

## Detailed Estimate

**JJM- KUMARAMANGALAM- 03&08-PROVIDING FHTC TO ALL HOUSEHOLDS  
OF KUMARAMANGALAM PANCHAYATH IN IDUKKI DISTRICT- Supply and laying  
of 250mm DI K9 Clear Water Gravity Main and Distribution lines In Zone-II.**

(Dsr year: 2016)

Sl No	Description	No	L	B	D	CF	Quantity	Remark
<b>108-Supplying and laying Distribution system in Zones II (Cost Index:38.91 %)</b>								
1	100.1.1 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil (Ref. Item No. 2.10.1 of DSR)							
	200mm DI K9 pipes, T r e n c h size=(0.9+0.7)/2*1.15	1	100.000	0.800	1.150	0.45	41.400	
	160mm PVC, width = 0.6 m, depth = 1.1 m	1	1382.000	0.600	1.100	0.45	410.454	
	140mm PVC, width=0.6m, depth=1.05 m	1	409.000	0.600	1.0500	0.45	115.952	
	110mm PVC, width=0.6m, depth=1.0 m	1	459.000	0.600	1.000	0.45	123.930	
							Total Quantity	691.736 cum
							Total Deducted Quantity	0.000 cum
							Net Total Quantity	691.736 cum
							Say 691.736 cum @ Rs 405.84 / cum	<b>Rs 280734.14</b>
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :"							

	Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)								
	200mm DI k9 pipes	1	100.000	0.800	1.150	0.3	27.600		
	160mm PVC	1	1382.000	0.600	1.100	0.3	273.636		
	140mm PVC	1	409.000	0.600	1.0500	0.3	77.301		
	110mm PVC	1	459.000	0.600	1.000	0.3	82.620		
	Total Quantity						461.157 cum		
	Total Deducted Quantity						0.000 cum		
	Net Total Quantity						461.157 cum		
	Say 461.157 cum @ Rs 571.82 / cum						<b>Rs 263698.80</b>		
3	100.2.7 "Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : Medium Rock (blasting prohibited) New Data derived from DAR								
	200mm DI k9 pipes	1	100.000	0.800	1.150	0.2	18.401		
	160mm PVC	1	1382.000	0.600	1.100	0.2	182.424		
	140mm PVC	1	409.000	0.600	1.050	0.2	51.534		
	110mm PVC	1	459.000	0.600	1.000	0.2	55.080		
	Total Quantity						307.439 cum		
	Total Deducted Quantity						0.000 cum		
	Net Total Quantity						307.439 cum		
	Say 307.439 cum @ Rs 952.71 / cum						<b>Rs 292900.21</b>		
4	100.4.1 Excavating in hard rock for trenches by blasting for laying pipes and stacking useful materials for measurements and disposing unserviceable materials within the initial lead of 50m and lift upto 1.50m(initial depth 0 m to 1.50m) and providing protection by earth filled cement bags during blasting to avoid damages to nearby structures(200 Nos. of earth filled cement bags for 10m3 blasting) (Ref. Item No. 1004 A of T C)								
	200mm DI k9 pipes	1	100.000	0.800	1.150	0.05	4.601		
	160mm PVC	1	1382.000	0.600	1.100	0.05	45.606		
	140mm PVC	1	409.000	0.600	1.0500	0.05	12.884		
	110mm PVC	1	459.000	0.600	1.000	0.05	13.770		
	Total Quantity						76.861 cum		

		Total Deducted Quantity					0.000 cum	
		Net Total Quantity					76.861 cum	
		Say 76.861 cum @ Rs 2734.83 / cum					<b>Rs 210201.77</b>	
5	100.59.1 Cutting the bituminous / concrete roads with cutting machine for a minimum depth of 200mm along the sides of proposed alignment of the pipe to be laid without causing any damage to other utilities, including the charges for hire and conveyance of tools and plant, cost of consumables and charges for lighting, watching, ribbon fencing, caution boards, traffic diversion, and as per the direction of departmental officers etc. complete, before carrying out the demolition of bituminous / concrete road by mechanical means and carrying out the excavation.							
	200mm DI k9 pipes	1	100.000				100.000	
	160mm PVC	1	1382.000				1382.000	
	140mm PVC	1	409.000				409.000	
	110mm PVC	1	459.000				459.000	
		Total Quantity					2350.000 metre	
		Total Deducted Quantity					0.000 metre	
		Net Total Quantity					2350.000 metre	
		Say 2350.000 metre @ Rs 31.67 / metre					<b>Rs 74424.50</b>	
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge							
	200mm DI k9 pipes	1	100.000	0.960		0.05	4.801	
	160mm PVC	1	1382.000	0.660		0.05	45.606	
	140mm PVC	1	409.000	0.660		0.05	13.497	
	110mm PVC	1	459.000	0.660		0.05	15.147	
		Total Quantity					79.051 cum	
		Total Deducted Quantity					0.000 cum	
		Net Total Quantity					79.051 cum	
		Say 79.051 cum @ Rs 432.37 / cum					<b>Rs 34179.28</b>	
7	100.8.2 Fencing 1.50m high with two rows of casuarina poles (girth 15cm to 24cm) tied with coir yarn on vertical casuarina pole (girth 15cm to 24cm) fixed at 1.5m intervals. NEW DATA (Prepared based on PWD SDB - Item No.1009)							
		1	2000.000				2000.000	
		Total Quantity					2000.000 metre	

