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		643613.27
2	Raw water channel		778586.22
3	Flash Mixer		297143.67
4	Clariflocculator		5812836.17
5	Filter house		16553791.52
6	Filter media		503357.65
7	Back wash water tank		1469781.40
8	Clear water channel		503896.58
9	Clear water Sump , Pump house		6637367.64
10	Con. of Transformer room		2643743.93
11	General ground levelling and Road formation		1288221.36
12	Installation of Fire Hydrant		52542.45
13	Wash Water Arrangements to nearest safe drain/source after purification of wash water		317289.42
14	Construction of retaining wall near river side and compound wall		6637973.10
15	Mechanical and Electrical works		6219459.99
16	Water supply and Sanitary Arrangements		571503.17
17	Providing and setting up Laboratory		350000.00
18	Operation and Maintanance charges		1882949.25
	Total Estimation PAC		53164056.79
C	**Extra Charges**		
C.001	Provision for GST		
	53164056.79	18.00%	9569530.22
	Grand Total		62733587.01
	Round off		6412.99
	Rounded Total(Rs)		62740000.00
	Rupees Six Crore Twenty Seven Lakh Forty Thousand		

Approved By
Sajiv Retnakaran
(PEN:G13690), 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

Sl 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	45.000	37.000			1665.000
	Total						**1665.000**
						Total Quantity in sqm	**1665.000**
1.002	20.1.3						
	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):500 mm dia piles						
	Providing 500mm dia.pile						
	RCC M25 grade pile of 500mm Dia.	5	5.600				28.000
	Total						**28.000**
						Total Quantity in metre	**28.000**
1.003	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						
	Design mix M-25 , all work up to plinth level						
	pile cap	5	0.800	0.800	0.800		2.560

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Plinth beam - radial-pile cap length deducted	-4	0.800	0.300	0.450		-0.432
	Plinth beam - ring(3.14x(2.5+.45)x0.3x0.45	1	3.140	0.885	0.450		1.251
	Total						**3.379**
						Total Quantity in cum	**3.379**
1.004	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	0.300	0.300	4.900		1.764
	central column	1	3.140	0.068	5.700		1.217
	beam under collection tray	1	3.140	0.885	0.450		1.251
	cantilever beam	4	0.550	0.300	0.300		0.198
	collection tray + drain bottom slab-slab	0.25	3.140	11.560	0.200		1.815
	collection tray - side wall	1	3.140	0.370	0.540		0.627
	Tray 1 side wall	1	3.140	0.288	0.350		0.317
	Tray 2 side wall	1	3.140	0.216	0.200		0.136
	Tray 3 side wall	1	3.140	0.144	0.200		0.090
	Tray 4 side wall	1	3.140	0.700	0.200		0.440
	Total						**7.855**
						Total Quantity in cum	**7.855**
1.005	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						
	Qnty same as item no.3&4	1	3.379+7.855				11.234

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						**11.234**
						Total Quantity in cum	**11.234**
1.006	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						
	for pile cap	5	3.200	0.800			12.800
	Total						**12.800**
						Total Quantity in sqm	**12.800**
1.007	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 out side wall	1	3.14*2.500	0.350			2.748
	Tray -1 inside wall	1	3.14*2.35	0.350			2.583
	Tray -2 outside wall	1	3.14*1.9	0.200			1.193
	Tray -2 inside wall	1	3.14*1.75	0.200			1.099
	Tray -3 out side wall	1	3.14*1.3	0.200			0.816
	Tray -3 inside wall	1	3.14*1.15	0.200			0.722
	Tray -4 outside wall	1	3.14*0.7	0.200			0.440
	Tray -4 inside wall	1	3.14*0.55	0.200			0.345
	Collection tray outer side wall (outer)	1	3.14*3.4	0.540			5.765
	Collection tray outer side wall (inner)	1	3.14*3.2	0.540			5.426
	Central column (outer)	1	3.14*0.45	5.700			8.054
	Total						**29.191**
						Total Quantity in sqm	**29.191**
1.008	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	centering and shuttering						
	bottom of trays and collection channel	1	3.14*3.4*3.4	1/4			9.075
	Total						**9.075**
						Total Quantity in sqm	**9.075**
1.009	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 - radial	4	0.800	1.200			3.840
	plinth beam - ring	1	3.14*2.87	1.200			10.814
	beam under collection tray	1	3.14*2.87	0.900			8.111
	cantilever beam	4	0.550	0.900			1.980
	Total						**24.745**
						Total Quantity in sqm	**24.745**
1.010	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	1.200	4.900			23.520
	Total						**23.520**
						Total Quantity in sqm	**23.520**
1.011	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	3.379+7.855			100.000000	1123.400
	Steel reinforcement for pile	5	1.100			100.000000	550.000
	Total						**1673.400**
						Total Quantity in kilogram	**1673.400**
1.012	20.6.2.1						

Sl 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 capacityInitial test						
	Vertical load testing of pile						
	Vertical load testing of pile	1					1.000
	Total						**1.000**
						Total Quantity in per test	**1.000**
1.013	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	Plastering 12mm thick 1:4 mix.						
	Bottom of Tray, including collection tray	2	3.14*3.4*3.4	1/4			18.149
	Tray 1 - side	2	3.14*2.58	0.350			5.671
	Tray 2 - side	2	3.14*1.98	0.200			2.487
	Tray 3 - side	2	3.14*1.38	0.200			1.733
	Tray 4 - side	2	3.14*0.78	0.200			0.980
	collection channel - side wall	2	3.14*3.3	0.540			11.191
	column pipe	1	3.14*0.45	5.700			8.054
	beam under tray	1	3.14*2.87	0.900			8.111
	canteliver beam	4	0.550	0.900			1.980
	column s	4	1.200	4.900			23.520
	Total						**81.876**
						Total Quantity in sqm	**81.876**
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 top of Trays including collection tray	1	3.14*3.2*3.2	1/4			8.038
	Tray 1 - side	1	3.14*2.5	0.350			2.748
	Tray 2 - side	1	3.14*1.9	0.200			1.193
	Tray 3 - side	1	3.14*1.3	0.200			0.816

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Tray 4 - side	1	3.14*0.7	0.200			0.440
	collection channel - inside wall	1	3.14*3.2	0.540			5.426
	Total						**18.661**
						Total Quantity in sqm	**18.661**
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						
	Applying water thinnable primer						
	Bottom of Trays including collection tray	3.14	3.4*3.4	1/4			9.075
	Tray 1 - bottom vertical side	3.14	2.350	0.350			2.583
	Tray 2 - side	3.14	1.750	0.200			1.099
	Tray 3 - side	3.14	1.150	0.200			0.722
	Tray 4 - side	3.14	0.550	0.200			0.345
	collection channel - side wall	3.14	3.400	0.450			4.804
	column pipe	3.14	0.450	5.700			8.054
	beam under tray	3.14	2.870	0.900			8.111
	canteliver beam	4	0.550	0.900			1.980
	columns	4	1.200	4.900			23.520
	Total						**60.293**
						Total Quantity in sqm	**60.293**
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	60.293				60.293
	Total						**60.293**
						Total Quantity in sqm	**60.293**
2	Raw water channel						
2.001	20.1.3						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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):500 mm dia piles						
	Providing cast in situ RCC pile						
	500 mm Dia	5	5.600				28.000
	Total						**28.000**
						Total Quantity in metre	**28.000**
2.002	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 M25						
	Pile cap	5	0.800	0.800	0.800		2.560
	Plinth beam	1	15-5*0.8	0.300	0.450		1.485
	Total						**4.045**
						Total Quantity in cum	**4.045**
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	0.300	0.300	5.200		2.340
	Tie beam & beam under slab	2	15-5*0.3	0.300	0.450		3.645
	Cantiliver beam	5	0.600	0.300	0.300		0.270
	bottom slab	1	15.000	0.600	0.150		1.350
	Side wall	2	15.000	0.150	0.400		1.800
	cover slab	30	0.500	0.600	0.100		0.900
	Total						**10.305**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in cum	**10.305**
2.004	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 M30						
	column	5	0.300	0.300	5.200		2.340
	tie beam	2	15-5*0.3	0.300	0.450		3.645
	bottom slab	1	15.000	0.600	0.150		1.350
	Side wall	2	15.000	0.150	0.400		1.800
	cover slab	30	0.500	0.600	0.100		0.900
	Total						**10.035**
						Total Quantity in cum	**10.035**
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	3.200		0.800		12.800
	plinth beam	1	15-5*0.8	1.200			13.200
	Total						**26.000**
						Total Quantity in sqm	**26.000**
2.006	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	2	15.000	0.550			16.500
	side wall - inside	2	15.000	0.400			12.000
	Total						**28.500**
						Total Quantity in sqm	**28.500**
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	15.000	0.600			9.000
	cover slab - sides	30	2.200	0.100			6.600
	Total						**15.600**
						Total Quantity in sqm	**15.600**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
2.008	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						
	tie beam	2	15.000	1.200			36.000
	cantilever beam	5	0.600	0.900			2.700
	Total						**38.700**
						Total Quantity in sqm	**38.700**
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	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	4.045+10.305			100.000000	1435.000
	Pile (3.14*.25*.25*5.6)	5	1.099			100.000000	549.500
	Total						**1984.500**
						Total Quantity in kilogram	**1984.500**
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					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)						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	12mm cement plaster of mix 1:4						
	column	5	1.200	5.200			31.200
	Beam	2	15.000	1.200			36.000
	Channel- inside slab and sidewall	1	15.000	1.000			15.000
	Channel- out side slab and sidewall	1	15.000	1.500			22.500
	cover slab -top	30	0.500	0.800			12.000
	Total						**116.700**
						Total Quantity in sqm	**116.700**
2.013	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, 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						
	Applying integral crystalline slurry						
	Inside wall	2	15.000	0.400			12.000
	Total						**12.000**
						Total Quantity in sqm	**12.000**
2.014	22.23.2						
	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.						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Applying integral crystalline slurry						
	bottom slab	1	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	1.200	5.200			31.200
	Beam	2	15.000	1.200			36.000
	Channel out side	1	15.000	1.500			22.500
	Channel cover slab top	30	0.500	0.800			12.000
	Total						**101.700**
						Total Quantity in sqm	**101.700**
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						
	Qnty same as item no.15	1	101.700				101.700
	Total						**101.700**
						Total Quantity in sqm	**101.700**
2.017	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 and fixing handrails						
	Providing and fixing handrails	1	300.000				300.000
	Total						**300.000**
						Total Quantity in kg	**300.000**
3	Flash Mixer						
3.001	20.1.3						
	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):500 mm dia piles						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing cast in situ RCC pile						
	500 mm dia. pile	1	5.600				5.600
	Total						**5.600**
						Total Quantity in metre	**5.600**
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 cone shape (3.14*0.4/3*(0.8*.8)+(0.8*0.45)+(0.45+0.45)	1	3.140	0.64+0.36+0.2025	0.4/3		0.503
	Pile cap - circular shape (3.14*.8*.8*.4)	1	3.140	0.8*0.8	0.400		0.804
	Total						**1.307**
						Total Quantity in cum	**1.307**
3.003	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 M-25						
	Bottom slab	1	3.140	0.95*0.95	0.200		0.567
	side wall(3.14*2.8(0.8+0.65)(0.8-0.65)	1	3.140	0.218	2.800		1.917
	walk way(3.14*0.15*(1.45+0.65)(1.45-0.65)	1	3.140	1.680	0.150		0.791

