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

SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
11 C	ivil Works.	(a) Design and Construction c Raw water pumpir					foot bridge	to Thonithady
1	cm measu	ungle including uprooting of ra ured at a height of 1 m above ery of the area cleared	-					•
		1	900.000	sqm	15.43	13887.00	15.60	14040.00
2		ing brick work manually / by of unserviceable material with				-		
			1.201	cum	1805.99	2168.99	1829.35	2197.05
3	or drains bottoms,	Kera k in excavation by mechanica (not exceeding 1.5 m in wid ift up to 1.5 m, including gett within a lead of 50 m.All kind	al means th or 10 ting out th	(Hydraulio sqm on p	olan), inclu	r) /manual mea ding dressing	of sides a	nd ramming of
			513.822	cum	309.95	159259.13	319.55	164191.82
4	1:6:12 (1	ubble masonry with hard stor cement : 6 coarse sand : 1 ent mortar 1:6 (1 cement : )	2 gradec	l stone a	•		•	
			6.968	cum	7520.41	52402.22	8030.80	55958.61
5	U U	and laying in position ceme - All work up to plinth level: ize)		•	•	•		0
			9.861	cum	7690.32	75834.25	9884.65	97472.53
6	confirming	k masonry using pre cast soli g to IS 2185 Part I of 1979 for e in: CM 1:6 ( 1 cement :6 coa	super stru	icture abo	ove floor tw			

			1				
		25.157	cum	7784.73	195840.45	8495.10	213711.23
7	10.6.1 Supplying and fixing rolling shutters of a	approved	make, m	ade of requ	ired size M.S.	laths, interle	ocked togethe
	through their entire length and jointed t shaft with brackets, side guides and arr	-		•			• • •
	complete, including the cost of providir	ng and fix	ing neces	sary 27.5 c	cm long wire s	prings man	ufactured from
	high tensile steel wire of adequate stre thickness for rolling shutters.80x1.25 r	-	-		•	•	ver of require
		17.700	sqm	3617.29	64026.03	4136.05	73208.09
8	10.5.1			11		11	
-	Providing and fixing 1 mm thick M.S. sh	neet door	with fram	e of 40x40	x6 mm angle ir	on and 3 m	m M.S. guss
	plates at the junctions and corners, a	III necess	ary fitting	gs complet	e, including a	pplying a p	riming coat
	approved steel primer.Using M.S. and	gels 40x4	0x6 mm	for diagon	al braces	1 1	
		1.800	sqm	5440.63	9793.13	6399.50	11519.10
	50.9.1.3						
9	00.0.1.0						
9	Providing wood work in frames of doors	s, window	s, clerest	ory window	s and other fra	imes, wroug	ght framed ar
9							
9	Providing wood work in frames of doors	with dash	fastene	rs of requir	ed dia & lengt		•
9	Providing wood work in frames of doors fixed in position with hold fast lugs or	with dash	fastene	rs of requir	ed dia & lengt		•
9	Providing wood work in frames of doors fixed in position with hold fast lugs or	with dash using go	n fastene od quality	v Vengai wo	ed dia & lengt ood	h ( hold fas	t lugs or das
	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately).	with dash using go 0.256	n fastene od quality cum	v Vengai wo 80265.15	ed dia & lengt ood 20547.88	h ( hold fas 118215.0 0	30263.04
	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked	with dash using go 0.256 d and gla M.S press	n fastene od quality cum zed shutt sed butt h	rs of requir Vengai wo 80265.15 ers for doo inges brigh	ed dia & lengt ood 20547.88 rs, windows ar t finished of red	h ( hold fas 118215.0 0 nd clerestor quired size	30263.04 30263.04 y windows, 3 with necessa
	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will	with dash using go 0.256 d and gla M.S press	n fastene od quality cum zed shutt sed butt h	rs of requir Vengai wo 80265.15 ers for doo inges brigh	ed dia & lengt ood 20547.88 rs, windows ar t finished of red	h ( hold fas 118215.0 0 nd clerestor quired size	30263.04 30263.04 y windows, 3 with necessa
	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked	with dash using go 0.256 d and gla M.S press	n fastene od quality cum zed shutt sed butt h	rs of requir Vengai wo 80265.15 ers for doo inges brigh	ed dia & lengt ood 20547.88 rs, windows ar t finished of red	h ( hold fas 118215.0 0 nd clerestor quired size	30263.04 y windows, 3 with necessa
	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will	with dash using go 0.256 d and gla M.S press	n fastene od quality cum zed shutt sed butt h	rs of requir Vengai wo 80265.15 ers for doo inges brigh	ed dia & lengt ood 20547.88 rs, windows ar t finished of red	h ( hold fas 118215.0 0 nd clerestor quired size	30263.04 y windows, 3 with necessa
	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will	with dash using go 0.256 d and gla M.S press be paid f	n fastene od quality cum zed shutt sed butt h or separa	rs of requir Vengai wo 80265.15 ers for doo inges brigh ttely, all co	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per	h ( hold fas 118215.0 0 nd clerestor quired size direction o	30263.04 y windows, 3 with necessa f Engineer in
10	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood	with dash using go 0.256 d and gla M.S press be paid f 7.821	n fastene od quality cum zed shutt sed butt h or separa	ers for doo inges brigh tely, all co	ed dia & lengt ood 20547.88 Is, windows ar t finished of rec mplete as per 20855.64	h ( hold fas 118215.0 0 nd clerestor quired size direction o 3555.55	30263.04 30263.04 y windows, 3 with necessa f Engineer in 27807.96
10	Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately). 50.9.2.3 Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood 5.33.1	with dash using go 0.256 d and gla M.S press be paid for 7.821	and mac	rs of requir Vengai wo 80265.15 ers for doo inges brigh ttely, all co 2666.62 hine mixed	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per 20855.64 design mix M-	h ( hold fas 118215.0 0 nd clerestor quired size direction o 3555.55 25 grade ce	30263.04 30263.04 y windows, 3 with necessa f Engineer in 27807.96 ement concre
10	<ul> <li>Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately).</li> <li>50.9.2.3</li> <li>Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood</li> <li>5.33.1</li> <li>Providing and laying in position machine for reinforced cement concrete work, us concrete to site of laying but excluding to the sector of the</li></ul>	with dash using go 0.256 d and gla M.S press be paid for 7.821 e batched sing ceme the cost of	and mace and mace and mace	rs of requir Vengai wo 80265.15 ers for doo inges brigh tely, all co 2666.62 hine mixed at as per ap ag, shutterir	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per 20855.64 design mix M- proved design ng, finishing an	h ( hold fas 118215.0 0 nd clerestor quired size direction or 3555.55 25 grade ce mix, includi d reinforcer	at lugs or das 30263.04 ay windows, 3 with necessa f Engineer in 27807.96 ement concre ing pumping nent, includir
10	<ul> <li>Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately).</li> <li>50.9.2.3</li> <li>Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood</li> <li>5.33.1</li> <li>Providing and laying in position machine for reinforced cement concrete work, us concrete to site of laying but excluding admixtures in recommended proportio</li> </ul>	with dash using go 0.256 d and gla M.S press be paid f 7.821 e batched sing ceme the cost c ns as per	and mace and mace and mace of centerin IS: 9103	rs of requir Vengai wo 80265.15 ers for doo inges brigh ttely, all coo 2666.62 hine mixed tt as per ap ig, shutterin 8 to acceler	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per 20855.64 design mix M- proved design ng, finishing an rate, retard set	h ( hold fas 118215.0 0 nd clerestor quired size direction o 3555.55 25 grade ce mix, includi d reinforcer tting of con	at lugs or das 30263.04 y windows, 3 with necessa f Engineer in 27807.96 ement concre ing pumping nent, includir crete, improv
10	<ul> <li>Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately).</li> <li>50.9.2.3</li> <li>Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood</li> <li>5.33.1</li> <li>Providing and laying in position machine for reinforced cement concrete work, us concrete to site of laying but excluding admixtures in recommended proportio workability without impairing strength a</li> </ul>	with dash using go 0.256 d and gla M.S press be paid f 7.821 e batched sing ceme the cost c ns as per and durab	and mace of centering zed shutt sed butt h or separa sqm and mace of centering IS: 9103 illity as pe	rs of requir Vengai wo 80265.15 ers for doo inges brigh tely, all co 2666.62 hine mixed at as per ap og, shutterin 8 to acceler er direction	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per 20855.64 design mix M- proved design ng, finishing an rate, retard set of Engineer -	h ( hold fas 118215.0 0 nd clerestor quired size direction o 3555.55 25 grade ce mix, includi d reinforcer tting of con- in-charge. I	and the second s
10	<ul> <li>Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately).</li> <li>50.9.2.3</li> <li>Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood</li> <li>5.33.1</li> <li>Providing and laying in position machine for reinforced cement concrete work, us concrete to site of laying but excluding admixtures in recommended proportio workability without impairing strength a content considered in this item is @ 330</li> </ul>	with dash using go 0.256 d and gla M.S press be paid f 7.821 e batched sing ceme the cost c ns as per and durab 0 kg/ cum	and mace of centering zed shutt sed butt h or separa sqm and mace of centering IS: 9103 illity as pe	rs of requir Vengai wo 80265.15 ers for doo inges brigh tely, all co 2666.62 hine mixed at as per ap og, shutterin 8 to acceler er direction	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per 20855.64 design mix M- proved design ng, finishing an rate, retard set of Engineer -	h ( hold fas 118215.0 0 nd clerestor quired size direction o 3555.55 25 grade ce mix, includi d reinforcer tting of con- in-charge. I	and the second s
10	<ul> <li>Providing wood work in frames of doors fixed in position with hold fast lugs or fastener shall be paid for separately).</li> <li>50.9.2.3</li> <li>Providing and fixing paneled or panele mm thick shutters including ISI marked screws, excluding paneling which will charge.using Vengai wood</li> <li>5.33.1</li> <li>Providing and laying in position machine for reinforced cement concrete work, us concrete to site of laying but excluding admixtures in recommended proportio workability without impairing strength a</li> </ul>	with dash using go 0.256 d and gla M.S press be paid f 7.821 e batched sing ceme the cost c ns as per and durab 0 kg/ cum	and mace of centering zed shutt sed butt h or separa sqm and mace of centering IS: 9103 illity as pe	rs of requir Vengai wo 80265.15 ers for doo inges brigh tely, all co 2666.62 hine mixed at as per ap og, shutterin 8 to acceler er direction	ed dia & lengt ood 20547.88 rs, windows ar t finished of rec mplete as per 20855.64 design mix M- proved design ng, finishing an rate, retard set of Engineer -	h ( hold fas 118215.0 0 nd clerestor quired size direction o 3555.55 25 grade ce mix, includi d reinforcer tting of con- in-charge. I	and the second s

