



Tel : 0495 - 2371046

KERALA WATER AUTHORITY

Office of the Superintending Engineer,
P.H. Circle, Kozhikode,
Malaparamba P.O,
Pin – 673 009.

No. 2742/D6/2022/PHC-KKD

Dated: 03.01.2023

From

Superintending Engineer

To

M/s. Midland Engineering & Contracting Company,
Varikkodan Office Building, Valiyavaramba Road,
Down Hill, Malappuram-676 519

Sir,

Sub:- Jal Jeevan Mission (JJM)-JJM PHASE II 2021-22: CWSS to Karassery,
Kodiyathur, Thiruvambady And Koodaranjhi Grama Panchayaths in Kozhikode
District: Part I: Supplying, Laying, Testing and Commissioning of CWPM and
CWGM, Construction of CW pump house, Supply and erection of Transformer &
pump sets - Work Order Issuing -Reg:-

Ref:- 1. AS Order Number:- GO (Rt) No.489/2021/WRD,Dated:18-09-2021 Rs.
2949000000.00.
2. TS : ORDER No. WRD/KWA-CE(NR)/EST_TS/3579/2022_5_1_1 Dated: 18-10-
2022 for Rs.399200000.00 ,TS Reg.No.(3413/2022-2023) of CE,NR,KKD.
3. e tender no:- SE/PHC/KKD/48/2022-23, Dtd:-19/10/2022.
4. Tender Approval Proceedings No:
KWA/CE/NR/D3/3579/2022/JJMPH2/TNo.48/Karassery Part 1 Dtd:-28/12/2022 of
CE,NR,KKD.

With reference to the above, you are hereby informed that your tender (item rate) for the above work is accepted consequent to approval vide ref (4) and awarded at an amount of **₹38,92,78,152.00 (Rupees Thirty Eight Crore Ninety Two Lakh Seventy Eight Thousand One Hundred and Fifty Two Only)** negotiated, reduced amount by yourself ;which is 9.99 % above the tendered PAC of ₹35,39,07,869.00.

You are directed to attend this office on or before **17/01/2023** with required Kerala Stamp paper



worth ₹ 1,00,000/- (0.1% of accepted PAC, max of One Lakh) to execute agreement and to start the work after getting necessary instructions from the **Executive Engineer, PH Division, Kozhikode.**

1. Before Executing the agreement you should provide **Performance guarantee of ₹ 1,16,78,500/- (Rupees One Crore Sixteen Lakh Seventy Eight Thousand Five Hundred Only)** At least fifty percent (50%) of this shall be in the form of Treasury Fixed Deposit and the balance in the form of Bank Guarantee and produce the pass book duly pledged in favour Superintending Engineer, PH Circle, Kozhikode for fulfilment of contract. It is informed that no interest will be payable by KWA on the security deposit or amount payable to the contractor under the contract. The EMD furnished with tender will be released on receipt of the Performance guarantee and on written request. You are not allowed to convert the EMD submitted by you as Performance Guarantee.
2. The Contractor shall also provide an Additional Performance guarantee for **₹1,44,500/- (Rupees One Lakh Forty Four Thousand Five Hundred Only)** towards under quoted items in tender(item rate) before execution of agreement. Fifty percent (50%) of this shall be in the form of Treasury Fixed Deposit and rest in the form of Bank Guarantee issued from any Nationalized Bank/Scheduled Bank/Kerala Financial Corporation or any other forms prescribed in the Kerala PWD Manual.
3. Any failure in this direction will be liable to result in the forfeiture of your offer, Permanent Earnest Money and the cancellation of the proposed contract and the contractor shall be liable to pay the Authority the entire loss that may be caused to Authority by the re-tender or the rearrangement of the work or otherwise consequent on the contractor's failure to execute the agreement or execute the work as provided for in the clause of the Notice Inviting Tender and all such loss shall be recovered from the contractor under the provision of the Revenue Recovery Act or otherwise.
4. It must be understood that on no account the rates once fixed will be increased. Payment will be made as per the availability of funds for the scheme.
5. The work should be completed in all respects within **6 Months** from the date of work order. The commissioned scheme shall be maintained for a further period of 24 months from the date of commissioning of the work.
6. All the terms and conditions of the NIT and Special conditions shall be binding on the Contract.
7. The contractor shall take over charge of the site within 10 days after executing agreement and commence the work.
8. The Contractor should complete the work in all respect as per scope of work within the accepted PAC of **₹38,92,78,152.00.**
9. The contractor shall engage a licensed plumber to lay service lines in FHTCs as per the judgement in WPC18399/2020 dated 08/09/2020 of the High Court of Kerala.
10. Payment will be made to the contractor for the total value of the work plus applicable GST.
11. 10% of Accepted PAC is to be secured by beneficiaries. This can be in the form of cash, kind, labour or materials. Hence if beneficiaries contribution is in any form other than cash such



items will be accounted accordingly. In such case measurements will be made separately and the contractor will be entitled for payments of such measurements.

12. Clause 5 of Government order No. G.O(P)No.54/2019/Fin dated:-04/05/2019 will be applicable to this work.
13. In case you desire to file any appeal on this order, you may approach the following higher authorities in succession. (1) Chief Engineer (Northern Region), KWA, Kozhikode, (P.O). Malapparamba. 673019 (2) Managing Director, KWA, Jalabhavan, (P.O) Vellyampalam, Thiruvananthapuram.

Yours faithfully,

Dr.Gireesan P

Superintending Engineer

Copy To

- 1) Chief Engineer (NR), Kerala Water Authority, Kozhikode for favour of information
- 2) Executive Engineer, P H Division, KWA, Kozhikode for necessary action. The date of handing over the site to the contractor shall be reported to this office.
- 3) RAO.