							Total Deducted Quantity	0.000 metre
							Net Total Quantity	2000.000 metre
							Say 2000.000 metre @ Rs 74.56 / metre	<b>Rs 149120.00</b>
8	100.12.11	Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 150 mm dia nominal ore Observed Data derived from item no.18.12 of DAR						
		1	154.000					154.000
							Total Quantity	154.000 metre
							Total Deducted Quantity	0.000 metre
							Net Total Quantity	154.000 metre
							Say 154.000 metre @ Rs 199.54 / metre	<b>Rs 30729.16</b>
9	100.12.10	"Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 125 mm dia nominal bore Observed Data derived from item no.18.12 of DAR						
		1	46.000					46.000
							Total Quantity	46.000 metre
							Total Deducted Quantity	0.000 metre
							Net Total Quantity	46.000 metre
							Say 46.000 metre @ Rs 180.30 / metre	<b>Rs 8293.80</b>
10	100.12.9	Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 100 mm dia nominal bore Observed Data derived from item no.18.12 of DAR						
		1	51.000					51.000
							Total Quantity	51.000 metre
							Total Deducted Quantity	0.000 metre
							Net Total Quantity	51.000 metre
							Say 51.000 metre @ Rs 160.72 / metre	<b>Rs 8196.72</b>
11	18.12.8	Providing and fixing G.I. pipes complete with G.I fittings including trenching and refilling etc. External work 80 mm dia nominal bore						
		1	1710.000					1710.000

							Total Quantity	1710.000 metre
							Total Deducted Quantity	0.000 metre
							Net Total Quantity	1710.000 metre
							Say 1710.000 metre @ Rs 800.61 / metre	<b>Rs 1369043.10</b>
12	100.14.3	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 200 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.17 in DAR						
		1	100.000					100.000
							Total Quantity	100.000 metre
							Total Deducted Quantity	0.000 metre
							Net Total Quantity	100.000 metre
							Say 100.000 metre @ Rs 86.63 / metre	<b>Rs 8663.00</b>
13	18.70.3	Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:200 mm dia pipes						
		20						20.000
							Total Quantity	20.000 joint
							Total Deducted Quantity	0.000 joint
							Net Total Quantity	20.000 joint
							Say 20.000 joint @ Rs 214.34 / joint	<b>Rs 4286.80</b>
14	18.71.3	Providing and laying Double Flanged ( screwed / welded) Centrifugally (Spun) Cast Iron, Class B ( IS : 1536):200 mm dia C.I Double Flanged Pipe						
		4						4.000
							Total Quantity	4.000 metre
							Total Deducted Quantity	0.000 metre
							Net Total Quantity	4.000 metre
							Say 4.000 metre @ Rs 5630.58 / metre	<b>Rs 22522.32</b>
15	od159815/2020_2021	Labour for cutting 200 mm diameter D.I. pipe with steel saw.						
		4						4.000
							Total Quantity	4.000 Each Cut
							Total Deducted Quantity	0.000 Each Cut
							Net Total Quantity	4.000 Each Cut

	Say 4.000 Each Cut @ Rs 295.85 / Each Cut						<b>Rs 1183.40</b>	
16	100.35.3 Testing 200mm DI/CI pipeline with potable water to the required test pressure 200 mm dia Observed Data derived from item no.1020 of PHED DATA							
		1	100.000				100.000	
	Total Quantity						100.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						100.000 metre	
	Say 100.000 metre @ Rs 30.99 / metre						<b>Rs 3099.00</b>	
17	100.9.11 Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials).160 mm nominal outer dia pipes.							
		1	1382.000				1382.000	
	Total Quantity						1382.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						1382.000 metre	
	Say 1382.000 metre @ Rs 137.03 / metre						<b>Rs 189375.46</b>	
18	100.9.10 Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 140 mm nominal outer dia pipes.							
		1	409.000				409.000	
	Total Quantity						409.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						409.000 metre	
	Say 409.000 metre @ Rs 113.70 / metre						<b>Rs 46503.30</b>	
19	100.9.9 Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 110 mm nominal outer dia pipes.							
		1	459.000				459.000	