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						**3.275**
						Total Quantity in cum	**3.275**
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						
	Bottom slab	1	3.140	0.95*0.95	0.200		0.567
	Side wall (3.14*2.8(0.8+0.65)(0.8-0.65)	1	3.140	0.218	2.800		1.917
	walk way(3.14*0.15*(1.45+0.65)(1.45-0.65)	1	3.140	1.680	0.150		0.791
	Total						**3.275**
						Total Quantity in cum	**3.275**
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	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						
	Pile cap - Frustum of circular cone shape (3.14*(0.45+0.8) 0.4	1	3.140	1.250	0.400		1.570
	Pile cap - circular shape (3.14*1.6*.4)	1	3.140	1.600	0.400		2.010
	Total						**3.580**
						Total Quantity in sqm	**3.580**
3.007	5.9.2						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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						
	Sidewall - inside	1	3.140	1.300	2.800		11.430
	Sidewall - out side	1	3.140	1.600	2.800		14.067
	Total						**25.497**
						Total Quantity in sqm	**25.497**
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	3.140	2.100	0.800		5.275
	walk way side	1	3.140	3.200	0.150		1.507
	Total						**6.782**
						Total Quantity in sqm	**6.782**
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 levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement for RCC works						
	Reinforcement	1	1.307+3.468			100.000000	477.500
	for Pile(3.14*0.25*0.25*7.3)	1	1.100			100.000000	110.000
	Total						**587.500**
						Total Quantity in kilogram	**587.500**
3.010	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					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)						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	12mm Cement plastering 1:4 mix						
	Side wall - inside	1	3.140	1.300	2.000		8.164
	Side wall - out side	1	3.140	1.600	2.800		14.067
	Walkway - top& bottom	2	3.140	2.100	0.800		10.550
	Walkway -side	1	3.140	2.900	0.150		1.366
	Total						**34.147**
						Total Quantity in sqm	**34.147**
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	3.140	1.600	2.800		14.067
	Walk way - top and bottom	2	3.140	2.100	0.800		10.550
	Walk way -side	1	3.140	2.900	0.150		1.366
	Total						**25.983**
						Total Quantity in sqm	**25.983**
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						
	Qnty same as Item no. 12	1	25.983				25.983
	Total						**25.983**
						Total Quantity in sqm	**25.983**
3.014	22.23.1						

Sl 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, 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						
	Providing and applying integral crystalline slurry						
	Side wall inside	1	3.140	1.300	2.000		8.164
	Total						**8.164**
						Total Quantity in sqm	**8.164**
3.015	22.23.2						
	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.						
	Providing and applying integral crystalline slurry						
		1	3.140	0.65*0.65			1.327
	Total						**1.327**
						Total Quantity in sqm	**1.327**
3.016	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 and fixing hand rail						
	Walkway	1	180.000				180.000
	Total						**180.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in kg	**180.000**
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	18.000	18.000	1.000		324.000
	Total						**324.000**
						Total Quantity in cum	**324.000**
4.002	OD47550/2022-2023						
	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 cast in situ RCC pile 600mm dia.						
	600 mm dia, pile	4	7.900				31.600
	Total						**31.600**
						Total Quantity in metre	**31.600**
4.003	20.1.1						
	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):400 mm dia piles						
	Providing driving and installing driven cast in situ RCC piles400 mm						
		1			7.900		7.900
	Total						**7.900**
						Total Quantity in metre	**7.900**
4.004	20.1.2						
	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):450 mm dia piles						
	Providing driving and installing driven cast in situ RCC piles -500mm						
		8			7.900		63.200

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						**63.200**
						Total Quantity in metre	**63.200**
4.005	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 PCC 1:2:4						
	for floor slab	0.25	3.140	14.3*14.3	0.200		32.105
	Total						**32.105**
						Total Quantity in cum	**32.105**
4.006	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 RCC design mix M-25						
	Floor slab	0.25	3.140	14.1*14.1	0.320		49.941
	Pile cap	4	1.000	1.000	0.600		2.400
	Pile cap	1	0.800	0.800	0.500		0.320
	Pile cap	8	1.000	1.000	0.600		4.800
	Radial beam(concealed beam)	8	4.200	0.400	0.320		4.301
	Ring beam(concealed beam)	1	3.14*13.25	0.400	0.320		5.325
	Ring beam(concealed beam)	1	3.14*6.12	0.500	0.320		3.075
	Total						**70.162**
						Total Quantity in cum	**70.162**
4.007	5.33.2						

Sl 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 RCC design mix M-25						
	Side of pit	1	3.14*1.100	0.300	0.700		0.725
	Side wall of clarifier	1	3.140*13.25	0.250	3.600		37.445
	haunch	0.5	3.140*13	0.500	0.700		7.144
	column for supporting flocculator side wall	6	0.300	0.300	0.700		0.378
	Beamfor supporting flocculator side wall	1	3.14*6.12	0.300	0.400		2.306
	flocculator side wall	1	3.14*6.12	0.120	3.200		7.379
	Collecting channel	1	3.14*12.5	0.500	0.150		2.944
	Collecting channel side wall	1	3.14*11.9	0.100	0.500		1.868
	Central shaft	1	3.14*.45	0.150	5.300		1.123
	cover slab of Central shaft	1	3.140	.5*.5/4	0.150		0.029
	Walk way	1	3.140*14.5	1.000	0.150		6.830
	Total						**68.171**
						Total Quantity in cum	**68.171**
4.008	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. 6&7	1	70.162+68.171				138.333
	Total						**138.333**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in cum	**138.333**
4.009	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						
	base slab sides	1	3.14*14.3	0.200			8.980
	Floor slab side	1	3.14*14.1	0.320			14.168
	Pile cap	4	4*1	0.600			9.600
	Pile cap	1	4*0.8	0.500			1.600
	Pile cap	8	4*1	0.600			19.200
	Total						**53.548**
						Total Quantity in sqm	**53.548**
4.010	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	3.14*1.1	0.700			2.418
	Side wall of Clarifier- inside	1	3.14*13	3.600			146.952
	Side wall of Clarifier- out side	1	3.14*13.5	3.600			152.604
	column for supporting flocculator side wall	6	4*.3	0.700			5.040
	Beamfor supporting flocculator side wall	1	3.14*6.12	1.100			21.138
	flocculator side wall - in side	1	3.14*6	3.200			60.288
	flocculator side wall - out side	3.14	6.240	3.200			62.700
	collecting channel	1	3.14*11.9	0.500			18.683
	collecting channel side wall- inner	3.14	11.800	0.500			18.526
	collecting channel side wall- outer	3.14	12.000	0.500			18.840
	central shaft	3.14	0.600	5.300			9.985

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	cover slab of central shaft	3.14	.6*.6	1/4			0.283
	Walk way	3.14	14.000	1.000			43.960
	Walk way - side	3.14	15.000	0.150			7.065
	Total						**568.482**
						Total Quantity in sqm	**568.482**
4.011	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						
	Steel reinforcement	1	138.333			100.000000	13833.300
	for pile	4	2.232			100.000000	892.800
	for pile	1	0.992			100.000000	99.200
	for pile	8	1.550			100.000000	1240.000
	Total						**16065.300**
						Total Quantity in kilogram	**16065.300**
4.012	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	3					3.000
	Total						**3.000**
						Total Quantity in per test	**3.000**
4.013	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	3.14*13*13	1/4			132.665
	Side of pit	1	3.14*1.1	0.700			2.418
	Side wall of Clarifier- inside	1	3.14*13	3.600			146.952

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Side wall of Clarifier-out side	1	3.14*13.5	3.600			152.604
	column for supporting flocculator side wall	6	4*.3	0.700			5.040
	Beamfor supporting flocculator side wall	1	3.14*6.12	1.100			21.138
	flocculator side wall - in side	1	3.14*6	3.200			60.288
	flocculator side wall - out side	1	3.14*6.24	3.200			62.700
	collecting channel top& bottom	2	3.14*11.9	0.500			37.366
	collecting channel side wall	6.28	11.800	0.500			37.052
	central shaft	1	3.14*.6	5.300			9.985
	cover slab of central shaft	3.14	.6*.6	1/4			0.283
	Walkway	6.28	14.000	1.000			87.920
	Walkway- side	3.14	14.000	0.150			6.594
	Total						**763.005**
						Total Quantity in sqm	**763.005**
4.014	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, 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						
	Applying integral crystalline slurry						
	Side wall of Clarifier- inside	1	3.14*13	3.600			146.952

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	flocculator side wall - in side	1	3.14*6	3.200			60.288
	flocculator side wall - out side	3.14	6.240	3.200			62.700
	collecting channel side wall- inner	3.14	11.800	0.500			18.526
	collecting channel side wall- inner	3.14	12.000	0.500			18.840
	central shaft	3.14	0.600	5.300			9.985
	Total						**317.291**
						Total Quantity in sqm	**317.291**
4.015	22.23.2						
	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.						
	Applying integral crystalline slurry						
	base slab	1	3.14*13*13	1/4			132.665
	collecting channel	1	3.14*12.5	0.500			19.625
	Total						**152.290**
						Total Quantity in sqm	**152.290**
4.016	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	3.14*13	3.600			146.952
	Side wall of Clarifier-out side	1	3.14*13.5	3.600			152.604

