

KIIFB Project: TRAN 10: WRD025-06 - WSS to Ayyappankovil Panchayat - Part II
,Package I - Design and construction of electrical control rooms at raw water pump
house and treatment plant compound, supply, erection and commissioning of
transformers and allied works (1) 500KVA at Thonithady raw water pump
house,(2)400 KVA at WTP compound, supply erection and commissioning of motor
pump sets at RWPH, treatment plant sump pump house, Kalthotty pump house and
Nariyanpara intermediate P H etc.

LMR Abstract with DAR 21-IDK(Idukki & Udumbanchola & Peerumedu) 01/07/2022 - 30/09/2022

Sl No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
11		Civil Works.(a) Design and Construction of Electrical Control room, RCC Columns with foot bridge to Thonithady Raw water pumping station(1) Control room and foot bridge.						
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	900.000	sqm	15.43	13887.00	15.60	14040.00
2	15.7.4	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.In cement mortar	1.201	cum	1805.99	2168.99	1829.35	2197.05
3	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	513.822	cum	309.95	159259.13	319.55	164191.82
4	7.1.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	6.968	cum	7520.41	52402.22	8030.80	55958.61
5	4.1.5	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 20 mm nominal size)	9.861	cum	7690.32	75834.25	9884.65	97472.53
6	50.6.1.3	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 above floor two level up to floor V level thickness 20cm and above in: CM 1:6 (1 cement :6 coarse sand) etc complete						

		25.157	cum	7784.73	195840.45	8495.10	213711.23
7	10.6.1 Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover						
		17.700	sqm	3617.29	64026.03	4136.05	73208.09
8	10.5.1 Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.Using M.S. angels 40x40x6 mm for diagonal braces						
		1.800	sqm	5440.63	9793.13	6399.50	11519.10
9	50.9.1.3 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 shall be paid for separately). using good quality Vengai wood						
		0.256	cum	80265.15	20547.88	118215.00	30263.04
10	50.9.2.3 Providing and fixing paneled or paneled and glazed shutters for doors, windows and clerestory windows, 35 mm thick shutters including ISI marked M.S pressed butt hinges bright finished of required size with necessary screws, excluding paneling which will be paid for separately, all complete as per direction of Engineer in - charge.using Vengai wood						
		7.821	sqm	2666.62	20855.64	3555.55	27807.96
11	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						
		79.842	cum	9825.93	784521.90	12022.00	959860.52

12	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	127.677	cum	11550.4	1474720.42	13768.90	1757971.85
13	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).	207.519	cum	85.7	17784.38	101.65	21094.31
14	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	11.135	cum	11433.93	127316.81	13791.85	153572.25
15	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	24051.941	kilogram	102.61	2467969.67	120.80	2905474.47
16	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	197.600	sqm	350.0	69160.00	347.55	68675.88
17	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	348.889	sqm	851.52	297085.96	907.25	316529.55
18	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers	668.774	sqm	678.28	453616.03	731.35	489107.86

19	5.9.6 Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
		430.401	sqm	901.48	387997.89	910.10	391707.95
20	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)						
		1503.77 1	sqm	418.79	629764.26	486.80	732035.72
21	13.8.2 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)						
		337.251	sqm	453.75	153027.64	530.10	178776.76
22	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)						
		1629.55 1	sqm	112.09	182656.37	121.20	197501.58
23	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						
		323.138	sqm	158.02	51062.27	160.55	51879.81
24	13.37.1 White washing with lime to give an even shade:New work (three or more coats)						
		151.229	sqm	35.1	5308.14	34.10	5156.91
25	13.50.3 Applying priming coat:With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works						
		46.200	sqm	62.27	2876.87	61.40	2836.68
26	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						
		55.276	sqm	154.62	8546.78	157.30	8694.91
27	13.71 Lettering with black Japan pint of approved brand and manufacture						
		2500.00 0	Letterxc m ht	5.8	14500.00	5.85	14625.00

28	11.21.1.1 Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile	3.312	sqm	1836.85	6083.65	2098.50	6950.23
29	11.21.2.1 Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In dado/ skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile	12.960	sqm	1975.33	25600.28	2235.80	28975.97
30	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.	3.151	sqm	1138.82	3588.42	1317.40	4151.13
31	11.22.1.1 Tile work in skirting, risers of steps and dado upto 2 m height, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm, including pointing in white cement mixed with pigment of matching shade complete.Marble tiles (polished) Raj Nagar8 mm thick	15.121	sqm	1523.0	23029.28	1532.50	23172.93
32	od2083/2019_2020 Providing sanitary facilities and electrical works including water closet ,flushing cistern ,wash basin, steel taps, 250ltr capacity PVC water tank and other required sanitary and electrical fittings as per the direction of departmental officers in charge.	1.000	No	42488.69	42488.69	46280.10	46280.10
33	od148982/2018_2019 Providing gantry girder arrangements to existing pump house with allied works etc.complete.	1.000	No	80000.0	80000.00	80000.00	80000.00
34	od173455/2020_2021 Providing and fixing MS hook of 22mm dia, bend to shape in RCC slab (ceiling of control room) or beam as per standards including painting the exposed portion	12.000	No	301.61	3619.32	377.95	4535.40

35	10.16.2	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.Hot finished seamless type tubes	911.028	kg	193.47	176256.59	209.55	190905.92
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
13	Civil Works.(a) Construction of Electrical Control room, RCC Columns with foot bridge to Thonithady Raw water pumping station-(3)Construction of waste water drain.							
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	100.000	sqm	15.43	1543.00	15.60	1560.00
2	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	38.250	cum	309.95	11855.59	319.55	12222.79
3	7.1.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	19.125	cum	7520.41	143827.84	8030.80	153589.05
4	5.1.3	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	11.701	cum	8964.72	104896.19	11245.05	131578.33
5	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.	99.002	sqm	748.62	74114.88	766.40	75875.13
6	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	7.021	kilogram	102.61	720.42	120.80	848.14
7	13.7.2	12 mm cement plaster finished with a floating coat of neat cement of mix:1:4 (1 cement : 4 fine sand)						

SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
14 Civil works-(b)Construction of Electrical Control room at water treatment plant site Alady and approach road work..(1)Construction of control room .			166.500	sqm	403.29	67147.79	468.30	77971.95
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	150.000	sqm	15.43	2314.50	15.60	2340.00
2	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	200.965	cum	309.95	62289.10	319.55	64218.37
3	2.7.2	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.Hard rock (requiring blasting)	5.400	cum	749.05	4044.87	1047.20	5654.88
4	7.1.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	18.407	cum	7520.41	138428.19	8030.80	147822.94
5	4.1.5	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 20 mm nominal size)	14.724	cum	7690.32	113232.27	9884.65	145541.59
6	50.6.1.3	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 above floor two level up to floor V level thickness 20cm and above in: CM 1:6 (1 cement :6 coarse sand) etc complete	21.383	cum	7784.73	166460.88	8495.10	181650.72

7	10.6.1 Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover	9.000	sqm	3617.29	32555.61	4136.05	37224.45
8	21.1.1.1 Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately):For fixed portionAnodised aluminium (anodised transparent or dyed to required shade according to IS : 1868, Minimum anodic coating of grade AC 15)	13.389	kg	520.9	6974.33	588.35	7877.42
9	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	7.500	sqm	1228.2	9211.50	1585.20	11889.00
10	5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size)	10.836	cum	9483.15	102759.41	11828.25	128170.92
11	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	26.087	cum	11433.93	298276.93	13791.85	359787.99
12	5.22A.6 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 of grade Fe-500D or more						

		4061.53 0	kg	102.61	416753.59	120.80	490632.82
13	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
		36.000	sqm	350.0	12600.00	347.55	12511.80
14	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
		98.987	sqm	851.52	84289.41	907.25	89805.96
15	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
		73.182	sqm	678.28	49637.89	731.35	53521.66
16	5.9.6 Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
		59.040	sqm	901.48	53223.38	910.10	53732.30
17	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)						
		207.662	sqm	418.79	86966.77	486.80	101089.86
18	13.8.2 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)						
		319.321	sqm	453.75	144891.90	530.10	169272.06
19	13.37.1 White washing with lime to give an even shade:New work (three or more coats)						
		81.120	sqm	35.1	2847.31	34.10	2766.19
20	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)						
		430.863	sqm	112.09	48295.43	121.20	52220.60
21	13.50.3 Applying priming coat:With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works						
		18.000	sqm	62.27	1120.86	61.40	1105.20

22	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						
		18.000	sqm	154.62	2783.16	157.30	2831.40	
23	13.71	Lettering with black Japan pint of approved brand and manufacture						
		1500.00 0	Letterxc m ht	5.8	8700.00	5.85	8775.00	
24	11.21.1.1	Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile						
		54.000	sqm	1836.85	99189.90	2098.50	113319.00	
25	11.22.1.1	Tile work in skirting, risers of steps and dado upto 2 m height, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry @ 3.3 kg/sqm, including pointing in white cement mixed with pigment of matching shade complete.Marble tiles (polished) Raj Nagar8 mm thick						
		5.480	sqm	1523.0	8346.04	1532.50	8398.10	
26	od173455/2020_2021	Providing and fixing MS hook of 22mm dia, bend to shape in RCC slab (ceiling of control room) or beam as per standards including painting the exposed portion						
		12.000	No	301.61	3619.32	377.95	4535.40	
27	10.16.2	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.Hot finished seamless type tubes						
		123.241	kg	193.47	23843.44	209.55	25825.15	
Sl No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
15		Civil work (b)Construction of Electrical Control room at water treatment plant site Alady and approach road work.(2).Construction of concrete road and retaining wall.						
1	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared						
		30.000	sqm	15.43	462.90	15.60	468.00	

2	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	36.000	cum	309.95	11158.20	319.55	11503.80
3	4.1.5 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 20 mm nominal size)	4.801	cum	7690.32	36921.23	9884.65	47456.20
4	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	36.800	cum	7520.41	276751.09	8030.80	295533.44
5	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	4.201	cum	11433.93	48033.94	13791.85	57939.56
6	2.2.1 Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with 1/2 tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead up to 50 m and lift up to 1.5 m:All kinds of soil	500.000	cum	917.54	458770.00	928.20	464100.00
7	od165801/2020_2021 Dry rubble masonry with hard stone in foundation and plinth including leveling 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:	500.000	cum	4957.19	2478595.00	4681.30	2340650.00
8	5.1.3 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	250.000	cum	8964.72	2241180.00	11245.05	2811262.50