12	5.33.2Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concretefor reinforced cement concrete work, using cement content as per approved design mix, including pumping ofconcrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, includingadmixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improveworkability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cementcontent considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable orrecoverable separately.All work above plinth level upto floor V level127.677cum11550.41474720.4213768.901757971.85								
		127.677	cum	11550.4	1474720.42	13768.90	1757971.85		
13	5.34.1 Extra for providing richer mixes at all content used is payable/ recoverable BMC/RMC. (Note:- Cement content c	separate	ely.Provid	ling M-30	grade concret				
		207.519	cum	85.7	17784.38	101.65	21094.31		
14	5.2.2 Reinforced cement concrete work in wa string courses, fillets, columns, pillars, cost of centering, shuttering, finishing an aggregate 20 mm nominal size)	piers, abu	itments, p	oosts and s	truts etc. up to	t floor five l	evel excluding		
	- ACCE	11.135	cum	11433.93	127316.81	13791.85	153572.25		
15	5.22.6 Steel reinforcement for R.C.C work inclu complete upto plinth levelThermo - Mec	uding stra	-	, cutting, be		•	and binding all		
	P J	24051.9 41	kilogram	102.61	2467969.67	120.80	2905474.47		
16	5.9.1 Centering and shuttering including str columns, etc for mass concrete	utting, et	c. and re	moval of fo	orm for:Founda	ations, foot	ings, bases of		
	_	197.600	sqm	350.0	69160.00	347.55	68675.88		
17	5.9.3 Centering and shuttering including stru balconies and access platform	ıtting, etc	. and rem	oval of for	m for:Suspend	ed floors, r	oofs, landings,		
		348.889	sqm	851.52	297085.96	907.25	316529.55		
18	5.9.5 Centering and shuttering including strut bressumers and cantilevers	ting, etc.	and remo	val of form	for:Lintels, bea	ims, plinth I	peams, girders		
		668.774	sqm	678.28	453616.03	731.35	489107.86		

19	5.9.6 Centering and shuttering including stru Posts and Struts	tting, etc.	and remo	oval of form	n for:Columns,	Pillars, Pie	rs, Abutments,
		430.401	sqm	901.48	387997.89	910.10	391707.95
20	13.7.1 12 mm cement plaster finished with a flo	pating coa	nt of neat of	cement of r	mix:1:3 ( 1 cem	ent : 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 mix:1: 4 ( 1 cement : 4 fine sand)	f single or	half brick	wall finish	ed with a floati	ng coat of	neat cement of
		337.251	sqm	453.75	153027.64	530.10	178776.76
22	13.44.1 Finishing walls with water proofing cerr 3.84 kg/10 sqm)	nent paint	of require	ed shade:N	lew work (Two	or more co	oats applied @
	(A)	1629.55 1	sqm	112.09	182656.37	121.20	197501.58
23	13.60.1 Wall painting with acrylic emulsion pain more coats on new work	nt of appr	oved brar	nd and ma	nufacture to giv	/e an even	shade:Two or
	Kera	323.138	atsqmA	158.02	V 51062.27	160.55	51879.81
24	13.37.1 White washing with lime to give an ever	n shade:N	ew work (	three or me	ore coats)		
		151.229	sqm	35.1	5308.14	34.10	5156.91
25	13.50.3 Applying priming coat:With ready mixed on steel galvanised iron /steel works	d red oxid	le zinc ch	romate prii	ner of approve	d brand an	d manufacture
		46.200	sqm	62.27	2876.87	61.40	2836.68
26	13.48.3 Finishing with Deluxe Multi surface pair specifications:Painting Steel work with applied @ 0.90 ltr/10 sqm over an une manufacture	Deluxe N	lulti Surfa	ce Paint to	give an even	shade. Tw	o or more coat
		55.276	sqm	154.62	8546.78	157.30	8694.91
27	13.71 Lettering with black Japan pint of appro	ved brand	and man	ufacture			
		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 a / or alkali resisting mortar bedding, and complete as per the direction of Engin proof cement : 4 coarse sand)Acid and	l joints fill eer-in-Ch	ed with a arge.In fl	cid and /or ooring on a	alkali resisting	cement as	s per IS : 4457,
		3.312	sqm	1836.85	6083.65	2098.50	6950.23
29	11.21.2.1 Providing and fixing 10 mm thick acid a / or alkali resisting mortar bedding, and complete as per the direction of Engine cement : 4 coarse sand)Acid and alkali	l joints fill er-in-Cha	ed with a irge.In da	cid and /or	alkali resisting	cement as	s per IS : 4457,
	Ι	12.960	sqm	1975.33	25600.28	2235.80	28975.97
30	11.37 Providing and laying Ceramic glazed manufacturer), of 1st quality conformin Grey, Fume Red Brown, laid on 20 m pointing the joints with white cement	ng to IS: nm thick o	15622, o cement n	f approved nortar 1:4	I make, in colo (1 Cement : 4	urs such a	s White, Ivory,
		3.151	sqm	1138.82	3588.42	1317.40	4151.13
31	11.22.1.1 Tile work in skirting, risers of steps and cement : 3 coarse sand) and jointed wit mixed with pigment of matching shade	h grey ce	ment slur	ry @ 3.3 kg	g/sqm, including	g pointing i	
32	od2083/2019_2020 Providing sanitary facilities and electrica 250ltr capacity PVC water tank and c 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	oump hou	se with alli	ed works etc.cc	omplete.	
		1.000	No	80000.0	80000.00	80000.00	80000.00
34	od173455/2020_2021 Providing and fixing MS hook of 22mm per standards including painting the ex	ı dia, ben	d to shap			control roo	
		12.000	No	301.61	3619.32	377.95	4535.40

35	hoisting, f	k in built up tubular (round, s ixing position and applying a ial shaped washers etc. com	priming o	coat of a	oproved ste	el primer, incl		
			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. pumping statio				-	to Thonitha	ady Raw water
1	cm measu	ungle including uprooting of ra ired at a height of 1 m above ery of the area cleared	-	-				•
			100.000	sqm	15.43	1543.00	15.60	1560.00
2	or drains bottoms,	k in excavation by mechanica (not exceeding 1.5 m in wid ift up to 1.5 m, including get within a lead of 50 m.All kind	Ith or 10 s ting out th	sqm on p	olan), inclu	ding dressing	of sides ar	nd ramming of
			38.250	cum	309.95	11855.59	319.55	12222.79
3	1:6:12 (1	ubble masonry with hard stor cement : 6 coarse sand: 1 ent mortar 1:6 (1 cement :	2 graded	stone a	·		•	
			19.125	cum	7520.41	143827.84	8030.80	153589.05
4	shuttering	and laying in position specifie , finishing and reinforcement regate 20 mm nominal size)	•				0	
5	-	and shuttering including str pilasters, butteresses, plinth	rutting, etc	c. and re			11	
			99.002	sqm	748.62	74114.88	766.40	75875.13
6		orcement for R.C.C work incluute of the second seco	-	ightening	-	• • •		and binding all
			7.021	kilogram	102.61	720.42	120.80	848.14
7	13.7.2 12 mm ce	ment plaster finished with a flo	pating coa	t of neat	cement of r	nix:1:4 ( 1 cem	ent : 4 fine	sand)

			166.500	sqm	403.29	67147.79	468.30	77971.95
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
14	Civil work	xs-(b)Construction of Electric work.	al Control r			•	ady and ap	proach road
1	cm meas	ungle including uprooting of ured at a height of 1 m abov nery of the area cleared	-	-				•
			150.000	sqm	15.43	2314.50	15.60	2340.00
2	or drains bottoms,	k in excavation by mechani (not exceeding 1.5 m in w lift up to 1.5 m, including go within a lead of 50 m.All kin	vidth or 10 s etting out th	sqm on p	olan), inclue	ding dressing	of sides ar	nd ramming
			200.965	cum	309.95	62289.10	319.55	64218.37
	30 cm in	k in excavation by mechanic depth, 1.5 m in width as well up to 1.5 m, disposed earth	l as 10 sqm to be levell	on plan) ed and n	including di eatly dresse	sposal of exca d.Hard rock (re	vated earth equiring bla	, lead up to sting)
			5.400	cum	749.05	4044.87	1047.20	5654.88
4	1:6:12 (1	rubble masonry with hard st cement : 6 coarse sand : ent mortar 1:6 (1 cement	one in foun 12 graded	stone a			-	
			18.407	cum	7520.41	138428.19	8030.80	147822.94
5	-	and laying in position cer g - All work up to plinth leve size)	nent concre	ete of sp	ecified grad	de excluding t	he cost of	centering ar
5	Providing shuttering	g - All work up to plinth leve	nent concre	ete of sp	ecified grad	de excluding t	he cost of	centering ar
6	Providing shuttering nominal s 50.6.1.3 Solid bloc confirming	g - All work up to plinth leve size) ek masonry using pre cast so g to IS 2185 Part I of 1979 fo	nent concre el:1:3:6 (1 c 14.724 blid blocks ( pr super stru	ete of sp cement : cum Factory r	ecified grad 3 coarse sa 7690.32 nade) of siz	de excluding t and : 6 graded 113232.27 e 40x20x20cm	he cost of stone agg 9884.65	centering au regate 20 m 145541.59 available size
	Providing shuttering nominal s 50.6.1.3 Solid bloc confirming	g - All work up to plinth leve size) ck masonry using pre cast so	nent concre el:1:3:6 (1 c 14.724 blid blocks ( pr super stru	ete of sp cement : cum Factory r	ecified grad 3 coarse sa 7690.32 nade) of siz	de excluding t and : 6 graded 113232.27 e 40x20x20cm	he cost of stone agg 9884.65	centering a regate 20 r 145541.5 : available s

7	10.6.1 Supplying and fixing rolling shutters of a through their entire length and jointed t shaft with brackets, side guides and arr complete, including the cost of providin high tensile steel wire of adequate stre thickness for rolling shutters.80x1.25 r	ogether a angemen ig and fixi	it the end ts for insi ing neces forming t	by end loc de and outs sary 27.5 o o IS: 4454	cks, mounted o side locking wit cm long wire sp - part 1 and N	n specially h push and prings man 1.S. top cov	designed pipe I pull operation ufactured from
		9.000	sqm	3617.29	32555.61	4136.05	37224.45
8	21.1.1.1 Providing and fixing aluminium work f standard tubular sections/ appropriate Z and IS: 1285, fixing with dash fastener junctions, i.e. at top, bottom and sides shall be smooth, rust free, straight, mit Aluminnium snap beading for glazing architectural drawings and the direction paid for separately):For fixed portionA according to IS : 1868, Minimum anod	Z sections rs of requi with requi red and jo /panelin ns of Eng nodised a	and othe ired dia a red EPDN binted me g, C.P. b ineer-in-c aluminium	r sections o and size, in 4 rubber/ n chanically rass/ stain harge.(Gla a (anodisec	of approved ma cluding necess eoprene gaske wherever requ less steel scre zing, paneling	ake conform sary filling et etc. Alum ired includi ews, all co and dash f	ning to IS : 733 up the gaps at inium sections ng cleat angle, mplete as per asteners to be
	15	13.389	kg	520.9	6974.33	588.35	7877.42
9	21.3.1 Providing and fixing glazing in alumini rubber / neoprene gasket etc. complete Charge. ( Cost of aluminium snap bea thickness	as per th	e archite	ctural draw	ings and the di	rections of	Engineer - in -
	DI	7.500	sqm	1228.2	9211.50	1585.20	11889.00
10	5.1.2 Providing and laying in position specifie shuttering, finishing and reinforcemen graded stone aggregate 20 mm nomin	d grade o at - All wo	f reinforce	ed cement	concrete, exclu	ding the co	st of centering,
	-	10.836	cum	9483.15	102759.41	11828.25	128170.92
11	5.2.2 Reinforced cement concrete work in wa string courses, fillets, columns, pillars, cost of centering, shuttering, finishing an aggregate 20 mm nominal size)	piers, abu	itments, p cement :1	oosts and s	truts etc. up to ement : 1.5 coa	t floor five l rse sand : :	evel excluding 3 graded stone
		26.087	cum	11433.93	298276.93	13791.85	359787.99
12	5.22A.6 Steel reinforcement for R.C.C work inclu complete above plinth level.Thermo - M	-		-	• • •	•	and binding all