	Total Quantity							459.000 metre
	Total Deducted Quantity							0.000 metre
	Net Total Quantity							459.000 metre
	Say 459.000 metre @ Rs 86.68 / metre							<b>Rs 39786.12</b>
20	100.31.2.5 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 200 mm diameter. Class II" Data derived from item no.18.31.4.2of DAR							
		2						2.000
	Total Quantity							2.000 Nos
	Total Deducted Quantity							0.000 Nos
	Net Total Quantity							2.000 Nos
	Say 2.000 Nos @ Rs 1359.45 / Nos							<b>Rs 2718.90</b>
21	100.31.2.1 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 80 mm diameter. Class II" Observed Data derived from item no.18.31.of DAR							
		6						6.000
	Total Quantity							6.000 Nos
	Total Deducted Quantity							0.000 Nos
	Net Total Quantity							6.000 Nos
	Say 6.000 Nos @ Rs 488.98 / Nos							<b>Rs 2933.88</b>
22	100.31.2.2 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 100 mm diameter. Class II" Data derived from item no.18.31.1.2of DAR							
		2						2.000
	Total Quantity							2.000 Nos
	Total Deducted Quantity							0.000 Nos
	Net Total Quantity							2.000 Nos
	Say 2.000 Nos @ Rs 769.14 / Nos							<b>Rs 1538.28</b>
23	100.31.2.3 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :							

	125 mm diameter. Class II" Data derived from item no.18.31.2.2of DAR							
		2					2.000	
		Total Quantity					2.000 metre	
		Total Deducted Quantity					0.000 metre	
		Net Total Quantity					2.000 metre	
		Say 2.000 metre @ Rs 850.55 / metre					<b>Rs 1701.10</b>	
24	100.31.2.4 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 150 mm diameter. Class II" Data derived from item no.18.31.3.2of DAR							
		2					2.000	
		Total Quantity					2.000 Nos	
		Total Deducted Quantity					0.000 Nos	
		Net Total Quantity					2.000 Nos	
		Say 2.000 Nos @ Rs 1029.59 / Nos					<b>Rs 2059.18</b>	
25	100.32.1 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR							
		15					15.000	
		Total Quantity					15.000 Nos	
		Total Deducted Quantity					0.000 Nos	
		Net Total Quantity					15.000 Nos	
		Say 15.000 Nos @ Rs 124.47 / Nos					<b>Rs 1867.05</b>	
26	100.32.2 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 40 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR							
		9					9.000	
		Total Quantity					9.000 Nos	
		Total Deducted Quantity					0.000 Nos	
		Net Total Quantity					9.000 Nos	
		Say 9.000 Nos @ Rs 156.61 / Nos					<b>Rs 1409.49</b>	



27	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil							
	Valve Chamber 1.20m x 1.20m x1.1m	12	1.500	1.500	1.300		35.100	
	Total Quantity						35.100 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						35.100 cum	
	Say 35.100 cum @ Rs 231.15 / cum						<b>Rs 8113.37</b>	
28	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)							
	Valve Chamber PCC	12	1.500	1.500	0.100		2.700	
	Anchor blocks	200	0.600	0.600	0.600		43.200	
	Road reformation	1	2000.000	0.600	0.150		180.000	
	Total Quantity						225.900 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						225.900 cum	
	Say 225.900 cum @ Rs 7614.98 / cum						<b>Rs 1720223.98</b>	
29	5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size)							
	Valve Chamber Base and Cover slab	2*12	1.500	1.500	0.200		10.800	
	side wall	12	1.35*4	0.150	0.900		8.749	
	Total Quantity						19.549 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						19.549 cum	
	Say 19.549 cum @ Rs 8633.74 / cum						<b>Rs 168780.98</b>	
30	5.9.2 Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.							