9	5.9.1	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
		220.001	sqm	350.0	77000.35	347.55	76461.35	
10	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						
		15420.001	kilogram	102.61	1582246.30	120.80	1862736.12	
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
19 2- Electromechanical works								
No Specifications added under this Estimate								
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
21	2(a)-	Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound- (1)- 11 KV substation and HT equipments						
1	od194695/2018_2019	Erection of RCC/ PCC pole of following length in brick ballast and ramming the foundation, finishing with 150 mm thick cement concrete (1:3:6) layer on top with including excavation and refilling etc. as required.						
		2.000	Nos	4957.0	9914.00	4957.00	9914.00	
2	od194696/2018_2019	Supplying and erection of a set of cross bracing frame work for 11 KV over head line double pole structure having four members fabricated out of 50 mm X 50 mm X 6 mm angle iron to form a rectangle of minimum size 1400 mm width X 2500 mm height, complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. (as per drawing) and painting with primer and finish paint as required.						
		1.000	set	6552.0	6552.00	6552.00	6552.00	
3	od194697/2018_2019	Erection of double pole 3 wire cross arm for 11 KV/22 KV/33 KV over head lines as required.						
		3.000	Nos	967.0	2901.00	967.00	2901.00	
4	od194698/2018_2019	Supplying and erection of 11 kV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required.						
		1.000	set	349.0	349.00	349.00	349.00	

5	od194699/2018_2019 Supplying and erection of three piece nonlinear resistor type lightning arrestor suitable for 3 wire, 11 kV overhead lines with rated voltage 9 kV (rms) with a nominal discharge current rating of 5 kA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.	1.000	set	3601.0	3601.00	3601.00	3601.00
6	od194700/2018_2019 OUTDOOR HT BREAKER PANEL (LBS) Supply, Installation, Testing & Commissioning of 11kV Outdoor HT Breaker Panel with the following components. 11kV Load Break Swich 11kV, 350 MVA, 630A, LBS unit - 1 set Voltmeter (0 - 11kV) - 3 Nos LED Pilot Indication - LBS ON / OFF - 1 Set Trip Push buttons - 1 set 2NO+2NC Aux contacts - 1 Set 230V AC Shunt Trip Coil - 1 No Aluminium Busbar - 1 Set Seal off Bushings - 3 Nos Space Heater Element with Thermostat & wiring - 1 Nos Inspection Lamp LED with switch & wiring - 1 set Metering Chamber PT - 100 VA, 11kV/110V, CL 0.2S - 1 No CT - */5A, 15VA, CL 0.2S - 3 Nos Provisions for mounting 3 phase, 4wire, HT CT/PT operated, bi- directional TOD meter with accuracy class 0.2S including wiring and test terminal block, site glass etc. - 1 set Voltage Circuit: The active & apparent power consumption of voltage circuit including power supply of meter at reference voltage, reference temperature & frequency shall not exceed 1.0 Watt & 4.0 VA per phase Current Circuit: The apparent power taken by current circuit at basic current, reference frequency & reference temperature shall not exceed 1.0 VA/phase.(The Quoted rate shall be inclusive of necessary control wiring,components working on LT supply should be prewired completely with necessary controls as specified till the connection point for feeding LT Supply from outside, Cable end box for receiving incoming and outgoing cables and suitable civil foundation etc as required.) Supply & Labour	1.000	set	215359.0	215359.00	215359.00	215359.00
7	od194701/2018_2019 HT Bidirectional TOD Meter Supply & Providing 3 phase, 4wire, HT CT/PT operated, bi-directional with accuracy class 0.2S for both Active and Reactive energy, -/5A, HT static tri vector meter with TOD register, DLMS compliant & AMR compatible with optical port and RS232 port having ISI Marking, suitable for measurement of active kWh, reactive energy kVARh and apparent energy kVAh and kVA MD, kW MD at nominal frequency in the range of 47.5 Hz to 52.5 Hz in balanced as well as unbalanced load conditions in the existing outdoor Meter cubicle including testing & commissioning etc. complete.	1.000	set	43954.0	43954.00	43954.00	43954.00
8	od194702/2018_2019 HT Equipment Pinth, Substation Yard Fencing & Levelling- Providing, fabricating and fixing 2m high chainlink fencing over 4mm thick barbed wire with a framework of 50x50x6mm MS angle between vertical posts of ISMC 75 at 2400mm interval, Earthing as per KSEI/KSEB standards shall be done around the periphery of the fencing. The MS framework for chainlink fencing shall be Hot Dip Galvanised. The rate shall be inclusive of all materials, labour, lead, lift etc including escalation works and fabrication and assembly works including all nuts, bolts and other miscallaneous items etc complete as per drawing and as directed by the Engineer in Charge.	1.000	set	43954.0	43954.00	43954.00	43954.00

			20.000	metre	1298.0	25960.00	1298.00	25960.00
9	od194703/2018_2019	Supplying and filling the substation yard with 40mm size blue jelly of 150mm thick including cost and conveyance of all materials, labour charges etc complete						
			5.000	cum	3017.0	15085.00	3017.00	15085.00
10	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)						
			2.000	cum	7520.41	15040.82	8030.80	16061.60
11	od194705/2018_2019	400 KVA Transformer- Supply, installation, testing and commissioning of one number 400 kVA, DYn11, 3Ph, 50Hz, 11/0.433 kV,ONAN cooled, copper wound outdoor distribution transformer with tappings from +5% to -10% in steps of 2.5% with OFTC. The HT side & LT side shall have cable end box for XLPE cable. The transformer shall have suitable enclosure for The HT side & LT side. The transformer shall be complete with all standard accessories and fittings & conform to IS:2026. The rate shall be inclusive of all materials, lead,lift, first fill of oil, necessary civil works for mounting to the existing transformer foundation complete as per single line schematic diagram & particular specifications.						
			1.000	set	631587.0	631587.00	631587.00	631587.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
22	2(a)-	Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound-(2)- LT / MV PANELS & ACCESSORIES						

1	<p>od201682/2018_2019</p> <p>PCC PANEL - Supply, fabrication, erection, testing and commissioning of cubicle type fully compartmentalised, dust tight, vermin proof, water proof 800A LT- Main MV Panel falling to IP54 category fabricated out of 16 SWG CRCA Sheet Steel painted as per standards with Alumimium Busbars of suitable size, earth bus of adequate capacity, double earth connection to all switches, internal rigid connection etc. including suitable chambers, front open, top cable entry with water proof shrouding, free standing panel consisting of the following as per standards (All switches shall confirm to conforming to IEC 60947-2 standards). Incommer 800A FP Microprocessor based MDO ACB (35kA) - 1 Nos. Restricted Earth Fault Relay - 1 Set 800A TPN best conductivity Aluminium busbar with SMC supports, heat shrinkable sleeves etc. as per ISS - 1set RYB indicators (LED Pilot type) with 2A Control MCB and toggle switches - 4 Set Multifunction Digital Panel meter to read V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh Class 1.0 - 1 Set 800/5A CL 1.0, 15VA Metering CTs - 1 Set Outgoings: 630A, 35kA 4P MCCB - 2 Nos. 200A FP SDFU (100kA) - 2 Nos. 63A FP SDFU (100kA) - 1 Nos. Surge Protection Pluggable type surge arrester with potential free contact, thermal disconnecter & provision for inbuilt common remote indication for defective arresters to connect between Line and Neutral and one number Spark Gap type arrester to connect between Neutral and Earth of following ratings including base element & pluggable arresters. Nominal voltage 230V, 50Hz, Nominal Discharge current 30 kA (8/20 sec) for Line to Neutral & 50 kA (8/20 sec) for Neutral to Earth, Maximum Discharge Current I_{max} 50 kA (8/20 sec) -1Set Supports The panel shall be supported to ground using framework fabricated out of MS Flats / Angles etc. painted with two coats of Zinc Chromate primer and two coats of enamel paint. The framework shall be firmly supported to ground using suitable cement concrete plinth. The Panel Board shall be provided with 25 x 3mm copper earth bus for the full length. Painting letters / identifications for the incoming and outgoing switches, cable, fuse sizes, etc., in white enamel paint. The board shall be fabricated in such a way that future extension be possible. Supply & Labour</p>
<p style="font-size: 2em; opacity: 0.5;">Kerala Water Authority</p> <p style="font-size: 4em; opacity: 0.5;">PRICE</p>	
2	<p>od194956/2018_2019</p> <p>WTP - MCC PANEL- Supply, fabrication, erection, testing and commissioning of cubicle type fully compartmentalised, dust tight, vermin proof, water proof 200A MV Panel falling to IP54 category fabricated out of 16 SWG CRCA Sheet Steel painted as per standards with Alumimium Busbars of suitable size, earth bus of adequate capacity, double earth connection to all switches, internal rigid connection etc. including suitable chambers, front open, top cable entry with water proof shrouding, free standing panel consisting of the following as per standards (All switches shall confirm to conforming to IEC 60947-2 standards). Incoming : 200A TPN Isolator - 1 No. 200A TPN best conductivity Aluminium busbar with SMC supports, heat shrinkable sleeves etc. as per ISS - 1set Multifunction Digital Panel meter to read V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh Class 1.0 - 1 Set RYB indicators (LED Pilot type) with 2A Control MCB and toggle switches - 1 Set 200/5A CL 1.0, 15VA Metering CTs - 1 Set Outgoings: 100A TPN SDFU (100kA) - 3 Nos. 32A TP D curve MCB (10kA) - 6 Nos. 25A TP D curve MCB (10kA) - 3 Nos. 10A TP D curve MCB (10kA) - 4 Nos. Supports The panel shall be supported to ground using framework fabricated out of MS Flats / Angles etc. painted with two coats of Zinc Chromate primer and two coats of enamel paint. The framework shall be firmly supported to ground using suitable cement concrete plinth. The Panel Board shall be provided with 25 x 3mm copper earth bus for the full length. Painting letters / identifications for the incoming and outgoing switches, cable, fuse sizes, etc., in white enamel paint. The board shall be fabricated in such a way that future extension be possible. Supply & Labour</p>

