

Amendment No: 1
to
Tender No: HLL/ID/JIPMER/EWS&SS/16/08 Dated: 21st June 2016
for the work
Providing External Water Supply and sewage system at staff quarters-II,IV&V
for JIPMER, Puducherry.

The following amendments are incorporated in the referred tender enquiry document:

IN (PART I) SCHEDULE FOR SUBMISSION OF BIDS:

For:

EVENT	DATE
Last date of sale of documents	04.07.2016
Last date and time for submission of completed Tender	04.07.2016 at 03:00PM
Date and time for Opening of Technical Bid	04.07.2016 at 03:30PM

Read As:

EVENT	DATE
Last date of sale of documents	07.07.2016
Last date and time for submission of completed Tender	08.07.2016 at 15:00 hrs
Date and time for Opening of Technical Bid	08.07.2016 at 15.30 hrs

In (PART I) INVITATION TO BID

For:

Last date and time of receipt of Tender: -04.07.2016 at 14.30 Hrs.

Date and time of opening of Tender: - 04.07.2016 at 15.00 Hrs.

Read As:

Last date and time of receipt of Tender: -08.07.2016 at 15.00 Hrs.

Date and time of opening of Tender: - 08.07.2016 at 15.30 Hrs.

In SECTION (PART I) II INFORMATION & INSTRUCTIONS FOR APPLICANTS

For:

12.1 Applications shall be submitted to HLL Infra Tech Services Limited., by hand or through registered post or courier service at the address given below and not later than 14.30 Hrs on 04.07.2016.

Read As:

12.1 Applications shall be submitted to HLL Infra Tech Services Limited., by hand or through registered post or courier service at the address given below and not later than 15.00 Hrs on 08.07.2016.

IN (PART I) SECTION I NOTICE INVITING TENDER

For:

6. Tenders, which should be placed in sealed envelopes, as prescribed in Para 11 of Section II (Information & Instructions to Tenderers), will be received by the Deputy general Manager (Civil), HLL Infra Tech Services Limited, JIPMER, Dhanvantri Nagar, Gorimedu, Puducherry-605 006, Tele Fax: 0413 2272054 upto 14.30 hrs on 04th July , 2016. The Technical Bid will be opened by him or his authorized representative in his office the same day at 15 hrs.

Read As:

6. Tenders, which should be placed in sealed envelopes, as prescribed in Para 11 of Section II (Information & Instructions to Tenderers), will be received by the Deputy general Manager (Civil), HLL Infra Tech Services Limited, JIPMER, Dhanvantri Nagar, Gorimedu, Puducherry-605 006, Tele Fax: 0413 2272054 upto 15.00 hrs on 08th July , 2016. The Technical Bid will be opened by him or his authorized representative in his office the same day at 15:30 hrs.

IN GCC

For:

Item Rate Tender & Contract for Works

(i) To be submitted by 14:30 hours on 04.07.2016 to Deputy General Manager (Civil), HLL Infra Tech Services Limited, JIPMER, Dhanvantri Nagar, Gorimedu, Puducherry-605 006,

(ii) To be opened in presence of tenderers who may be present at 15:00 hours on 04.07.2016 in the office of Deputy General Manager (Civil) HLL Infra Tech Services Limited, JIPMER, Dhanvantri Nagar, Gorimedu, Puducherry-605 006,

Read As:

Item Rate Tender & Contract for Works

(i) To be submitted by 15:00 hours on 08.07.2016 to Deputy General Manager (Civil), HLL Infra Tech Services Limited, JIPMER, Dhanvantri Nagar, Gorimedu, Puducherry-605 006,

(ii) To be opened in presence of tenderers who may be present at 15:30 hours on 08.07.2016 in the office of Deputy General Manager (Civil) HLL Infra Tech Services Limited, JIPMER, Dhanvantri Nagar, Gorimedu, Puducherry-605 006,