Encl:

1. Accepted Schedule.



<u>KERALA WATER AUTHORITY, P.H. CIRCLE, KOZHIKODE</u>						
<u>Accepted Schedule</u>						
Jal Jeevan Mission (JJM)-JJM PHASE II 2021-22: CWSS to Karassery, Kodyathur,Thiruvambady And Koodaranjhi Grama Panchayaths in Kozhikode District: Part I: Supplying, Laying, Testing and Commissioning of CWPM and CWGM, Construction of CW pump house, Supply and erection of Transformer & pump sets.						
e-Tender No : SE/PHC/KKD/48/2022-23						
Name of Contractor:- M/s.Mid land Engineering & Contracting Company, Varikkodan Office Building, Valiyavaramba Road, Down Hill, Malappuram-676 519					Tendered PAC: Rs.	353,907,869
					Accepted PAC: Rs.	389,278,152.42
					Time of Completion	6 Months
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT With All Taxes(Except GST) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13.00	53	55
1	Appendix A:Supplying, Laying, Testing and Commissioning of CWPM from CWPH at Koolimadu to the Proposed 50LL OHSR at Ellangal : Cost of Materials					
1.001	100.98.124:Supply of DI K9 Pipe Conforming to IS 8329/2000, 600mm Dia.	8927.00	metre	13178.781	117646977.99	Rupees Eleven Crore Seventy Six Lakh Forty Six Thousand Nine Hundred Seventy
1.002	100.98.437:Supply of CI Air Valve, Conforming to IS 14848 - 2000, Kinetic Air Valve Type DK, Size 100mm.	10.0000	no	19760.136	197601.36	Rupees One Lakh Ninety Seven Thousand Six Hundred One and Thirty Six Paise Only
1.003	100.98.482:Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Hand Wheel PN 1.6, Size 100mm.	10.0000	no	10183.589	101835.89	Rupees One Lakh One Thousand Eight Hundred Thirty Five and Eighty Nine Paise
1.004	100.98.464:Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 350mm.	4.0000	no	85587.216	342348.86	Rupees Three Lakh Forty Two Thousand Three Hundred Forty Eight and Eighty Six
1.005	OD36912/2022-2023:Supply of CI D/F Non Return Valve, Conforming to IS 5312 Part I - 1984, PN 1.6, Size 600mm.	5.0000	no	204424	1022120.00	Rupees Ten Lakh Twenty Two Thousand One Hundred Twenty Only
2	Appendix B: Supplying, Laying, Testing and Commissioning of CWPM from CWPH at Koolimadu to the Proposed 50LL OHSR at Ellangal : Cost of Materials : Working charge					
2.001	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	7000.0000	metre	33.693	235851.00	Rupees Two Lakh Thirty Five Thousand Eight Hundred Fifty One Only
2.002	OD37002/2022-2023:Dismantling manually / by mechanical means and disposal of material within 50 metres lead as per	7000.0000	sqm	97.262	680834.00	Rupees Six Lakh Eighty Thousand Eight Hundred Thirty Four Only
2.003	OD37050/2022-2023:Demolishing cement concrete manually / by mechanical means including disposal of material within 50	15.0000	cum	620.829	9312.44	Rupees Nine Thousand Three Hundred Twelve and Forty Three Paise Only
2.004	100.1.1:Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the	17641.9840	cum	615.922	10866086.07	Rupees One Crore Eight Lakh Sixty Six Thousand Eighty Six and Six Paise Only
2.005	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 1.5m, including getting out the	4704.5290	cum	895.969	4215112.14	Rupees Forty Two Lakh Fifteen Thousand One Hundred Twelve and Fourteen Paise
2.006	100.2.2:Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10m2 on plan), including dressing	1176.1320	cum	1173.172	1379805.13	Rupees Thirteen Lakh Seventy Nine Thousand Eight Hundred Five and Thirteen
2.007	100.8.1:Fencing one side of trenches, 1.50m height with two rows of 10cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2m intervals.	4460.0000	metre	30.965	138103.90	Rupees One Lakh Thirty Eight Thousand One Hundred Three and Ninety Paise Only