	_	4061.53 0	kg	102.61	416753.59	120.80	490632.82
13	5.9.1 Centering and shuttering including str columns, etc for mass concrete	utting, etc	c. and re	moval of fo	orm for:Founda	ations, foot	ings, bases of
		36.000	sqm	350.0	12600.00	347.55	12511.80
14	5.9.3 Centering and shuttering including strubalconies and access platform	itting, etc.	and rem	oval of for	m for:Suspend	ed floors, r	oofs, landings,
		98.987	sqm	851.52	84289.41	907.25	89805.96
15	5.9.5 Centering and shuttering including strut bressumers and cantilevers	ting, etc. a	and remo	val of form	for:Lintels, bea	ims, plinth	beams, girders
		73.182	sqm	678.28	49637.89	731.35	53521.66
16	5.9.6 Centering and shuttering including stru Posts and Struts	tting, etc.	and remo	oval of forn	n for:Columns,	Pillars, Pie	rs, Abutments,
	1 al	59.040	sqm	901.48	53223.38	910.10	53732.30
17	13.7.1 12 mm cement plaster finished with a flo	pating coa	t of neat	cement of I	mix:1:3 ( 1 cem	ent : 3 fine	sand)
	Kera	207.662	aternA	u 418.79 t	y 86966.77	486.80	101089.86
18	13.8.2 15 mm cement plaster on rough side of mix:1: 4 (1 cement : 4 fine sand)	single or	half brick	wall finish	ed with a floati	ng coat of	neat cement of
		319.321	sqm	453.75	144891.90	530.10	169272.06
19	13.37.1 White washing with lime to give an ever	n shade:N	ew work (	three or m	ore coats)		
		81.120	sqm	35.1	2847.31	34.10	2766.19
20	13.44.1 Finishing walls with water proofing cerr 3.84 kg/10 sqm)	nent paint	of require	ed shade:N	lew work (Two	or more co	pats applied @
		430.863	sqm	112.09	48295.43	121.20	52220.60
21	13.50.3 Applying priming coat:With ready mixed on steel galvanised iron /steel works	d red oxid	e zinc ch	romate pri	mer of approve	d brand an	d manufacture
		18.000	sqm	62.27	1120.86	61.40	1105.20

	1							
22	13.48.3							
	Finishing	with Deluxe Multi surface pair	nt system	for interio	ors and ext	eriors using prii	mer as per	manufacturers
	specificati	ions:Painting Steel work with	Deluxe M	lulti Surfa	ce Paint to	o give an even	shade. Tw	o or more coat
	applied @	0.90 ltr/10 sqm over an une	der coat o	of primer	applied @	0.80 ltr/10 sqr	n of appro	ved brand and
	manufact	ure	1				1	
			18.000	sqm	154.62	2783.16	157.30	2831.40
23	13.71							
_		with black Japan pint of approv	ved brand	l and man	ufacture			
			1500.00	Letterxc				
			0	m ht	5.8	8700.00	5.85	8775.00
24	11.21.1.1		.,					
	U U	and fixing 10 mm thick acid a				••		e e
		resisting mortar bedding, and as per the direction of Engin				-		
		nent : 4 coarse sand)Acid and						11.4 (1 aciu
	proof och		100		2			
			54.000	sqm	1836.85	99189.90	2098.50	113319.00
25	11.22.1.1							
	Tile work	in skirting, risers of steps and	l dado upi	to 2 m he	ight, over '	2 mm thick be	d of cemer	nt mortar 1:3 (1
		3 coarse sand) and jointed wit						n white cement
	mixed with	n pigment of matching shade	complete.	Marble til	es ( polishe	ed)Raj Nagar8	3 mm thick	
			5.480	sqm	1523.0	8346.04	1532.50	8398.10
26	od173455	/2020_2021 Kera	ala Wa	ater A	uthorit	У		
20		and fixing MS hook of 22mm	dia ben	d to shap	e in RCC s	alab (ceiling of	control roo	m) or beam as
	-	ards including painting the ex						
	1		12.000	No	301.61	3619.32	377.95	4535.40
27	10.16.2		I					<u> </u>
21		k in built up tubular (round, s	auare or i	rectangul	ar hollow t	ibes etc.) truss	ses etc in	cluding cutting
		ixing position and applying a	•	-				
	-	ial shaped washers etc. com	• •		•	•	daling word	ing and bollou
							200 55	25025 45
SI No	Spec	Description	123.241 Quantity	kg Unit	193.47 DSOR Rate	23843.44 TS Amount	209.55 LMR Rate	25825.15 LMR Amount
	-							
15		(b)Construction of Electrical				•	ady and ap	proacn road
		work.(2).Constru		oncrete ro	ad and ret	aining wall.		
1	2.31							
		ungle including uprooting of ra	-	-				• •
		ured at a height of 1 m above	ground le	evel and r	emoval of	rubbish up to a	distance of	of 50 m outside
	the periph	ery of the area cleared		]			1	
			30.000	sqm	15.43	462.90	15.60	468.00

0	2.8.4								
2	2.8.1		1. I <b>.</b>		) /				
	Earth work in excavation by mechanica								
	or drains (not exceeding 1.5 m in wid		• •		• •		-		
	bottoms, lift up to 1.5 m, including get	•	ie excava	ated soil ar	id disposal of s	surplus exc	avated soll as		
	directed, within a lead of 50 m.All kind	IS OF SOII							
		36.000	cum	309.95	11158.20	319.55	11503.80		
3	4.1.5								
	Providing and laying in position ceme	ent concre	ete of spe	ecified grad	de excluding t	he cost of	centering and		
	shuttering - All work up to plinth level:	1:3:6 (1 c	ement:	3 coarse sa	and : 6 graded	stone agg	regate 20 mm		
	nominal size)								
		4.801	cum	7690.32	36921.23	9884.65	47456.20		
		4.001	Cum	1090.52	50921.25	9004.00	47430.20		
4	7.1.1								
	Random rubble masonry with hard stor					•			
	1:6:12 (1 cement : 6 coarse sand : 1			ggregate 2	20 mm nomina	I size) up	to plinth level		
	with:Cement mortar 1:6 (1 cement :	6 coarse	sand)	20-					
	6, 9	36.800	cum	7520.41	276751.09	8030.80	295533.44		
5	5.2.2								
Ũ	Reinforced cement concrete work in wa	alls (anv th	nickness).	includina	attached pilaste	ers. buttres	ses. plinth and		
	string courses, fillets, columns, pillars,	1	and the second		and the second				
	cost of centering, shuttering, finishing a	and the second second	and the second se		· · · ·		•		
	aggregate 20 mm nominal size)						3		
			ator A	uthorit	* 7				
	Kela	4.201		11433.93	y 48033.94	13791.85	57939.56		
			T	11455.95					
6	2.2.1				H.				
	Earth work in rough excavation, bankin	•		•	•				
	clods, watering, rolling each layer with					-	•		
	top-most layer with power roller of minir								
	marginal banks and guide banks or fillin	ng up grou	nd depre	ssions, lead	d up to 50 m ar	nd 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 f	oundation	and plint	h including	leveling up wit	h cement c	oncrete 1:6:12		
	(1 cement : 6 coarse sand : 12 graded			-	• •				
			-						
		500.000	cum	4957.19	2478595.00	4681.30	2340650.00		
		000.000	Gain	1007.10	2110000.00	1001100			
8	5.1.3								
	Providing and laying in position specifie	-				•	-		
	shuttering, finishing and reinforcement	- All work	up to plin	th level:1:2	:4 ( 1 cement :	2 coarse s	and : 4 graded		
	stone aggregate 20 mm nominal size)								
		250.000	cum	8964.72	2241180.00	11245.05	2811262.50		