IN PART-III Special Conditions of Contract & Price Bid

SECTION II LIST OF APPROVED MANUFACTURERS / AGENCIES

FOR

LIST OF APPROVED MAKES FOR FIRE HYDRANT SYSEM

S. No	Materials	Manufacturers / Agencies
1	Diesel Engine	Kirloskar/Cummins
2	Fire Pumps	Kirloskar/Mather & Platt/Seimens
3	Electrical Motors	Kirloskar / Seimens
4	MS Pipes ('C' Class)	TATA / ZENITH
5	Butterfly Valves	Intervalve / Audco/ Leader
6	BALL VALVE (15-40 mm Dia)	RB/ITAP/Leader
7	Sluice Valves	Kirloskar/Kalpana/UNIK'R' Brand
8	Non-Return Valve-Flap Type Cast Iron	Intervalve/Audco
9	Hydrant Valves	Newage/Minimax/Peter Autokit
10	Hose	Newage Premier Extra /Padmini Aqua Dura
11	Fire Extinguisher	Safex/Minimax/Peter Autokit
12	Pressure Guage	HD/Waree/H-GURU/Fiebig
13	Pressure Switch	Danfoss/Indfoss
14	Termination Lugs	Dowells/Usha

15	PVC insulated Copper Wires	FINOLEX/WINCAP/POLYCAB
16	Cables	Universal/CCI/Gloster
17	SFU's/FSU's	Ee/L&T/C&S
18	HRC Fuses	Havells/Ee
19	Over Load Relays	Ee/L&T
20	Single Phase Preventer	L&T/ Minilac
21	Indicating Lamps & Push Buttons (LED Type)	L&T /Technic
22	Air Break Contractors	Seimens/L&T/ABB
23	Sprinkler Head	HD/Tyco/Reliable/Fireasfe
24	Sprinkler Icv	HD/Tyco/Viking/Reliable/Fireasfe/Wormacd
25	Gunmetal Branch Pipe	Newage/Minimax/WINCO/Kailash
26	Threaded pipe fittings	R Brand/Unik
27	Air Release Valve	Rb/Tbs/Cimbrio
28	First Aid Hose Reel Drum	Minimax/Newage
29	First Aid Hose pipe	Padmini/Swastik/Usha Fire
30	Suction Strainer	Grandprix /Jaypee/Kirloskar/Leader
31	Battery	Exide/Amco
32	Pipe Protection	Pipe Kote (4mm Thick)
33	Pipe Support	Hi-Tech /Fabricated As per Site Conditions
34	Nozzle	Newage/Winco/Kailash
35	Foot valve (Gunmetal)	Neta/Leader
36	Foot Valve (Cast iron)	Kirloskar

READ AS

LIST OF APPROVED MAKES FOR PUMP AND ENABLING WORKS

S. No	Materials	Manufacturers / Agencies
1	Pumps	Kirloskar/Mather & Platt/Seimens
2	Electrical Motors	Kirloskar / Seimens
3	MS Pipes ('C' Class)	TATA / ZENITH
4	Butterfly Valves	Intervalve / Audco/ Leader
5	BALL VALVE (15-40 mm Dia)	RB/ITAP/Leader
6	Sluice Valves	Kirloskar/Kalpana/UNIK'R' Brand
7	Non-Return Valve-Flap Type Cast Iron	Intervalve/Audco
8	Pressure Guage	HD/Waree/H-GURU/Fiebig
9	Pressure Switch	Danfoss/Indfoss
10	Suction Strainer	Grandprix /Jaypee/Kirloskar/Leader
11	Pipe Protection	Pipe Kote (4mm Thick)
12	Pipe Support	Hi-Tech /Fabricated As per Site Conditions
13	Nozzle	Newage/Winco/Kailash
14	Foot valve (Gunmetal)	Neta/Leader
15	Foot Valve (Cast iron)	Kirloskar
16	Over Load Relays	Ee/L&T
17	Single Phase Preventer	L&T/ Minilac
18	Indicating Lamps & Push Buttons (LED Type)	L&T /Technic
19	Air Break Contractors	Seimens/L&T/ABB
20	Sprinkler Head	HD/Tyco/Reliable/Fireasfe
21	Sprinkler Icv	HD/Tyco/Viking/Reliable/Fireasfe/Wormaccd
22	Gunmetal Branch Pipe	Newage/Minimax/WINCO/Kailash
23	Threaded pipe fittings	R Brand/Unik
24	Air Release Valve	Rb/Tbs/Cimbrio
25	First Aid Hose Reel Drum	Minimax/Newage
26	First Aid Hose pipe	Padmini/Swastik/Usha Fire