2.008	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.	890.0000	metre	106.425	94718.25	Rupees Ninety Four Thousand Seven Hundred Eighteen and Twenty Five Paise
2.009	100.14.10:Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials: 600mm diameter Ductile Iron Class	8927.0000	metre	649.701	5799880.83	Rupees Fifty Seven Lakh Ninety Nine Thousand Eight Hundred Eighty and Eighty
2.01	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	50.0000	quintal	22272.47	1113623.50	Rupees Eleven Lakh Thirteen Thousand Six Hundred Twenty Three and Fifty Paise
2.011	18.69.1:Providing and laying D.I Specials of Class K - 12 suitable for mechanical jointing as per IS : 9523 :Upto 600 mm dia	10.0000	quintal	23405.569	234055.69	Rupees Two Lakh Thirty Four Thousand Fifty Five and Sixty Nine Paise Only
2.012	18.70.10: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:600 mm dia pipes	1780.0000	joint	1210.297	2154328.66	Rupees Twenty One Lakh Fifty Four Thousand Three Hundred Twenty Eight and
2.013	OD37148/2022-2023:Labour for cutting C.I. pipe with steel saw.
600 mm diameter C.I. pipe	220.0000	no	1411.74	310582.80	Rupees Three Lakh Ten Thousand Five Hundred Eighty Two and Eighty Paise
2.014	100.37.14.1:In situ fabrication of M.S. pipes of size 600mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting	230.0000	metre	14954.665	3439572.95	Rupees Thirty Four Lakh Thirty Nine Thousand Five Hundred Seventy Two and
2.015	100.37.14.2:Fabricating M.S. flanges of diameter 600mm using 16mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel	28.0000	no	8507.576	238212.13	Rupees Two Lakh Thirty Eight Thousand Two Hundred Twelve and Twelve Paise
2.016	100.37.14.3:Cutting 600mm (I.D.) M.S. 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	84.0000	no	674.707	56675.39	Rupees Fifty Six Thousand Six Hundred Seventy Five and Thirty Eight Paise Only
2.017	100.37.14.4:Welding 600mm (I.D.) M.S. 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.,	108.0000	no	2550.394	275442.55	Rupees Two Lakh Seventy Five Thousand Four Hundred Forty Two and Fifty Five
2.018	100.37.14.5:Grinding cut and weld edges of 600mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick	84.0000	no	479.039	40239.28	Rupees Forty Thousand Two Hundred Thirty Nine and Twenty Seven Paise Only
2.019	100.35.10:Testing 600mm DI/CI pipeline with potable water to the required test pressure. 600 mm dia	8927.0000	metre	146.705	1309635.54	Rupees Thirteen Lakh Nine Thousand Six Hundred Thirty Five and Fifty Three Paise
2.02	100.31.1.8:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid	4.0000	no	3834.831	15339.32	Rupees Fifteen Thousand Three Hundred Thirty Nine and Thirty Two Paise Only
2.021	100.31.2.12:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid	5.0000	no	11249.502	56247.51	Rupees Fifty Six Thousand Two Hundred Forty Seven and Fifty One Paise Only
2.022	100.32.5:Conveying and fixing C. I. Double Acting Air Valve of approved quality with bolts, nuts, rubber insertions etc., complete, but excluding the cost of air valve (tail pieces, if required, will be	10.0000	no	372.46	3724.60	Rupees Three Thousand Seven Hundred Twenty Four and Sixty Paise Only
2.023	100.31.1.2:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid	10.0000	no	981.299	9812.99	Rupees Nine Thousand Eight Hundred Twelve and Ninety Nine Paise Only
2.024	OD37502/2022-2023:Supplying an electro - magnetic flow meter of size 600 mm bore dia conforming to protection level of IP68 for Flow Sensor and IP- 67 for transmitter and having an	1.0000	no	265650	265650.00	Rupees Two Lakh Sixty Five Thousand Six Hundred Fifty Only
2.025	OD37514/2022-2023:Conveying and fixing 600mm dia electro magnetic flow meter	1.0000	no	9064.198	9064.20	Rupees Nine Thousand Sixty Four and Nineteen Paise Only
2.026	2.6.1:Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of	449.9960	cum	236.907	106607.20	Rupees One Lakh Six Thousand Six Hundred Seven and Twenty Paise Only
2.027	4.1.8:Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded	16.5680	cum	7543.36	124978.39	Rupees One Lakh Twenty Four Thousand Nine Hundred Seventy Eight and Thirty
2.028	5.1.3:Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 (1	17.6400	cum	9506.574	167695.97	Rupees One Lakh Sixty Seven Thousand Six Hundred Ninety Five and Ninety Six
2.029	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	266.2110	cum	10056.288	2677094.48	Rupees Twenty Six Lakh Seventy Seven Thousand Ninety Four and Forty Eight
2.03	5.9.1:Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	601.8000	sqm	371.162	223365.29	Rupees Two Lakh Twenty Three Thousand Three Hundred Sixty Five and Twenty Nine
2.031	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.	367.2000	sqm	793.87	291509.06	Rupees Two Lakh Ninety One Thousand Five Hundred Nine and Six Paise Only



2.032	5.9.3:Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	75.4000	sqm	902.946	68082.13	Rupees Sixty Eight Thousand Eighty Two and Twelve Paise Only
2.033	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	17031.0600	kilogram	108.812	1853183.70	Rupees Eighteen Lakh Fifty Three Thousand One Hundred Eighty Three and
2.034	100.41.33:Supplying and fixing 500mm dia C.I. manhole cover with frame (medium duty) charges including all cost, labour charges etc., complete.	20.0000	no	8309.521	166190.42	Rupees One Lakh Sixty Six Thousand One Hundred Ninety and Forty Two Paise Only
3	Appendix C:Investigation, Design, Construction and Commissioning of 2nos Steel Bridge for Pipe line River crossing at two location.					
3.001	OD38056/2022-2023:Providing and constructing temporary island 10m diameter for construction of well/pipe foundation
	2.0000	no	545725.444	1091450.89	Rupees Ten Lakh Ninety One Thousand Four Hundred Fifty and Eighty Eight Paise Only
3.002	OD38057/2022-2023:Providing and constructing one span service road to reach island location from one pier location to another pier location	80.0000	metre	4568.454	365476.32	Rupees Three Lakh Sixty Five Thousand Four Hundred Seventy Six and Thirty Two Paise Only
3.003	20.2.3:Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite	400.0000	metre	2353.252	941300.80	Rupees Nine Lakh Forty One Thousand Three Hundred and Eighty Paise Only
3.004	20.6.1.1:Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge.	20.0000	per test	69729.022	1394580.44	Rupees Thirteen Lakh Ninety Four Thousand Five Hundred Eighty and Forty Four Paise Only
3.005	5.9.1:Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	59.2000	sqm	371.162	21972.79	Rupees Twenty One Thousand Nine Hundred Seventy Two and Seventy Nine Paise Only
3.006	5.9.5:Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers	169.6000	sqm	719.268	121987.85	Rupees One Lakh Twenty One Thousand Nine Hundred Eighty Seven and Eighty Five Paise Only
3.007	5.9.6:Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts	527.5200	sqm	955.933	504273.78	Rupees Five Lakh Four Thousand Two Hundred Seventy Three and Seventy Seven Paise Only
3.008	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	15290.7000	kilogram	108.812	1663811.65	Rupees Sixteen Lakh Sixty Three Thousand Eight Hundred Eleven and Sixty Four Paise Only
3.009	5.33.2:Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering,	152.9040	cum	12248.522	1872848.01	Rupees Eighteen Lakh Seventy Two Thousand Eight Hundred Forty Eight Only
3.01	13.7.1:12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)	756.3200	sqm	444.114	335892.30	Rupees Three Lakh Thirty Five Thousand Eight Hundred Ninety Two and Thirty Paise Only
3.011	13.44.1:Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)	756.3220	sqm	118.855	89892.65	Rupees Eighty Nine Thousand Eight Hundred Ninety Two and Sixty Five Paise Only
3.012	OD40810/2022-2023:Structural design trial boring and soil testing for construction of the bridge	6.0000	no	55000	330000.00	Rupees Three Lakh Thirty Thousand Only
3.013	10.2:Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	89434.4100	kg	132.594	11858466.16	Rupees One Crore Eighteen Lakh Fifty Eight Thousand Four Hundred Sixty Six and Fifteen Paise Only
4	Appendix D:Supplying, Laying, Testing and Commissioning of CWGM from 50LL OHSR at Ellengal to OHSR at Thiruvambadi and Sump at Koodaranhi : Cost of Materials					
4.001	100.98.123:Supply of DI K9 Pipe Conforming to IS 8329/2000, 500mm Dia.	2561.0000	metre	10932.029	27996926.27	Rupees Two Crore Seventy Nine Lakh Ninety Six Thousand Nine Hundred Twenty Six and Twenty Six Paise Only