	• •	utting, et	c. and rei	moval of fo	orm for:Founda	itions, foot	ings, bases of
		220.001	sqm	350.0	77000.35	347.55	76461.35
		-		-	• • •	•	and binding all
complete	upto plinth level I hermo - Mec	-	I reated b	ars of grad	le Fe-500D or n	nore	
1	r	15420.0 01	kilogram	102.61	1582246.30	120.80	1862736.12
Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
	19	2- Electro	omechani	cal works			
	No Specifi	cations a	dded unde	er this Estir	nate		
Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
2(a)- Su			•			d works at	Alady plant
Erection of	of RCC/ PCC pole of following						•
		2.000	Nos	4957.0	9914.00	4957.00	9914.00
Supplying having for size 1400 including	and erection of a set of cros ur members fabricated out of mm width X 2500 mm heigh drilling holes for insulator pir	s bracing 50 mm X t, comple	frame w ( 50 mm ) ete with 50	ork for 11 X 6 mm an ) mm X 6n	KV over head I gle iron to form nm M.S. flat iro	n a rectang n clamps,	le of minimum bolts and nuts
		1.000	set	6552.0	6552.00	6552.00	6552.00
	—	n for 11 K	V/22 KV/3	3 KV over	head lines as r	equired.	
		3.000	Nos	967.0	2901.00	967.00	2901.00
							2001.00
	/2018_2019 and erection of 11 kV pin in:	sulator co	omplete w	ith large st	teel head G.I. p	oin, nuts, w	
	Centering columns, 5.22.6 Steel reinf complete Spec 2(a)- Sup od194695 Erection c mm thick Supplying having for size 1400 including finish pair	Centering and shuttering including str columns, etc for mass concrete	Centering and shuttering including strutting, et columns, etc for mass concrete 220.001 5.22.6 Steel reinforcement for R.C.C work including stra complete upto plinth levelThermo - Mechanically 15420.0 01 Spec Description Quantity 19 2- Electro No Specifications ar Spec Description Quantity 2(a)- Supply, erection, testing and commissionin compound- (1)- 11 KV s od194695/2018_2019 Erection of RCC/ PCC pole of following length in mm thick cement concrete (1:3:6) layer on top w 2.000 od194696/2018_2019 Kerala Wa Supplying and erection of a set of cross bracing having four members fabricated out of 50 mm A size 1400 mm width X 2500 mm height, comple including drilling holes for insulator pins, bolts a finish paint as required. 1.000 od194697/2018_2019 Erection of double pole 3 wire cross arm for 11 K	Centering and shuttering including strutting, etc. and recolumns, etc for mass concrete         220.001       sqm         5.22.6       Steel reinforcement for R.C.C work including straightening, complete upto plinth levelThermo - Mechanically Treated b         15.22.6       15420.0         Spec       Description         Quantity       Unit         19       2- Electromechanic         Spec       Description       Quantity         Void       Spec       Description         Quantity       Unit       Unit         2(a)- Supply, erection, testing and commissioning of 400 l compound- (1)- 11 KV substation       od194695/2018_2019         Erection of RCC/ PCC pole of following length in brick bal mm thick cement concrete (1:3:6) layer on top with includi       2.000         0d194696/2018_2019       Xerala       Water A         Supplying and erection of a set of cross bracing frame w having four members fabricated out of 50 mm X 50 mm 3 size 1400 mm width X 2500 mm height, complete with 50 including drilling holes for insulator pins, bolts and nuts of finish paint as required.         1.000       set         od194697/2018_2019       1.000         Erection of double pole 3 wire cross arm for 11 KV/22 KV/3	Centering and shuttering including strutting, etc. and removal of for columns, etc for mass concrete       220.001       sqm       350.0         5.22.6       Steel reinforcement for R.C.C work including straightening, cutting, be complete upto plinth levelThermo - Mechanically Treated bars of gract 15420.0       01       kilogram       102.61         Spec       Description       Quantity       Unit       DSOR Rate         19       2- Electromechanical works         No Specifications added under this Estir         Spec       Description       Quantity       Unit       DSOR Rate         2(a)- Supply, erection, testing and commissioning of 400 KVA Trans compound- (1)- 11 KV substation and HT eq       od194695/2018_2019         Erection of RCC/ PCC pole of following length in brick ballast and ra mm thick cement concrete (1:3:6) layer on top with including excava         2.000       Nos       4957.0         od194696/2018_2019       Kerala       Water Authorit         Supplying and erection of a set of cross bracing frame work for 11       having four members fabricated out of 50 mm X 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete with 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete with 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete with 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete with 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete with 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete with 50 mm X 6 m an size 1400 mm width X 2500 mm height, complete wit	Centering and shuttering including strutting, etc. and removal of form for:Founda columns, etc for mass concrete       220.001       sqm       350.0       77000.35         5.22.6       Steel reinforcement for R.C.C work including straightening, cutting, bending, placing complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or not straightening.       102.61       1582246.30         Spec       Description       Quantity       Unit       DSOR Rate       TS Amount         19       2- Electromechanical works       No Specifications added under this Estimate         Spec       Description       Quantity       Unit       DSOR Rate       TS Amount         2(a)- Supply, erection, testing and commissioning of 400 KVA Transformer and allie compound- (1)- 11 KV substation and HT equipments       od194695/2018_2019         Erection of RCC/ PCC pole of following length in brick ballast and ramming the four mm thick cement concrete (1:3:6) layer on top with including excavation and refilling         0d194696/2018_2019       2:000       Nos       4957.0       9914.00         od194696/2018_2019       Erectian of a set of cross bracing frame work for 11 KV over head I having four members fabricated out of 50 mm X 60 mm X 6 mm angle iron to form size 1400 mm width X 2500 mm height, complete with 50 mm X 6 mm angle iron to form size 1400 mm width X 2500 mm height, complete with 50 mm X 6 mm angle iron to form size 1400 mm width X 2500 mm height, complete with 50 mm X 6 mm angle iron to form size 1400 mm width X 2500 mm height, complete with 50 mm X 6	Centering and shuttering including strutting, etc. and removal of form for:Foundations, foot columns, etc for mass concrete         220.001       sqm       350.0       77000.35       347.55         5.22.6       Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more       15420.0       01       kilogram       102.61       1582246.30       120.80         Spec       Description       Quentity       Unit       DSOR Rate       TS Amount       LMR Rate         Spec         Description         Quentity       Unit       DSOR Rate       TS Amount       LMR Rate         2. Electromechanical works         No Specifications added under this Estimate         Spec       Description       Quantity       Unit       DSOR Rate       TS Amount       LMR Rate         2(a)- Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at compound- (1)- 11 KV substation and HT equipments         od194695/2018_2019         Erection of RCC/ PCC pole of following length in brick ballast and ramming the foundation, fini mm thick cement concrete (1:3:6) layer on top with including excavation and refilling etc. as re         2.000       Nos       4957.0 </td

5	od194699/2018_2019 Supplying and erection of three piece overhead lines with rated voltage 9 kV ( galvanised clamping arrangement, G.I.	rms) with	a nomina	l discharge	current rating		
		1.000	set	3601.0	3601.00	3601.00	3601.00
6	od194700/2018_2019 OUTDOOR HT BREAKER PANEL (LBS Breaker Panel with the following compo Voltmeter (0 - 11kV) - 3 Nos LED Pilot Aux contacts - 1 Set 230V AC Shunt T Space Heater Element with Thermosta Metering Chamber PT - 100 VA, 11kV/ mounting 3 phase, 4wire, HT CT/PT op wiring and test terminal block, site glass of voltage circuit including power supp shall not exceed 1.0 Watt & 4.0 VA per basic current, reference frequency & re- shall be inclusive of necessary cont completely with necessary controls as Cable end box for receiving incoming Supply & Labour	nents. 11 Indication Trip Coil - at & wiring 110V, CL berated, b s etc 1 s ly of mete phase Cu ference te rol wiring specified	kV Load E - LBS OI 1 No Alu g - 1 Nos 0.2S - 1 I i- directio et Voltage er at refe urrent Cirr emperatur g, compor till the co	Break Swic N / OFF - 1 Iminium Br Inspection No CT - */5 onal TOD n e Circuit: T rence volta cuit: The a cuit: The a re shall not nents work	h 11kV, 350 M Set Trip Push usbar - 1 Set S Lamp LED wi A, 15VA, CL 0 neter with accu he active & app age, reference pparent power exceed 1.0 VA sing on LT sup point for feeding	VA, 630A, L buttons - 1 Seal off Bus ith switch & .2S - 3 Nos iracy class parent powe temperatur taken by cu /phase.( Th oply should g LT Supply	BS unit - 1 set set 2NO+2NC shings - 3 Nos wiring - 1 set Provisions for 0.2S including r consumption e & frequency urrent circuit at he Quoted rate d be prewired v from outside,
	Kera	ala Wa 1.000	ater A	uthorit 215359.0	y 215359.00	215359.0 0	215359.00
7	od194701/2018_2019 HT Bidirectional TOD Meter Supply & accuracy class 0.2S for both Active an DLMS compliant & AMR compatible measurement of active kWh, reactive nominal frequency in the range of 47.5 I existing outdoor Meter cubicle including	d Reactiv with optio energy k Hz to 52.5	e energy cal port a VARh an 5 Hz in ba	, -/5A, HT and RS232 d apparen lanced as y	static tri vector 2 port having t energy kVAh well as unbalar	meter with ISI Marking and kVA N	TOD register, g, suitable for /ID, kW MD at
		1.000	set	43954.0	43954.00	43954.00	43954.00
8	od194702/2018_2019 HT Equipment Pinth, Substation Yard F fencing over 4mm thick barbed wire w ISMC 75 at 2400mm interval, Earthing a fencing. The MS framework for chainline materials, labour, lead, lift etc includin nuts, bolts and other miscallaneous ite Charge.	rith a fran as per KSI k fencing g escalati	nework o EI/KSEB shall be H ion works	f 50x50x6r standards s lot Dip Gal and fabric	nm MS angle I shall be done a vanised. The ra cation and ass	between ve round the p ate shall be embly work	ertical posts of eriphery of the inclusive of all is including all

							1					
	1		20.000	metre	1298.0	25960.00	1298.00	25960.00				
9	od194703	/2018_2019										
		and filling the substation ce of all materials, labour	•		-	lly of 150mm	thick inclu	ding cost and				
			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:Cem	ent mortar 1:6 (1 cement	: 6 coarse	sand)	r1		1					
			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, 3Pt											
	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											
		rd accessories and fittings &										
		oil, necessary civil works for			sting transf	ormer foundati	on complet	e as per singl				
	line schen	natic diagram & particular sp	pecification	S.								
		Va	1.000	set	631587.0	631587.00	631587.0 0	631587.00				
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount				
22	2(a)- Sup	oply, erection, testing and co compound-(2		-			ed works at	Alady plant				

## 1 od201682/2018\_2019

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 disconnector & 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 Imax 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

	Kordo Water Authority
	Kerala Water Authority         294498.0         294498.0         294498.0         0         294498.00
2	od194956/2018_2019 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 extenstion be possible. Supply & Labour

			1		1						
	1		1.000	set	84484.0	84484.00	84484.00	84484.00			
3	APFC PA operation mounted having fol earth bus suitable of standards supports, kW, kVA, and toggl step IPFC TP MCB - TP MCB - with Pilot contacts for polypropy	7/2018_2019 NEL -Automatic Power Facto to be fabricated out of 14 g inside the panel with adequ lowing specific components( of adequate capacity, double chambers, front open, top o s. Incomer 100A TPN Isolato heat shrinkable sleeves etc. kVAR, kWh, kVAh, kVARh C e switches- 1 Set 100/5A 15 c relay with PF display - 1 No - 1 Nos 16A, 10kA C Curve T - 3 Nos Capacitor duty contact LED indication for ON & OFF for all the stages 15 kVAr - 1 vlene ( MPP heavy duty ) Ca	r Correctio guage CRG ate numbe refer partic earth con cable entry or - 1 No. as per ISS class 1.0 - VA CL 1.0 Not goin P MCB - 2 ctors worki , Push But Nos 10 k pacitors o	n Panel c CA sheet er of louv cular spec nection to y , free s 100 A TF S - 1set M 1 Set RYI 0 Metering gs 40A, 1 Nos 10A ng on 3 P tons for M VAr- 3 No f the follo	f total 40 K steel Pow ers and po cification) w all switche tanding pa PN best co ultifunction B indicators g CTs - 3 S 0kA C Cur , 10kA C C hase 415V Janual ON ps 7.5 kVA	VAR capacity of der coated with wder coated with wder coated with ith Alumimium s, internal rigic inel consisting nductivity Alur Digital Panel of ( LED Pilot ty dets Microproce we TP MCB - 1 aurve TP MCB - 1 AC supply of the & OFF operation r- 4 Nos 480 V gs including fix	with Auto / th provision vith approv Busbars of connection of the fol ninium bus meter to re pe ) with 2/ essor base Nos 20A, 1 Nos 6A, he followin on using su 50 Hz Don	Mannual mode of for capacito red shade and of suitable size of suitable size of etc. including lowing as pe sbar with SMC ad V, A, F, PF A Control MCF ad intelligent, a 10kA C Curve 10kA C Curve 10kA C Curve g ratings wiree itable NO / NC uble di-electri-			
	shall be p incoming panel sha coats of 2 ground us bus for th	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 Support 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									
			1.000	set	119898.0	119898.00	119898.0 0	119898.00			
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount			
23		pply, erection, testing and cor		( 100							
		compound- (3)- DISTRIBU		•				Alady plant			
1	Supply, in vermin pr and DIN r wall using damages	<b>U</b>	sioning of to TPN Dout Isolator (8 xed in rec	ARDS, SV Dest quali ble door [ module ] cess inclu	VITCHGEA ty sheet ste DB including as incomm	R & ACCESSC eel, phosphatis g copper bus b er and SP/TP ng hole on the	DRIES eed and pai par, neutral MCB as ou e wall , ma	nted, dust ar link, earth bu tgoings etc. c king good th			