27	Suction Strainer	Grandprix /Jaypee/Kirloskar/Leader
28	Battery	Exide/Amco
29	Pipe Protection	Pipe Kote (4mm Thick)
30	Pipe Support	Hi-Tech /Fabricated As per Site Conditions
31	Nozzle	Newage/Winco/Kailash
32	Foot valve (Gunmetal)	Neta/Leader
33	Foot Valve (Cast iron)	Kirloskar

In Price bid format

For:

Providing external water supply and sewage system to Staff Quarters II ,IV & V, for JIPMER Puducherry.

Sl.No	Description	Unit	Quantity	Rate in Rs. (In Figures & Words)	Amount in Rs.
	CIVIL WORKS				
	<u>Bore Well</u>				
1	Drilling of borewell including transportation in alluvial soil sedimentary strata of clay, sand stone, shale, pebbles, boulders etc. By first taking a pilot bore of 216mm and then enlarging to required dia by direct or reverse rotary mud circulation method, including fuel, labor for drilling, bentonite mud, water required for drilling at the site, construction of mud pit, using rotary rig.	Rm	150		

2	Reaming from 216mm dia pilot bore to 312mm dia bore, upto 106 mts depth ending below ground level.	Rm	150		
3	Reaming from 312mm dia pilot bore to 406mm dia bore, upto 106 mts depth ending below ground level.	Rm	150		
4	Supplying of approved make UPVC plain casing pipe (IS 12818-1992) for borewell, with relevant amendments with class designation CM. Including transportation and stocking at site - 200mm dia.	Rm	100		
5	Supplying of approved make UPVC ribbed screen slotted casing pipe (IS 12818-1992) for borewell, with relevant amendments with class designation CM. Including transportation and stocking at site - 200mm dia.	Rm	50		
6	Supplying transportation and packing of 8mm/suitable size pebbles, including filling the annular space gradually complete.	cum	24		
7	Supplying transportation and packing of clay balls, including filling the annular space gradually complete.	cum	6		
8	Charges for developing the bore wells with air compressor. Including transportation, labor, and fuel charges for compressor.	Hours	18		
9	Supplying and fixing of M.S top cover suitable for UPVC casing pipes. Including the cost of materials and labor etc.	Nos	1		
10	Getting Approval from Ground Water authorizes and Geo Technical Investigation	LS			
	Total for Bore well				
	<u>PUMP ROOM AND TANK</u>				

11	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kinds of soil	Cum	313.38		
12	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size	Cum	13.7		
13	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	cum	8.58		
14	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/ less cement used as per design mix is payable/recoverable separately).				

a	All work upto plinth level	cum	67.34		
b	All work above plinth level upto floor V level	cum	29.36		
15	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable /recoverable separately. 5.34.1 Providing M-30 grade concrete instead of M-25 grade BMC / RMC. (Note:- Cement content considered in M-30 is @ 340 kg/ kg/cum)	cum	96.7		
16	Centering and shuttering including strutting, propping etc. and removal of form for :				
a	Foundations, footings, bases of columns, etc. for mass concrete	cum	120		
b	Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc	cum	485		
c	Suspended floors, roofs, landings, balconies and access platform /Shelves (Cast in situ)	cum	145		
d	Lintels, beams, plinth beams, girders, bressumers and cantilevers	cum	35		
e	Columns, Pillars, Piers, Abutments, Posts and Struts	cum	65		
17	Brick work with common burnt clay modular bricks of class designation 5 in foundation and plinth in:				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	15		
18	Brick work with common burnt clay modular bricks of class designation 5 above plinth level up to floor V level in all shapes and sizes in				

