 3/20 PVC insulated copper conductor. Supplying and fixing a 4 way 30 A rated terminal block include the weather proof box. The pole shall be painted with one coat of primer and two coats of enamel paint as required by the Engineer in charge. The street pole shall be as per the drawing enclosed.- Double bracket type						
	External Lighting						
	Double bracket type	5.0000 0					5.000
	Total						5.000
	Total Quantity in no						5.000
19.00 9	OD191288/2023-2024 External lighting: Supplying and fixing street light fittings with all accessories and 100 watts LED lamp fixed with above poles.						
	External lighting						
	Supplying and fixing street light fittings with all accessories and 100 watts LED lamp fixed with above poles.	25.000 00					25.000
	Total						25.000
	Total Quantity in no						25.000
19.01 0	OD191287/2023-2024 External lighting: Supplying and fixing light fittings over compound wall allround the WTP yard with all accessories and 20 watts LED lamp fixed with above poles.						
	External lighting:						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing light fittings over compound wall allround the WTP yard with all accessories and 20 watts LED lamp fixed with above poles.	20.000 00					20.000
	Total						20.000
						Total Quantity in no	20.000
19.01 1	OD191286/2023-2024 Safety items: Supply and providing safety items as per Kerala Electrical Inspectorate and relevant standards. 2nos 1800X900X12mm 11KV rubber mat, 2sets 11KV Hand Gloves, 6nos. 11KV Danger board, 1set Fire bucket with stand, 2sets First aid box, 2sets Shock treatment chart, 2sets Fire extinguisher 5kg						
	Safety items						
		1.0000 0					1.000
	Total						1.000
						Total Quantity in set	1.000
20	Operation and Maintanance charges						
20.00 1	OD190313/2023-2024 Engaging Operator						
	Engaging Operator						
	2 shift	2.0000 0	540.000				1080.000
	Total						1080.000
						Total Quantity in no	1080.000
20.00 2	OD190314/2023-2024 Engaging Man Mazdoor						
	Engaging Operator						
	2 shift	2.0000 0	540.000				1080.000
	Total						1080.000
						Total Quantity in no	1080.000
20.00 3	OD190315/2023-2024 Engaging Gardner						
	Engaging Gardner						
	1/2 duty	0.5000 0	540.000				270.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						270.000
							Total Quantity in no 270.000
20.00 4	OD190316/2023-2024 Supply and delivery of Hydrated lime as per specification at dosage(or as per condition)						
	Supply and delivery of lime						
		14.800 00					14.800
	Total						14.800
							Total Quantity in MT 14.800
20.00 5	OD190317/2023-2024 Supply and delivery of alum (as per condition)						
	Supply and delivery of alum						
		18.900 00					18.900
	Total						18.900
							Total Quantity in MT 18.900
20.00 6	OD190318/2023-2024 Supply and delivery of Chlorine cylinder						
	Supply and delivery of Chlorine cylinder						
		5.0000 0					5.000
	Total						5.000
							Total Quantity in no 5.000