2	Supply an Junction	/2018_2019 d providing the following MCC Boxes etc. including giving etc. complete. 63A, 100m/	proper te	erminatio				0
			1.000	No	6640.0	6640.00	6640.00	6640.00
3	Supply an Junction	/2018_2019 d providing the following MCC Boxes etc. including giving etc. complete. 63A, 4P MC	proper te	erminatio				•
			1.000	No	1050.0	1050.00	1050.00	1050.00
4	Supply an Junction	/2018_2019 d providing the following MCC Boxes etc. including giving etc. complete. 6A to 32A ,	proper te	erminatio				•
	1	15	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)- Sup	oply, erection, testing and com compound- (4)					ed works at	Alady plant
1	HT Powe screened conducting tape, galva	/2018_2019 Kera r Cables - Supply & laying with extruded semi conductin g compound in combination w anized steel flat strip armoure ch conforming to IS: 7098 par	11KV stra g compo rith coppe d, and ove	anded co und XLPE er tape (0. erall PVC	insulated 3 kA for 1 sheathed o	cular aluminiur , insulation scre sec.), cores laid cable of the follo	eened with d up, inner owing sizes	extruded semi sheath of PVC
	•		25.000	metre	2281.0	57025.00	2281.00	57025.00
2	HT Powe screened conducting tape, galva	/2018_2019 r Cables - Supply & laying with extruded semi conductin g compound in combination w anized steel flat strip armoure ch conforming to IS: 7098 par	ig compo vith coppe d, and ove	und XLPE er tape (0. erall PVC	insulated 3 kA for 1 sheathed o	, insulation scre sec.), cores laid cable of the follo	eened with d up, inner owing sizes	extruded semi sheath of PVC
			25.000	metre	2318.0	57950.00	2318.00	57950.00

3	od195980/2018_2019 HT Cable Terminatio including lugs and of grade as required. 3	ns Supplying and ther jointing mate	-					
			1.000	set	7664.0	7664.00	7664.00	7664.00
4	od195981/2018_2019 HT Cable Terminatio including lugs and of grade as required. 3	ns Supplying and ther jointing mate	-					, ,
	1		1.000	set	10002.0	10002.00	10002.00	10002.00
5	od195993/2018_2019 HT Cable Terminatic including lugs and oth grade as required. 30	on- Supplying and her jointing materi				Ũ		
		A	1.000	set	12802.0	12802.00	12802.00	12802.00
6	od196006/2018_2019 HT Cable Terminatio including lugs and oth grade as required. 30	ns - Supplying an her jointing materi	als, for fo	r following	g sizes, XL	PE aluminium		
	1	DI	1.000	set	14660.0	14660.00	14660.00	14660.00
7	od195889/2018_2019 LT Power Cables - armoured power cab	Supply & laying I						
			120.000	metre	1752.0	210240.00	1752.00	210240.00
8	od195890/2018_2019 LT Power Cables S armoured power cab	upply & laying U						
			60.000	metre	1241.0	74460.00	1241.00	74460.00
9	od195891/2018_2019 LT Power Cables S armoured power cab	upply & laying U						
			30.000	metre	539.0	16170.00	539.00	16170.00

10	od195892/2018_2019 LT Power Cables Supply & laying U armoured power cable of 1.1 KV grad						
		30.000	metre	421.0	12630.00	421.00	12630.00
11	od195893/2018_2019 LT Power Cables - Supply & laying I armoured power cable of 1.1 KV grad						
		30.000	metre	350.0	10500.00	350.00	10500.00
12	od195894/2018_2019 LT Power Cables - Supply & laying l armoured power cable of 1.1 KV gra						
		75.000	metre	216.0	16200.00	216.00	16200.00
13	od195895/2018_2019 LT Power Cables - Supply & laying l armoured power cable of 1.1 KV gra						
		105.000	metre	179.0	18795.00	179.00	18795.00
14	od195896/2018_2019 LT Power Cables - Supply & laying UG Power / Control cable of 1.1 KV grade of					••	
		50.000	metre	305.0	15250.00	305.00	15250.00
15	od195897/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr						
		6.000	No	1245.0	7470.00	1245.00	7470.00
16	od195898/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr			-			•
		8.000	No	917.0	7336.00	917.00	7336.00
17	od195899/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr	nding, gla	ind earthi	ng & end t	ermination of U	IG cables o	of the following

18	od195900/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr			-			-
		4.000	No	437.0	1748.00	437.00	1748.00
19	od195901/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr			-			-
		4.000	No	398.0	1592.00	398.00	1592.00
20	od195902/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr			-			-
	1	10.000	No	266.0	2660.00	266.00	2660.00
21	od195903/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr			-			-
		14.000	No	225.0	3150.00	225.00	3150.00
22	od195904/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr	nding, gla					-
		2.000	No	211.0	422.00	211.00	422.00
23	od195905/2018_2019 LT Power Cables - Supply & drawing t Copper conductor round flexible wire 8130/1984 Insulated and sheathed w conforming to IS 694/1990 for working casing capping wall. 3C x 0.5 Sqmm	manufact ith electr	ured with ical grade	bright anr e PVC cor	nealed bare co npound as per	pper condu IS 5831/1	uctor as per IS 1984 generally
		25.000	metre	47.0	1175.00	47.00	1175.00
24	od195906/2018_2019 LT Power Cables - Supply & drawing t Copper conductor round flexible wire t 8130/1984 Insulated and sheathed w conforming to IS 694/1990 for working casing capping wall. 3C x 1.5 Sqmm	manufact ith electr g voltage	ured with ical grade up to and	bright anr e PVC cor d including	nealed bare co npound as per 1100 V throug	pper condu IS 5831/1 h existing	uctor as per IS 1984 generally PVC conduit /
		25.000	metre	88.0	2200.00	88.00	2200.00

25	od195907/2018_2019 PVC Conduits - Supply and providing confirming to IS 9537/1983 on su etc.complete.20mm dia, 1.5mm th	rface / c	•		0		•	
		350.000	metre	88.0	30800.00	88.00	30800.00	
26	od195908/2018_2019 PVC Conduits - Supply and providing confirming to IS 9537/1983 on s etc.complete.25mm dia, 1.5mm tl	urface co	•		0		•	
		250.000	metre	107.0	26750.00	107.00	26750.00	
27	od195909/2018_2019 PVC Conduits - Supply and providing confirming to IS 9537/1983 on surface 32mm dia 1.5mm thick	1000			0		•	
	( )	100.000	metre	138.0	13800.00	138.00	13800.00	
28	od195910/2018_2019 PVC Conduits- Supply & providing Cap	ping / Cas	ing of goo	od quality o	f the following s	sizes. 20 m	m	
		100.000	metre	43.0	4300.00	43.00	4300.00	
29	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 protection in the existing trench in pos			-	f B class GI P	ipe for UG	Cable tamper	
		10.000	metre	379.0	3790.00	379.00	3790.00	
31	od195913/2018_2019 UG Cable Tamper Protection- Supply protection in the existing trench in pos			-	f B class GI P	ipe for UG	Cable tamper	
		10.000	metre	485.0	4850.00	485.00	4850.00	
32	od195914/2018_2019 Circuit Mains- Supply and wiring the fe annealed bunched electrolytic copper compound per as IS 5831/1984 Genera 1100 V.through the existing PVC condu- estimate	ollowing s conductor ally Confo	ize of PV as per IS rming to I	\$ 8130/198 S 694/1990	4 insulated wit 0 for working vo	h di-electri oltage up to	cal grade PVC	

		100.000	metre	199.0	19900.00	199.00	19900.00
33	od195915/2018_2019 Circuit Mains- Supply and wiring the f annealed bunched electrolytic copper compound per as IS 5831/1984 Gener 1100 V.through the existing PVC cond estimate.	conductor ally Confo	as per IS rming to I	S 8130/198 S 694/199	4 insulated wit 0 for working vo	h di-electri oltage up to	cal grade PVC o and including
		200.000	metre	154.0	30800.00	154.00	30800.00
34	od195916/2018_2019 Circuit Mains- Supply and wiring the f annealed bunched electrolytic copper compound per as IS 5831/1984 Gener 1100 V.through the existing PVC cond	conductor ally Confo	as per IS rming to I	S 8130/198 S 694/199	4 insulated wit 0 for working vo	h di-electri oltage up to	cal grade PVC
		350.000	metre	118.0	41300.00	118.00	41300.00
35	od195917/2018_2019 Cable Supports & Trenching- Supply angles 25x25x6mm (ISA) and 25x6mm and supported using 25cm long 32x6m painted with two coats of Zinc Chroma Ker od195918/2018_2019 Cable Supports & Trenching- Supply a	nMS flats on m MS flat te primer a 500.000	with and 2 at every and two c atter A kg	20cm spac 1m spacin oats of ena uthorit 142.0	ing between su g. The cable tra amel paint. 71000.00	ays and su	pports shall be 71000.00
	cutting, welding, painting etc. as requir						
		100.000	kg	121.0	12100.00	121.00	
				.20	12100.00	121.00	12100.00
37	od195919/2018_2019 Cable Supports & Trenching - Charges burnt bricks breadth wise above the ca surface etc.complete as per standards	able, provi	g cable tr iding san	enches in a d cushionir	all type of soil ir	ncluding pro	oviding country storing normal
37	Cable Supports & Trenching - Charges burnt bricks breadth wise above the ca	able, provi	g cable tr iding san	enches in a d cushionir	all type of soil ir	ncluding pro	oviding country storing normal
37 38	Cable Supports & Trenching - Charges burnt bricks breadth wise above the ca	able, provi s of the fol 100.000 for makin able, provi	g cable tr iding san lowing siz metre g cable tr iding san	enches in a d cushionir ze. 35 cm 640.0 enches in a d cushionir	all type of soil ir ng of 150mm re Wide x 100 cm 64000.00 all type of soil ir ng of 150mm re	ncluding pro efilling & re Deep ( HT 640.00 ncluding pro efilling & re	oviding country storing normal Γ Cables) 64000.00 oviding country storing normal

39	Cable Sup	/2018_2019 ports & Trenching - Supply ro / welded to 35x35x6mm angle				-		-		
			50.000	No	516.0	25800.00	516.00	25800.00		
40	Cable Sup	/2018_2019 oports & Trenching - Supply ro / welded to 35x35x6mm angle	oute marke	er with 10	cmx10cm (	GI plate 5mm th	nick with ins	scriptions there		
			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	25 2(a)- Supply, erection, testing and commissioning of 400 KVA Transformer and allied works at Alady plant compound- (5)- EARTHING & ACCESSORIES									
1	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.									
		Ker	18.0007	set A	11091.0	V 88728.00	11091.00	88728.00		
2	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	Supply &	/2018_2019 laying the following sizes of earthing along with cables	Earth St	rip for ea	rthing inte	rconnection, te	ermination			
			300.000	metre	1507.0	452100.00	1507.00	452100.00		
4	Supply &	/2018_2019 laying the following sizes of earthing along with cables		•	-					
			500.000	metre	797.0	398500.00	797.00	398500.00		

5	Supply an	/2018_2019 d drawing bare earthing conc n as required. No. 16 SWG C			ving sizes a	along with wiring	g/ cables a	nd giving earth
			300.000	metre	199.0	59700.00	199.00	59700.00
6	Supply an	/2018_2019 Id drawing bare earthing conc n as required. No. 10 SWG C			ing sizes a	along with wiring	g/ cables a	nd giving earth
	1		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)- Su	oply, erection, testing and con compound-(6)		-			ed works at	Alady plant
1	Supply an	/2018_2019 Id providing 6 mm thick & 1 m strength conforming to IS 542		ctrical gra	ide cheque	ered type rubbe	r mat to wi	thstand 3.3 KV
2	Supply an	/2018_2019 d providing 12 mm thick & 1 strength conforming to IS 542 Kera	29/ 1969 in	front of t		aker Panel.	773.00 er mat to w	3865.00 ithstand 15 KV
			2.000	sqm	1379.0	2758.00	1379.00	2758.00
3	Supply an	/2018_2019 d providing 5 Kg. Dry Chemic s required.	K			E	I	
			2.000	set	2383.0	4766.00	2383.00	4766.00
4	Supply ar and writte	/2018_2019 nd providing 9 Litre capacity ( en with white paint 'FIRE' m he bracket/ floor stand inclu	ounted or	n MS ang	gle frame	work/ wall brac	ket filled	with fine sand,
			4.000	set	638.0	2552.00	638.00	2552.00
5	od196127	/2019 2010	I		I		1	
		d providing First Aid Chart du	ly framed	and place	ed in a cons	spicuous locatio	on for clear	vision.