			1.000	set	84484.0	84484.00	84484.00	84484.00
3	od194957/2018_2019	<p>APFC PANEL -Automatic Power Factor Correction Panel of total 40 KVAR capacity with Auto / Manual mode operation to be fabricated out of 14 guage CRCA sheet steel Powder coated with provision for capacitor mounted inside the panel with adequate number of louvers and powder coated with approved shade and having following specific components(refer particular specification) with Aluminium Busbars of suitable size, earth bus of adequate capacity, double earth connection to all switches, internal rigid connection etc. including suitable chambers, front open, top cable entry , free standing panel consisting of the following as per standards. Incomer 100A TPN Isolator - 1 No. 100 A TPN best conductivity Aluminium busbar with SMC supports, heat shrinkable sleeves etc. as per ISS - 1set Multifunction Digital Panel meter to read V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh Class 1.0 - 1 Set RYB indicators (LED Pilot type) with 2A Control MCB and toggle switches- 1 Set 100/5A 15VA CL 1.0 Metering CTs - 3 Sets Microprocessor based intelligent, 8 step IPFC relay with PF display - 1 No. Out goings 40A, 10kA C Curve TP MCB - 1 Nos 20A, 10kA C Curve TP MCB - 1 Nos 16A, 10kA C Curve TP MCB - 2 Nos 10A, 10kA C Curve TP MCB - 1 Nos 6A, 10kA C Curve TP MCB - 3 Nos Capacitor duty contactors working on 3 Phase 415V AC supply of the following ratings wired with Pilot LED indication for ON & OFF, Push Buttons for Manual ON & OFF operation using suitable NO / NC contacts for all the stages 15 kVAR - 1 Nos 10 kVAR- 3 Nos 7.5 kVAR- 4 Nos 480 V,50 Hz Double di-electric polypropylene (MPP heavy duty) Capacitors of the following ratings including fixed compensation for low load losses. 15 kVAR - 1 Nos 10 kVAR- 1 Nos 5 kVAR- 2 Nos 2 kVAR - 2 Nos 1 kVAR - 1 Nos The Panel Board shall be provided with 25 x 3mm copper earth bus for the full length. Painting letters / identifications for the incoming and outgoing switches, cable, fuse sizes, etc., in white enamel paint. Supply & Labour Supports The panel shall be supported to ground using framework fabricated out of MS Flats / Angles etc. painted with two coats of Zinc Chromate primer and two coats of enamel paint. The framework shall be firmly supported to ground using suitable cement concrete plinth. The Panel Board shall be provided with 25 x 3mm copper earth bus for the full length. Painting letters / identifications for the incoming and outgoing switches, cable, fuse sizes, etc., in white enamel paint. Supply & Labour</p>						
			1.000	set	119898.0	119898.00	119898.00	119898.00
Sl No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
23	2(a)-	Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound- (3)- DISTRIBUTION BOARDS, SWITCHGEAR & ACCESSORIES						
1	od194998/2018_2019	<p>Supply, installation, testing & commissioning of best quality sheet steel, phosphatised and painted, dust and vermin proof enclosure (IP43) Vertical TPN Double door DB including copper bus bar, neutral link, earth bus and DIN rail suitable for fixing RCCB + Isolator (8 module)as incomer and SP/TP MCB as outgoings etc. on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing, dressing the DB including termination etc. as required. (Including closing vaccant slots using Dummy) - 12 Way</p>						
			1.000	No	11136.0	11136.00	11136.00	11136.00

2	od194999/2018_2019 Supply and providing the following MCCB/ RCCB / MCB / MCB Isolators/COS etc. to the existing DBs / MCS / Junction Boxes etc. including giving proper termination using suitable Bananna copper lugs, sleeves, insulation etc. complete. 63A, 100mA 3Ph RCCB		1.000	No	6640.0	6640.00	6640.00	6640.00
3	od195000/2018_2019 Supply and providing the following MCCB/ RCCB / MCB / MCB Isolators/COS etc. to the existing DBs / MCS / Junction Boxes etc. including giving proper termination using suitable Bananna copper lugs, sleeves, insulation etc. complete. 63A, 4P MCB Isolator		1.000	No	1050.0	1050.00	1050.00	1050.00
4	od195001/2018_2019 Supply and providing the following MCCB/ RCCB / MCB / MCB Isolators/COS etc. to the existing DBs / MCS / Junction Boxes etc. including giving proper termination using suitable Bananna copper lugs, sleeves, insulation etc. complete. 6A to 32A , 10kA SP MCB		36.000	No	181.0	6516.00	181.00	6516.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
24	2(a)- Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound- (4)- CABLES , WIRES & ACCESSORIES							
1	od195885/2018_2019 HT Power Cables - Supply & laying 11KV stranded compact circular aluminium conductor, conductors screened with extruded semi conducting compound XLPE insulated, insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.), cores laid up, inner sheath of PVC tape, galvanized steel flat strip armoured, and overall PVC sheathed cable of the following sizes in the existing cable trench conforming to IS: 7098 part II 1985 with latest amendments. 3C x 300 Sqm		25.000	metre	2281.0	57025.00	2281.00	57025.00
2	od195886/2018_2019 HT Power Cables - Supply & laying 11KV stranded compact circular aluminium conductor, conductors screened with extruded semi conducting compound XLPE insulated, insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.), cores laid up, inner sheath of PVC tape, galvanized steel flat strip armoured, and overall PVC sheathed cable of the following sizes in the existing cable trench conforming to IS: 7098 part II 1985 with latest amendments.3C x 150 Sqm		25.000	metre	2318.0	57950.00	2318.00	57950.00

3	od195980/2018_2019 HT Cable Terminations Supplying and making indoor cable end termination with heat shrinkable jointing kit, including lugs and other jointing materials, for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 150 Sqmm	1.000	set	7664.0	7664.00	7664.00	7664.00
4	od195981/2018_2019 HT Cable Terminations Supplying and making indoor cable end termination with heat shrinkable jointing kit, including lugs and other jointing materials, for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 300 Sqmm	1.000	set	10002.0	10002.00	10002.00	10002.00
5	od195993/2018_2019 HT Cable Termination- Supplying and making Outdoor cable end jointing with heat shrinkable jointing kit, including lugs and other jointing materials, for for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 150 Sqmm	1.000	set	12802.0	12802.00	12802.00	12802.00
6	od196006/2018_2019 HT Cable Terminations - Supplying and making Outdoor cable end jointing with heat shrinkable jointing kit, including lugs and other jointing materials, for for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 300 Sqmm	1.000	set	14660.0	14660.00	14660.00	14660.00
7	od195889/2018_2019 LT Power Cables - Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling. 3.5C x 185 Sqmm	120.000	metre	1752.0	210240.00	1752.00	210240.00
8	od195890/2018_2019 LT Power Cables Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling. 3.5C x 150 Sqmm	60.000	metre	1241.0	74460.00	1241.00	74460.00
9	od195891/2018_2019 LT Power Cables Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling. 3.5C x 50 Sqmm	30.000	metre	539.0	16170.00	539.00	16170.00

10	od195892/2018_2019 LT Power Cables Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling. 3.5C x 35 Sqmm	30.000	metre	421.0	12630.00	421.00	12630.00
11	od195893/2018_2019 LT Power Cables - Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling- 3.5C x 25 Sqmm	30.000	metre	350.0	10500.00	350.00	10500.00
12	od195894/2018_2019 LT Power Cables - Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling - 4C x 6 Sqmm	75.000	metre	216.0	16200.00	216.00	16200.00
13	od195895/2018_2019 LT Power Cables - Supply & laying UG AYFY,PVC insulated and PVC sheathed Aluminium conductor armoured power cable of 1.1 KV grade of following sizes through trench/wall/ ceiling- 4C x 4 Sqmm	105.000	metre	179.0	18795.00	179.00	18795.00
14	od195896/2018_2019 LT Power Cables - Supply & laying UG 2XFY,PVC insulated and PVC sheathed Copper conductor armoured Power / Control cable of 1.1 KV grade of the following sizes through trench/wall/ ceiling - 4C x 2.5 Sqmm	50.000	metre	305.0	15250.00	305.00	15250.00
15	od195897/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete- 3.5C x 185 Sqmm (57mm)	6.000	No	1245.0	7470.00	1245.00	7470.00
16	od195898/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete- 3.5C x 150 Sqmm (50mm)	8.000	No	917.0	7336.00	917.00	7336.00
17	od195899/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete- 3.5C x 50 Sqmm (35mm)	4.000	No	548.0	2192.00	548.00	2192.00

18	od195900/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete- 3.5C x 35 Sqmm (32mm)	4.000	No	437.0	1748.00	437.00	1748.00
19	od195901/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete- 3.5C x 25 Sqmm (28mm)	4.000	No	398.0	1592.00	398.00	1592.00
20	od195902/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete - 4C x 6 sqmm (22mm)	10.000	No	266.0	2660.00	266.00	2660.00
21	od195903/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete - 4C x 4 sqmm (22mm)	14.000	No	225.0	3150.00	225.00	3150.00
22	od195904/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete - 4C x 2.5 Sqmm	2.000	No	211.0	422.00	211.00	422.00
23	od195905/2018_2019 LT Power Cables - Supply & drawing the following size of FR Multi-core PVC Insulated and PVC sheathed Copper conductor round flexible wire manufactured with bright annealed bare copper conductor as per IS 8130/1984 Insulated and sheathed with electrical grade PVC compound as per IS 5831/1984 generally conforming to IS 694/1990 for working voltage up to and including 1100 V through existing PVC conduit / casing capping wall. 3C x 0.5 Sqmm	25.000	metre	47.0	1175.00	47.00	1175.00
24	od195906/2018_2019 LT Power Cables - Supply & drawing the following size of FR Multi-core PVC Insulated and PVC sheathed Copper conductor round flexible wire manufactured with bright annealed bare copper conductor as per IS 8130/1984 Insulated and sheathed with electrical grade PVC compound as per IS 5831/1984 generally conforming to IS 694/1990 for working voltage up to and including 1100 V through existing PVC conduit / casing capping wall. 3C x 1.5 Sqmm	25.000	metre	88.0	2200.00	88.00	2200.00