	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	40		
19	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level				
	Thermo-Mechanically Treated bars	kg	13460		
20	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level				
	Thermo-Mechanically Treated bars	kg	7300		
21	12 mm cement plaster of mix :				
	1:6 (1 cement: 6 fine sand)	sqm	150		
22	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :				
	1:4 (1 cement: 4 fine sand)	sqm	572.4		
23	6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	sqm	60		
24	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers	Per bag of 50 kg cement used in the mix	700		

25	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	500		
26	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.				
	80x0.90 mm M.S. laths with 0.90 mm thick top cover	Sqm	15		
27	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener).	cum	1.5		
	Sal wood				
28	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate	sqm	68		

29	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm	500		
30	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brickbats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height				

	including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineerin-Charge :				
	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	68		
31	providing fixing of Rungs of required nos as per instruction of Engineer In charge	LS			
32	providing fixing of Puddle Flange of required nos as per instruction of Engineer In charge	LS			
33	Pressure sand filter	Nos	2		
34	RCC Cover Slab	LS			
	Total for Pump room & tank				
	<u>External Water Supply Line</u>				

35	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kinds of soil	Cum	1166		
36	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge. External work 50 mm nominal outer dia Pipes	Rm	1050		
37	Providing and fixing gun metal non-return valve of approved quality (screwed end) 50 mm nominal bore Horizontal	Nos	10		
38	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 50 mm nominal bore	Nos	10		
39	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 300 mm dia. R.C.C. pipe 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :	Rm	80		
	Total for External Water Supply Line				
	<u>External Sewage Line</u>				

40	Providing and fixing PVC Soil, waste and vent pipe to IS: 13592 of SWR quality 4kg/sq.cm pressure rated upto 110mm dia and 6kg/sq.cm pressure rated agriculture series above 100mm, including all fittings, like EG: Bends, Tees, Elbows, Collars, junction, (including Earth work etc complete)				
a	160mm	Rm	325		
41	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty)455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):				
	With common burnt clay F.P.S.(non modular) bricks of class designation 5.0	Nos	11		
42	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
	With common burnt clay F.P.S.(non modular) bricks of class designation 5	Nos	15		
43	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
a	150 x 100 mm size P type	Nos	28		
	Total for External Sewage line				
Electrical & Mechanical Work					

	PUMP FOR DOMESTIC TANK				
44	Supply Installation testing and commisioning of 5 HP submersible Motor pump(1 Main and 1 stand by pump)suitable for pumping from Under ground sump to Overhead tank with head upto 35 meters ,and delivery of 5LPS with dia 50mm delivery. The cost shall include CPVC pipe from suction to pump,NRV valves suably, Bypass valve suitable and CPC pump to nearest delivery approximately 1mtrs from tank with all accessories complete etc.	set	3		
45	Supply Installation testing and commisioning of 3HP submersible Motor pump(1 Main and 1 stand by pump)suitable for pumping from Under ground sump to Overhead tank with head upto 35 meters ,and delivery of 5LPS with dia 50mm delivery. The cost shall include CPVC pipe from suction to pump,NRV valves suably, Bypass valve suitable and CPC pump to nearest delivery approximately 1mtrs from tank with all accessories complete etc.	set	1		
46	Supply Installation testing and commisioning of CONTROL PANEL with starter for the pump from UG sump to over head tank. The panel shall work automatically with auto chage over from main pump to standby pump and also to control on/off according to the availabuiltiy of water. The cost shall include wiring from sump to control panel and also the control cables.	NOS	4		
	PUMP FOR BORE WELL				