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	column for supporting flocculator side wall	6	4*.3	0.700			5.040
	Beamfor supporting flocculator side wall	1	3.14*6.12	1.100			21.138
	flocculator side wall	2	3.14*6	3.120			117.562
	collecting channel top & bottom	2	3.14*11.9	0.500			37.366
	collecting channel side wall	6.28	11.800	0.500			37.052
	central shaft	1	3.14*.6	5.300			9.985
	central shaft - cover slab	3.14	.6*.6	1/4			0.283
	Walk way	6.28	14.000	1.000			87.920
	Walk way- side	3.14	14.000	0.150			6.594
	Total						**622.496**
						Total Quantity in sqm	**622.496**
4.017	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	3.14*13.5	3.600			152.604
	central shaft - cover slab	3.14	.6*.6	1/4			0.283
	Walk way	6.28	14.000	1.000			87.920
	Walk way	6.28	14.000	1.000			87.920
	Total						**328.727**
						Total Quantity in sqm	**328.727**
4.018	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					1000.000
	Total						**1000.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in kg	**1000.000**
4.019	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						
	for 250mm DI pipe	1	40.000	0.900	1.200		43.200
	Total						**43.200**
						Total Quantity in cum	**43.200**
4.020	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	40.000				40.000
	Total						**40.000**
						Total Quantity in metre	**40.000**
4.021	100.98.118						
	Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.						
	Supply 250mm DI K9						
	250mm DI K9	1	40.000				40.000
	Total						**40.000**
						Total Quantity in metre	**40.000**
4.022	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					1.000
	for raw water channel scour	1					1.000
	Total						**2.000**
						Total Quantity in no	**2.000**
4.023	100.31.1.6						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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					2.000
	Total						**2.000**
						Total Quantity in no	**2.000**
4.024	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						
	Providing and laying DI specials						
	250mm wall casing pipe	2				0.850000	1.700
	250mm - 90 degree bend	4				0.480000	1.920
	250mm - 45 degree bend	2				0.360000	0.720
	250mm - 22.5 degree bend	2				0.320000	0.640
	250mm - 11.25 degree bend	2				0.300000	0.600
	250 x 250 mm tee	2				0.570000	1.140
	Total						**6.720**
						Total Quantity in quintal	**6.720**
4.025	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					15.000
	Total						**15.000**
						Total Quantity in joint	**15.000**
4.026	OD260287/2022-2023						
	Labour for cutting C I/ D I pipe with steel saw. 250mm dia. D I pipe						
	Labour for cutting 250 mm DI pipe						
		4					4.000
	Total						**4.000**
						Total Quantity in Each Cut	**4.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
4.027	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					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
4.028	100.36.1						
	Filling water with 5000 litre tankers fited 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 appliences and cost of water etc. complete.						
	Filling water with 5000 litre tankers fited in lorry						
		3.14	6.5*6.5	3.400			451.061
	Total						**451.061**
						Total Quantity in Kilo litre	**451.061**
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	13.000	10.000	0.800		104.000
	Total						**104.000**
						Total Quantity in cum	**104.000**
5.002	OD51383/2022-2023						
	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 RCC pile - 600mm dia.						
	for 600mm dia. pile	29	7.900				229.100
	Total						**229.100**
						Total Quantity in metre	**229.100**
5.003	4.1.3						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	11.700	9.000	0.150		15.795
	filling gullet	3	3.500	0.750	1.050		8.269
	porch	1	8.400	3.300	0.150		4.158
	Lobby	1	7.330	3.850	0.150		4.233
	stair room	1	4.080	3.580	0.150		2.191
	Chlorine room	1	3.950	7.330	0.150		4.343
	Chemical room	1	12.720	3.580	0.150		6.831
	Blower	1	3.830	3.550	0.150		2.039
	wash & toilet	2	3.180	1.690	0.150		1.612
	Provision for unforseen quantity	5					5.000
	Total						**54.471**
						Total Quantity in cum	**54.471**
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	29	0.900	0.900	0.800		18.792
	Beam under filter bed	4	11.500	0.450	0.600		12.420
	Beam under filter bed	2	8.800	0.450	0.600		4.752
	Filter house plinth beam	4	12.600	0.300	0.450		6.804
	Filter house plinth beam	3	11.500	0.300	0.450		4.658
	Filter house Plinth beam	3	3.300	0.300	0.450		1.337
	Filter house plinth beam	1	8.400	0.300	0.450		1.134

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Filter house plinth beam	2	4.050	0.300	0.450		1.094
	Filter house plinth beam	1	4.030	0.300	0.450		0.544
	Filter bed -floor	1	11.500	4.950	0.300		17.078
	clear water channel in pipe gallery bottom slab	1	11.500	0.900	0.200		2.070
	clear water channel side wall	2	11.500	0.150	1.000		3.450
	clear water channel cover slab	1	11.500	0.900	0.150		1.553
	Manifauld side wall	6	3.500	0.200	0.500		2.100
	Manifauld cover slab	3	3.500	0.400	0.200		0.840
	Total						**78.626**
						Total Quantity in cum	**78.626**
5.005	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 design mix M25						
	column ground floor(C1)	14	0.450	0.600	3.300		12.474
	column ground floor(C1)	12	0.450	0.600	4.000		12.960
	column ground floor(C3)	5	0.300	0.300	3.300		1.485
	GF roof beam	2	20.950	0.300	0.450		5.657
	GF roof beam	2	25.000	0.300	0.450		6.750
	GF roof beam	6	11.500	0.300	0.450		9.315
	GF roof beam	1	4.030	0.300	0.450		0.544
	GF roof beam	1	8.400	0.300	0.450		1.134
	GF roof beam	3	3.300	0.300	0.450		1.337
	GF LINTEL	1	94.270	0.200	0.150		2.828

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Sunshade	1	53.500	0.600	0.100		3.210
	GF Roof slab	1	21.550	12.100	0.150		39.113
	GF Roof slab	1	4.050	4.630	0.150		2.813
	GF Roof slab-porch	1	9.600	3.300	0.150		4.752
	Deduction roof slab in filter room	-3	2.200	1.350	0.150		-1.336
	Deduction roof slab in filter room	-1	8.650	1.700	0.150		-2.206
	Stair case to alum lime tank	24	1.000	0.300	0.150		1.080
	Stair case landing	2	1.000	1.000	0.150		0.300
	Stair case slab	1	4.470	1.000	0.100		0.447
	Stair case slab	1	4.020	1.000	0.100		0.402
	Main Stair case steps	22	1.200	0.300	0.150	0.500000	0.594
	Main Stair case landing	2	1.200	1.200	0.150		0.432
	Main Stair case slab	1	3.500	1.200	0.100		0.420
	Main Stair case slab	1	2.300	1.200	0.100		0.276
	Main Stair case slab	1	1.700	1.200	0.100		0.204
	FF column	20	0.450	0.300	3.000		8.100
	FF column	4	0.300	0.300	3.000		1.080
	FF roof beam	5	11.500	0.300	0.450		7.763
	FF roof beam	4	16.900	0.300	0.450		9.126
	FF roof beam	1	4.350	0.300	0.450		0.587
	FF roof beam	1	3.300	0.300	0.450		0.446
	Alum , lime tank slab	1	4.500	2.500	0.200		2.250
	Alum , lime tank side wall	2	4.500	0.150	1.300		1.755
	Alum , lime tank side wall	5	1.500	0.150	1.300		1.463
	Alum , lime tank partitian wall	1	4.500	0.150	0.500		0.338
	Alum , lime room - landing	1	4.830	0.900	0.150		0.652
	Lintel	1	87.500	0.200	0.150		2.625
	Sunshade	1	65.800	0.600	0.100		3.948

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF roof slab	1	17.500	12.100	0.150		31.763
	FF roof slab	1	4.950	3.600	0.150		2.673
	Main stair case steps	22	1.200	0.300	0.150	0.500000	0.594
	Main stair case landing	2	1.200	1.200	0.100		0.288
	Main stair case slab	1	3.500	1.200	0.100		0.420
	Main stair case slab	1	2.300	1.200	0.100		0.276
	Main stair case slab	1	1.700	1.200	0.100		0.204
	SF column (C2)	8	0.300	0.450	3.000		3.240
	SF column (C3)	4	0.300	0.300	3.000		1.080
	Second floor-roof beam	2	11.500	0.300	0.450		3.105
	Second floor-roof beam	3	4.350	0.300	0.450		1.762
	Second floor-roof beam	1	7.330	0.300	0.450		0.990
	Second floor-roof beam	1	3.300	0.300	0.450		0.446
	Second F - lintel	1	35.340	0.200	0.150		1.060
	Second floor - Sunshade	1	48.700	0.600	0.100		2.922
	Second floor - roof slab	1	7.930	5.030	0.150		5.983
	floor of Back wash tank	1	12.100	4.900	0.300		17.787
	Stair case to B/W tank steps	15	0.900	0.300	0.200		0.810
	Stair case to B/W tank landing	1	0.900	0.900	0.150		0.122
	Stair case to B/W tank slab	1	5.400	0.900	0.100		0.486
	Provision for unforseen quantity	5					5.000
	Total						**226.129**
						Total Quantity in cum	**226.129**
5.006	5.34.1						

Sl 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 design mix M30						
	Qnty same as item No. 5 & 6	1	78.626+226.129				304.755
	Total						**304.755**
						Total Quantity in cum	**304.755**
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	11.7+9	0.150			6.210
	pile cap 600 mm pile	29	4*0.9	0.800			83.520
	Total						**89.730**
						Total Quantity in sqm	**89.730**
5.008	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 wall of bed including pipe gallery	2	61.500	4.020			494.460
	gullet wall	2	11.100	4.020			89.244
	C/W channel in pipe gallery side wall - inside	2	17.500	0.800			28.000
	C/W channel in pipe gallery side wall - out side	2	17.500	1.000			35.000
	Manifauld side wall	6	3.500	0.500			10.500
	wash water trough -in sideside wall	12	3.500	0.350			14.700
	wash water trough -out sideside wall	12	3.500	0.500			21.000
	Alum lime tank side wall - inside	4	4.500	1.300			23.400

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Alum lime tank side wall - inside	10	1.500	1.300			19.500
	Alum , lime tank partitian wall	2	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	17.500	0.900			15.750
	C/W channel cover slab- side	2	17.5+.9	0.150			5.520
	Roof slab of GF	1	21.550	12.100			260.755
	Roof slab of GF	1	4.050	4.630			18.752
	Roof slab of GF	1	9.600	3.300			31.680
	Roof slab side of GF	1	82.000	0.150			12.300
	Main Stair case - landing	4	1.200	1.200			5.760
	Main Stair case - slab	2	3.500	1.200			8.400
	Main Stair case - slab	2	2.300	1.200			5.520
	Main Stair case - slab	2	1.700	1.200			4.080
	Stair case to back wash water tank-landing	1	0.900	0.900			0.810
	Stair case to back wash water tank-slab	1	5.400	0.900			4.860
	Alum lime tank - landing	1	4.830	0.900			4.347
	Stair alum lime tank landing	2	1.000	1.000			2.000
	Stair case to alum lime tank	1	4.470	1.000			4.470
	Stair case to alum lime tank	1	4.020	1.000			4.020
	FF Roof slab	1	17.500	12.100			211.750
	FF Roof slab	1	4.950	3.600			17.820