	Valve Chamber outside	12	1.5*4		1.300		93.601		
	inside	12	1.2*4		0.900		51.840		
	Anchor blocks	150	0.6*4		0.600		216.000		
	Total Quantity						361.441 sqm		
	Total Deducted Quantity						0.000 sqm		
	Net Total Quantity						361.441 sqm		
	Say 361.441 sqm @ Rs 525.91 / sqm						<b>Rs 190085.44</b>		
31	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more								
	all rcc works	1	19.600			70.0	1372.000		
	Total Quantity						1372.000 kilogram		
	Total Deducted Quantity						0.000 kilogram		
	Net Total Quantity						1372.000 kilogram		
	Say 1372.000 kilogram @ Rs 78.62 / kilogram						<b>Rs 107866.64</b>		
32	100.98.117 Supply of DI K9 Pipe Conforming to IS 8329/2000, 200mm Dia.								
	For laying	1	100.000				100.000		
	For future mace 2.5 %	1	100.000			0.03	2.500		
	Total Quantity						102.500 metre		
	Total Deducted Quantity						0.000 metre		
	Net Total Quantity						102.500 metre		
	Say 102.500 metre @ Rs 2092.50 / metre						<b>Rs 214481.25</b>		
33	18.68.1 Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upt 600 mm dia								
	200mm Bends, 90 degree, 1 no-32 kg, 22.5 degree, 1no-23 kg, 11.25 degree, 1no-21 kg	1				0.76	0.760		
	Total Quantity						0.760 quintal		
	Total Deducted Quantity						0.000 quintal		
	Net Total Quantity						0.760 quintal		
	Say 0.760 quintal @ Rs 21384.36 / quintal						<b>Rs 16252.11</b>		

34	100.98.226 Supply of PVC Pipe, 8kg/cm2, 160mm Dia.						
	For laying	1	688.000				688.000
	Total Quantity						688.000 metre
	Total Deducted Quantity						0.000 metre
	Net Total Quantity						688.000 metre
	Say 688.000 metre @ Rs 745.05 / metre						<b>Rs 512594.40</b>
35	od159863/2020_2021 Supply of 160 mm PVC specials 8kg/cm2						
	Specials @ 3% of cost of pipe	1					1.000
	Total Quantity						1.000 L.S
	Total Deducted Quantity						0.000 L.S
	Net Total Quantity						1.000 L.S
	Say 1.000 L.S @ Rs 15377.83 / L.S						<b>Rs 15377.83</b>
36	100.98.216 Supply of PVC Pipe, 6kg/cm2, 160mm Dia.						
	For laying	1	694.000				694.000
	Total Quantity						694.000 metre
	Total Deducted Quantity						0.000 metre
	Net Total Quantity						694.000 metre
	Say 694.000 metre @ Rs 465.75 / metre						<b>Rs 323230.50</b>
37	od159899/2020_2021 Supply of 160 mm PVC specials 6kg/cm2						
	Specials @ 3% of cost of pipe	1					1.000
	Total Quantity						1.000 L.S
	Total Deducted Quantity						0.000 L.S
	Net Total Quantity						1.000 L.S
	Say 1.000 L.S @ Rs 9696.91 / L.S						<b>Rs 9696.91</b>
38	100.98.225 Supply of PVC Pipe, 8kg/cm2, 140mm Dia.						
	For laying	1	409.000				409.000
	Total Quantity						409.000 metre
	Total Deducted Quantity						0.000 metre

	Net Total Quantity						409.000 metre	
	Say 409.000 metre @ Rs 585.45 / metre						<b>Rs 239449.05</b>	
39	od159866/2020_2021 Supply of 140 mm PVC specials 8kg/cm2							
	Specials @ 3 % of cost of Pipe	1					1.000	
	Total Quantity						1.000 L.S	
	Total Deducted Quantity						0.000 L.S	
	Net Total Quantity						1.000 L.S	
	Say 1.000 L.S @ Rs 7183.47 / L.S						<b>Rs 7183.47</b>	
40	100.98.224 Supply of PVC Pipe, 8kg/cm2, 110mm Dia.							
	For laying	1	459.000				459.000	
	Total Quantity						459.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						459.000 metre	
	Say 459.000 metre @ Rs 346.00 / metre						<b>Rs 158814.00</b>	
41	od159877/2020_2021 Supply of 110 mm PVC specials 8 kg/cm2							
	Specials @ 3% of pipe	1					1.000	
	Total Quantity						1.000 L.S	
	Total Deducted Quantity						0.000 L.S	
	Net Total Quantity						1.000 L.S	
	Say 1.000 L.S @ Rs 4764.42 / L.S						<b>Rs 4764.42</b>	
42	od125164/2020_2021 Supply of 150mm GI (M) pipes							
		1	154.000				154.000	
	Total Quantity						154.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						154.000 metre	
	Say 154.000 metre @ Rs 1425.95 / metre						<b>Rs 219596.30</b>	
43	od160052/2020_2021 Supplying 150 mm G.I(M) specials							