25	od195907/2018_2019 PVC Conduits - Supply and providing the following size of ISI Marked rigid PVC conduits with specials confirming to IS 9537/1983 on surface / concealed position making good the damages made etc.complete.20mm dia, 1.5mm thick	350.000	metre	88.0	30800.00	88.00	30800.00
26	od195908/2018_2019 PVC Conduits - Supply and providing the following size of ISI Marked rigid PVC conduits with specials confirming to IS 9537/1983 on surface concealed position making good the damages made etc.complete.25mm dia, 1.5mm thick	250.000	metre	107.0	26750.00	107.00	26750.00
27	od195909/2018_2019 PVC Conduits - Supply and providing the following size of ISI Marked rigid PVC conduits with specials confirming to IS 9537/1983 on surface concealed position making good the damages made etc.complete. 32mm dia 1.5mm thick	100.000	metre	138.0	13800.00	138.00	13800.00
28	od195910/2018_2019 PVC Conduits- Supply & providing Capping / Casing of good quality of the following sizes. 20 mm	100.000	metre	43.0	4300.00	43.00	4300.00
29	od195911/2018_2019 PVC Conduits- Supply & providing Capping / Casing of good quality of the following sizes. 25 mm	100.000	metre	49.0	4900.00	49.00	4900.00
30	od195912/2018_2019 UG Cable Tamper Protection- Supply & laying the following size of B class GI Pipe for UG Cable tamper protection in the existing trench in position etc. complete.50 mm	10.000	metre	379.0	3790.00	379.00	3790.00
31	od195913/2018_2019 UG Cable Tamper Protection- Supply & laying the following size of B class GI Pipe for UG Cable tamper protection in the existing trench in position etc. complete. 75 mm	10.000	metre	485.0	4850.00	485.00	4850.00
32	od195914/2018_2019 Circuit Mains- Supply and wiring the following size of PVC insulated copper wire manufactured with bright annealed bunched electrolytic copper conductor as per IS 8130/1984 insulated with di-electrical grade PVC compound per as IS 5831/1984 Generally Conforming to IS 694/1990 for working voltage up to and including 1100 V.through the existing PVC conduits / capping casing. 3 run x 4.0 Sqmm - SPN + E - rate as per vetted estimate						

		100.000	metre	199.0	19900.00	199.00	19900.00
33	od195915/2018_2019 Circuit Mains- Supply and wiring the following size of PVC insulated copper wire manufactured with bright annealed bunched electrolytic copper conductor as per IS 8130/1984 insulated with di-electrical grade PVC compound per as IS 5831/1984 Generally Conforming to IS 694/1990 for working voltage up to and including 1100 V.through the existing PVC conduits / capping casing. 3 run x 2.5 Sqmm - SPN + E - rate as per vetted estimate.						
		200.000	metre	154.0	30800.00	154.00	30800.00
34	od195916/2018_2019 Circuit Mains- Supply and wiring the following size of PVC insulated copper wire manufactured with bright annealed bunched electrolytic copper conductor as per IS 8130/1984 insulated with di-electrical grade PVC compound per as IS 5831/1984 Generally Conforming to IS 694/1990 for working voltage up to and including 1100 V.through the existing PVC conduits / capping casing. 3 run x 1.5 sqmm - SPN + E						
		350.000	metre	118.0	41300.00	118.00	41300.00
35	od195917/2018_2019 Cable Supports & Trenching- Supply and erection of Cable trays and cable supports fabricated out of MS angles 25x25x6mm (ISA) and 25x6mmMS flats with and 20cm spacing between successive cross members and supported using 25cm long 32x6mm MS flat at every 1m spacing. The cable trays and supports shall be painted with two coats of Zinc Chromate primer and two coats of enamel paint.						
		500.000	kg	142.0	71000.00	142.00	71000.00
36	od195918/2018_2019 Cable Supports & Trenching- Supply and providing 6mm MS chequered plate of suitable thickness including cutting, welding, painting etc. as required for the cable trench covering.						
		100.000	kg	121.0	12100.00	121.00	12100.00
37	od195919/2018_2019 Cable Supports & Trenching - Charges for making cable trenches in all type of soil including providing country burnt bricks breadth wise above the cable, providing sand cushioning of 150mm refilling & restoring normal surface etc.complete as per standards of the following size. 35 cm Wide x 100 cm Deep (HT Cables)						
		100.000	metre	640.0	64000.00	640.00	64000.00
38	od195920/2018_2019 Cable Supports & Trenching - Charges for making cable trenches in all type of soil including providing country burnt bricks breadth wise above the cable, providing sand cushioning of 150mm refilling & restoring normal surface etc.complete as per standards of the following size. 35 cm Wide x 75 cm Deep (LT Cables)						
		100.000	metre	594.0	59400.00	594.00	59400.00

39	od195921/2018_2019 Cable Supports & Trenching - Supply route marker with 10cmx10cm GI plate 5mm thick with inscriptions there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.							
	50.000	No	516.0	25800.00	516.00	25800.00		
40	od195922/2018_2019 Cable Supports & Trenching - Supply route marker with 10cmx10cm GI plate 5mm thick with inscriptions there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.							
	25.000	No	417.0	10425.00	417.00	10425.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
25	2(a)- Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound- (5)- EARTHING & ACCESSORIES							
1	od196108/2018_2019 Supply and providing plate earthing as per IS 3043 with 1200x1200x12 mm GI/CI earth plate, 50 mm GI watering pipe fixed to the earth plate with 25 x 3mm GI clamps, GI funnel with weld mesh, filling required quantity of charcoal including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 450 x 450 x 450 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top.							
	8.000	set	11091.0	88728.00	11091.00	88728.00		
2	od196109/2018_2019 Supply and providing pipe earthing as per IS 3043 with 2.5 m long 40 mm dia B class GI pipe, GI funnel with weld mesh, filling required quantity of charcoal & salt including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 300 x 300 x 300 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top.							
	5.000	set	2952.0	14760.00	2952.00	14760.00		
3	od196110/2018_2019 Supply & laying the following sizes of Earth Strip for earthing interconnection, termination and leads, for continous earthing along with cables tinned at terminals etc. complete. 25 x 6 mm Copper Strip							
	300.000	metre	1507.0	452100.00	1507.00	452100.00		
4	od196111/2018_2019 Supply & laying the following sizes of Earth Strip for earthing interconnection, termination and leads, for continous earthing along with cables tinned at terminals etc. complete. 25 x 3 mm Copper strip							
	500.000	metre	797.0	398500.00	797.00	398500.00		

5	od196112/2018_2019 Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving earth connection as required. No. 16 SWG Copper Conductor							
			300.000	metre	199.0	59700.00	199.00	59700.00
6	od196113/2018_2019 Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving earth connection as required. No. 10 SWG Copper Conductor							
			600.000	metre	113.0	67800.00	113.00	67800.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
26	2(a)- Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound-(6) SUBSTATION EQUIPMENTS & MISC							
1	od196123/2018_2019 Supply and providing 6 mm thick & 1 m wide electrical grade chequered type rubber mat to withstand 3.3 KV dielectric strength conforming to IS 5429/ 1969.							
			5.000	sqm	773.0	3865.00	773.00	3865.00
2	od196124/2018_2019 Supply and providing 12 mm thick & 1 m wide electrical grade chequered type rubber mat to withstand 15 KV dielectric strength conforming to IS 5429/ 1969 in front of the HT Breaker Panel.							
			2.000	sqm	1379.0	2758.00	1379.00	2758.00
3	od196125/2018_2019 Supply and providing 5 Kg. Dry Chemical Powder type Fire Extinguisher with hose and clamps including fixing it to wall as required.							
			2.000	set	2383.0	4766.00	2383.00	4766.00
4	od196126/2018_2019 Supply and providing 9 Litre capacity GI Fire Bucket painted in post office red with primer coat of red oxide and written with white paint 'FIRE' mounted on MS angle frame work/ wall bracket filled with fine sand, painting the bracket/ floor stand including making good the damages, colour washing etc. as required.							
			4.000	set	638.0	2552.00	638.00	2552.00
5	od196127/2018_2019 Supply and providing First Aid Chart duly framed and placed in a conspicuous location for clear vision.							
			1.000	set	247.0	247.00	247.00	247.00

6	od196128/2018_2019 Supply and providing Laminated Electrical Schematic diagram framed and placed in a conspicuous location for clear vision.							
	1.000	set	226.0	226.00	226.00	226.00		
7	od196129/2018_2019 Supply & providing Aluminium anodised Danger Notice Board of size 200 x 150 mm. with inscriptions (both in English and Malayalam) and conventional Skull and Bone in Red colour at locations as directed by the Engineer in Charge							
	10.000	Nos	267.0	2670.00	267.00	2670.00		
8	od202018/2018_2019 SCHEME APPROVAL & POWER ALLOCATION - Preparation and submission of latest scheme drawings, Voltage drop calculations, Earthing design & fault level calculations to the Electrical Inspectorate including all MV additions recently made and obtaining approval, arranging inspection for entire installation, obtaining sanction orders for the electrical installation, complete (Including all incidental and statutory expenses).							
	1.000	L.S	20000.0	20000.00	20000.00	20000.00		
9	od202020/2018_2019 SCHEME APPROVAL & POWER ALLOCATION - Preparation and submission of latest scheme drawings to KSEB for obtaining sanction for power allocation (Including all incidental and statutory expenses) .Preparation, submission and execution of HT agreement(6 sets) as per the renewed Contract demand according to the latest additions.							
	1.000	L.S	15000.0	15000.00	15000.00	15000.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
27	2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady raw water pump house compound- (1)- 11 KV substation and HT equipments							
1	od194695/2018_2019 Erection of RCC/ PCC pole of following length in brick ballast and ramming the foundation, finishing with 150 mm thick cement concrete (1:3:6) layer on top with including excavation and refilling etc. as required.							
	2.000	Nos	4957.0	9914.00	4957.00	9914.00		
2	od194696/2018_2019 Supplying and erection of a set of cross bracing frame work for 11 KV over head line double pole structure having four members fabricated out of 50 mm X 50 mm X 6 mm angle iron to form a rectangle of minimum size 1400 mm width X 2500 mm height, complete with 50 mm X 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. (as per drawing) and painting with primer and finish paint as required.							
	1.000	set	6552.0	6552.00	6552.00	6552.00		