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF Roof slab side	1	65.800	0.150			9.870
	SF - roof slab	1	7.930	5.030			39.888
	SF - roof slab and back wsh tank roof slab	2	12.100	4.900			118.580
	Stair case to Wash water tank	1	5.400	0.900			4.860
	Stair case to Wash water tank	1	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	11.500	1.650			75.900
	beam under filter bed	4	8.800	1.650			58.080
	GF plinth beam	4	12.600	1.200			60.480
	GF plinth beam	3	11.500	1.200			41.400
	GF plinth beam	3	3.300	1.200			11.880
	GF plinth beam	1	8.400	1.200			10.080
	GF plinth beam	1	4.050	1.200			4.860
	GF plinth beam	1	4.030	1.200			4.836
	GF Lintel	2	94.270	0.150			28.281
	GF sunshade	1	53.500	0.700			37.450
	GF roof beam	2	20.950	1.200			50.280
	GF roof beam	2	25.000	1.200			60.000
	GF roof beam	6	11.500	1.200			82.800
	GF roof beam	1	4.030	1.200			4.836
	GF roof beam	1	8.400	1.200			10.080
	GF roof beam	3	3.300	1.200			11.880
	FF- Lintel	2	87.500	0.150			26.250
	FF sunshade	1	65.800	0.700			46.060
	FF roof beam	5	11.500	1.200			69.000
	FF roof beam	4	16.900	1.200			81.120
	FF roof beam	1	4.350	1.200			5.220
	FF roof beam	1	3.300	1.200			3.960

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	SF lintel	2	35.340	0.150			10.602
	SF sunshade	1	48.700	0.700			34.090
	SF roof beam	2	11.500	1.200			27.600
	SF roof beam	3	4.350	1.200			15.660
	SF roof beam	1	7.330	1.200			8.796
	SF roof beam	1	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						
	Column up to filter roof slab	12	2.100	4.020			101.304
	Column under trough	6	1.200	2.170			15.624
	Column GF to FF floor	12	2.100	4.000			100.800
	Column GF to FF floor	2	2.100	3.300			13.860
	Column GF to FF floor	5	1.200	3.300			19.800
	Column FF floor to SF roof	20	1.500	3.000			90.000
	Column FF floor to SF roof	4	1.200	3.000			14.400
	Column SF floor	10	1.500	3.000			45.000
	Column SF floor	4	1.200	3.000			14.400
	Total						**415.188**
						Total Quantity in sqm	**415.188**
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	1.000	0.150			3.600
	Stair case slab side	1	4.470	0.100			0.447
	Stair case slab side	1	4.020	0.100			0.402

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Stair case landing slab side	2	1.000	0.100			0.200
	Main Stair case steps GF	44	1.200	0.150			7.920
	Main Stair case landing slab side	4	1.200	0.100			0.480
	Main Stair case - slab side	2	3.500	0.100			0.700
	Main Stair case - slab side	2	2.300	0.100			0.460
	Main Stair case - slab	2	1.700	0.100			0.340
	Stair case to B/W tank steps	15	0.900	0.200			2.700
	Stair case to B/W tank landing slab side	1	0.900	0.100			0.090
	Stair case to B/W tank slab side	1	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 levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel rein forcement						
	Qnty same as item no.7	1	304.755			100.000000	30475.500
	Pile -600mm dia.(3.14*.6*.6*1/4*7.9)	29	2.230			100.000000	6467.000
	Total						**36942.500**
						Total Quantity in kilogram	**36942.500**
5.014	22.23.1						

Sl 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, 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						
	Providing Crystalline slurry for water proofing treatment						
	filter bed - side wall	2	11.100		3.000		66.600
	filter bed - side wall	3	3.500		3.000		31.500
	filter bed - gullet wall	2	11.100		2.700		59.940
	WW trough - side wall	24	3.500		0.350		29.400
	Manifauld - side wall	6	3.500		0.500		10.500
	Clear water channel in pipe gallery side wall	2	17.500		1.000		35.000
	Total						**232.940**
						Total Quantity in sqm	**232.940**
5.015	22.23.2						
	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.						
	Providing Crystalline slurry for water proofing treatment						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Floor slab of filter bed including pipe gallery	1	11.500	8.800			101.200
	WW trough slab	6	3.500	0.400			8.400
	Clear water channel in pipe gallery	1	17.500	0.600			10.500
	Total						**120.100**
						Total Quantity in sqm	**120.100**
5.016	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					1.000
	Total						**1.000**
						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	82.580	0.200	4.000		66.064
	Parapet wall	1	34.530	0.200	0.750		5.180
	First floor	1	87.500	0.200	3.000		52.500
	Parapet wall	1	44.150	0.200	0.750		6.623
	Second floor	1	35.340	0.200	3.000		21.204
	Parapet wall	1	18.900	0.200	0.750		2.835
	Deduction - Lintel GF	-1	94.270	0.200	0.150		-2.828
	Deduction - Lintel FF	-1	87.500	0.200	0.150		-2.625
	Deduction - Lintel SF	-1	35.340	0.200	0.150		-1.060
	Deduction - Rolling shutter	-2	3.000	0.200	2.800		-3.360
	Deduction - Rolling shutter	-1	2.000	0.200	2.100		-0.840

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Deduction - Jalli work	-2	3.000	0.200	1.800		-2.160
	Deduction - Opening	-1	1.200	0.200	2.100		-0.504
	Deduction -Door	-5	0.800	0.200	2.100		-1.680
	Deduction -Door	-7	1.000	0.200	2.100		-2.940
	Deduction - Door& window	-3	2.000	0.200	2.100		-2.520
	Deduction - window	-19	1.500	0.200	1.400		-7.980
	Deduction - ventilator	-5	1.500	0.200	1.400		-2.100
	Deduction columnwidth	-38	0.600	0.200	4.000		-18.240
	Total						**105.569**
						Total Quantity in cum	**105.569**
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	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	2.100		4.020		101.304
	column - under trough	6	1.200		2.170		15.624
	column - GF	12	2.100		4.000		100.800
	column - GF	2	2.100		3.300		13.860
	column - GF	5	1.200		3.300		19.800
	column - FF	20	1.500		3.000		90.000
	column - FF	4	1.200		3.000		14.400
	GF - out side wall	1	64.600		4.000		258.400
	GF - out side wall	1	8.400		3.300		27.720
	GF -wall - lobby	1	22.360		3.300		73.788

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	GF -wall - lobby	1	15.320		3.300		50.556
	GF -wall -blower	1	14.760		3.300		48.708
	GF -wall - Chlorine room	1	22.560		4.000		90.240
	GF -wall - Chemical room	1	32.580		4.000		130.320
	GF -wall -Toilet & wash	2	9.740		4.000		77.920
	filter bed floor slab	1	11.500	8.800			101.200
	Clear water channel bottom	1	17.500	0.600			10.500
	Clear water channel side	4	17.500	1.000			70.000
	filter bed including pipe gallery -side wall	4	11.500	4.020			184.920
	filter bed including pipe gallery -side wall	2	8.800	4.020			70.752
	filter bed including pipe gallery -side wall	4	4.450	2.700			48.060
	gullet wall	2	11.500	2.700			62.100
	W/W trough- slab	6	3.500	0.400			8.400
	W/W trough- side wall	12	3.500	0.500			21.000
	GF - roof beam	2	20.950	1.200			50.280
	GF - roof beam	2	25.000	1.200			60.000
	GF - roof beam	6	11.500	1.200			82.800
	GF - roof beam	1	4.030	1.200			4.836
	GF - roof beam	1	8.400	1.200			10.080
	GF - roof beam	3	3.300	1.200			11.880
	GF - Sunshade	2	53.500	0.650			69.550
	parapet wall	2	34.530	0.800			55.248
	GF - ceiling	1	25.000	4.630			115.750
	GF - ceiling	1	21.550	7.480			161.194
	Deduct-top of filter bed	-1	8.750	1.800			-15.750
	Deduct top of filter bed	-3	2.200	1.280			-8.448
	GF - porch ceiling	1	9.000	3.300			29.700

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	GF - open terrace	1	12.100	4.470			54.087
	GF - open terrace	1	4.050	4.630			18.752
	FF - column	20	1.500	3.000			90.000
	FF - column	4	1.200	3.000			14.400
	FF - wall - out side	1	63.400	3.000			190.200
	FF - wall -filter & pipe gallery	1	38.760	3.000			116.280
	FF - wall -stair room	1	14.860	3.000			44.580
	FF - wall -office	1	14.860	3.000			44.580
	FF - wall -lab	1	22.620	3.000			67.860
	FF - wall - alum lime tank	4	4.800	3.000			57.600
	FF - wall - alum lime room	1	16.800	3.000			50.400
	FF - wall - toilet	1	9.780	3.000			29.340
	FF - roof beam	5	11.500	1.200			69.000
	FF - roof beam	4	16.900	1.200			81.120
	FF - roof beam	1	4.350	1.200			5.220
	FF - roof beam	1	3.300	1.200			3.960
	FF - sunshade	2	65.800	0.700			92.120
	FF - roof ceiling	1	17.500	12.100			211.750
	FF - roof ceiling	1	4.950	3.600			17.820
	Parapet wall	2	44.150	0.800			70.640
	SF - column	10	1.500	3.000			45.000
	SF - column	4	1.200	3.000			14.400
	SF - wall - out side	1	40.300	3.000			120.900
	SF - wall - stair room	1	14.860	3.000			44.580
	SF - wall - room	1	22.220	3.000			66.660
	SF - wall - dress & toilet	2	10.940	3.000			65.640
	SF - roof beam	2	11.500	1.200			27.600
	SF - roof beam	3	4.350	1.200			15.660
	SF - roof beam	1	7.330	1.200			8.796
	SF - roof beam	1	3.330	1.200			3.996
	SF - sunshade	2	48.700	0.800			77.920