4.002	100.98.106:Supply of DI K7 Pipe Conforming to IS 8329/2000, 350mm Dia.	6610.0000	metre	4619.56	30535291.60	Rupees Three Crore Five Lakh Thirty Five Thousand Two Hundred Ninety One and Sixty Paise Only
4.003	100.98.118:Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.	4860.0000	metre	3835.095	18638561.70	Rupees One Crore Eighty Six Lakh Thirty Eight Thousand Five Hundred Sixty One and Seventy Paise Only
4.004	100.98.437:Supply of CI Air Valve, Conforming to IS 14848 - 2000, Kinetic Air Valve Type DK, Size 100mm.	30.0000	no	19760.136	592804.08	Rupees Five Lakh Ninety Two Thousand Eight Hundred Four and Eight Paise Only
4.005	100.98.458:Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 100mm.	30.0000	no	9904.345	297130.35	Rupees Two Lakh Ninety Seven Thousand One Hundred Thirty and Thirty Five Paise Only
4.006	100.98.474:Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.0, Size 250mm.	9.0000	no	35338.523	318046.71	Rupees Three Lakh Eighteen Thousand Forty Six and Seventy Paise Only
4.007	100.98.476:Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.0, Size 350mm.	3.0000	no	79810.962	239432.89	Rupees Two Lakh Thirty Nine Thousand Four Hundred Thirty Two and Eighty Eight Paise Only
4.008	100.98.479:Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.0, Size 500mm.	2.0000	no	187878.438	375756.88	Rupees Three Lakh Seventy Five Thousand Seven Hundred Fifty Six and Eighty Seven Paise Only
5	Appendix E:Supplying, Laying, Testing and Commissioning of CWGM from 50 LL OHSR at Ellengal to OHSR at Thiruvambadi and sump at koodaranhi:Working charges					
5.001	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	12700.0000	metre	33.693	427901.10	Rupees Four Lakh Twenty Seven Thousand Nine Hundred One and Ten Paise Only
5.002	OD40849/2022-2023:Dismantling manually / by mechanical means and disposal of material within 50 metres lead as per direction of Engineer -in-Charge:Bituminous road

	10160.0000	sqm	97.262	988181.92	Rupees Nine Lakh Eighty Eight Thousand One Hundred Eighty One and Ninety Two Paise Only
5.003	OD43495/2022-2023:Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in-Charge. Nominal concrete 1:3:6 or richer mix (i/c	36.0000	cum	620.829	22349.84	Rupees Twenty Two Thousand Three Hundred Forty Nine and Eighty Four Paise Only
5.004	100.1.1:Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth,	14449.8340	cum	616.922	8914420.49	Rupees Eighty Nine Lakh Fourteen Thousand Four Hundred Twenty and Forty Nine Paise Only
5.005	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 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth,	4128.5240	cum	894.969	3694901.00	Rupees Thirty Six Lakh Ninety Four Thousand Nine Hundred and Ninety Nine Paise Only
5.006	100.2.2:Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5m in width or 10m2 on plan), including dressing of sides and ramming of bottoms, lift up to 1.5m, including getting out the excavated soil and	2064.2620	cum	1173.172	2421734.38	Rupees Twenty Four Lakh Twenty One Thousand Seven Hundred Thirty Four and Thirty Seven Paise Only
5.007	100.8.1:Fencing one side of trenches, 1.50m height with two rows of 10cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2m intervals.	7015.5000	metre	30.965	217234.96	Rupees Two Lakh Seventeen Thousand Two Hundred Thirty Four and Ninety Five Paise Only
5.008	100.8.2:Fencing 1.50m high with two rows of casuarina poles (girth 15cm to 24cm) tied with coir yam on vertical casuarina pole (girth 15cm to 24cm) fixed at 1.5m intervals.	1403.1000	metre	106.425	149324.92	Rupees One Lakh Forty Nine Thousand Three Hundred Twenty Four and Ninety One Paise Only
5.009	100.14.4:Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials: 250mm diameter Ductile Iron Class K-9 Pipes.	4860.0000	metre	180.521	877332.06	Rupees Eight Lakh Seventy Seven Thousand Three Hundred Thirty Two and Six Paise Only