3	od194697/2018_2019 Erection of double pole 3 wire cross arm for 11 KV/22 KV/33 KV over head lines as required.	3.000	Nos	967.0	2901.00	967.00	2901.00
4	od194698/2018_2019 Supplying and erection of 11 kV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required.	1.000	set	349.0	349.00	349.00	349.00
5	od194699/2018_2019 Supplying and erection of three piece nonlinear resistor type lightning arrester suitable for 3 wire, 11 kV overhead lines with rated voltage 9 kV (rms) with a nominal discharge current rating of 5 kA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.	1.000	set	3601.0	3601.00	3601.00	3601.00
6	od201137/2018_2019 OUTDOOR HT BREAKER PANEL (LBS) - Supply, Installation, Testing & Commissioning of 11kV Outdoor HT Breaker Panel with the following components. 11kV Load Break Swich 11kV, 350 MVA, 630A, LBS unit - 1 set Voltmeter (0 - 11kV) - 3 Nos LED Pilot Indication - LBS ON / OFF - 1 Set Trip Push buttons - 1 set 2NO+2NC Aux contacts - 1 Set 230V AC Shunt Trip Coil - 1 No Aluminium Busbar - 1 Set Seal off Bushings - 3 Nos Space Heater Element with Thermostat & wiring - 1 Nos Inspection Lamp LED with switch & wiring - 1 set Metering Chamber PT - 100 VA, 11kV/110V, CL 0.2S - 1 No CT - */5A, 15VA, CL 0.2S - 3 Nos Provisions for mounting 3 phase, 4wire, HT CT/PT operated, bi-directional TOD meter with accuracy class 0.2S including wiring and test terminal block, site glass etc. - 1 set Voltage Circuit: The active & apparent power consumption of voltage circuit including power supply of meter at reference voltage, reference temperature & frequency shall not exceed 1.0 Watt & 4.0 VA per phase Current Circuit: The apparent power taken by current circuit at basic current, reference frequency & reference temperature shall not exceed 1.0 VA/phase. (The Quoted rate shall be inclusive of necessary control wiring, components working on LT supply should be prewired completely with necessary controls as specified till the connection point for feeding LT Supply from outside, Cable end box for receiving incoming and outgoing cables and suitable civil foundation etc as required.) - Supply & Labour	1.000	set	215359.0	215359.00	215359.00	215359.00
7	od201138/2018_2019 HT Bidirectional TOD Meter - Supply & Providing 3 phase, 4wire, HT CT/PT operated, bi-directional with accuracy class 0.2S for both Active and Reactive energy, -/5A, HT static tri vector meter with TOD register, DLMS compliant & AMR compatible with optical port and RS232 port having ISI Marking, suitable for measurement of active kWh, reactive energy kVARh and apparent energy kVAh and kVA MD, kW MD at nominal frequency in the range of 47.5 Hz to 52.5 Hz in balanced as well as unbalanced load conditions in the existing outdoor Meter cubicle including testing & commissioning etc. complete.						

		1.000	set	43954.0	43954.00	43954.00	43954.00
8	od201139/2018_2019 HT Equipment Pinth, Substation Yard Fencing & Levelling - Providing, fabricating and fixing 2m high chainlink fencing over 4mm thick barbed wire with a framework of 50x50x6mm MS angle between vertical posts of ISMC 75 at 2400mm interval, Earthing as per KSEI/KSEB standards shall be done around the periphery of the fencing. The MS framework for chainlink fencing shall be Hot Dip Galvanised. The rate shall be inclusive of all materials, labour, lead, lift etc including escalation works and fabrication and assembly works including all nuts, bolts and other miscellaneous items etc complete as per drawing and as directed by the Engineer in Charge.						
		20.000	metre	1298.0	25960.00	1298.00	25960.00
9	od201140/2018_2019 HT Equipment Pinth, Substation Yard Fencing & Levelling - Supplying and filling the substation yard with 40mm size blue jelly of 150mm thick including cost and conveyance of all materials, labour charges etc complete						
		5.000	cum	3017.0	15085.00	3017.00	15085.00
10	od201141/2018_2019 HT Equipment Pinth, Substation Yard Fencing & Levelling - Supply & erection of 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) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand).						
		2.000	cum	6143.0	12286.00	6143.00	12286.00
11	od201142/2018_2019 500 KVA Transformer - Supply, installation, testing and commissioning of one number 500 kVA, DYn11, 3Ph, 50Hz, 11/3.3 kV, ONAN cooled, copper wound outdoor distribution transformer with tappings from +5% to -10% in steps of 2.5% with OFTC. The HT side & LT side shall have cable end box for XLPE cable. The transformer shall have suitable enclosure for The HT side & LT side. The transformer shall be complete with all standard accessories and fittings & conform to IS:2026. The rate shall be inclusive of all materials, lead, lift, first fill of oil, necessary civil works for mounting to the existing transformer foundation complete as per single line schematic diagram & particular specifications.						
		1.000	set	918604.0	918604.00	918604.00	918604.00

12	od210621/2020_2021 Supply/erection/testing commissioning of one number50/ 63 KVA(or suitable near size) 3.3KV/433V ,distribution transformer Indoor (or out door),with HT/LT cable entry ,with suitable HT and LT cables from 3.3 KV pannel to transformer and LT cable to LT panel,cable termination,foundation/structure/enclosure for transformer including ,erection ,testing and commissioning of LT pannel with 100A incomer MCCB, 3 NOS 63 A outgoing MCCB with isolation,erathing , with meters and indicating lamps etc complete including approval from Inspectrate.-complete-as per CEA and Inspectrate statutes							
	1.000	No	350000.0	350000.00	350000.00	350000.00	350000.00	
13	od201143/2018_2019 Neutral Grounding Resistor - Supply & Providing 50A,3.3kV 40ohm 30sec NGR - Supply							
	1.000	No	155766.0	155766.00	155766.00	155766.00	155766.00	
14	od201144/2018_2019 Neutral Grounding Resistor - Supply & Providing 50A,3.3kV 40ohm 30sec NGR - Labour							
	1.000	No	656.0	656.00	656.00	656.00	656.00	
15	od201145/2018_2019 NEUTRAL CT - Supply & Providing 5P10 Protection Class 20/5A, 15VA Neutral CT in a suitable enclosure including giving connections to Transformer Neutral etc.complete - Supply							
	1.000	No	4327.0	4327.00	4327.00	4327.00	4327.00	
16	od201146/2018_2019 NEUTRAL CT - Supply & Providing 5P10 Protection Class 20/5A, 15VA Neutral CT in a suitable enclosure including giving connections to Transformer Neutral etc.complete - Labour							
	1.000	No	625.0	625.00	625.00	625.00	625.00	
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
28	2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady raw water pump house compound-(2)- LT / MV PANELS & ACCESSORIES							

1	od201161/2018_2019 PCC PANEL -Design ,approval, Supply, fabrication, erection, testing and commissioning of 3.3kv cubicle type fully compartmentalized, dust tight, vermin proof, water proof 3.3 kv , VCB panel set 200Amp or suitable rating - Main 3.3.KV Panel falling to IP54 category fabricated out of 16 SWG CRCA Sheet Steel painted as per standards with Alumimium Busbars of suitable size, earth bus of adequate capacity, double earth connection to all switches, internal rigid connection etc. including suitable chambers, front open, top cable entry with water proof shrouding, free standing panel consisting of the following as per standards (All switches shall confirm to conforming to IEC 60947-2 standards). Incommer - 200A FP Microprocessor based VCB - suitable MVA based on fault level-- 1 Nos. Restricted Earth Fault Relay - best conductivity Aluminium busbar with SMC supports, heat shrinkable sleeves etc. as per ISS - 1set RYB indicators (LED Pilot type) with 2A Control MCB and toggle switches - 4 Set Multifunction Digital Panel meter to read V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh Class 1.0 - 1 Set 200/5A CL 1.0, 15VA Metering CTs -one VCB incomer 200 A or suitable size- 3 Sets Outgoings: 200A, VCB - 1 Nos. 100/50A VCB out going- .with isolation facility - Surge Protection Pluggable type surge arrester with potential free contact, thermal disconnecter & provision for inbuilt common remote indication for defective arresters to connect between Line and Neutral and one number Spark Gap type arrester to connect between Neutral and Earth of following ratings including base element & pluggable arresters. Nominal voltage 3.3KV, 50Hz, Nominal Discharge current 30 kA (8/20 sec) for Line to Neutral & 50 kA (8/20 sec) for Neutral to Earth, Maximum Discharge Current I _{max} 50 kA (8/20 sec) -1Set Supports The panel shall be supported to ground using framework fabricated out of MS Flats / Angles etc. painted with two coats of Zinc Chromate primer and two coats of enamel paint. The framework shall be firmly supported to ground using suitable cement concrete plinth. The Panel Board shall be provided with 25 x 3mm copper earth bus for the full length. Painting letters / identifications for the incoming and outgoing switches, cable, fuse sizes, etc., in white enamel paint. The board shall be fabricated in such a way that future extension be possible. Supply & Labour ,suitable battery and charger for the pannel,-complete as per CEA and kerala State Electrical Inspectrate relevant statutes,approval from inspectrate ,2.5 sq mm copper cable shall be used for all control circuits-							1.000	set	1806133.0	1806133.00	1806133.00	1806133.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount					
29	2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady raw water pump house compound- (3)- DISTRIBUTION BOARDS, SWITCHGEAR & ACCESSORIES												
1	od194998/2018_2019 Supply, installation, testing & commissioning of best quality sheet steel, phosphatised and painted, dust and vermin proof enclosure (IP43) Vertical TPN Double door DB including copper bus bar, neutral link, earth bus and DIN rail suitable for fixing RCCB + Isolator (8 module)as incommer and SP/TP MCB as outgoings etc. on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing, dressing the DB including termination etc. as required. (Including closing vaccant slots using Dummy) - 12 Way							1.000	No	11136.0	11136.00	11136.00	11136.00