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	SF - roof ceiling	1	12.100	4.900			59.290
	SF - roof ceiling	1	7.980	4.180			33.356
	parapet wall	1	18.900	0.800			15.120
	deduction - Rolling shutter	-2	3.000	2.800			-16.800
	deduction - Rolling shutter	-1	2.000	2.100			-4.200
	deduction - Jalli work	-2	3.000	1.800			-10.800
	deduction - opening	-1	1.200	2.100			-2.520
	deduction - Door& window	-3	2.000	2.100			-12.600
	deduction - Door	-7	1.000	2.100			-14.700
	deduction - Door	-5	0.800	2.100			-8.400
	deduction - window	-19	1.500	1.400			-39.900
	deduction - ventilators	-5	1.500	0.600			-4.500
	Total						**4131.699**
						Total Quantity in sqm	**4131.699**
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						
	Qnty same as item no. 21	1	4131.699				4131.699
	Total						**4131.699**
						Total Quantity in sqm	**4131.699**
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						
	Qnty same as item no.22	1	4131.699				4131.699
	Total						**4131.699**
						Total Quantity in sqm	**4131.699**
5.022	10.6.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	3.000	2.800			16.800
	Supplying and fixing rolling shutter	1	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	3.000	2.500		2.400000	36.000
	Rolling shutter	1	2.000	2.100		2.400000	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, Aluminnium 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)						
	providing Aluminium door and windows						
	Door & window-vertical	18	2.100			0.580000	21.924

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Door & window-horizontal	6	2.000			0.580000	6.960
	Door - vertical	14	2.100			0.580000	17.052
	Door - horizontal	14	1.000			0.580000	8.120
	Door - vertical	10	2.100			0.580000	12.180
	Door - horizontal	10	0.800			0.580000	4.640
	window- vertical	76	1.400			0.580000	61.712
	window-horizontal	38	1.500			0.580000	33.060
	Ventilator - vertical	15	0.600			0.580000	5.220
	Ventilator-horizontal	10	1.000			0.580000	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	1.000	2.100			6.300
	Door & window	6	0.500	2.100			6.300
	Door	7	1.000	2.100			14.700
	Door	5	0.800	2.100			8.400
	Windows	57	0.500	1.400			39.900
	Ventilator	10	0.500	0.600			3.000
	Total						**78.600**
						Total Quantity in sqm	**78.600**
5.026	21.17						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	0.500			0.250000	11.250
	Windows	190	1.500			0.250000	71.250
	Ventilator	20	1.000			0.250000	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	4.050	7.530			30.497
	G.F. Lobby	1	4.280	3.780			16.178
	Blower	1	4.030	3.750			15.113
	Filter slab	1	11.300	8.480			95.824
	Filter slab deduction	-1	8.750	1.800			-15.750
	Filter slab deduction	-3	2.200	1.280			-8.448
	Main Stair case - steps	22	1.300	0.300			8.580
	Main Stair case - steps	23	1.300	0.150			4.485
	Main Stair case - landing	2	1.300	1.300			3.380
	Main Stair case - side	1	3.500	0.250			0.875
	Main Stair case - side	1	2.300	0.250			0.575
	Main Stair case - side	1	1.700	0.250			0.425

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF -stair room	1	7.830	1.500			11.745
	FF -Balcony	1	4.550	3.500			15.925
	FF -Office	1	4.050	5.640			22.842
	FF -lab	1	4.180	7.530			31.475
	FF -Alum lime tank landing	1	4.030	1.100			4.433
	FF -Alum lime steps landing	2	1.100	1.100			2.420
	FF -Alum lime steps	24	1.100	0.500			13.200
	FF -Alum lime slab side	1	4.470	0.250			1.118
	FF -Alum lime slab side	1	4.020	0.250			1.005
	FF -Main stair case- steps	22	1.300	0.500			14.300
	FF -Main stair case- landing	2	1.300	1.300			3.380
	FF -Main stair case-side	1	3.500	0.250			0.875
	FF -Main stair case-side	1	2.300	0.250			0.575
	FF -Main stair case-side	1	1.700	0.250			0.425
	SF -stair room	1	4.050	1.500			6.075
	SF -balcony	1	4.350	3.400			14.790
	SF -Room	1	3.980	7.530			29.969
	SF -dress	1	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	3.200	1.690			10.816
	FF. Toilet	1	3.200	1.690			5.408
	SF. Toilet	1	3.780	1.690			6.388
	Total						**22.612**
						Total Quantity in sqm	**22.612**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
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	1.400	1.300			14.560
	Alum lime tank - side wall	2	4.500	1.500			13.500
	W/W trough	6	3.500	0.400			8.400
	W/W trough side wall	24	3.500	0.600			50.400
	Filter - side walls	6	3.500	3.000			63.000
	Gullet wall	2	11.000	2.700			59.400
	GF. Toilet & wash	2	9.780	3.000			58.680
	FF. Toilet	1	9.780	3.000			29.340
	SF. Toilet	1	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	8.400	3.300			27.720
	Total						**27.720**
						Total Quantity in sqm	**27.720**
5.031	11.26.1						
	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	12.920	3.770			48.708
	chlorine room	1	4.150	7.530			31.250

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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 offilter house, staircase and balcony.						
	40mm dia.	1	150.000			3.250000	487.500
	15mm dia.	1	500.000			0.952000	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			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	6.000				12.000
	Total						**12.000**
						Total Quantity in metre	**12.000**
5.035	9.118.2						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing to existing door frames30 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 (± 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 (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 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.						
	uPVC Door						
		2	0.800		2.100		3.360
	Total						**3.360**
						Total Quantity in sqm	**3.360**
6	Filter media						
6.001	100.55.1						
	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.						
	Supplying,stacking and spreading fine pebbles						
	Fine pebbles	3	3.500	3.500	0.200		7.350
	Total						**7.350**
						Total Quantity in cum	**7.350**
6.002	100.55.2						
	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.						
	Supplying,stacking and spreading 12 to 20mm size pebbles						
	12 to 20mm size pebbles	3	3.500	3.500	0.200		7.350
	Total						**7.350**
						Total Quantity in cum	**7.350**
6.003	100.55.3						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	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	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	30.300	0.250	3.000		22.725
	Haunch	1	29.300	0.300	0.700		6.153
	Cover slab	1	12.100	4.750	0.150		8.621
	Deduct Column width	-8	0.300	0.250	3.000		-1.800
	Beams	4	3.650	0.300	0.350		1.533
	Beams	2	11.000	0.300	0.350		2.310
	Deduct MH	-2	0.600	0.600	0.150		-0.108
	Total						**39.434**
						Total Quantity in cum	**39.434**
7.002	5.34.1						

Sl 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 richer mix-M 30 grade						
	Quantity as per item No.1	1	39.434				39.434
	Total						**39.434**
						Total Quantity in cum	**39.434**
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	39.434			100.000000	3943.400
	Total						**3943.400**
						Total Quantity in kilogram	**3943.400**
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	31.300		3.000		93.900
	Side wall inside	1	29.300		3.000		87.900
	haunch	1	29.300		0.700		20.510
	Total						**202.310**
						Total Quantity in sqm	**202.310**
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	12.100	4.750			57.475
	Cover slab - sides	1	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	3.000	1.200			28.800

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	3.650		1.000		14.600
	Beams	2	11.000		1.000		22.000
	Total						**36.600**
						Total Quantity in sqm	**36.600**
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	31.300		3.000		93.900
	Side wall inside	1	29.300		3.000		87.900
	Haunch	1	29.300		0.350		10.255
	Cover slab	1	12.100	4.750			57.475
	Cover slab-sides	1	33.700		0.150		5.055
	Beams	4	3.650	1.000			14.600
	Total						**269.185**
						Total Quantity in sqm	**269.185**
7.009	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, 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						
	Providing and appying waterproofing						
	Side wall	1	30.300		3.000		90.900
	Total						**90.900**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in sqm	**90.900**
7.010	22.23.2						
	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.						
	Providing and appying waterproofing						
	Floor slab	1	11.000	3.650			40.150
	Total						**40.150**
						Total Quantity in sqm	**40.150**
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	31.300		3.000		93.900
	Cover slab	1	12.100	4.750			57.475
	Cover slab-sides	1	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	156.430				156.430
	Total						**156.430**
						Total Quantity in sqm	**156.430**
7.013	10.25.2						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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				50.000000	100.000
	For hand rail	1				150.000000	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					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
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				0.280000	0.560
	150 mm dia. wall casting pipe	2				0.450000	0.900
	250 mm dia. wall casting pipe	1				0.850000	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					2.000
	Total						**2.000**
						Total Quantity in no	**2.000**
7.017	100.31.1.4						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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					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					2.000
	Total						**2.000**
						Total Quantity in no	**2.000**
7.019	100.36.1						
	Filling water with 5000 litre tankers fited 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 appliences and cost of water etc. complete.						
	Filling water						
	Wash water tank	1	108.000				108.000
	Total						**108.000**
						Total Quantity in Kilo litre	**108.000**
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					2.000
	Total						**2.000**
						Total Quantity in no	**2.000**
7.021	OD50137/2022-2023						
	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						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Water level indicator	1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
7.022	OD50138/2022-2023						
	Supply and Fitting 100 mm Vent cowl						
	Supplying and fitting Vent cowl-100mm						
	Vent cowl-100mm	4					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						
	Earth work for foundation						
	Channel	1	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	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	35.000	0.800	0.200		5.600

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Side wall	2	35.000	0.150	0.500		5.250
	Cover slab	1	35.000	0.800	0.200		5.600
	Total						**16.450**
						Total Quantity in cum	**16.450**
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	16.450				16.450
	Total						**16.450**
						Total Quantity in cum	**16.450**
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	35.000		0.500		35.000
	Side wall - outside	2	35.000		0.700		49.000
	Cover slab-sides	70	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 levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel Reinforcement						
		1	16.450			100.000000	1645.000
	Total						**1645.000**
						Total Quantity in kilogram	**1645.000**
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	35.000		0.500		35.000
	bottom slab	1	35.000	0.500			17.500
	Cover slab top	1	35.000	0.800			28.000
	Total						**80.500**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in sqm	**80.500**
8.008	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, 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						
	Water proofing Treatment						
	Side wall inside	2	35.000		0.500		35.000
	Total						**35.000**
						Total Quantity in sqm	**35.000**
8.009	22.23.2						
	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.						
	Water proofing Treatment						
	Floor slab	1	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						