47	Supply Installation testing and commisioning of suitable HP submersible Motor pump for pumping from borewell to Under Ground sump with head upto 200 meters ,and delivery of 10LPS with dia 25 mm delivery. The cost shall include CPVC pipe from suction to pump,pump to ug sump with suitable valves, NRV valves suablywith all accessories complete etc.(the cost shall include cabel also)	Set	1		
48	Supply installation testing and commisioning of Control panel suitable for borewell and reserivor complete in automation(Inclusive of all types of cables)	Set	1		
	WATER TREATMENT PLANT				
	Supply , installation testing and commisioning of following with all accessories complete etc. complete (inclusive of plumbing pipes , valve and accessories)				
49	Feed Pump, 3EH3-40 , 3 HP, 3P, 50X40 mm (1W + 1S) - CRI Make	Nos	2		
50	Dosing Pump (1W + 1S) make - I Dose/UKL	Nos	2		
51	Dosing Tank 200 Liters Capacity	Nos	1		
52	Hypo in Liters	Nos	50		
53	PSF & ACF - Vessel 36 72, Top & Bottom Distribution, Vacuum Beaker and 2" MPV - Make Aventura	Nos	2		
54	PSF Media in Lot (Pebbles, Silex, Fine sand)	Nos	1		
55	ACF Media in Lot (Pebbles, Silex, Activated Carbon)	Nos	1		

56	Micron Cartridge with Housing - 20" Jumbo, Spun, - 5 micron,	Nos	3		
57	Pressure Gauges	Nos	3		
58	Floty 5 meter	Nos	2		
59	Electrical Panel (OLR)	Nos	1		
60	UV - ECS 150 R _ Alfaa	Nos	1		
	Grand Total				
	GRAND TOTAL				

Read As:

Providing external water supply and sewage system to Staff Quarters II ,IV & V, for JIPMER Puducherry.					
Sl.No.	Description	Unit	Quantity	Rate in Rs. (In Figures & Words)	Amount in Rs.
	CIVIL WORKS				
	<u>Bore Well</u>				
1	Drilling of borewell including transportation in alluvial soil sedimentary strata of clay, sand stone, shale, pebbles, boulders etc. By first taking a pilot bore of 216mm and then enlarging to require dia by direct or reverse rotary mud circulation method, including fuel, labor for drilling, bentonite mud, water required for drilling at the site, construction of mud pit, using rotary rig.	Rm	150		

2	Reaming from 216mm dia pilot bore to 312mm dia bore, upto 106 mts depth ending below ground level.	Rm	150		
3	Reaming from 312mm dia pilot bore to 406mm dia bore, upto 106 mts depth ending below ground level.	Rm	150		
4	Supplying of approved make UPVC plain casing pipe (IS 12818-1992) for borewell, with relevant amendments with class designation CM. Including transportation and stocking at site - 200mm dia.	Rm	100		
5	Supplying of approved make UPVC ribbed screen slotted casing pipe (IS 12818-1992) for borewell, with relevant amendments with class designation CM. Including transportation and stocking at site - 200mm dia.	Rm	50		
6	Supplying transportation and packing of 8mm/suitable size pebbles, including filling the annular space gradually complete.	cum	24		
7	Supplying transportation and packing of clay balls, including filling the annular space gradually complete.	cum	6		
8	Charges for developing the bore wells with air compressor. Including transportation, labor, and fuel charges for compressor.	Hours	18		
9	Supplying and fixing of top cover suitable for UPVC casing pipes. Including the cost of materials and labor etc.	Nos	1		
10	Getting Approval from Ground Water authorizes and Geo Technical Investigation	LS	1		
	Total for Bore well				
	<u>PUMP ROOM AND TANK</u>				

11	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kinds of soil	Cum	313.38		
12	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40 mm nominal size	Cum	13.7		
13	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	cum	8.58		
14	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/ less cement used as per design mix is payable/recoverable separately).				
a	All work upto plinth level	cum	67.34		
b	All work above plinth level upto floor V level	cum	29.36		