2	od201177/2018_2019 Supply and providing the following MCCB/ RCCB / MCB / MCB Isolators/COS etc. to the existing DBs / MCS / Junction Boxes etc. including giving proper termination using suitable Bananna copper lugs, sleeves, insulation etc. complete - 63A, 100mA 3Ph RCCB		1.000	No	6640.0	6640.00	6640.00	6640.00
3	od195000/2018_2019 Supply and providing the following MCCB/ RCCB / MCB / MCB Isolators/COS etc. to the existing DBs / MCS / Junction Boxes etc. including giving proper termination using suitable Bananna copper lugs, sleeves, insulation etc. complete. 63A, 4P MCB Isolator		1.000	No	1050.0	1050.00	1050.00	1050.00
4	od201178/2018_2019 Supply and providing the following MCCB/ RCCB / MCB / MCB Isolators/COS etc. to the existing DBs / MCS / Junction Boxes etc. including giving proper termination using suitable Bananna copper lugs, sleeves, insulation etc. complete - 6A to 32A , 10kA SP MCB		36.000	No	181.0	6516.00	181.00	6516.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
30	2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady raw water pump house compound- (4)- CABLES , WIRES & ACCESSORIES							
1	od201350/2018_2019 HT Power Cables - Supply & laying 11KV stranded compact circular aluminium conductor, conductors screened with extruded semi conducting compound XLPE insulated, insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.), cores laid up, inner sheath of PVC tape, galvanized steel flat strip armoured, and overall PVC sheathed cable of the following sizes in the existing cable trench conforming to IS: 7098 part II 1985 with latest amendments. 3C x 150 Sqm		60.000	metre	2318.0	139080.00	2318.00	139080.00
2	od201351/2018_2019 HT Power Cables - Supply & laying 11KV stranded compact circular aluminium conductor, conductors screened with extruded semi conducting compound XLPE insulated, insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.), cores laid up, inner sheath of PVC tape, galvanized steel flat strip armoured, and overall PVC sheathed cable of the following sizes in the existing cable trench conforming to IS: 7098 part II 1985 with latest amendments. 3C x 50 Sqm		65.000	metre	1072.0	69680.00	1072.00	69680.00

3	od201352/2018_2019 HT Power Cables - Supply & laying 11KV stranded compact circular aluminium conductor, conductors screened with extruded semi conducting compound XLPE insulated, insulation screened with extruded semi conducting compound in combination with copper tape (0.3 kA for 1 sec.), cores laid up, inner sheath of PVC tape, galvanized steel flat strip armoured, and overall PVC sheathed cable of the following sizes in the existing cable trench conforming to IS: 7098 part II 1985 with latest amendments. 1C x 50 Sqmm	20.000	metre	628.0	12560.00	628.00	12560.00
4	od201353/2018_2019 HT Cable Terminations - Supplying and making indoor cable end termination with heat shrinkable jointing kit, including lugs and other jointing materials, for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 150 Sqmm	4.000	set	10002.0	40008.00	10002.00	40008.00
5	od201354/2018_2019 HT Cable Terminations - Supplying and making indoor cable end termination with heat shrinkable jointing kit, including lugs and other jointing materials, for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 50 Sqmm	8.000	set	7664.0	61312.00	7664.00	61312.00
6	od201355/2018_2019 HT Cable Terminations - Supplying and making indoor cable end termination with heat shrinkable jointing kit, including lugs and other jointing materials, for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 1C x 50 Sqmm	1.000	set	7664.0	7664.00	7664.00	7664.00
7	od201356/2018_2019 HT Cable Terminations - Supplying and making Outdoor cable end jointing with heat shrinkable jointing kit, including lugs and other jointing materials, for for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 3C x 150 Sqmm	2.000	set	12367.0	24734.00	12367.00	24734.00
8	od201357/2018_2019 HT Cable Terminations - Supplying and making Outdoor cable end jointing with heat shrinkable jointing kit, including lugs and other jointing materials, for for following sizes, XLPE aluminium conductor cable of 11 KV grade as required. 1C x 50 Sqmm	1.000	set	14660.0	14660.00	14660.00	14660.00

9	od201358/2018_2019 LT Power Cables - Supply & laying UG 2XFY,PVC insulated and PVC sheathed Copper conductor armoured Power / Control cable of 1.1 KV grade of the following sizes through trench/wall/ ceiling - 4C x 2.5 Sqmm	50.000	metre	308.0	15400.00	308.00	15400.00
10	od201359/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete. 3.5C x 400 Sqmm (82mm)	6.000	No	2152.0	12912.00	2152.00	12912.00
11	od201360/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete. 3.5C x 300 Sqmm (70mm)	8.000	No	1713.0	13704.00	1713.00	13704.00
12	od201361/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete. 3.5C x 35 Sqmm (32mm)	2.000	No	437.0	874.00	437.00	874.00
13	od201362/2018_2019 LT Power Cables - Providing cable glanding, gland earthing & end termination of UG cables of the following sizes using Siemens type Brass compression gland & Copper lugs etc. complete. 4C x 2.5 Sqmm	2.000	No	217.0	434.00	217.00	434.00
14	od201363/2018_2019 LT Power Cables - Supply & drawing the following size of FR Multi-core PVC Insulated and PVC sheathed Copper conductor round flexible wire manufactured with bright annealed bare copper conductor as per IS 8130/1984 Insulated and sheathed with electrical grade PVC compound as per IS 5831/1984 generally conforming to IS 694/1990 for working voltage up to and including 1100 V through existing PVC conduit / casing capping wall. 3C x 0.5 Sqmm	25.000	metre	47.0	1175.00	47.00	1175.00
15	od201364/2018_2019 LT Power Cables - Supply & drawing the following size of FR Multi-core PVC Insulated and PVC sheathed Copper conductor round flexible wire manufactured with bright annealed bare copper conductor as per IS 8130/1984 Insulated and sheathed with electrical grade PVC compound as per IS 5831/1984 generally conforming to IS 694/1990 for working voltage up to and including 1100 V through existing PVC conduit / casing capping wall. 3C x 1.5 Sqmm	25.000	metre	88.0	2200.00	88.00	2200.00

16	od201365/2018_2019 PVC Conduits - Supply and providing the following size of ISI Marked rigid PVC conduits with specials confirming to IS 9537/1983 on surface / concealed position making good the damages made etc.complete. 20mm dia 1.5mm thick	350.000	metre	88.0	30800.00	88.00	30800.00
17	od201366/2018_2019 PVC Conduits - Supply and providing the following size of ISI Marked rigid PVC conduits with specials confirming to IS 9537/1983 on surface / concealed position making good the damages made etc.complete. 25mm dia 1.5mm thick	250.000	metre	107.0	26750.00	107.00	26750.00
18	od201367/2018_2019 PVC Conduits - Supply and providing the following size of ISI Marked rigid PVC conduits with specials confirming to IS 9537/1983 on surface / concealed position making good the damages made etc.complete. 32mm dia 1.5mm thick	100.000	metre	138.0	13800.00	138.00	13800.00
19	od201368/2018_2019 PVC Conduits - Supply & providing Capping / Casing of good quality of the following sizes. 20 mm	100.000	metre	43.0	4300.00	43.00	4300.00
20	od201369/2018_2019 PVC Conduits - Supply & providing Capping / Casing of good quality of the following sizes. 25 mm	100.000	metre	49.0	4900.00	49.00	4900.00
21	od201370/2018_2019 UG Cable Tamper Protection - Supply & laying the following size of B class GI Pipe for UG Cable tamper protection in the existing trench in position etc. complete. 50 mm	10.000	metre	379.0	3790.00	379.00	3790.00
22	od201371/2018_2019 UG Cable Tamper Protection - Supply & laying the following size of B class GI Pipe for UG Cable tamper protection in the existing trench in position etc. complete. 75 mm	10.000	metre	485.0	4850.00	485.00	4850.00

23	od201372/2018_2019 Circuit Mains - Supply and wiring the following size of PVC insulated copper wire manufactured with bright annealed bunched electrolytic copper conductor as per IS 8130/1984 insulated with di-electrical grade PVC compound per as IS 5831/1984 Generally Conforming to IS 694/1990 for working voltage up to and including 1100 V.through the existing PVC conduits / capping casing. 3 run x 4.0 Sqmm - SPN + E	100.000	metre	199.0	19900.00	199.00	19900.00
24	od201373/2018_2019 Circuit Mains - Supply and wiring the following size of PVC insulated copper wire manufactured with bright annealed bunched electrolytic copper conductor as per IS 8130/1984 insulated with di-electrical grade PVC compound per as IS 5831/1984 Generally Conforming to IS 694/1990 for working voltage up to and including 1100 V.through the existing PVC conduits / capping casing. 3 run x 2.5 Sqmm - SPN + E	200.000	metre	154.0	30800.00	154.00	30800.00
25	od201374/2018_2019 Circuit Mains- Supply and wiring the following size of PVC insulated copper wire manufactured with bright annealed bunched electrolytic copper conductor as per IS 8130/1984 insulated with di-electrical grade PVC compound per as IS 5831/1984 Generally Conforming to IS 694/1990 for working voltage up to and including 1100 V.through the existing PVC conduits / capping casing. 3 run x 1.5 sqmm - SPN + E	350.000	metre	118.0	41300.00	118.00	41300.00
26	od201375/2018_2019 Cable Supports & Trenching- Supply and erection of Cable trays and cable supports fabricated out of MS angles 25x25x6mm (ISA) and 25x6mmMS flats with and 20cm spacing between successive cross members and supported using 25cm long 32x6mm MS flat at every 1m spacing. The cable trays and supports shall be painted with two coats of Zinc Chromate primer and two coats of enamel paint.	500.000	kg	149.0	74500.00	149.00	74500.00
27	od201376/2018_2019 Cable Supports & Trenching- Supply and providing 6mm MS chequered plate of suitable thickness including cutting, welding, painting etc. as required for the cable trench covering.	100.000	kg	121.0	12100.00	121.00	12100.00
28	od201377/2018_2019 Charges for making cable trenches in all type of soil including providing country burnt bricks breadth wise above the cable, providing sand cushioning of 150mm refilling & restoring normal surface etc.complete as per standards of the following size. 35 cm Wide x 100 cm Deep (HT Cables)	100.000	metre	651.0	65100.00	651.00	65100.00