Sl 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						
	EW excavation for foundation						
	For Sump	1	11.500	11.500	1.500		198.375
	Total						**198.375**
						Total Quantity in cum	**198.375**
9.002	OD61527/2022-2023						
	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	11.500	11.500	1.500		198.375
	Total						**198.375**
						Total Quantity in cum	**198.375**
9.003	OD61525/2022-2023						
	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	11.500	11.500	0.850		112.413
	Total						**112.413**
						Total Quantity in cum	**112.413**
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	60*10			0.746000	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						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Bailing out water with 10HP	20	60*10			0.746000	8952.000
	Total						**8952.000**
						Total Quantity in Kwh	**8952.000**
9.006	OD251863/2022-2023						
	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	1.650				26.400
	Total						**26.400**
						Total Quantity in metre	**26.400**
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 capacityInitial test						
	Vertical load testing of pile						
	Vertical load testing of pile	1					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	10.300	10.300	0.150		15.914
	Total						**15.914**
						Total Quantity in cum	**15.914**
9.009	5.33.1						

Sl 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	10.100	10.100	0.300		30.603
	Pile cap	16	0.900	0.900	0.800		10.368
	Pile connecting beam	8	9.000	0.600	0.450		19.440
	Deduction dor Pile cap	-24	0.900	0.600	0.450		-5.832
	side wall	1	37.000	0.250	3.750		34.688
	Haunch	0.5	36.000	0.300	0.700		3.780
	columns	16	0.300	0.300	3.750		5.400
	roof beams	8	9.500	0.300	0.330		7.524
	cover slab	1	10.100	10.100	0.200		20.402
	Total						**126.373**
						Total Quantity in cum	**126.373**
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						
	Pump house-Lintel	1	36.800	0.200	0.150		1.104
	columns	16	0.300	0.300	4.000		5.760
	Roof beams	8	9.500	0.300	0.330		7.524
	Corbel	8	0.500	0.300	0.300		0.360
	Sunshade	1	40.400	0.600	0.100		2.424
	Roof slab	1	10.100	10.100	0.150		15.302

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						**32.474**
						Total Quantity in cum	**32.474**
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	10.100	10.100	0.300		30.603
	side wall	1	37.000	0.250	3.750		34.688
	Haunch	0.5	36.000	0.300	0.700		3.780
	columns	16	0.300	0.300	3.750		5.400
	roof beams	9	9.500	0.300	0.330		8.465
	cover slab	1	10.100	10.100	0.200		20.402
	Total						**103.338**
						Total Quantity in cum	**103.338**
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	41.200		0.150		6.180
	Bottom slab	1	40.400		0.300		12.120
	Pile cap	16	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, butteresses, plinth and string courses etc.						
	Centering and shuttering						
	Side wall inside	1	36.000		3.750		135.000
	Side wall outside	1	38.000		3.750		142.500
	Haunch	1	36.000		0.700		25.200
	Total						**302.700**
						Total Quantity in sqm	**302.700**
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	1.200		3.750		72.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Pump house - Columns	16	1.200		4.000		76.800
	Total						**148.800**
						Total Quantity in sqm	**148.800**
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	10.100	10.100			102.010
	floor slab - sides	1	40.400		0.200		8.080
	Roof slab - sides	1	10.100	10.100			102.010
	Roof slab - sides	1	40.400		0.150		6.060
	Sunshade	1	40.400	0.600			24.240
	Sunshade - sides	1	40.400		0.100		4.040
	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	9.500	0.800			60.800
	Pump house lintel	2	37.200	0.150			11.160
	Pump house Roof beam	8	9.500	0.900			68.400
	Pile	8	9.000		1.650		118.800
	Total						**259.160**
						Total Quantity in sqm	**259.160**
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 levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Reinforcement						
	Qnty same as item no. 9&10	1	126.373+ 32.474			100.00 0000	15884.70 0
	600 mm pile	16	0.466			100.00 0000	745.600
	Total						**16630.30 0**
						Total Quantity in kilogram	**16630.30 0**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
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	36.800	0.200	4.000		29.440
	For pump house parapet wall	1	36.800	0.200	0.750		5.520
	Deduction-Rolling shutter	-1	3.000	0.200	2.500		-1.500
	Deduction-Windows	-9	1.500	0.200	1.400		-3.780
	Deduct Column portion	-16	0.300	0.300	4.000		-5.760
	Total						**23.920**
						Total Quantity in cum	**23.920**
9.019	13.7.1						
	12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)						
	12mm thick Plastering						
	sump top & bottom slab	2	9.000	9.000			162.000
	Haunch	1	36.000		0.700		25.200
	Side wall - inside	1	36.000		3.050		109.800
	Side wall -outside	1	38.000		3.750		142.500
	Column	16	1.200		3.750		72.000
	sump roof beams	8	9.000	0.960			69.120
	Floor slab of PH	1	10.100	10.100			102.010
	Gantry beam	2	9.100	2.100			38.220
	PH wall - inside	1	36.400		4.000		145.600
	PH wall - outside	1	38.000		4.000		152.000
	PH roof slab top and bottom	2	10.100	10.100			204.020
	Roof slab side	1	40.400	0.150			6.060
	PH roof beam	8	9.000	0.960			69.120
	Sunshade	2	40.400	0.600			48.480
	Sunshade side	1	40.400	0.100			4.040
	Parapet wall	2	40.400	0.800			64.640

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Deduction-window	-9	1.500	1.400			-18.900
	Deduction-Rolling shutter	-1	3.000	2.500			-7.500
	Deduction-ventilator	-11	1.000	0.600			-6.600
	Total						**1381.810**
						Total Quantity in sqm	**1381.810**
9.020	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, 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						
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures						
	side wall	1	36.000	3.050			109.800
	Haunch	1	36.000	0.700			25.200
	Total						**135.000**
						Total Quantity in sqm	**135.000**
9.021	22.23.2						
	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.						

Sl 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						
	floor slab	1	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						
	PH- Side wall - out side	1	36.400	4.000			145.600
	PH- Side wall - in side	1	38.000	4.000			152.000
	PH- column	4	1.200	4.000			19.200
	PH- Gantry beam	2	9.200	2.100			38.640
	PH- roof beam	8	9.100	0.960			69.888
	PH- roof & ceiling	2	10.100	10.100			204.020
	PH- roof side	1	40.400	0.150			6.060
	Sunshade	2	40.400	0.600			48.480
	Sunshade side	1	40.400	0.150			6.060
	Parapet wall	2	40.400	0.800			64.640
	Deduction - windows	-9	1.500	1.400			-18.900
	Deduction - Rolling shutter	-1	3.000	2.500			-7.500
	Deduction - windows	-11	1.000	0.600			-6.600
	Total						**721.588**
						Total Quantity in sqm	**721.588**
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						
	Qnty same as item no. 20	1	721.588				721.588
	Total						**721.588**
						Total Quantity in sqm	**721.588**
9.024	10.6.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	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	3.000	2.500		2.400000	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, Aluminnium 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)						
	Aluminium works for windows						
	Windows - V	36	1.400			0.580000	29.232
	Windows - H	18	1.500			0.580000	15.660
	Ventilator - V	33	0.600			0.580000	11.484
	Ventilator - H	22	1.000			0.580000	12.760

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	0.500	1.400			18.900
	Ventilator shutter	22	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	1.500	1.400		0.250000	4.725
	Ventilators	11	1.000	0.600		0.250000	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						
	Steel work						
	Ladder	1				100.000000	100.000
	Total						**100.000**
						Total Quantity in kg	**100.000**
9.030	100.36.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Filling water with 5000 litre tankers fited 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 appliences and cost of water etc. complete.						
	Filling water						
	Filling water	1	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				0.840000	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					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
9.033	OD63042/2022-2023						
	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					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
9.034	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Lettering						
	Lettering	100				15.000000	1500.000
	Total						**1500.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						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	750.000				750.000
	Total						**750.000**
						Total Quantity in kilogram	**750.000**
9.036	OD249775/2022-2023						
	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					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
10	Con. of Transformer room						
10.001	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 in excavation by mechanical means						
	For levelling	1	12.000	8.000	0.500		48.000
	Total						**48.000**
						Total Quantity in cum	**48.000**
10.002	OD63169/2022-2023						
	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	8.500				102.000
	Total						**102.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in metre	**102.000**
10.003	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 and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:						
	Flooring	1	10.000	7.000	0.100		7.000
	Total						**7.000**
						Total Quantity in cum	**7.000**
10.004	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 and laying Design mix -M25 cement concrete						
	Pile connecting beam	9	3.367-0.9	0.300	0.450		2.997
	Pile connecting beam	8	3.55-0.9	0.300	0.450		2.862
	Pile cap	12	0.900	0.900	0.800		7.776
	Total						**13.635**
						Total Quantity in cum	**13.635**
10.005	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 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	0.300	0.300	4.000		4.320
	Beams	9	3.370	0.300	0.450		4.095
	Beams	8	3.550	0.300	0.450		3.834

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Lintel	1	34.800	0.200	0.150		1.044
	Roof slab	1	10.700	7.700	0.120		9.887
	Sunshade	1	36.800	0.600	0.100		2.208
	Total						**25.388**
						Total Quantity in cum	**25.388**
10.006	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	34.800	0.200	4.000		27.840
	Parapet	1	36.800	0.200	0.750		5.520
	Deduction-Windows	-9	1.400	0.200	1.500		-3.780
	Rolling shutter	-1	3.000	0.200	2.500		-1.500
	Lintel	-1	34.800	0.200	0.150		-1.044
	Column width	-10	0.300	0.200	3.750		-2.250
	Total						**24.786**
						Total Quantity in cum	**24.786**
10.007	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 including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	columns	12	1.200		4.000		57.600
	Pile cap	12	3.600		0.800		34.560
	Total						**92.160**
						Total Quantity in sqm	**92.160**
10.008	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 for roof slab,sunshade						
	Roof slab	1	10.700	7.700			82.390
	Roof slab-projection	1	36.800		0.120		4.416
	Sunshade	1	36.800	0.600			22.080
	Total						**108.886**
						Total Quantity in sqm	**108.886**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
10.009	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	3.367-0.9		1.200		26.644
	Pile connecting Beam	8	3.55-0.9		1.200		25.440
	Beams	9	3.370		1.200		36.396
	Beams	8	3.550		1.200		34.080
	Lintel	2	34.800		0.150		10.440
	Total						**133.000**
						Total Quantity in sqm	**133.000**
10.010	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 R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level						
	RCC	1	13.635+25.388			100.000000	3902.300
	Pile-(3.14*0.6*0.6*8.5/4)	12	2.402			100.000000	2882.400
	Total						**6784.700**
						Total Quantity in kilogram	**6784.700**
10.011	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						
		1					1.000
	Total						**1.000**
						Total Quantity in per test	**1.000**
10.012	13.1.1						
	12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)						
	12 mm cement plaster of mix						
	Beams	9	3.370	1.200			36.396