5.01	100.14.6:Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials: 350mm diameter Ductile Iron Class K-9 Pipes.	6610.0000	metre	301.883	1995446.63	Rupees Nineteen Lakh Ninety Five Thousand Four Hundred Forty Six and Sixty Three Paise Only
5.011	100.14.9:Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials: 500mm diameter Ductile Iron Class K-9 Pipes.	2561.0000	metre	489.753	1254257.43	Rupees Twelve Lakh Fifty Four Thousand Two Hundred Fifty Seven and Forty Three Paise Only
5.012	18.68.1:Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upto 600 mm dia	75.0000	quintal	22272.47	1670435.25	Rupees Sixteen Lakh Seventy Thousand Four Hundred Thirty Five and Twenty Five Paise Only
5.013	18.69.1:Providing and laying D.I Specials of Class K - 12 suitable for mechanical jointing as per IS : 9523 :Upto 600 mm dia	10.0000	quintal	23405.569	234055.69	Rupees Two Lakh Thirty Four Thousand Fifty Five and Sixty Nine Paise Only
5.014	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	970.0000	joint	349.789	339295.33	Rupees Three Lakh Thirty Nine Thousand Two Hundred Ninety Five and Thirty Three Paise Only
5.015	18.70.6: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:350 mm dia pipes	1440.0000	joint	484.572	697783.68	Rupees Six Lakh Ninety Seven Thousand Seven Hundred Eighty Three and Sixty Eight Paise Only
5.016	18.70.9: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:500 mm dia pipes	558.0000	joint	925.023	516162.83	Rupees Five Lakh Sixteen Thousand One Hundred Sixty Two and Eighty Three Paise Only
5.017	OD40921/2022-2023:Labour for cutting D.I. pipe with steel saw.
250 mm diameter D.I. pipe	60.0000	Each Cut	592.911	35574.66	Rupees Thirty Five Thousand Five Hundred Seventy Four and Sixty Six Paise Only
5.018	OD40922/2022-2023:Labour for cutting D.I. pipe with steel saw.
350 mm diameter D.I. pipe	160.0000	Each Cut	808.555	129368.80	Rupees One Lakh Twenty Nine Thousand Three Hundred Sixty Eight and Eighty Paise Only
5.019	OD40923/2022-2023:Labour for cutting D.I. pipe with steel saw.
500 mm diameter D.I. pipe	120.0000	Each Cut	1182.632	141915.84	Rupees One Lakh Forty One Thousand Nine Hundred Fifteen and Eighty Four Paise Only
5.02	100.37.8.1:In situ fabrication of M.S. pipes of size 250mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. 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	40.0000	metre	7596.05	303842.00	Rupees Three Lakh Three Thousand Eight Hundred Forty Two Only
5.021	100.37.8.2:Fabricating M.S. flanges of diameter 250mm using 12mm thick M.S. plate including cost and conveyance charges of M.S. 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	30.0000	no	2697.739	80932.17	Rupees Eighty Thousand Nine Hundred Thirty Two and Seventeen Paise Only
5.022	100.37.8.3:Cutting 250mm (I.D.) M.S. 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 M.S. plates.	90.0000	no	291.346	26221.14	Rupees Twenty Six Thousand Two Hundred Twenty One and Fourteen Paise Only
5.023	100.37.8.4:Welding 250mm (I.D.) M.S. 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 M.S. plates.	120.0000	no	1101.298	132155.76	Rupees One Lakh Thirty Two Thousand One Hundred Fifty Five and Seventy Six Paise Only
5.024	100.37.8.5:Grinding cut and weld edges of 250mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.	120.0000	no	206.866	24823.92	Rupees Twenty Four Thousand Eight Hundred Twenty Three and Ninety Two Paise Only
5.025	100.37.10.1:In situ fabrication of M.S. pipes of size 350mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. 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	40.0000	metre	9697.952	387918.08	Rupees Three Lakh Eighty Seven Thousand Nine Hundred Eighteen and Eight Paise Only
5.026	100.37.10.2:Fabricating M.S. flanges of diameter 350mm using 12mm thick M.S. plate including cost and conveyance charges of M.S. 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	30.0000	no	3878.16	116344.80	Rupees One Lakh Sixteen Thousand Three Hundred Forty Four and Eighty Paise Only