6		/2018_2019 nd providing Laminated Electr rision.	ical Sche	matic dia	gram frame	ed and placed	in a conspi	cuous location	
	1		1.000	set	226.0	226.00	226.00	226.00	
7	Supply & English a	/2018_2019 providing Aluminium anodised nd Malayalam) and convent in Charge	-						
			10.000	Nos	267.0	2670.00	267.00	2670.00	
8	SCHEME Voltage d MV additi	/2018_2019 APPROVAL & POWER ALL rop calculations, Earthing des ons recently made and obtai orders for the electrical insta	ign & faul ining app	lt level ca roval, arr	lculations t anging ins	o the Electrical pection for ent	Inspectora ire installa	te including all tion, obtaining	
	1	15	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)- Supp	ly, erection, testing and comm water pump house comp	•					nonithady raw	
1	Erection of	/2018_2019 of RCC/ PCC pole of following cement concrete (1:3:6) layer	-			-		-	
			2.000	Nos	4957.0	9914.00	4957.00	9914.00	
2	Supplying having for size 1400 including	/2018_2019 and erection of a set of cros ur members fabricated out of mm width X 2500 mm heigh drilling holes for insulator pin nt as required.	50 mm X t, comple is, bolts a	( 50 mm ) te with 50	K 6 mm an 0 mm X 6n etc. (as pe	gle iron to forn nm M.S. flat irc r drawing) and	n a rectang on clamps, painting w	le of minimum bolts and nuts vith primer and	
			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	1.000	set	3601.0	3601.00	3601.00	3601.00				
6											
		1.000	set	215359.0	215359.00	215359.0 0	215359.00				
7											

		1				1				
	1	1.000	set	43954.0	43954.00	43954.00	43954.00			
8	od201139/2018_2019 HT Equipment Pinth, Substation Yard F fencing over 4mm thick barbed wire w ISMC 75 at 2400mm interval, Earthing a fencing. The MS framework for chainlin materials, labour, lead, lift etc includin nuts, bolts and other miscallaneous ite Charge.	vith a fran as per KS k fencing g escalat	nework o EI/KSEB shall be H ion works	f 50x50x6r standards s lot Dip Gal and fabric	nm MS angle I shall be done a vanised. The ra cation and ass	between veround the pate shall be	ertical posts periphery of the inclusive of a sincluding a			
		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									
	(1)	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 w 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). Kerala Water Authority										
	ות	2.000	cum	6143.0	12286.00	6143.00	12286.00			
11										
		1.000			918604.00	918604.0	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 approvel from Inspectratecomplete-as per CEA and Inspectrate statutes										
			1.000	No	350000.0	350000.00	350000.0 0	350000.00			
13		/2018_2019 rounding Resistor - Supply & F	Providing \$	50A,3.3k	V 40ohm 30	)sec NGR - Su	pply				
			1.000	No	155766.0	155766.00	155766.0 0	155766.00			
14	od201144/2018_2019 Neutral Grounding Resistor - Supply & Providing 50A,3.3kV 40ohm 30sec NGR - Labour										
		1 Sh	1.000	No	656.0	656.00	656.00	656.00			
15	NEUTRAL	/2018_2019 . CT - Supply & Providing 5P giving connections to Transfo					CT in a suita	able enclosure			
		D	1.000	No	4327.0	4327.00	4327.00	4327.00			
16	NEUTRAL	/2018_2019 . CT - Supply & Providing 5P giving connections to Transfo					CT in a suita	able enclosure			
	I		1.000	No	625.0	625.00	625.00	625.00			
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount			
28	2(b)- Suppl	y, erection, testing and comm water pump house com	-					nonithady raw			

1	PCC PAN fully comp - Main 3.3 standards to all swite water proc confirm to MVA base SMC supp MCB and kVAh, kVA 3 Sets Ou Pluggable remote ind type arres arresters. kA (8/20 s panel shal coats of Z ground us bus for the sizes, etc possible. S	2018_2019 EL -Design ,appro artmentalized, du AKV Panel falling with Alumimium I ches, internal rigit of shrouding, free conforming to IEC ed on fault level orts, heat shrinka toggle switches - NRh Class 1.0 - 1 atgoings: 200A, N type surge arrest dication for defect ter to connect be Nominal voltage 3 sec) for Neutral to inc Chromate pri ing suitable ceme e full length. Pair and Supply & Labour , Inspectrate releva	st tight, verm to IP54 ca Busbars of s id connection standing p C 60947-2 s 1 Nos. Res ble sleeves 4 Set Multifu Set 200/5A /CB - 1 Nos rer with pote tive arrester tween Neutri 3.3KV, 50Hz b Earth, Max ground usin mer and two nt concrete nting letters el paint. The suitable batt	nin proof, tegory fa suitable si on etc. ind anel cons tandards) stricted E etc. as pe unction D CL 1.0, 1 s. 100/50, ntial free rs to com ral and Ea z, Nomina kimum Dis ng framew o coats o plinth. Th / identific e board s erry and c	water pro bricated ize, earth cluding si sisting of . Incomm arth Faul er ISS - 19 igital Pan 5VA Mete A VCB o contact, t nect betw arth of foi I Dischar scharge ( vork fabrie f enamel e Panel E cations fo shall be f harger fo	bof 3.3 kv, out of 16 S bus of ade uitable cha the followin er - 200A F t Relay - b set RYB inc el meter to ering CTs -c ut going hermal disc een Line a lowing ratin ge current ima cated out o paint. The Board shall r the incom abricated i r the panne	VCB panel set WG CRCA Sh quate capacity mbers, front of ng as per stan- P Microproces est conductivit licators ( LED F read V, A, F, F one VCB incom with isolation fa connector & pro nd Neutral and ngs including b 30 kA (8/20 sed ax 50 kA (8	200Amp or neet Steel p , double ea pen, top ca dards ( All ssor based y Aluminiu Pilot type ) w PF, kW, kV, ner 200 A o acility - Su by sion for i d one numb ase eleme c) for Line t sec) -1Set gles etc. pa all be firmly th 25 x 3mr ing switche that future per CEA ar er cable sh	suitable rating painted as per arth connection able entry with switches shall VCB - suitable m busbar with with 2A Control A, kVAR, kWh, r suitable size- rge Protection nbuilt common per Spark Gap nt & pluggable to Neutral & 50 Supports The ainted with two y supported to m copper earth es, cable, fuse e extension be and kerala State
	_					0		00	
SI No	Spec	Descriptio	on	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
29	.,	y, erection, testing ump house comp	-	-					-
1	Supply, in	/2018_2019 stallation, testing pof enclosure (IP4		•	•			•	

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 11136.00 11136.00 11136.00 11136.00
----------------------------------------------

	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	<ul> <li>3 od195000/2018_2019</li> <li>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</li> </ul>										
	1		1.000	No	1050.0	1050.00	1050.00	1050.00			
4	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										
		) K	36.000	No	181.0	6516.00	181.00	6516.00			
SI No	Spec Descr	iption	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount			
30	water pump house compound- (4)- CABLES , WIRES & ACCESSORIES										
			60.000	metre	2318.0	139080.00	2318.00	139080.00			
2											

3	<ul> <li>od201352/2018_2019</li> <li>HT Power Cables - Supply &amp; 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</li> </ul>										
		20.000	metre	628.0	12560.00	628.00	12560.00				
4	od201353/2018_2019 HT Cable Terminations - Supplying and including lugs and other jointing mater grade as required. 3C x 150 Sqmm	-									
	1	4.000	set	10002.0	40008.00	10002.00	40008.00				
5	od201354/2018_2019 HT Cable Terminations - Supplying and including lugs and other jointing mater grade as required. 3C x 50 Sqmm										
	4 CC	8.000	set	7664.0	61312.00	7664.00	61312.00				
6	od201355/2018_2019 HT Cable Terminations - Supplying and including lugs and other jointing mater grade as required. 1C x 50 Sqmm	rials, for f		sizes, XLP	E aluminium c	conductor c	able of 11 KV				
		1.000	set	7664.0	7664.00	7664.00	7664.00				
7	od201356/2018_2019 HT Cable Terminations - Supplying an including lugs and other jointing materia grade as required. 3C x 150 Sqmm	als, for fo	r following	g sizes, XL	PE aluminium	conductor o	cable of 11 KV				
		2.000	set	12367.0	24734.00	12367.00	24734.00				
8	od201357/2018_2019 HT Cable Terminations - Supplying an including lugs and other jointing materia 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 Power / Control cable of 1.1 KV grade of									
		50.000	metre	308.0	15400.00	308.00	15400.00			
10	od201359/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr			-			-			
	Γ	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)									
	1	8.000	No	1713.0	13704.00	1713.00	13704.00			
12	<ul> <li>od201361/2018_2019</li> <li>LT Power Cables - Providing cable glanding, gland earthing &amp; end termination of UG cables of the following sizes using Siemens type Brass compression gland &amp; Copper lugs etc. complete. 3.5C x 35 Sqmm (32mm)</li> </ul>									
		2.000	No	437.0	874.00	437.00	874.00			
13	od201362/2018_2019 LT Power Cables - Providing cable gla sizes using Siemens type Brass compr						-			
		2.000	No	217.0	434.00	217.00	434.00			
14	od201363/2018_2019 LT Power Cables - Supply & drawing t Copper conductor round flexible wire 8130/1984 Insulated and sheathed w conforming to IS 694/1990 for working casing capping wall. 3C x 0.5 Sqmm	manufact ith electr	ured with ical grade	bright anr e PVC cor	nealed bare cop npound as per	oper condu IS 5831/1	uctor as per IS 984 generally			
		25.000	metre	47.0	1175.00	47.00	1175.00			
15										
		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	<ul> <li>od201366/2018_2019</li> <li>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.</li> <li>25mm dia 1.5mm thick</li> </ul>										
		250.000	metre	107.0	26750.00	107.00	26750.00				
18	<ul> <li>od201367/2018_2019</li> <li>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.</li> <li>32mm dia 1.5mm thick</li> </ul>										
	( )	100.000	metre	138.0	13800.00	138.00	13800.00				
19	9 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 Car			uthorit od quality o	<i></i>	sizes. 25 n	าฑ				
		100.000	metre	49.0	4900.00	49.00	4900.00				
21	od201370/2018_2019 UG Cable Tamper Protection - Supply protection in the existing trench in pos			-	of B class GI P	ipe for UG	Cable tamper				
		10.000	metre	379.0	3790.00	379.00	3790.00				
22	od201371/2018_2019 UG Cable Tamper Protection - Supply protection in the existing trench in pos	sition etc.	complete	e. 75 mm		-					
		10.000	metre	485.0	4850.00	485.00	4850.00				