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Beams	8	3.550	1.200			34.080
	Column	12	1.200		4.000		57.600
	Roof slab	1	10.700	7.700			82.390
	Roof slab-Projection	1	36.800		0.270		9.936
	Sunshade	2	36.800	0.700			51.520
	Walls -inside	1	34.000		4.000		136.000
	Walls-outside	1	35.600		4.000		142.400
	Parapet	2	36.200		0.750		54.300
	Over flooring&ceiling	2	10.000	7.000			140.000
	Rolling shutter	-1	3.000		2.500		-7.500
	Window	-9	1.400		1.500		-18.900
	Total						**718.222**
						Total Quantity in sqm	**718.222**
10.013	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:11	1	719.122				719.122
	Deduction-Flooring	-1	70.000				-70.000
	Total						**649.122**
						Total Quantity in sqm	**649.122**
10.014	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:12	1	649.122				649.122
	Total						**649.122**
						Total Quantity in sqm	**649.122**
10.015	10.6.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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 shutters						
		1	3.000		2.500		7.500
	Total						**7.500**
						Total Quantity in sqm	**7.500**
10.016	13.48.1						
	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	3.000	2.500		2.400000	18.000
	Total						**18.000**
						Total Quantity in sqm	**18.000**
10.017	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, Aluminnium 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	1.500			0.580000	15.660
	Windows -V	36	1.400			0.580000	29.232
	Total						**44.892**
						Total Quantity in kg	**44.892**
10.018	21.3.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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	1.500	1.400			18.900
	Total						**18.900**
						Total Quantity in sqm	**18.900**
10.019	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	1.500	10.000		0.250000	33.750
	Total						**33.750**
						Total Quantity in kg	**33.750**
10.020	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Lettering with black Japan pint of approved brand and manufacture						
		1	100.000			20.000000	2000.000
	Total						**2000.000**
						Total Quantity in per Letter per cm height	**2000.000**
11	General ground levelling and Road formation						
11.001	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 including uprooting of rank vegetation, grass, brush wood, trees and saplings						
		1	70.000	20.000			1400.000
	Total						**1400.000**
						Total Quantity in sqm	**1400.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
11.002	2.33.1						
	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.Beyound 30 cm girth up to and including 60 cm girth						
	Felling trees of the girth						
		5					5.000
	Total						**5.000**
						Total Quantity in each	**5.000**
11.003	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.Beyound 60 cm girth up to and including 120 cm girth						
	Felling trees of the girth						
		3					3.000
	Total						**3.000**
						Total Quantity in each	**3.000**
11.004	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					3.000
	Total						**3.000**
						Total Quantity in each	**3.000**
11.005	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	60.000	12.000	1.300		936.000
	Total						**936.000**
						Total Quantity in cum	**936.000**
11.006	16.91.2						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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 in footpath, parks, lawns, drive ways or light traffic parking etc,.						
		1	100.000	1.500			150.000
		1	25.000	5.000			125.000
	Total						**275.000**
						Total Quantity in sqm	**275.000**
11.007	4.1.6						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)						
	CC 1:3:6with 40 mm B/S						
	Road surface	1	90.000	3.500	0.150		47.250
	Total						**47.250**
						Total Quantity in cum	**47.250**
11.008	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						
		1	90.000	3.500	0.100		31.500
	Total						**31.500**
						Total Quantity in cum	**31.500**
12	Installation of Fire Hydrant						
12.001	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						
	Fire hydrant						
	Fire hydrant	1	2.500	2.500	1.500		9.375
	Total						**9.375**
						Total Quantity in cum	**9.375**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
12.002	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	6.000				6.000
	Total						**6.000**
						Total Quantity in metre	**6.000**
12.003	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						
		2	2.5+2.5		1.500		15.000
	Total						**15.000**
						Total Quantity in sqm	**15.000**
12.004	6.3.1						
	Brick work with common burnt clay machine moulded perforated bricks of classdesignation 12.5 conforming to IS: 2222 in superstructure above plinth level up tofloor 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	3.360	0.120	0.600		0.242
	Total						**0.242**
						Total Quantity in cum	**0.242**
12.005	4.2.3						
	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						
		2	1.000		1.000		2.000
	Total						**2.000**
						Total Quantity in cum	**2.000**
12.006	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						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering including strutting, etc. and removal of form						
		2	4.000		1.000		8.000
	Total						**8.000**
						Total Quantity in sqm	**8.000**
12.007	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	6.000				6.000
	Total						**6.000**
						Total Quantity in metre	**6.000**
12.008	OD198471/2022-2023						
	Supply of 100mm GI pipe						
	Supply of 100 mm GI pipe						
		1	6.000				6.000
	Total						**6.000**
						Total Quantity in metre	**6.000**
12.009	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						
		1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
12.010	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	1.440		0.600		0.864
	outer	1	3.360		0.600		2.016
		1	3.360	0.120			0.403
	Total						**3.283**
						Total Quantity in sqm	**3.283**
12.011	100.98.458						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 100mm.						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supply of CI Double Flanged Sluice Valve						
		1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
13	Wash Water Arrangements to nearest safe drain/source after purification of wash water						
13.001	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						
	For drain	1	60.000	0.900	1.200		64.800
	Total						**64.800**
						Total Quantity in cum	**64.800**
13.002	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	60.000				60.000
	Total						**60.000**
						Total Quantity in metre	**60.000**
13.003	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					15.000
	Total						**15.000**
						Total Quantity in joint	**15.000**
13.004	OD115445/2022-2023						
	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					4.000
	Total						**4.000**
						Total Quantity in Each Cut	**4.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
13.005	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			0.480		0.960
	250mm TP	2			0.320		0.640
	250x 250 tee	1			0.570		0.570
	Total						**2.170**
						Total Quantity in quintal	**2.170**
13.006	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					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
13.007	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					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
13.008	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	60.000				60.000
	Total						**60.000**
						Total Quantity in metre	**60.000**
14	Construction of retaining wall near river side and compound wall						
14.001	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						
	Earth work excavation						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	for retaining wall	1	62.000	2.700	1.500		251.100
	for compound wall	1	180.000	0.600	0.600		64.800
	Total						**315.900**
						Total Quantity in cum	**315.900**
14.002	OD67444/2022-2023						
	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	62.000	2.700	1.500		251.100
	Total						**251.100**
						Total Quantity in cum	**251.100**
14.003	OD67525/2022-2023						
	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 4.5 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 - third depth 3.00m to 4.50m.						
	Earth work excavation						
	for retaining wall	1	62.000	2.700	1.400		234.360
	Total						**234.360**
						Total Quantity in cum	**234.360**
14.004	OD67711/2022-2023						
	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					1.000
	Total						**1.000**
						Total Quantity in L.S	**1.000**
14.005	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	300.000			0.750000	2250.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						**2250.000**
						Total Quantity in Kwh	**2250.000**
14.006	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						
		10	300.000			0.750000	2250.000
	Total						**2250.000**
						Total Quantity in Kwh	**2250.000**
14.007	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	62.000	2.700	0.100		16.740
	Total						**16.740**
						Total Quantity in cum	**16.740**
14.008	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	62.000	2.500	0.300		46.500
	Total						**46.500**
						Total Quantity in cum	**46.500**
14.009	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						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing M25 design mix						
	retaining wall	1	62.000	(0.40+0.20)/2	5.000		93.000
	retaining wall - buttress	20	(1.60+0.20)/2	0.300	5.000		27.000
	Total						**120.000**
						Total Quantity in cum	**120.000**
14.010	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	62.000		0.100		6.200
	PCC for levelling	2	2.700		0.100		0.540
	RCC foundation	2	62.000		0.300		37.200
	RCC foundation	2	2.500		0.300		1.500
	Total						**45.440**
						Total Quantity in sqm	**45.440**
14.011	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						
	for retaining wall	2	62.000		5.000		620.000
	for retaining wall buttress	20	2*((1.6+.2)/2)+0.3		5.000		210.000
	Total						**830.000**
						Total Quantity in sqm	**830.000**
14.012	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 RCC work						
		1	46.5+120.00			100.000000	16650.000
	Total						**16650.000**
						Total Quantity in kilogram	**16650.000**
14.013	10.26.3						