15	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable /recoverable separately. 5.34.1 Providing M-30 grade concrete instead of M-25 grade BMC / RMC. (Note:- Cement content considered in M-30 is @ 340 kg/ kg/cum)	cum	96.7		
16	Centering and shuttering including strutting, propping etc. and removal of form for :				
a	Foundations, footings, bases of columns, etc. for mass concrete	cum	120		
b	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	cum	485		
c	Suspended floors, roofs, landings, balconies and access platform /Shelves (Cast in situ)	cum	145		
d	Lintels, beams, plinth beams, girders, bressumers and cantilevers	cum	35		
e	Columns, Pillars, Piers, Abutments, Posts and Struts	cum	65		
17	Brick work with common burnt clay modular bricks of class designation 5 in foundation and plinth in:				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	15		
18	Brick work with common burnt clay modular bricks of class designation 5 above plinth level up to floor V level in all shapes and sizes in				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	40		
19	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level				
	Thermo-Mechanically Treated bars	kg	13460		

20	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level				
	Thermo-Mechanically Treated bars	kg	7300		
21	12 mm cement plaster of mix :				
	1:6 (1 cement: 6 fine sand)	sqm	150		
22	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix :				
	1:4 (1 cement: 4 fine sand)	sqm	572.4		
23	6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	sqm	60		
24	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers	Per bag of 50 kg cement used in the mix	700		
25	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	500		

26	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.				
	80x0.90 mm M.S. laths with 0.90 mm thick top cover	Sqm	15		
27	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener).	cum	1.5		
	Sal wood				
28	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete. 40 mm thick with 20 mm nominal size stone aggregate	sqm	68		
29	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm	500		

30	Providing and laying brush bond waterproofing treatment by approved specialized agency for water tanks, roofs .providing water proof cement plastering average 25mm thick on Horizontal treating surfaces and average 15mm thick for side walls of water tanks with CM 1:4 with waterproofing compound as per the manufacture reference for usage and continued upto full height of the walls and testing etc completed. All above operations to be done in order and as directed and specified by the Engineer in-Charge.	sqm	68		
31	providing and fixing of poly propylene 100mm x 250 mm Rungs suitable for water bodies all as directed by Engineer In charge	Nos	20		
32a	Cutting concrete roads and making the surface good etc complete.(Width not exceeding 1 M)	Meter	50		
32 b	Cutting BT roads and making the surface good etc complete.	Meter	80		
32 c	Removing and relaying paver blocks and making the surface good including replacement of damaged paver blocks etc complete.	Meter	80		
32 d	Cutting masonry Drains and reconstruct the same making surface good etc complete.	Each	30		
32 e	removing and re fixing stone pitching making surface good etc complete	Meter	40		
32 f	Providing and fixing of casing pipe 110mm PVC 8 kg/cm ² casing pipe etc complete	Meter	50		
33	Design of sump and pump room, vetting of Structural design by institution as directed by engineer In-charge	Ls	1		
34	Providing and fixing of RCC Cover Slab size 450 X 510 mm	Nos	8		

	Total for Pump room & tank				
	<u>External Water Supply Line</u>				
35	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 upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	Cum	1166		
36	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge. External work 50 mm nominal outer dia Pipes	Rm	1050		
37	Providing and fixing gun metal non-return valve of approved quality (screwed end) 50 mm nominal bore Horizontal	Nos	10		
38	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 50 mm nominal bore	Nos	10		
39	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 300 mm dia. R.C.C. pipe 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :	Rm	80		
	Total for External Water Supply Line				
	<u>External Sewage Line</u>				

40	Providing and fixing PVC Soil, waste and vent pipe to IS: 13592 of SWR quality 4kg/sq.cm pressure rated upto 110mm dia and 6kg/sq.cm pressure rated agriculture series above 100mm, including all fittings, like EG: Bends, Tees, Elbows, Collars, junction, (including Earth work etc complete)				
a	160mm	Rm	325		
41	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty)455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):				
	With common burnt clay F.P.S.(non modular) bricks of class designation 5.0	Nos	11		
42	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
	With common burnt clay F.P.S.(non modular) bricks of class designation 5	Nos	15		
43	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
a	150 x 100 mm size P type	Nos	28		
	Total for External Sewage line				
	Electrical & Mechanical Work				
	PUMP FOR DOMESTIC TANK				