23	<ul> <li>od201372/2018_2019</li> <li>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</li> </ul>										
	-	100.000	metre	199.0	19900.00	199.00	19900.00				
24											
	1	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 angles 25x25x6mm (ISA) and 25x6mm and supported using 25cm long 32x6m painted with two coats of Zinc Chroma	and erection MS flats of MS flat	on of Cal with and 2 at every	0cm spac 1m spacin	nd cable suppo ing between su g. The cable tra	ccessive c	ross members				
		500.000	kg	149.0	74500.00	149.00	74500.00				
27	od201376/2018_2019 Cable Supports & Trenching- Supply a cutting, welding, painting etc. as requir		-		•	itable thick	ness including				
	L	100.000	kg	121.0	12100.00	121.00	12100.00				
28	od201377/2018_2019 Charges for making cable trenches in above the cable, providing sand cushio standards of the following size. 35 cm \	ning of 15	0mm refil	ling & resto	oring normal su						
		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 )										
	1			100.000	metre	604.0	60400.00	604.00	60400.00		
30	<ul> <li>od195921/2018_2019</li> <li>Cable Supports &amp; 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.</li> </ul>										
				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.										
	-	1	14	25.000	No	417.0	10425.00	417.00	10425.00		
SI No	Spec	Description	K	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount		
31 2	31 2(b)- Supply, erection, testing and commissioning of 500 KVA Transformer and allied works at Thonithady plant compound- (5)- EARTHING & ACCESSORIES										
1	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											
	1			5.000	set	2952.0	14760.00	2952.00	14760.00		
3	Supply &	/2018_2019 laying the following earthing along with			•	-					

		300.000	metre	1600.0	480000.00	1600.00	480000.00
4	od201564/2018_2019						
	Supply & laying the following size		•	-			
	continous earthing along with cat	oles tinned at	terminals	s etc. com	olete. 25 x 3 m	nm Copper	strip
		500.000	metre	797.0	398500.00	797.00	398500.00
5	od201565/2018_2019	oonductore of	the fellow				ad airrinan a anth
	Supply and drawing bare earthing connection as required. No.16 SW			ing sizes a	aong with winng	g/ cables a	nd giving earth
		• • • • • • • • • • • • • • • • • • •					
		300.000	metre	199.0	59700.00	199.00	59700.00
6	od201566/2018_2019	0	6	1			
Ū	Supply and drawing bare earthing	conductors of	the follow	ving sizes a	long with wiring	g/ cables a	nd giving earth
	connection as required. No.10 SW	G Copper Con	ductor				
	/	Re l	20	XA.			
	( )	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 co						nonithady raw
	water pump house o	compound-(6)	SUBSTA	TION EQU	IPMENTS & MI	SC	
1	od201637/2018_2019	New B	ing and	and a	17 11		
	Supply and providing 6 mm thick & dielectric strength conforming to IS	Arala M/9	ater A		y sred type rubbe	r mat to wi	Instand 3.3 KV
			Т				
		5.000	sqm	773.0	3865.00	773.00	3865.00
2	od201638/2018_2019	5.000	sqm	773.0	3865.00	773.00	3865.00
2	od201638/2018_2019 Supply and providing 12 mm thick						
2		& 1 m wide ele	ectrical gr	ade chequ	ered type rubbe		
2	Supply and providing 12 mm thick	& 1 m wide ele	ectrical gr	ade chequ	ered type rubbe		
2	Supply and providing 12 mm thick	& 1 m wide ele	ectrical gr	ade chequ	ered type rubbe		
2	Supply and providing 12 mm thick	& 1 m wide ele 5429/ 1969 in	ectrical gr	ade chequ the HT Bre	ered type rubbe aker Panel.	er mat to w	ithstand 15 KV
	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Che	& 1 m wide ele 5429/ 1969 in 2.000	ectrical gr	ade chequ the HT Bre 1379.0	ered type rubbe aker Panel. 2758.00	er mat to w 1379.00	ithstand 15 KV 2758.00
	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019	& 1 m wide ele 5429/ 1969 in 2.000	ectrical gr	ade chequ the HT Bre 1379.0	ered type rubbe aker Panel. 2758.00	er mat to w 1379.00	ithstand 15 KV 2758.00
	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Che	& 1 m wide ele 5429/ 1969 in 2.000 emical Powder	ectrical gr front of t sqm	ade chequ the HT Bre 1379.0 e Extinguisl	ered type rubbe aker Panel. 2758.00 her with hose a	er mat to w 1379.00 nd clamps	ithstand 15 KV 2758.00 including fixing
	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Che	& 1 m wide ele 5429/ 1969 in 2.000	ectrical gr	ade chequ the HT Bre 1379.0	ered type rubbe aker Panel. 2758.00	er mat to w 1379.00	ithstand 15 KV 2758.00
	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Che it to wall as required.	& 1 m wide ele 5429/ 1969 in 2.000 emical Powder 2.000	ectrical gr a front of t sqm r type Fire set	ade chequ the HT Bre 1379.0 e Extinguist 2383.0	ered type rubbe aker Panel. 2758.00 her with hose a 4766.00	er mat to w 1379.00 nd clamps 2383.00	ithstand 15 KV 2758.00 including fixing 4766.00
3	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Che it to wall as required. od201640/2018_2019 Supply and providing 9 Litre capac	& 1 m wide ele 5429/ 1969 in 2.000 emical Powder 2.000 city GI Fire Bu	ectrical gr front of t sqm r type Fire set	ade chequ the HT Bre 1379.0 Extinguisi 2383.0	ered type rubbe aker Panel. 2758.00 her with hose a 4766.00	er mat to w 1379.00 nd clamps 2383.00	ithstand 15 KV 2758.00 including fixing 4766.00 at of red oxide
3	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Cho it to wall as required. od201640/2018_2019 Supply and providing 9 Litre capac and written with white paint 'FIRE	& 1 m wide ele 5429/ 1969 in 2.000 emical Powder 2.000 city GI Fire Bu	ectrical gr front of t sqm r type Fire set	ade chequ the HT Bre 1379.0 e Extinguist 2383.0 ated in post gle frame v	ered type rubbe aker Panel. 2758.00 her with hose a 4766.00 t office red with work/ wall brac	er mat to w 1379.00 nd clamps 2383.00 primer co sket filled v	ithstand 15 KV 2758.00 including fixing 4766.00 at of red oxide with fine sand,
3	Supply and providing 12 mm thick dielectric strength conforming to IS od201639/2018_2019 Supply and providing 5 Kg. Dry Che it to wall as required. od201640/2018_2019 Supply and providing 9 Litre capac	& 1 m wide ele 5429/ 1969 in 2.000 emical Powder 2.000 city GI Fire Bu	ectrical gr front of t sqm r type Fire set	ade chequ the HT Bre 1379.0 e Extinguist 2383.0 ated in post gle frame v	ered type rubbe aker Panel. 2758.00 her with hose a 4766.00 t office red with work/ wall brac	er mat to w 1379.00 nd clamps 2383.00 primer co sket filled v	ithstand 15 KV 2758.00 including fixing 4766.00 at of red oxide with fine sand,

5		/2018_2019 d providing First Aid Chart dul	y framed	and place	ed in a cons	picuous locatio	on for clear	vision.
	•		1.000	set	247.0	247.00	247.00	247.00
6		/2018_2019 Id providing Laminated Electr rision.	ical Sche	matic dia	gram frame	ed and placed	in a conspi	cuous location
			1.000	set	226.0	226.00	226.00	226.00
7								
		1	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	.,	ly, erection, testing and comm water pump house compound	1 1 2 2					nonithady raw
1	SCHEME Voltage di MV additi	/2018_2019 APPROVAL & POWER ALL rop calculations, Earthing des ons recently made and obtain orders for the electrical insta	ign & faul ining appi	t level ca roval, arr	lculations to anging ins	o the Electrical pection for ent	Inspectora tire installat	te including all tion, obtaining
2								
			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 ar	nd commi	ssioning of	motor pump se	et	
		No Specifi	cations ac	ded und	er this Estin	nate		
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
38 volta	.,	bly, Erection, Testing and Com ) having discharge of 80 lps ag	gainst a to	-	of 180 M. s			

1	od197162/2018_2019 Supply, Erection, Testing and Commiss 3300V) having discharge of 80 lps agai raw water pumping station to Alady pla	inst a tota	l head of	180 M. suo	ction head 20.3	• •		
		2.000	No	3888802. 96	7777605.92	3888802. 95	7777605.90	
2	od197164/2018_2019 Supply of additional cable byond the ini and from starter to motor	tial supply	∕ of 10Mtr	. Additiona	l requirement fi	om panel t	board to starter	
		25.000	metre	1518.0	37950.00	1518.00	37950.00	
3	od197165/2018_2019 Supply of suitable size PVC insulated, s code, for giving power connections to including end termination materials as	main sw	vitchboard	to panne	l board etc. co	mplete as	per standards	
	101	20.000	metre	1518.0	30360.00	1518.00	30360.00	
4	2.8.1 Earth work in excavation by mechanica or drains (not exceeding 1.5 m in wid bottoms, lift up to 1.5 m, including get directed, within a lead of 50 m.All kind	Ith or 10 ting out th	sqm on p	olan), inclu	ding dressing	of sides ar	nd ramming of	
	P	15.000	cum	309.95	4649.25	319.55	4793.25	
5								
		1.000	No	600000.0	600000.00	600000.0 0	600000.00	
6	od197168/2018_2019 Providing 350mm surge arrestor- Cem including charges of form work and lab			-	-			
		5.000	cum	8941.83	44709.15	8941.85	44709.25	

7	Providing with flang sluice valv	/2018_2019 350mm surge arrestor- Prov ed ends including all cost o ve - 1 No. etc and all labour tate as per DSR Observed d	f materials charges fo	s such a	s 200mm ai	r cushion valv	e - 1 No., 2	200mm D/F CI	
			1.000	No	409500.0	409500.00	409500.0 0	409500.00	
8	Providing providing	/2018_2019 350mm surge arrestor- Co the zero velocity valve inclu by the departmental officers	uding all c	ost of m	aterials, lab	our charge, fo			
	1		1.000	No	63841.4	63841.40	63841.40	63841.40	
9									
			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) Powe	r Allocation	n and CE	, OYEC cha	rges etc.			
1	-	19_2020 11 KV line extension, CD a 0 KVA ( Approval from KSE		charges	for the pow	er connection	of Alady w	ater treatment	
			1.000	No	2439594. 0	2439594.00	2439594. 00	2439594.00	
2		19_2020 11 KV line extension, CD a station - 500 KVA ( Approva		-	for the pov	ver connection	of Thonith	ady raw water	
			1.000	No	872306.0	872306.00	872306.0 0	872306.00	
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount	
40	9(a) Suppl	ly, Erection, Testing and Con pump		-	os motor pur top GL tank		yanpara pur	mp house for	
		No Speci	fications ad	dded und	der this Estir	nate			
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount	
41	9(a.) Supp	ly, Erection, Testing and Cor pump		•	os motor pur top GL tank	•	yanpara pu	mp house for	