	Specials @ 5% of cost of pipe	1					1.000	
	Total Quantity						1.000 L.S	
	Total Deducted Quantity						0.000 L.S	
	Net Total Quantity						1.000 L.S	
	Say 1.000 L.S @ Rs 10979.82 / L.S						<b>Rs 10979.82</b>	
44	od125165/2020_2021 Procuring and supply of 125mm GI(M) pipes							
		1	46.000				46.000	
	Total Quantity						46.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						46.000 metre	
	Say 46.000 metre @ Rs 1281.80 / metre						<b>Rs 58962.80</b>	
45	od160070/2020_2021 Supplying 125 mm G.I(M) specials							
	Specials @ 5 % of cost of pipe	1					1.000	
	Total Quantity						1.000 L.S	
	Total Deducted Quantity						0.000 L.S	
	Net Total Quantity						1.000 L.S	
	Say 1.000 L.S @ Rs 2949.42 / L.S						<b>Rs 2949.42</b>	
46	od125166/2020_2021 Supply of 100 mm GI (M) pipes							
		1	51.000				51.000	
	Total Quantity						51.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						51.000 metre	
	Say 51.000 metre @ Rs 939.57 / metre						<b>Rs 47918.07</b>	
47	od160073/2020_2021 Supplying 100 mm G.I(M) specials							
	Specials @ 5% of cost of pipe	1					1.000	
	Total Quantity						1.000 L.S	
	Total Deducted Quantity						0.000 L.S	
	Net Total Quantity						1.000 L.S	

		Say 1.000 L.S @ Rs 2396.84 / L.S					<b>Rs 2396.84</b>	
48	100.98.440	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.						
		15					15.000	
		Total Quantity					15.000 No	
		Total Deducted Quantity					0.000 No	
		Net Total Quantity					15.000 No	
		Say 15.000 No @ Rs 966.75 / No					<b>Rs 14501.25</b>	
49	100.98.441	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 40mm.						
		9					9.000	
		Total Quantity					9.000 No	
		Total Deducted Quantity					0.000 No	
		Net Total Quantity					9.000 No	
		Say 9.000 No @ Rs 1421.70 / No					<b>Rs 12795.30</b>	
50	100.98.457	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.						
		6					6.000	
		Total Quantity					6.000 No	
		Total Deducted Quantity					0.000 No	
		Net Total Quantity					6.000 No	
		Say 6.000 No @ Rs 3131.05 / No					<b>Rs 18786.30</b>	
51	100.98.458	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 100mm.						
		2					2.000	
		Total Quantity					2.000 No	
		Total Deducted Quantity					0.000 No	
		Net Total Quantity					2.000 No	
		Say 2.000 No @ Rs 4186.85 / No					<b>Rs 8373.70</b>	
52	100.98.459	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 125mm.						
		2					2.000	

		Total Quantity						2.000 No	
		Total Deducted Quantity						0.000 No	
		Net Total Quantity						2.000 No	
		Say 2.000 No @ Rs 5249.35 / No						<b>Rs 10498.70</b>	
53	100.98.460 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 150mm.								
		2					2.000		
		Total Quantity						2.000 No	
		Total Deducted Quantity						0.000 No	
		Net Total Quantity						2.000 No	
		Say 2.000 No @ Rs 6770.65 / No						<b>Rs 13541.30</b>	
54	100.98.461 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.								
		2					2.000		
		Total Quantity						2.000 No	
		Total Deducted Quantity						0.000 No	
		Net Total Quantity						2.000 No	
		Say 2.000 No @ Rs 11793.95 / No						<b>Rs 23587.90</b>	
SI No	Description	No	L	B	D	CF	Quantity	Remark	
<b>203-Supplying and Laying Clear Water Gravity Main (Cost Index:38.91 %)</b>									
1	100.1.1 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil (Ref. Item No. 2.10.1 of DSR)								
	250mm DI K9 pipe gap closing	1	3392.000	0.900	1.200	0.45	1648.513		
		Total Quantity						1648.513 cum	
		Total Deducted Quantity						0.000 cum	
		Net Total Quantity						1648.513 cum	
		Say 1648.513 cum @ Rs 405.84 / cum						<b>Rs 669032.52</b>	
2	100.1.5								

	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)						
	250mm DI K9 pipe gap closing, Trench size(1+0.8)/2, depth-1.2m	1	3392.000	0.900	1.200	0.3	1099.008
	Total Quantity						1099.008 cum
	Total Deducted Quantity						0.000 cum
	Net Total Quantity						1099.008 cum
	Say 1099.008 cum @ Rs 571.82 / cum						<b>Rs 628434.75</b>
3	100.2.7 "Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : Medium Rock (blasting prohibited) New Data derived from DAR						
	250mm DI K9 pipe gap closing	1	3392.000	0.900	1.200	0.2	732.672
	Total Quantity						732.672 cum
	Total Deducted Quantity						0.000 cum
	Net Total Quantity						732.672 cum
	Say 732.672 cum @ Rs 952.71 / cum						<b>Rs 698023.94</b>
4	100.4.1 Excavating in hard rock for trenches by blasting for laying pipes and stacking useful materials for measurements and disposing unserviceable materials within the intial lead of 50m and lift upto 1.50m(intial depth 0 m to 1.50m) and providing protection by earth filled cement bags during blasting to avoid damages to nearby structures(200 Nos. of earth filled cement bags for 10m3 blasting) (Ref. Item No. 1004 A of T C)						
	250mm DI pipe for gap closing	1	3392.000	0.900	1.200	0.05	183.168
	Total Quantity						183.168 cum
	Total Deducted Quantity						0.000 cum
	Net Total Quantity						183.168 cum