44	Supply Installation testing and commissioning of 5 HP submersible Motor pump(1 Main and 1 stand by pump)suitable for pumping from Under ground sump to Overhead tank with head upto 35 meters ,and delivery of 5LPS with dia 50mm delivery. The cost shall include CPVC pipe from suction to pump, NRV valves, Bypass valve suitable and CPC pump to nearest delivery approximately 1mtrs from tank with all accessories complete etc.	set	3		
45	Supply Installation testing and commissioning of 3HP submersible Motor pump(1 Main and 1 stand by pump)suitable for pumping from Under ground sump to Overhead tank with head upto 35 meters ,and delivery of 5LPS with dia 50mm delivery. The cost shall include CPVC pipe from suction to pump,NRV valves , Bypass valve suitable and CPC pump to nearest delivery approximately 1mtrs from tank with all accessories complete etc.	set	1		
46	Supply Installation testing and commissioning of CONTROL PANEL with starter for the pump from UG sump to over head tank. The panel shall work automatically with auto change over from main pump to standby pump and also to control on/off according to the availability of water. The cost shall include wiring from sump to control panel and also the control cables.	NOS	4		
	PUMP FOR BORE WELL				
47	Supply Installation testing and commissioning of suitable HP submersible Motor pump for pumping from bore well to Under Ground sump with head upto 200 meters ,and delivery of 10LPS with dia 25 mm delivery. The cost shall include CPVC pipe from suction to pump, pump to UG sump with suitable valves, NRV valves suitable with all accessories complete etc.(the cost shall include cable from pump to panel)	Set	1		

48	Supply installation testing and commissioning of Control panel suitable for borewell and reservoir complete in automation(Inclusive of all types of cables)	Set	1		
48 a	Supply installation testing and commissioning of Control panel suitable for borewell and reservoir complete in automation(Inclusive of all types of cables)	set	1		
48b	Availing Power Supply Connection from Puducherry Electricity Board including incoming break switch etc complete.	LS	1		
48 c	Supplying and fixing of following amps surface/recess mounting, vertical type, 415 Volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's With suitable Incomer and 4 Nos of outgoing breaker as required. Note: Vertical type MCB DB is normally used where 3 phase outlets were required.				
	4 Way (4+12), Double door	Each	1		
48d	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	Meter	60		
	WATER TREATMENT PLANT				
	Supply , installation testing and commissioning of following with all accessories complete etc. complete (inclusive of plumbing pipes , valve and accessories)				
49	Feed Pump, 3EH3-40 , 3 HP, 3P, 50X40 mm (Nos	2		

	1W + 1S) - CRI Make				
50	Dosing Pump (1W + 1S) make - I Dose/UKL	Nos	2		
51	Dosing Tank 200 Liters Capacity	Nos	1		
52	Hypo in Liters	Nos	50		
53	Pressure Sand Filter(PSF) & Activated Carbon Filter(ASF) - Vessel 36 72, Top & Bottom Distribution, Vacuum Beaker and 2" MPV - Make Aventura/Any ISI Make	Nos	2		
54	PSF Media in Lot (Pebbles, Silex, Fine sand)	Nos	1		
55	ACF Media in Lot (Pebbles, Silex, Activated Carbon)	Nos	1		
56	Micron Cartridge with Housing - 20" Jumbo, Spun, - 5 micron,	Nos	3		
57	Pressure Gauges	Nos	3		
58	Floty 5 meter	Nos	2		
59	Electrical Panel (OLR)	Nos	1		
60	Ultra Violet treatment unit	Nos	1		
	Grand Total				
	GRAND TOTAL				

All other terms & conditions remain unaltered.