1	Supply, E motor Pur	2020_2021 rection, Testing and Commis npset having discharge of 3.5 para pumping station.(Interm	50 lps agai	inst a tota	al head of 1	73 M. suction h			
			2.000	No	247846.9 2	495693.84	247846.9 0	495693.80	
2	2 od54106/2020_2021 Supply of additional cable byond 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									
			20.000	metre	266.8	5336.00	266.80	5336.00	
4		2020_2021 DRY APPROVAL FROM KSE	ala Wa		uthorit	У			
SI No	Spoc	Description	1.000 Quantity	- No Unit	25000.0 DSOR Rate	25000.00 TS Amount	25000.00 LMR Rate	25000.00	
42	9(b) Suppl	y, Erection, Testing and Com pumping to N	missioning	g of 2 No:	s motor pur	np sets at Nari			
1	Supply, E motor Pun	2020_2021 rection, Testing and Commis npset having discharge of 22 ra pumping station.(Intermedi	lps agains	st a total h	nead of 113	M. suction hea	ad 5m, spee	-	
			2.000	No	734489.4 1	1468978.82	734489.4 0	1468978.80	
2	Supply of	2020_2021 additional cable beyond the d from starter to motor	e initial su	ipply of 1	0Mtr. Addi	tional requiren	nent from p	panel board to	
			25.000	metre	425.5	10637.50	425.50	10637.50	

3	Supply of	2020_2021 suitable size PVC insulated						-
		giving power connections end termination materials			•			
	1		20.000	metre	816.5	16330.00	816.50	16330.00
4		2020_2021 DRY APPROVAL FROM KSI	EB					
			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	9(c) Supply	r, Erection, Testing and Com	-	of 2 Nos kada GL	-	p sets at Kaltho	otty pump h	ouse pumping
1	od54190/	2020_2021	1.5		-			
		rection, Testing and Commi	1					-
		mpset having discharge of 1 pumping station.(To Labbak			head of 19	M. suction hea	ad 5m, spee	ed 1450 rpm at
	realinotity							
		Le la	2.000	No	116130.5 1	232261.02	116130.5 0	232261.00
2	od54191/	2020_2021 Ke	rala Wa	ater A	uthorit	V		
_		DRY APPROVAL FROM KSI		T				
			$\mathbf{R}^{-}$			H-	1	
	1		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	9(d) Supply	r, Erection, Testing and Com	U U	of 2 Nos para GL ta	•	p sets at Kaltho	otty pump h	ouse pumping
1	od54202/2	2020_2021						
		rection, Testing and Commi	-					-
		npset having discharge of 1 pumping station.(Kalthotty to			nead of 184	M. suction hea	ad 5m, spee	ed 1450 rpm at
			2.000	No	646338.9 7	1292677.94	646338.9 5	1292677.90
2	od54203/2	2020_2021						
		additional cable beyond th	ne initial su	pply of 1	0Mtr. Addi	tional requirer	nent from p	panel board to
	starter ar	d from starter to motor						
			25.000	metre	339.25	8481.25	339.25	8481.25

3	Supply of code, for	2020_2021 suitable size PVC insulated, giving power connections to end termination materials as	o main sw	itchboard	d to pannel	board etc. co	mplete as	per standards
	1		20.000	metre	396.75	7935.00	396.75	7935.00
4		2020_2021 DRY APPROVAL FROM KSE	В					
			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 1		allocation charges (OYEC & (		sion of th tation	ree phase li	ine to Kalthotti	and Nariyai	npara pumping
	Power all allocation	ocation and energization of c fee , Estimate cost for ser CHR/326 dated 22.03.2019	vice conn	ection, C			• • •	
			1.000	No	1965000. 0	1965000.00	1965000. 00	1965000.00
2	Any addit	2020_2021 Ker ional cost for actual executi Kalthotty 100 KVA ( Approv	on of wor	k - Powe	uthorit r allocation	e/	ation of clea	ar water pump
			1.000	L.S	200000.0	200000.00	200000.0 0	200000.00
3	integration       integration							
	1		1.000	No	920000.0	920000.00	920000.0 0	920000.00
4	Any addit	2020_2021 ional cost for actual executi Nariyampara 160 KVA ( Ap				n and energiza	ation of clea	ar water pump
			1.000	L.S	200000.0	200000.00	200000.0 0	200000.00
SI No	Spec	Description	Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount

	46									
	1		Ν	No Specifi	ications a	dded und	er this Estir	nate		
SI No	Spec		Description		Quantity	Unit	DSOR Rate	TS Amount	LMR Rate	LMR Amount
47			-		-		-	otor Pumpset h ping to Alady ł	-	•
1	motor Pu	Erection, Impset ha	Testing and	arge of 5 I	lps agains			tal / Vertical ty M. suction hea	•	
	1				2.000	No	238352.1 2	476704.24	238352.1 0	476704.20
2		of addition			e initial su	ipply of 1	0Mtr. Addi	tional requirer	ment from p	panel board t
									1 1	
3		f suitable	size PVC ir					10407.50 onductor cable I board etc. co		-
3	Supply of code, for	f suitable r giving p	e size PVC ir power conne	ections to	sheathed o main sw Sper IE ri	,armoure itchboard ules. The	d copper c d to panne supply sh	onductor cable I board etc. co all be limited t	e conforming omplete as to the actua	g to relevantl per standard Il requiremen
3	Supply of code, for	f suitable r giving p	e size PVC ir power conne	ections to	sheathed	,armoure	d copper c d to panne	onductor cable I board etc. co	e conforming omplete as	g to relevantl per standard
3	Supply of code, for including od54794/	f suitable r giving p g end terr /2020_20	e size PVC ir power conne mination ma	ections to aterials as	sheathed main sw sper IE ri 20.000	,armoure itchboard ules. The	d copper c d to panne supply sh	onductor cable I board etc. co all be limited t	e conforming omplete as to the actua	g to relevantl per standard Il requiremen
	Supply of code, for including od54794/	f suitable r giving p g end terr /2020_20	e size PVC ir power conne mination ma	ections to aterials as	sheathed main sw sper IE ri 20.000	,armoure itchboard ules. The	d copper c d to panne supply sh	onductor cable I board etc. co all be limited t	e conforming omplete as to the actua	g to relevantl per standard Il requiremen
_	Supply of code, for including od54794/	f suitable r giving p g end terr /2020_20	e size PVC ir power conne mination ma	ections to aterials as	sheathed o main sw Siper IE n 20.000 B	,armoure itchboard ules.I The metre	d copper c d to panne supply sh 416.3	onductor cable I board etc. co all be limited t 8326.00	e conforming omplete as to the actua 416.30	g to relevantis per standard Il requiremen 8326.00
4 <u>SI No</u> 48 (	Supply of code, for including od54794/ STATUT( STATUT( Spec 2) - Supply	f suitable r giving p j end terr /2020_20 ORY APF	e size PVC ir power conne mination ma 21 21 PROVAL FR Description n, Testing ar	COM KSE	sheathed o main sw sper IE ri 20.000 B 1.000 Quantity hissioning n head 5n	,armoure itchboard ales. The metre No Unit of 2 Nos	d copper c d to panne supply sh 416.3 25000.0 DSOR Rate new Centrif 450 rpm at	onductor cable I board etc. co all be limited t 8326.00 25000.00	e conforming omplete as to the actua 416.30 25000.00 LMR Rate	g to relevantl per standard Il requiremen 8326.00 25000.00 LMR Amount
4 <u>SI No</u> 48 (	Supply of code, for including od54794/ STATUTO 2) - Supply Ips agains od55073/ Supply, E motor Pu	f suitable r giving p g end terr /2020_20 ORY APF y, Erectio st a total h /2020_20 Erection, impset ha	e size PVC ir power conne mination ma 21 21 PROVAL FR Description n, Testing an nead of 125 21 Testing and aving dischar	COM KSER	sheathed o main sw Sper IE ri 20.000 B 1.000 Quantity hissioning n head 5m Nariyan sioning of Ips agains	,armoure itchboard ales. The metre No Unit of 2 Nos n speed 1 npara sun 2 Nos ne st a total h	d copper c d to panne supply sh 416.3 25000.0 DSOR Rate new Centrif 450 rpm at nps	onductor cable I board etc. co all be limited t 8326.00 25000.00 TS Amount	e conforming omplete as to the actual 416.30 25000.00 LMR Rate mpset havin r pumping to	g to relevantl per standard il requiremen 8326.00 25000.00 LMR Amount ig discharge o b Kalthotty /

2	od55074/2020_2021 Supply of additional cable beyond to starter and from starter to motor	he initial su	ipply of 1	0Mtr. Addi	tional requirer	nent from p	banel board to		
		25.000	metre	1104.0	27600.00	1104.00	27600.00		
3	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								
	1	20.000	metre	1104.0	22080.00	1104.00	22080.00		
4	od55076/2020_2021 Earth work in excavation by mechani or drains (not exceeding 1.5 m in w bottoms, lift up to 1.5 m, including g directed, within a lead of 50 m.All cla	vidth or 10 etting out th	sqm on p ne excava	olan), inclu ated soil ar	ding dressing nd disposal of s	of sides ar surplus exc	nd ramming of		
	A	15.000	cum	425.54	6383.10	425.55	6383.25		
5	2.8.1 Earth work in excavation by mechani or drains (not exceeding 1.5 m in w bottoms, lift up to 1.5 m, including g directed, within a lead of 50 m.All ki	vidth or 10 etting out th	sqm on p	olan), inclu	ding dressing	of sides ar	nd ramming of		
	D	15.000	cum	309.95	4649.25	319.55	4793.25		
6									
		1.000	No	600000.0	600000.00	600000.0 0	600000.00		
7	od55078/2020_2021 Cement concrete 1:2:4 using 20mm r labour charges etc. complete ( Rate a	•			block including 44709.15	charges of 8941.85	form work and 44709.25		

8	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	409500.0 0	409500.00		
9	od55080/2020_2021								
	Constructing RCC valve chamber of	size 2.50	m x 1.2	0m x 1.20n	n for providing	the zero	velocity valve		
	including all cost of materials, labour ch					-	-		
	(Rate as per DSR Observed data)	arge, iem		e complete		and adparts			
		10	16.90						
		1.000	No	63841.0	63841.00	63841.00	63841.00		
10	od55081/2020 2021	6.0		2-					
10	STATUTORY APPROVAL FROM KSEE	421							
	STATUTORT APPROVAL FROM KSEE								
		-	177.11						
		1.000	No	25000.0	25000.00	25000.00	25000.00		
	1840-		N.S	1. Ale	Esti	mate PAC	53654910.55		
			an of	272	LMR Esti	mate PAC	55989263.00		
	Varia	1. W	ton A	utle quite	Percentag	ge Excess	4.35		
	Rupees Five Crore Fift	tia vva Nipolo	tter A		and Two Lun	drad and Si	vty Throp Only		
	Rupees Five Crofe Filly	y mine La	si Eighty	TVILLE THOUS		ureu anu Si	xty Three Only		
		X		U	E				