29	od201378/2018_2019 Charges for making cable trenches in all type of soil including providing country burnt bricks breadth wise above the cable, providing sand cushioning of 150mm refilling & restoring normal surface etc.complete as per standards of the following size. 35 cm Wide x 75 cm Deep (LT Cables)							
	100.000	metre	604.0	60400.00	604.00	60400.00		
30	od195921/2018_2019 Cable Supports & Trenching - Supply route marker with 10cmx10cm GI plate 5mm thick with inscriptions there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.							
	50.000	No	516.0	25800.00	516.00	25800.00		
31	od195922/2018_2019 Cable Supports & Trenching - Supply route marker with 10cmx10cm GI plate 5mm thick with inscriptions there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.							
	25.000	No	417.0	10425.00	417.00	10425.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
31	2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady plant compound- (5)- EARTHING & ACCESSORIES							
1	od201561/2018_2019 Supply and providing plate earthing as per IS 3043 with 1200x1200x12 mm GI/CI earth plate, 50 mm GI watering pipe fixed to the earth plate with 25 x 3mm GI clamps, GI funnel with weld mesh, filling required quantity of charcoal including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 450 x 450 x 450 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top.							
	8.000	set	11091.0	88728.00	11091.00	88728.00		
2	od201562/2018_2019 Supply and providing pipe earthing as per IS 3043 with 2.5 m long 40 mm dia B class GI pipe, GI funnel with weld mesh, filling required quantity of charcoal & salt including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 300 x 300 x 300 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top.							
	5.000	set	2952.0	14760.00	2952.00	14760.00		
3	od201563/2018_2019 Supply & laying the following sizes of Earth Strip for earthing interconnection, termination and leads, for continous earthing along with cables tinned at terminals etc. complete. 25 x 6 mm Copper Strip							

			300.000	metre	1600.0	480000.00	1600.00	480000.00
4	od201564/2018_2019	Supply & laying the following sizes of Earth Strip for earthing interconnection, termination and leads, for continuous earthing along with cables tinned at terminals etc. complete. 25 x 3 mm Copper strip						
			500.000	metre	797.0	398500.00	797.00	398500.00
5	od201565/2018_2019	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving earth connection as required. No.16 SWG Copper Conductor						
			300.000	metre	199.0	59700.00	199.00	59700.00
6	od201566/2018_2019	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving earth connection as required. No.10 SWG Copper Conductor						
			600.000	metre	113.0	67800.00	113.00	67800.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
32	2(b)-	Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady raw water pump house compound-(6) SUBSTATION EQUIPMENTS & MISC						
1	od201637/2018_2019	Supply and providing 6 mm thick & 1 m wide electrical grade chequered type rubber mat to withstand 3.3 KV dielectric strength conforming to IS 5429/ 1969.						
			5.000	sqm	773.0	3865.00	773.00	3865.00
2	od201638/2018_2019	Supply and providing 12 mm thick & 1 m wide electrical grade chequered type rubber mat to withstand 15 KV dielectric strength conforming to IS 5429/ 1969 in front of the HT Breaker Panel.						
			2.000	sqm	1379.0	2758.00	1379.00	2758.00
3	od201639/2018_2019	Supply and providing 5 Kg. Dry Chemical Powder type Fire Extinguisher with hose and clamps including fixing it to wall as required.						
			2.000	set	2383.0	4766.00	2383.00	4766.00
4	od201640/2018_2019	Supply and providing 9 Litre capacity GI Fire Bucket painted in post office red with primer coat of red oxide and written with white paint 'FIRE' mounted on MS angle frame work/ wall bracket filled with fine sand, painting the bracket/ floor stand including making good the damages, colour washing etc. as required.						
			4.000	set	638.0	2552.00	638.00	2552.00

5	od201641/2018_2019 Supply and providing First Aid Chart duly framed and placed in a conspicuous location for clear vision.							
	1.000	set	247.0	247.00	247.00	247.00		
6	od201642/2018_2019 Supply and providing Laminated Electrical Schematic diagram framed and placed in a conspicuous location for clear vision.							
	1.000	set	226.0	226.00	226.00	226.00		
7	od201643/2018_2019 Supply & providing Aluminium anodised Danger Notice Board of size 200 x 150 mm. with inscriptions (both in English and Malayalam) and conventional Skull and Bone in Red colour at locations as directed by the Engineer in Charge							
	10.000	No	267.0	2670.00	267.00	2670.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
33	2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady raw water pump house compound-(7) - SCHEME APPROVAL & POWER ALLOCATION							
1	od202018/2018_2019 SCHEME APPROVAL & POWER ALLOCATION - Preparation and submission of latest scheme drawings, Voltage drop calculations, Earthing design & fault level calculations to the Electrical Inspectorate including all MV additions recently made and obtaining approval, arranging inspection for entire installation, obtaining sanction orders for the electrical installation, complete (Including all incidental and statutory expenses).							
	1.000	L.S	20000.0	20000.00	20000.00	20000.00		
2	od202020/2018_2019 SCHEME APPROVAL & POWER ALLOCATION - Preparation and submission of latest scheme drawings to KSEB for obtaining sanction for power allocation (Including all incidental and statutory expenses) .Preparation, submission and execution of HT agreement(6 sets) as per the renewed Contract demand according to the latest additions.							
	1.000	L.S	15000.0	15000.00	15000.00	15000.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
34	Supply, erection, testing and commissioning of motor pump set							
No Specifications added under this Estimate								
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
38	(4) Supply, Erection, Testing and Commissioning of 2 Nos new Vertical Turbine motor Pumpset (working voltage 3300V) having discharge of 80 lps against a total head of 180 M. suction head 20.30m at Thonithady raw water pump house							

1	od197162/2018_2019 Supply, Erection, Testing and Commissioning of 2 Nos new Vertical Turbine motor Pumpset (working voltage 3300V) having discharge of 80 lps against a total head of 180 M. suction head 20.30 m at WTP sump.(From raw water pumping station to Alady plant) including cost of soft starter						
		2.000	No	3888802.96	7777605.92	3888802.95	7777605.90
2	od197164/2018_2019 Supply of additional cable beyond the initial supply of 10Mtr. Additional requirement from panel board to starter and from starter to motor						
		25.000	metre	1518.0	37950.00	1518.00	37950.00
3	od197165/2018_2019 Supply of suitable size PVC insulated, sheathed, armoured copper conductor cable conforming to relevant IS code, for giving power connections to main switchboard to panel board etc. complete as per standards including end termination materials as per IE rules. The supply shall be limited to the actual requirement.						
		20.000	metre	1518.0	30360.00	1518.00	30360.00
4	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						
		15.000	cum	309.95	4649.25	319.55	4793.25
5	od197167/2018_2019 Providing 350mm surge arrestor- Providing 350mm surge arrestor having test pressure 45Kg/cm2 to the clear water pumping main including cost of specials such as 2 Nos. Tail piece, 2 Nos. Mechanical joints, cutting the existing DI pipe, inserting surge arrestor, jointing with flanged joints etc. including cost of surge arrestor.(Rate as per DSR Observed data)						
		1.000	No	600000.0	600000.00	600000.00	600000.00
6	od197168/2018_2019 Providing 350mm surge arrestor- Cement concrete 1:2:4 using 20mm nominay size metal for anchore block including charges of form work and labour charges etc. complete.(Rate as per DSR Observed data)						
		5.000	cum	8941.83	44709.15	8941.85	44709.25

7	od197169/2018_2019 Providing 350mm surge arrestor- Providing air cushion valve of diameter - 200mm & test pressure 45 Kg/cm ² with flanged ends including all cost of materials such as 200mm air cushion valve - 1 No., 200mm D/F CI sluice valve - 1 No. etc and all labour charges for fitting the same in position as directed by the departmental officers.(Rate as per DSR Observed data)							
	1.000	No	409500.0	409500.00	409500.00	409500.00		
8	od197170/2018_2019 Providing 350mm surge arrestor- Constructing RCC valve chamber of size 2.50m x 1.20m x 1.20m for providing the zero velocity valve including all cost of materials, labour charge, form work etc complete as directed by the departmental officers. (Rate as per DSR Observed data)							
	1.000	No	63841.4	63841.40	63841.40	63841.40		
9	od197171/2018_2019 STATUTORY APPROVAL FROM KSEB							
	1.000	No	50000.0	50000.00	50000.00	50000.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
39 (3) Power Allocation and CD, OYEC charges etc.								
1	od494/2019_2020 Providing 11 KV line extension, CD and OYEC charges for the power connection of Alady water treatment plant - 400 KVA (Approval from KSEB)							
	1.000	No	2439594.0	2439594.00	2439594.00	2439594.00		
2	od495/2019_2020 Providing 11 KV line extension, CD and OYEC charges for the power connection of Thonithady raw water pumping station - 500 KVA (Approval from KSEB)							
	1.000	No	872306.0	872306.00	872306.00	872306.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
40	9(a) Supply, Erection, Testing and Commissioning of 2 Nos motor pump sets at Nariyanpara pump house for pumping to Nariyanpara top GL tank							
No Specifications added under this Estimate								
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
41	9(a.) Supply, Erection, Testing and Commissioning of 2 Nos motor pump sets at Nariyanpara pump house for pumping to Nariyanpara top GL tank							