5.027	100.37.10.3:Cutting 350mm (I.D.) M.S. 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 M.S. plates.	90.0000	no	400.873	36078.57	Rupees Thirty Six Thousand Seventy Eight and Fifty Seven Paise Only
5.028	100.37.10.4:Welding 350mm (I.D.) M.S. 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 M.S. plates.	120.0000	no	1515.305	181836.60	Rupees One Lakh Eighty One Thousand Eight Hundred Thirty Six and Sixty Paise Only
5.029	100.37.10.5:Grinding cut and weld edges of 350mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.	120.0000	no	284.614	34153.68	Rupees Thirty Four Thousand One Hundred Fifty Three and Sixty Eight Paise Only
5.03	100.37.13.1:In situ fabrication of M.S. pipes of size 500mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. 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	40.0000	metre	12851.784	514071.36	Rupees Five Lakh Fourteen Thousand Seventy One and Thirty Six Paise Only
5.031	100.37.13.2:Fabricating M.S. flanges of diameter 500mm using 16mm thick M.S. plate including cost and conveyance charges of M.S. 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	30.0000	no	6902.863	207085.89	Rupees Two Lakh Seven Thousand Eighty Five and Eighty Nine Paise Only
5.032	100.37.13.3:Cutting 500mm (I.D.) M.S. 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 M.S. plates.	90.0000	no	565.169	50865.21	Rupees Fifty Thousand Eight Hundred Sixty Five and Twenty One Paise Only
5.033	100.37.13.4:Welding 500mm (I.D.) M.S. 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 M.S. plates.	120.0000	no	2136.376	256365.12	Rupees Two Lakh Fifty Six Thousand Three Hundred Sixty Five and Twelve Paise Only
5.034	100.37.13.5:Grinding cut and weld edges of 500mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.	120.0000	no	401.269	48152.28	Rupees Forty Eight Thousand One Hundred Fifty Two and Twenty Eight Paise Only
5.035	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	4860.0000	metre	56.342	273822.12	Rupees Two Lakh Seventy Three Thousand Eight Hundred Twenty Two and Twelve Paise Only
5.036	100.35.6:Testing 350mm DI/CI pipeline with potable water to the required test pressure. 350 mm dia Observed Data derived from item no.1024 of PHED DATA	6610.0000	metre	75.075	496245.75	Rupees Four Lakh Ninety Six Thousand Two Hundred Forty Five and Seventy Five Paise Only
5.037	100.35.9:Testing 500mm DI/CI pipeline with potable water to the required test pressure. 500 mm dia Observed Data derived from item no.1028 of PHED DATA	2561.0000	metre	120.868	309542.95	Rupees Three Lakh Nine Thousand Five Hundred Forty Two and Ninety Four Paise Only
5.038	100.31.1.6:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 250mm diameter, Class I.	9.0000	no	2444.101	21996.91	Rupees Twenty One Thousand Nine Hundred Ninety Six and Ninety Paise Only
5.039	100.31.1.8:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 350mm diameter, Class I.	3.0000	no	3834.831	11504.49	Rupees Eleven Thousand Five Hundred Four and Forty Nine Paise Only
5.04	100.31.1.11:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 500mm diameter, Class I.	2.0000	no	7388.139	14776.28	Rupees Fourteen Thousand Seven Hundred Seventy Six and Twenty Seven Paise Only



5.041	100.32.5:Conveying and fixing C. I. Double Acting Air Valve of approved quality with bolts, nuts, rubber insertions etc., complete, but excluding the cost of air valve (tail pieces, if required, will be paid separately): 100mm Double Acting Air Valve.	30.0000	no	372.46	11173.80	Rupees Eleven Thousand One Hundred Seventy Three and Eighty Paise Only
5.042	100.31.1.2:Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 100mm diameter, Class I.	30.0000	no	981.299	29438.97	Rupees Twenty Nine Thousand Four Hundred Thirty Eight and Ninety Seven Paise Only
5.043	OD41027/2022-2023:Supplying an electro - magnetic flow meter suitable for pipeline of size 500 mm bore dia conforming to protection level of IP68 for Flow Sensor and IP- 67 for transmitter and having an accuracy level of 0.5% with LED/LCD Display unit.	1.0000	no	246674.989	246674.99	Rupees Two Lakh Forty Six Thousand Six Hundred Seventy Four and Ninety Eight Paise Only
5.044	OD41037/2022-2023:Conveying and fixing C.I. Conveying and fixing 500mm dia electro magnetic flow meter, excluding the cost of electro magnetic flow meter(500 mm diameter. &Data derived from item no.18.31.5.1 of DAR&Observed Data	2.0000	no	8222.236	16444.47	Rupees Sixteen Thousand Four Hundred Forty Four and Forty Seven Paise Only
5.045	OD41038/2022-2023:Supplying a Mechanical Flow Meter of Woltman type confirming to ISO 4064 Class B of ARAD/ZENNER/REYCHEM RPG/ITRON make having warranty at least two years and the flow	1.0000	no	82225	82225.00	Rupees Eighty Two Thousand Two Hundred Twenty Five Only
5.046	OD41046/2022-2023:Conveying and fixing C.I. Conveying and fixing 250mm dia electro magnetic flow meter, excluding the cost of electro magnetic flow meter(250 mm diameter. &Data derived from	2.0000	no	2444.145	4888.29	Rupees Four Thousand Eight Hundred Eighty Eight and Twenty Nine Paise Only
5.047	16.79:Providing , laying spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, for all leads	300.0000	cum	3441.526	1032457.80	Rupees Ten Lakh Thirty Two Thousand Four Hundred Fifty Seven and Eighty Paise Only
5.048	2.6.1:Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly	391.8840	cum	236.907	92840.06	Rupees Ninety Two Thousand Eight Hundred Forty and Six Paise Only
5.049	4.1.8:Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)	16.5200	cum	7543.36	124616.31	Rupees One Lakh Twenty Four Thousand Six Hundred Sixteen and Thirty Paise Only
5.05	5.1.3:Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	26.3760	cum	9506.574	250745.40	Rupees Two Lakh Fifty Thousand Seven Hundred Forty Five and Thirty Nine Paise Only
5.051	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	184.4060	cum	10056.288	1854439.84	Rupees Eighteen Lakh Fifty Four Thousand Four Hundred Thirty Nine and Eighty Four Paise Only
5.052	5.9.1:Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	468.4800	sqm	371.162	173881.97	Rupees One Lakh Seventy Three Thousand Eight Hundred Eighty One and Ninety Seven Paise Only
5.053	5.9.2:Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	621.9200	sqm	793.87	493723.63	Rupees Four Lakh Ninety Three Thousand Seven Hundred Twenty Three and Sixty Three Paise Only
5.054	5.9.3:Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	109.8400	sqm	902.946	99179.59	Rupees Ninety Nine Thousand One Hundred Seventy Nine and Fifty Eight Paise Only
5.055	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	11064.3600	kilogram	108.812	1203935.14	Rupees Twelve Lakh Three Thousand Nine Hundred Thirty Five and Fourteen Paise Only
5.056	100.41.33:Supplying and fixing 500mm dia C.I. manhole cover with frame (medium duty) charges including all cost, labour charges etc., complete.	60.0000	no	8309.521	498571.26	Rupees Four Lakh Ninety Eight Thousand Five Hundred Seventy One and Twenty Six Paise Only
6	Appendix F Panchayath road restoration as per MORD Specification					