	Say 183.168 cum @ Rs 2734.83 / cum							<b>Rs 500933.34</b>
5	100.59.1 Cutting the bituminous / concrete roads with cutting machine for a minimum depth of 200mm along the sides of proposed alignment of the pipe to be laid without causing any damage to other utilities, including the charges for hire and conveyance of tools and plant, cost of consumables and charges for lighting, watching, ribbon fencing, caution boards, traffic diversion, and as per the direction of departmental officers etc. complete, before carrying out the demolition of bituminous / concrete road by mechanical means and carrying out the excavation.							
	250mm DI pipe for gap closing	1	3392.000				3392.000	
	Total Quantity							3392.000 metre
	Total Deducted Quantity							0.000 metre
	Net Total Quantity							3392.000 metre
	Say 3392.000 metre @ Rs 31.67 / metre							<b>Rs 107424.64</b>
6	50.2.25.1 Filling with contractor's own earth ( excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge							
	250mm DI pipe for gap closing	1	3392.000	1.080		0.05	183.168	
	Kerala Water Authority Total Quantity							183.168 cum
	Total Deducted Quantity							0.000 cum
	Net Total Quantity							183.168 cum
	Say 183.168 cum @ Rs 432.37 / cum							<b>Rs 79196.35</b>
7	100.8.2 Fencing 1.50m high with two rows of casuarina poles (girth 15cm to 24cm) tied with coir yarn on vertical casuarina pole (girth 15cm to 24cm) fixed at 1.5m intervals. NEW DATA (Prepared based on PWD SDB - Item No.1009)							
	250mm DI pipe for gap closing	1	3392.000				3392.000	
	Total Quantity							3392.000 metre
	Total Deducted Quantity							0.000 metre
	Net Total Quantity							3392.000 metre
	Say 3392.000 metre @ Rs 74.56 / metre							<b>Rs 252907.52</b>
8	100.14.4 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 250 mm dia Ductile Iron Class K-9 Pipes							

	Data derived from 18.72.18 in DAR							
	250mm DI pipe for gap closing	1	3392.000				3392.000	
	Total Quantity						3392.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						3392.000 metre	
	Say 3392.000 metre @ Rs 115.99 / metre						<b>Rs 393438.08</b>	
9	<p>100.37.8.1 Fabricating MS pipes of size 250mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.</p>							
	Initial reach of CWGM from Sump at UWSS to TDPA	1	260.000				260.000	
	Total Quantity						260.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						260.000 metre	
	Say 260.000 metre @ Rs 5786.76 / metre						<b>Rs 1504557.60</b>	
10	<p>100.37.8.3 Cutting 250 mm (ID) MS pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.</p>							
		21					21.000	
	Total Quantity						21.000 No	
	Total Deducted Quantity						0.000 No	
	Net Total Quantity						21.000 No	
	Say 21.000 No @ Rs 267.63 / No						<b>Rs 5620.23</b>	
11	<p>100.37.8.4 Welding 250mm (ID) MS pipes for making bends and other specials by gas/electric welding machine including cost of gas and welding rods ,all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.</p>							
		21					21.000	
	Total Quantity						21.000 No	
	Total Deducted Quantity						0.000 No	
	Net Total Quantity						21.000 No	
	Say 21.000 No @ Rs 991.86 / No						<b>Rs 20829.06</b>	

12	100.37.8.5 Grinding cut and weld edges of 250 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.		21				21.000	
		Total Quantity					21.000 No	
		Total Deducted Quantity					0.000 No	
		Net Total Quantity					21.000 No	
		Say 21.000 No @ Rs 127.99 / No					<b>Rs 2687.79</b>	
13	18.70.4 Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:250 mm dia pipes		680				680.000	
		Total Quantity					680.000 joint	
		Total Deducted Quantity					0.000 joint	
		Net Total Quantity					680.000 joint	
		Say 680.000 joint @ Rs 260.66 / joint					<b>Rs 177248.80</b>	
14	18.71.4 Providing and laying Double Flanged ( screwed / welded) Centrifugally (Spun) Cast Iron, Class B ( IS : 1536):250 mm dia C.I Double Flanged Pipe		18				18.000	
		Total Quantity					18.000 metre	
		Total Deducted Quantity					0.000 metre	
		Net Total Quantity					18.000 metre	
		Say 18.000 metre @ Rs 6810.48 / metre					<b>Rs 122588.64</b>	
15	od159884/2020_2021 Labour for cutting 250 mm dia D.I. pipe with steel saw.		36				36.000	
		Total Quantity					36.000 Each Cut	
		Total Deducted Quantity					0.000 Each Cut	
		Net Total Quantity					36.000 Each Cut	
		Say 36.000 Each Cut @ Rs 367.36 / Each Cut					<b>Rs 13224.96</b>	
16	100.35.4 Testing 250mm DI/CI pipeline with potable water to the required test pressure . 250 mm dia Observed Data derived from item no.1022 of PHED DATA							