Sl 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 rails using 40mm dia GI pipes						
		1	250.000			3.720000	930.000
	Total						**930.000**
						Total Quantity in kg	**930.000**
14.014	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	180.000	0.600	0.600		64.800
	Total						**64.800**
						Total Quantity in cum	**64.800**
14.015	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	180.000	0.200	1.500		54.000
	Total						**54.000**
						Total Quantity in cum	**54.000**
14.016	13.1.2						
	12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).						
	Plastering						
	for compound wall	2	180.000		1.600		576.000
	Total						**576.000**
						Total Quantity in sqm	**576.000**
14.017	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						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	for gate	1				200.000000	200.000
	Total						**200.000**
						Total Quantity in kg	**200.000**
14.018	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	5.000	2.000			20.000
	Total						**20.000**
						Total Quantity in sqm	**20.000**
14.019	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						
	Qnty same as item no.16	1	576.000				576.000
	Total						**576.000**
						Total Quantity in sqm	**576.000**
14.020	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						
	Qnty same as item no.19	1	576.000				576.000
	Total						**576.000**
						Total Quantity in sqm	**576.000**
15	Mechanical and Electrical works						
15.001	OD204028/2022-2023						
	Mechanical items and Electrification works - 15% 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					1.000
	Total						**1.000**
						Total Quantity in L.S	**1.000**
16	Water supply and Sanitary Arrangements						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
16.001	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	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.002	50.18.7.2.1						
	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/cm2 - Internal work - Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 metre spacing						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.003	50.18.7.3.1						
	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 25 mm dia 12 Kgf/cm2 - Internal work - Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.004	50.18.7.4.1						
	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 32 mm dia 10Kgf/cm2- Internal work - Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.005	50.18.7.5.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps 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/cm2- Internal work- exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.006	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 Kfg/cm - Internal work- Exposed on wall						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing.						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.007	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	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.008	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	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
16.009	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.						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.010	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					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.011	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					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
16.012	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	30.000	0.300	0.600		5.400
	laying 25mm dia. pipe	1	30.000	0.300	0.600		5.400
	laying waste pipe	2	30.000	0.300	0.600		10.800
	Total						**21.600**
						Total Quantity in cum	**21.600**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
16.013	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.						
	Laying UPVC pipes of 20mm						
		1	30.000				30.000
	Total						**30.000**
						Total Quantity in metre	**30.000**
16.014	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	30.000				30.000
	Total						**30.000**
						Total Quantity in metre	**30.000**
16.015	100.98.229						
	Supply of PVC Pipe, 10kg/cm2, 20mm Dia.						
	Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 20mm.						
		1	30.000				30.000
	Total						**30.000**
						Total Quantity in metre	**30.000**
16.016	100.98.230						
	Supply of PVC Pipe, 10kg/cm2, 25mm Dia.						
	Supply of uPVC Pipe, IS 4985: 2000 , 10kg/cm2, 25mm.						
		1	30.000				30.000
	Total						**30.000**
						Total Quantity in metre	**30.000**
16.017	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						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing European type WC	3					3.000
	Total						**3.000**
						Total Quantity in each	**3.000**
16.018	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					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
16.019	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 fixingstainless steel soap dish						
		4					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
16.020	50.17.1.5						
	Supplying and fixing CP Health Faucet superior quality (Jagur or equvalent 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					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
16.021	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					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
16.022	17.11.2						
	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					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.023	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					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.024	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					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.025	17.28.2.1						
	Flexible pipe32 mm dia						
	Flexible pipe32 mm dia						
		4					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.026	17.28.2.2						
	Flexible pipe40 mm dia						
	Flexible pipe40 mm dia						
		4					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.027	17.34.1						
	Providing and fixing toilet paper holder:C.P. brass						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing toilet paper holder:C.P. brass						
		4					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
16.028	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	30.000				30.000
	Total						**30.000**
						Total Quantity in metre	**30.000**
16.029	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	30.000				30.000
	Total						**30.000**
						Total Quantity in metre	**30.000**
16.030	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					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.031	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						
	Providing and fixing PTMT liquid soap container						
		4					4.000
	Total						**4.000**
						Total Quantity in each	**4.000**
16.032	18.33.1						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	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					6.000
	Total						**6.000**
						Total Quantity in each	**6.000**
16.033	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					6.000
	Total						**6.000**
						Total Quantity in each	**6.000**
16.034	18.8.2						
	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, covey ,fitting ,concealed and fixing 20 mm CPVC						
		50					50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
16.035	OD66686/2022-2023						
	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, covey ,fitting and fixing 15 mm chrome plated angle valve with branch connection						
		6					6.000
	Total						**6.000**
						Total Quantity in no	**6.000**
16.036	OD66687/2022-2023						
	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, covey ,fitting and fixing 25 mm 25mm chrome plated angle valve						
		6					6.000
	Total						**6.000**
						Total Quantity in no	**6.000**
16.037	OD66688/2022-2023						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying, conveying ,fitting ,concealed and fixing 25 mm CPVC (Chlorinated Polyvinyl Chloride) pipes of approved make conforming to IS-15778: 2007 . with all necessary accessories, specials viz. Brass socket, Brass bend, MALE BRASS UNION ,TRANSITION COUPLING ,END CAP,REDUCER BUSHING,MALE BRASS TEE,MALE ADAPTOR (BRASS THREADS),MALE ADAPTOR (BRASS THREADS) ,REDUCING MALE ADAPTOR (BRASS THREADS),FEMALE ADAPTOR (BRASS THREADS),REDUCING BRASS COUPLING,MALE BRASS UNION,FEMALE BRASS UNION,COUPLING,all types of bends,Brass tee, union, cross, elbo, nipple, longscrew, reducing socket, reducing tee, short piece ,Brass threaded reducer,Brass threaded tee ,Brass threaded elbow etc. fitted with holder bats clamps, 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. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials.						
	Supplying, covey ,fitting ,concealed and fixing 25 mm CPVC						
		1	50.000				50.000
	Total						**50.000**
						Total Quantity in metre	**50.000**
16.038	OD66692/2022-2023						
	Supplying, conveying ,fitting , and fixing of 15 mm Stainless Steel tap 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, covey ,fitting , and fixing of 15 mm Stainless Steel tap set with all accessories<						
		8					8.000
	Total						**8.000**
						Total Quantity in no	**8.000**
16.039	OD66693/2022-2023						

Sl 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, covey ,fitting , and fixing of 200 mm Stainless Steel shower						
		4					4.000
	Total						**4.000**
						Total Quantity in no	**4.000**
16.040	OD66710/2022-2023						
	: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, covey ,and fixing 50 mm G.M. ball valve with polythene float for 50 mm connection<						
		1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
16.041	OD66711/2022-2023						
	: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, covey ,and fixing 40 mm G.M ball valve with polythene float for 40 mm connection<						
		1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
16.042	OD66715/2022-2023						
	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.						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying, covey ,and fixing 32 mm G.M. ball valve with polythene float for 32 mm<						
		1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
16.043	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					1.000
	Total						**1.000**
						Total Quantity in each	**1.000**
16.044	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					1.000
	Total						**1.000**
						Total Quantity in each	**1.000**
16.045	OD261156/2022-2023						
	Supply and erection of concrete septic tank						
	providing and fixing concrete septic tank						
		1					1.000
	Total						**1.000**
						Total Quantity in no	**1.000**
17	Providing and setting up Laboratory						
17.001	OD65547/2022-2023						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	:Provision for setting Laboratory including chemicals,lab equipments,furniture etc such as Mag-salt of EDTA- 100 gm, Magnesium Sulphate-100 gm, Ethyl Alcohol (95%)-500 ml, Methyl Red Indicator-125 ml, Calcium Carbonate-250 mg, 02 NEDTA Solution- 4x250 ml, Sodium Sulphate-150 gm, SPADNS-5 gm, Silver Sulphate-100 gm, Zirconyl Oxy Chloride-100 gm, Sodium Fluoride-100 gm, White Phenol-100 gm, Pot Nitrate-100 gm, Pot Hydroxide-250 gm,Fuming Sulphuric Acid-500 ml, Sulfamic Acid-500 ml, Al Hydroxide-250 gm, Glacial Acetic Acid-2x500 ml, 1x10 phenantholine- 25 gm, Ferrous Ammo: Sulphate-100 gm, Acetone3x500 ml, Whatsman No.41- 25 Nos,Whatsman No.40-25 Nos, Mac Conkey Broth (Hi Media)-5x1kg, Tissue paper-3 Rolls, Cotton-2 Rolls,Kraft Paper-100 Nos, Ordinary Filter Paper-25 Nos. Refrigerator 200 Ltrs with Stabilizer-1 No, Jar Test Apparatus with 4 Jars-1 No, pH Meter-1 No.,Turbidity Meter-1 No,Gas Stove with gas Connection-1 No, Double Distiller (Pyrex / Corning Glass)-1 No, Bunson Burner-5 Nos,Chlorine Comparator-2 Nos, Stop watch-1 No, Spirit Lamp-2 Nos,Servo Stabilizer – 2 KVA Electronics-1 No. Nesslers Tube 100 ml-10 Nos, Nesslers Tube 50 ml-5 Nos, Conical Flask 250 ml-5 Nos, Standard Flask 100 ml-5 Nos,Standard Flask 250 ml-5 Nos, Standard Flask 500 mls-5 Nos, Graduated pipette 10 ml-5 Nos, Burette25 ml-3 Nos, Burette 50 ml-3 Nos, Burette 100 ml-2 Nos, Burette Stand-8 Nos, Nesslers Tube Stand (Fibre made)-5 Nos, Pipette Stand (Fibre)-5 Nos,Pipette barrel-5 Nos,Sampling Bottles 125 ml-25 Nos, Stoppered Bottles Amber coloured (1 ltr)-5 Nos, Stoppered Bottles 500 ml-10 Nos, Stoppered Bottles 1 Lit- 10 Nos, Erlenmeye Flask 1 Lit-2 Nos, Round Bottom Flask 1 Lit-3 Nos, Round Bottom Flask 500 ml-3 Nos, Vaccum Descicator-2 Nos, Reflex Condenser-2 Nos, Maconkey Bottle-25 Nos, Polyethelene Bottles 150 ml-10 Nos, Polyethelene Bottles 250 ml-10 Nos, Polyethene Beaker 100 ml-10 Nos, Polyethene Beaker 150 ml-10 Nos, Spatula-1 Dozen, Glass Rod-1 Dozen, Rubber Bulb with various pours - 5 Nos, Porcelain Crucible-5 Nos, Silica Crucible-5 Nos, China Dish 10 cm dia-5 Nos. Watch Glass 15 cm dia- 5 Nos, Watch Glass 10 cm dia-4 No Stool (Teak wood)-4 Nos, Armed Chair -6 Nos,Office table with drawers on both end and glass slab at the top-2 Nos,Glass door cupboard.-1 No, Ordinary Chairs-4 Nos, Steel Almarah with locker-1 No, Table, Chair and coat- 1 No each .						
	:Provision for setting Laboratory including chemicals,lab equipments,furniture etc						
		1					1.000
	Total						**1.000**
						Total Quantity in L.S	**1.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
18	Operation and Maintanance charges						
18.001	OD220105/2022-2023						
	Engaging Operator						
	Engaging Operator						
	2 shift	2	540.000				1080.000
	Total						**1080.000**
						Total Quantity in no	**1080.000**
18.002	OD220106/2022-2023						
	Engaging Man Mazdoor						
	Engaging Operator						
	2 shift	2	540.000				1080.000
	Total						**1080.000**
						Total Quantity in no	**1080.000**
18.003	OD220107/2022-2023						
	Engaging Gardner						
	Engaging Gardner						
	1/2 duty	0.5	540.000				270.000
	Total						**270.000**
						Total Quantity in no	**270.000**
18.004	OD220147/2022-2023						
	Supply and delivery of Hydrated lime as per specification at dosage(or as per condition)						
	Supply and delivery of lime						
		14.8					14.800
	Total						**14.800**
						Total Quantity in MT	**14.800**
18.005	OD220151/2022-2023						
	Supply and delivery of alum (as per condition)						
	Supply and delivery of alum						
		18.9					18.900
	Total						**18.900**
						Total Quantity in MT	**18.900**
18.006	OD220112/2022-2023						
	Supply and delivery of Chlorine cylinder						
	Supply and delivery of Chlorine cylinder						
		5					5.000
	Total						**5.000**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
						Total Quantity in no	**5.000**