6.001	OD96114/2022-2023:3.6. Excavation for roadway with hydraulic excavator 0.9 cum bucket capacity including cutting and loading in tippers and disposal with a lift up to 1.5 m and lead up to 1000 m, trimming of bottom and side slopes in accordance with requirements of lines, grades and	1056.0000	cum	59.444	62772.86	Rupees Sixty Two Thousand Seven Hundred Seventy Two and Eighty Six Paise Only
6.002	OD96115/2022-2023:Filling with quarry muck- Filling up low lying areas with local material/ quarry muck, levelling the top at site and consolidation by ramming etc. complete for improving the CBR value of sub grade -MORD Specification	528.0000	cum	1034.242	546079.78	Rupees Five Lakh Forty Six Thousand Seventy Nine and Seventy Seven Paise Only
6.003	OD96118/2022-2023:4.9. Wet Mix Macadam - Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying	528.0000	cum	3673.568	1939643.90	Rupees Nineteen Lakh Thirty Nine Thousand Six Hundred Forty Three and Ninety Paise Only
6.004	OD96117/2022-2023:5.1.1a. Prime Coat :- Low porosity - Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0 kg/sqm using mechanical means as per	3520.0000	sqm	97.262	342362.24	Rupees Three Lakh Forty Two Thousand Three Hundred Sixty Two and Twenty Four Paise Only
6.005	OD96119/2022-2023:5.2.3a. Tack Coat - Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification	5280.0000	sqm	17.644	93160.32	Rupees Ninety Three Thousand One Hundred Sixty and Thirty Two Paise Only
6.006	OD96120/2022-2023:5.9.1.2a. 20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder - Bitumen S-65- Providing, laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either	5280.0000	sqm	222.541	1175016.48	Rupees Eleven Lakh Seventy Five Thousand Sixteen and Forty Eight Paise Only
6.007	OD96121/2022-2023:5.12.A.3.2a. Seal Coat - Manual Means - Type C - Bitumen S-65 - Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A, Type B and Type C as per Technical Specification Clause 510-	5280.0000	sqm	94.424	498558.72	Rupees Four Lakh Ninety Eight Thousand Five Hundred Fifty Eight and Seventy Two Paise Only
6.008	12.8.1.C:Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications & RCC Grade M20 - Using Concrete Mixer - (Without formwork) &	51.0000	cum	8611.317	439177.17	Rupees Four Lakh Thirty Nine Thousand One Hundred Seventy Seven and Sixteen Paise Only
7	Appendix G: Provision for PWD Road Restoration Charge					
7.001	3.19.1:Loosening of the ground upto a level of 500 mm below the sub-grade level, watered, graded and compacted in layers to meet requirement of table 300-2 for Compacting original ground supporting sub-grade construction.	4032.0000	cum	73.997	298355.90	Rupees Two Lakh Ninety Eight Thousand Three Hundred Fifty Five and Ninety Paise Only
7.002	4.2.A.1:Construction of granular sub-base by providing graded material, spreading in uniform layers with a motor grader on a prepared surface, mixing by mix in-place method with rotavator at OMC, and compacting with a vibratory roller to achieve the desired density, complete as per clause	2226.0000	cum	3485.405	7758511.53	Rupees Seventy Seven Lakh Fifty Eight Thousand Five Hundred Eleven and Fifty Three Paise Only
7.003	4.12:Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course	2226.0000	cum	3589.682	7990632.13	Rupees Seventy Nine Lakh Ninety Thousand Six Hundred Thirty Two and Thirteen Paise Only
7.004	5.1.a:Providing and applying primer coat with bitumen emulsion (SS) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 - 1.0 kg/sqm using mechanical means.	14840.0000	sqm	80.806	1199161.04	Rupees Eleven Lakh Ninety Nine Thousand One Hundred Sixty One and Four Paise Only
7.005	5.2.a:Providing and applying tack coat with bitumen emulsion(RS) using emulsion pressure distributor at the rate of 0.20 - 0.30 kg per sqm on the prepared bituminous surface cleaned with mechanical broom.	47500.0000	sqm	13.123	623342.50	Rupees Six Lakh Twenty Three Thousand Three Hundred Forty Two and Fifty Paise Only
7.006	5.3.2.a:Providing and laying bituminous macadam with 80-100 TPH hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading premixed with a bituminous binder (VG 30), transported to the site, laid over a previously prepared surface with	940.0000	cum	9493.583	8923968.02	Rupees Eighty Nine Lakh Twenty Three Thousand Nine Hundred Sixty Eight and Two Paise Only
7.007	5.6.2.a:Providing and laying bituminous concrete with 80-100 TPH hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with a bituminous binder(NRMB) @ 5.4 percent of mix and filler, transporting the hot mix to work	564.0000	cum	14573.834	8219642.38	Rupees Eighty Two Lakh Nineteen Thousand Six Hundred Forty Two and Thirty Seven Paise Only
7.008	5.7.1:Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.09 mm (Type-A) aggregates using viscosity grade bitumen (VG - 30) to the required line, grade, and level to serve as wearing course on a previously prepared base,	9900.0000	sqm	230.285	2279821.50	Rupees Twenty Two Lakh Seventy Nine Thousand Eight Hundred Twenty One and Fifty Paise Only