	250mm DI pipe for gap closing	1	3392.000				3392.000		
	Double flanged CI pipe	1	18.000				18.000		
	Total Quantity						3410.000 metre		
	Total Deducted Quantity						0.000 metre		
	Net Total Quantity						3410.000 metre		
	Say 3410.000 metre @ Rs 39.93 / metre						<b>Rs 136161.30</b>		
17	od194941/2020_2021 Testing 250mm MS pipeline with potable water to the required test pressure . 250 mm dia								
		1	260.000				260.000		
	Total Quantity						260.000 metre		
	Total Deducted Quantity						0.000 metre		
	Net Total Quantity						260.000 metre		
	Say 260.000 metre @ Rs 38.89 / metre						<b>Rs 10111.40</b>		
18	100.31.2.6 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 250 mm diameter. Class II" Data derived from item no.18.31.5.2of DAR								
		2					2.000		
	Total Quantity						2.000 Nos		
	Total Deducted Quantity						0.000 Nos		
	Net Total Quantity						2.000 Nos		
	Say 2.000 Nos @ Rs 1968.49 / Nos						<b>Rs 3936.98</b>		
19	100.31.2.4 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 150 mm diameter. Class II" Data derived from item no.18.31.3.2of DAR								
	for scour	3					3.000		
	Total Quantity						3.000 Nos		
	Total Deducted Quantity						0.000 Nos		
	Net Total Quantity						3.000 Nos		
	Say 3.000 Nos @ Rs 1029.59 / Nos						<b>Rs 3088.77</b>		
20	100.32.2								

	Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 40 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR						
		6					6.000
	Total Quantity						6.000 Nos
	Total Deducted Quantity						0.000 Nos
	Net Total Quantity						6.000 Nos
	Say 6.000 Nos @ Rs 156.61 / Nos						<b>Rs 939.66</b>
21	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	Valve chambers	7	1.500	1.500	1.300		20.475
	Total Quantity						20.475 cum
	Total Deducted Quantity						0.000 cum
	Net Total Quantity						20.475 cum
	Say 20.475 cum @ Rs 231.15 / cum						<b>Rs 4732.80</b>
22	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)						
	PCC for chamber	7	1.500	1.500	0.100		1.575
	Anchor Blocks	180	0.900	0.600	0.600		58.320
	Total Quantity						59.895 cum
	Total Deducted Quantity						0.000 cum
	Net Total Quantity						59.895 cum
	Say 59.895 cum @ Rs 7614.98 / cum						<b>Rs 456099.23</b>
23	5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size)						
	Valve chamber Base and Cover slabs	2*7	1.500	1.500	0.200		6.300
	wall	7	1.35*4	0.150	0.900		5.104
	Man hole cover ((3.14*0.5*0.5*0.2)/4)	7				0.04	-0.280

						Total Quantity	11.404 cum	
						Total Deducted Quantity	-0.280 cum	
						Net Total Quantity	11.124 cum	
						Say 11.124 cum @ Rs 8633.74 / cum	<b>Rs 96041.72</b>	
24	5.9.2	Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.						
	outside of chamber	7	1.5*4		1.300		54.601	
	inside	7	1.2*4		0.900		30.241	
	anchor blocks	150	0.9+0.6+0.9+0.6		0.600		270.000	
						Total Quantity	354.842 sqm	
						Total Deducted Quantity	0.000 sqm	
						Net Total Quantity	354.842 sqm	
						Say 354.842 sqm @ Rs 525.91 / sqm	<b>Rs 186614.96</b>	
25	5.22.6	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more						
		1	11.12400		70.0		778.681	
						Total Quantity	778.681 kilogram	
						Total Deducted Quantity	0.000 kilogram	
						Net Total Quantity	778.681 kilogram	
						Say 778.681 kilogram @ Rs 78.62 / kilogram	<b>Rs 61219.90</b>	
26	100.98.118	Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.						
	For laying	1	3392.000				3392.000	
	Add 2.5 % for future maintenance	1	85.000				85.000	
						Total Quantity	3477.000 metre	
						Total Deducted Quantity	0.000 metre	
						Net Total Quantity	3477.000 metre	
						Say 3477.000 metre @ Rs 2803.95 / metre	<b>Rs 9749334.15</b>	
27	18.68.1	Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upt 600 mm dia						