1	od54105/2020_2021 Supply, Erection, Testing and Commissioning of 2 Nos new Horizontal / Vertical type multi stage Centrifugal motor Pumpset having discharge of 3.50 lps against a total head of 173 M. suction head 5m, speed 1450 rpm at Nariampara pumping station.(Intermediate sump to Narianpara Top GLSR)							
			2.000	No	247846.9 2	495693.84	247846.9 0	495693.80
2	od54106/2020_2021 Supply of additional cable beyond the initial supply of 10Mtr. Additional requirement from panel board to starter and from starter to motor							
			25.000	metre	193.2	4830.00	193.20	4830.00
3	od54107/2020_2021 Supply of suitable size PVC insulated, sheathed, armoured copper conductor cable conforming to relevant IS code, for giving power connections to main switchboard to pannel board etc. complete as per standards including end termination materials as per IE rules. The supply shall be limited to the actual requirement.							
			20.000	metre	266.8	5336.00	266.80	5336.00
4	od54108/2020_2021 STATUTORY APPROVAL FROM KSEB							
			1.000	No	25000.0	25000.00	25000.00	25000.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
42	9(b) Supply, Erection, Testing and Commissioning of 2 Nos motor pump sets at Nariyanpara pump house for pumping to Mulakamedu/ Kochuthovala GL tank							
1	od54144/2020_2021 Supply, Erection, Testing and Commissioning of 2 Nos new Horizontal / Vertical type multi stage Centrifugal motor Pumpset having discharge of 22 lps against a total head of 113 M. suction head 5m, speed 1450 rpm at Nariampara pumping station.(Intermediate sump to Mulakamedu and Kochuthovala GLSR)							
			2.000	No	734489.4 1	1468978.82	734489.4 0	1468978.80
2	od54145/2020_2021 Supply of additional cable beyond the initial supply of 10Mtr. Additional requirement from panel board to starter and from starter to motor							
			25.000	metre	425.5	10637.50	425.50	10637.50

3	od54146/2020_2021 Supply of suitable size PVC insulated, sheathed,armoured copper conductor cable conforming to relevantIS code, for giving power connections to main switchboard to pannel board etc. complete as per standards including end termination materials as per IE rules. The supply shall be limited to the actual requirement.							
	20.000	metre	816.5	16330.00	816.50	16330.00		
4	od54147/2020_2021 STATUTORY APPROVAL FROM KSEB							
	1.000	No	25000.0	25000.00	25000.00	25000.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
43	9(c) Supply, Erection, Testing and Commissioning of 2 Nos motor pump sets at Kalthotty pump house pumping to Labbakada GL tank							
1	od54190/2020_2021 Supply, Erection, Testing and Commissioning of 2 Nos new Horizontal / Vertical type multi stage Centrifugal motor Pumpset having discharge of 11 Ips against a total head of 19 M. suction head 5m, speed 1450 rpm at Kalthotty pumping station.(To Labbakada GLSR)							
	2.000	No	116130.5 1	232261.02	116130.5 0	232261.00		
2	od54191/2020_2021 STATUTORY APPROVAL FROM KSEB							
	1.000	No	5000.0	5000.00	5000.00	5000.00		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
44	9(d) Supply, Erection, Testing and Commissioning of 2 Nos motor pump sets at Kalthotty pump house pumping to Meppara GL tank							
1	od54202/2020_2021 Supply, Erection, Testing and Commissioning of 2 Nos new Horizontal / Vertical type multi stage Centrifugal motor Pumpset having discharge of 11 Ips against a total head of 184 M. suction head 5m, speed 1450 rpm at Kalthotty pumping station.(Kalthotty to Mepar GLSR)							
	2.000	No	646338.9 7	1292677.94	646338.9 5	1292677.90		
2	od54203/2020_2021 Supply of additional cable beyond the initial supply of 10Mtr. Additional requirement from panel board to starter and from starter to motor							
	25.000	metre	339.25	8481.25	339.25	8481.25		

3	od54204/2020_2021 Supply of suitable size PVC insulated, sheathed,armoured copper conductor cable conforming to relevant IS code, for giving power connections to main switchboard to pannel board etc. complete as per standards including end termination materials as per IE rules. The supply shall be limited to the actual requirement.			20.000	metre	396.75	7935.00	396.75	7935.00
4	od54205/2020_2021 STATUTORY APPROVAL FROM KSEB			1.000	No	25000.0	25000.00	25000.00	25000.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount	
45	9(e) Power allocation charges (OYEC & CD) Extension of three phase line to Kalthotti and Nariyanpara pumping station								
1	od54540/2020_2021 Power allocation and energization of clear water pump house at Kalthotty (Including application fee, power allocation fee , Estimate cost for service connection, Cash deposit) - As per intimation notice DB-2018-19/ESKNCHR/326 dated 22.03.2019 from KSEB)			1.000	No	1965000.0	1965000.00	1965000.00	1965000.00
2	od54541/2020_2021 Any additional cost for actual execution of work - Power allocation and energization of clear water pump house at Kalthotty 100 KVA (Approval from KSEB)			1.000	L.S	200000.0	200000.00	200000.00	200000.00
3	od54542/2020_2021 Power allocation and energization of clear water pump house at Nariyampara (Including application fee, power allocation fee , Estimate cost for service connection, Cash deposit) - As per intimation notice DB-2018-19/ESKNCHR/326 dated 22.03.2019 from KSEB)			1.000	No	920000.0	920000.00	920000.00	920000.00
4	od54543/2020_2021 Any additional cost for actual execution of work - Power allocation and energization of clear water pump house at Nariyampara 160 KVA (Approval from KSEB)			1.000	L.S	200000.0	200000.00	200000.00	200000.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount	

46 13 - Supply, erection, testing and commissioning of motor pumpsets at Alady pump house								
No Specifications added under this Estimate								
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
47		Supply, Erection, Testing and Commissioning of 2 Nos Centrifugal Motor Pumpset having discharge of 5 lps against a total head of 81 M. suction head 5m at WTP sump for pumping to Alady Kurisumala GLSR.						
1	od54791/2020_2021	Supply, Erection, Testing and Commissioning of 2 Nos new Horizontal / Vertical type multi stage Centrifugal motor Pumpset having discharge of 5 lps against a total head of 81 M. suction head 5m, speed 1450 rpm at Alady water treatment plant to Alady GLSR.						
			2.000	No	238352.1 2	476704.24	238352.1 0	476704.20
2	od54792/2020_2021	Supply of additional cable beyond the initial supply of 10Mtr. Additional requirement from panel board to starter and from starter to motor						
			25.000	metre	416.3	10407.50	416.30	10407.50
3	od54793/2020_2021	Supply of suitable size PVC insulated, sheathed,armoured copper conductor cable conforming to relevant IS code, for giving power connections to main switchboard to pannel board etc. complete as per standards including end termination materials as per IE rules. The supply shall be limited to the actual requirement.						
			20.000	metre	416.3	8326.00	416.30	8326.00
4	od54794/2020_2021	STATUTORY APPROVAL FROM KSEB						
			1.000	No	25000.0	25000.00	25000.00	25000.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
48	(2) -	Supply, Erection, Testing and Commissioning of 2 Nos new Centrifugal motor Pumpset having discharge of 65 lps against a total head of 125 M. suction head 5m speed 1450 rpm at WTP sump for pumping to Kalthotty / Nariyampara sumps						
1	od55073/2020_2021	Supply, Erection, Testing and Commissioning of 2 Nos new Horizontal / Vertical type multi stage Centrifugal motor Pumpset having discharge of 65 lps against a total head of 125 M. suction head 5m, speed 1450 rpm at WTP Alady. (From sump to Nariyanpara/ kalthotty intermediate pumping station) including soft starter						
			2.000	No	2884326. 68	5768653.36	2884326. 70	5768653.40

2	od55074/2020_2021 Supply of additional cable beyond the initial supply of 10Mtr. Additional requirement from panel board to starter and from starter to motor	25.000	metre	1104.0	27600.00	1104.00	27600.00
3	od55075/2020_2021 Supply of suitable size PVC insulated, sheathed, armoured copper conductor cable conforming to relevant IS code, for giving power connections to main switchboard to panel board etc. complete as per standards including end termination materials as per IE rules. The supply shall be limited to the actual requirement.	20.000	metre	1104.0	22080.00	1104.00	22080.00
4	od55076/2020_2021 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 classes of soil (Rate as per DSR Observed data)	15.000	cum	425.54	6383.10	425.55	6383.25
5	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	15.000	cum	309.95	4649.25	319.55	4793.25
6	od55077/2020_2021 Providing 350mm surge arrestor having test pressure 45Kg/cm2 to the clear water pumping main including cost of specials such as 2 Nos. Tail piece, 2 Nos. Mechanical joints, cutting the existing DI pipe, inserting surge arrestor, jointing with flanged joints etc. including cost of surge arrestor.(Rate as per DSR Observed data)	1.000	No	600000.0	600000.00	600000.00	600000.00
7	od55078/2020_2021 Cement concrete 1:2:4 using 20mm nominay size metal for anchore block including charges of form work and labour charges etc. complete (Rate as per DSR observed data)	5.000	cum	8941.83	44709.15	8941.85	44709.25

8	od55079/2020_2021 Providing air cushion valve of diameter - 200mm & test pressure 45 Kg/cm2 with flanged ends including all cost of materials such as 200mm air cushion valve - 1 No., 200mm D/F CI sluice valve - 1 No. etc and all labour charges for fitting the same in position as directed by the departmental officers.(Rate as per DSR Observed data)	1.000	No	409500.0	409500.00	409500.00	409500.00
9	od55080/2020_2021 Constructing RCC valve chamber of size 2.50m x 1.20m x 1.20m for providing the zero velocity valve including all cost of materials, labour charge, form work etc complete as directed by the departmental officers. (Rate as per DSR Observed data)	1.000	No	63841.0	63841.00	63841.00	63841.00
10	od55081/2020_2021 STATUTORY APPROVAL FROM KSEB	1.000	No	25000.0	25000.00	25000.00	25000.00
						Estimate PAC	53654910.55
						LMR Estimate PAC	55989263.00
						Percentage Excess	4.35
Rupees Five Crore Fifty Nine Lakh Eighty Nine Thousand Two Hundred and Sixty Three Only							

Kerala Water Authority
PRICE