	250mm Bend, 90 degree 48 kg/Each	4				0.48	1.920		
	250mm Bend, 45 degree 36 kg/Each	8				0.36	2.880		
	250mm Bend, 22.5 degree 32 kg/Each	31				0.32	9.920		
	250mm Bend, 11.25 degree 48 kg/Each	16				0.3	4.800		
	Tee 250*150*250, 45 kg/Each	1				0.45	0.450		
	Tee 250*80*250, 37 kg/Each	6				0.37	2.220		
	Total Quantity						22.190 quintal		
	Total Deducted Quantity						0.000 quintal		
	Net Total Quantity						22.190 quintal		
	Say 22.190 quintal @ Rs 21384.36 / quintal						<b>Rs 474518.95</b>		
28	100.98.441 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 40mm.								
		6					6.000		
	Kerala Water Authority Total Quantity						6.000 No		
	Total Deducted Quantity						0.000 No		
	Net Total Quantity						6.000 No		
	Say 6.000 No @ Rs 1421.70 / No						<b>Rs 8530.20</b>		
29	100.98.460 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 150mm.								
		3					3.000		
	Total Quantity						3.000 No		
	Total Deducted Quantity						0.000 No		
	Net Total Quantity						3.000 No		
	Say 3.000 No @ Rs 6770.65 / No						<b>Rs 20311.95</b>		
30	100.98.462 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 250mm.								
		2					2.000		
	Total Quantity						2.000 No		

							Total Deducted Quantity	0.000 No
							Net Total Quantity	2.000 No
							Say 2.000 No @ Rs 18345.20 / No	<b>Rs 36690.40</b>
Sl No	Description	No	L	B	D	CF	Quantity	Remark
<b>309-Road Restoration Works (Cost Index:38.91 %)</b>								
1	od125152/2020_2021 Road restoration charges for 20mm open graded chipping carpet surface cutting							
	PWD road from KWA office to Bypass road	1	450.000	0.850			382.500	
	Municipal road at vengaloor	1	150.000	0.750			112.500	
	for distribution	1	250.000	0.750			187.500	
							Total Quantity	682.500 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	682.500 sqm
							Say 682.500 sqm @ Rs 2759.44 / sqm	<b>Rs 1883317.80</b>
2	od125153/2020_2021 Road restoration charges for PWD BM BC road surface cutting							
	Bypass road and TM road	1	1050.000	0.800			840.000	
	Oonnukal road	1	200.000	0.950			190.000	
							Total Quantity	1030.000 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	1030.000 sqm
							Say 1030.000 sqm @ Rs 3633.49 / sqm	<b>Rs 3742494.70</b>
3	od125154/2020_2021 Road restoration - Berm cutting							
	By-Pass road	1	1750.000	0.500			875.000	
	Distribution	1	5500.000	0.500			2750.000	
							Total Quantity	3625.000 sqm
							Total Deducted Quantity	0.000 sqm
							Net Total Quantity	3625.000 sqm
							Say 3625.000 sqm @ Rs 321.29 / sqm	<b>Rs 1164676.25</b>
4	od125155/2020_2021 Road restoration charges for 80mm thick inter locking tile road surface cutting							



	Distribution lines	1	250.000	0.750			187.500	
	Total Quantity						187.500 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						187.500 sqm	
	Say 187.500 sqm @ Rs 3323.34 / sqm						<b>Rs 623126.25</b>	
5	od125156/2020_2021 Road restoration charges for concrete road surface							
	Distribution networks	1	300.000	0.750			225.000	
	Total Quantity						225.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						225.000 sqm	
	Say 225.000 sqm @ Rs 4886.61 / sqm						<b>Rs 1099487.25</b>	
	Total						<b>32130553.64</b>	
	Centage @						<b>0.0%</b>	
	Centage Amount						<b>0.00</b>	
	Provision for GST payments (in %) @						<b>12.0%</b>	
	Amount reserved for GST payments						<b>3855666.44</b>	
	Total & Centage						<b>35986220.07</b>	
	Lumpsum for round off						<b>3779.93</b>	
	<b>GRAND TOTAL Rs</b>						<b>35990000.00</b>	
	<b>Rounded Grand Total Rs</b>						<b>3,59,90,000</b>	
	<b>Rupees Three Crore Fifty Nine Lakh Ninety Thousand Only</b>							