7.009	8.35:Providing and fixing reflective road studs (Raised Pavement Marker) of ' category A'; made out of ASA/HIPS/ABS moulded body with shanks and conforming to ASTM D 4280, strong enough to support a load of more than 13.635 T when tested in accordance with	3400.0000	no	220.924	751141.60	Rupees Seven Lakh Fifty One Thousand One Hundred Forty One and Sixty Paise Only
7.010	8.13:Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads on Bituminous Surface @ 250 gms per sqm area, the thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level,	1020.0000	sqm	557.667	568820.34	Rupees Five Lakh Sixty Eight Thousand Eight Hundred Twenty and Thirty Four Paise Only
8	Appendix H:River Protection Work					
8.001	2.6.1:Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil	68.0000	cum	236.907	16109.68	Rupees Sixteen Thousand One Hundred Nine and Sixty Seven Paise Only
8.002	7.1.1:Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	199.0000	cum	7976.912	1587405.49	Rupees Fifteen Lakh Eighty Seven Thousand Four Hundred Five and Forty Eight Paise Only
8.003	5.9.5:Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers	22.3500	sqm	719.268	16075.64	Rupees Sixteen Thousand Seventy Five and Sixty Three Paise Only
8.004	5.33.2:Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level	13.3600	cum	12248.522	163640.25	Rupees One Lakh Sixty Three Thousand Six Hundred Forty and Twenty Five Paise Only
8.005	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	1068.8000	kilogram	108.812	116298.27	Rupees One Lakh Sixteen Thousand Two Hundred Ninety Eight and Twenty Six Paise Only
9	Appendix I:Construction and Commissioning of CWPB near Existing 18MLD WTP at koolimad					
9.001	2.1.1:Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5m in width as well as 10 sqm on plan including disposal of excavated earth up to 50 m and lift up to 1.5 m, disposed soil to be levelled and neatly dressed:All Kinds of soil	332.0500	sqm	120.604	40046.56	Rupees Forty Thousand Forty Six and Fifty Five Paise Only
9.002	2.6.1:Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil	51.0300	cum	236.907	12089.36	Rupees Twelve Thousand Eighty Nine and Thirty Six Paise Only
9.003	2.7.1:Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.Ordinary rock	21.8700	cum	459.217	10043.08	Rupees Ten Thousand Forty Three and Seven Paise Only
9.004	4.1.8:Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)	11.2480	cum	7543.36	84847.71	Rupees Eighty Four Thousand Eight Hundred Forty Seven and Seventy One Paise Only



9.005	5.33.1:Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work upto plinth level	44.7910	cum	10419.805	466713.49	Rupees Four Lakh Sixty Six Thousand Seven Hundred Thirteen and Forty Eight Paise Only
9.006	5.33.2:Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately.All work above plinth level upto floor V level	93.9990	cum	12248.522	1151348.82	Rupees Eleven Lakh Fifty One Thousand Three Hundred Forty Eight and Eighty One Paise Only
9.007	5.9.1:Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	10.8000	sqm	371.162	4008.55	Rupees Four Thousand Eight and Fifty Four Paise Only
9.008	5.9.3:Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	393.7900	sqm	904.946	356358.69	Rupees Three Lakh Fifty Six Thousand Three Hundred Fifty Eight and Sixty Eight Paise Only
9.009	5.9.5:Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers	238.5600	sqm	719.268	171588.57	Rupees One Lakh Seventy One Thousand Five Hundred Eighty Eight and Fifty Seven Paise Only
9.01	5.9.6:Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts	249.6000	sqm	955.933	238600.88	Rupees Two Lakh Thirty Eight Thousand Six Hundred and Eighty Seven Paise Only
9.011	5.22.6:Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more	10424.8000	kilogram	110	1146728.00	Rupees Eleven Lakh Forty Six Thousand Seven Hundred Twenty Eight Only
9.012	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	48.1980	cum	582.043	28053.31	Rupees Twenty Eight Thousand Fifty Three and Thirty Paise Only
9.013	50.6.1.5:Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete	73.5200	cum	7331.83	539036.14	Rupees Five Lakh Thirty Nine Thousand Thirty Six and Fourteen Paise Only
9.014	13.1.1:12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)	1683.1050	sqm	347.688	585195.41	Rupees Five Lakh Eighty Five Thousand One Hundred Ninety Five and Forty One Paise Only
9.015	10.6.1:Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover	11.5500	sqm	3835.942	44305.13	Rupees Forty Four Thousand Three Hundred Five and Thirteen Paise Only



9.016	21.1.1.1:Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portionAnodised aluminium (anodised transparent or dyed to required shade according to IS : 1868, Minimum anodic coating of grade AC 15)	99.0000	kg	552.398	54687.40	Rupees Fifty Four Thousand Six Hundred Eighty Seven and Forty Paise Only
9.017	21.3.1:Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in - Charge. (Cost of aluminium snap beading shall be paid in basic item);With float glass panes of 4.0 mm thickness	33.0000	sqm	1302.411	42979.56	Rupees Forty Two Thousand Nine Hundred Seventy Nine and Fifty Six Paise Only
9.018	9.48.2:Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to openings/ wooden frames with rawl plugs screws etc	1000.8000	kg	239.074	239265.26	Rupees Two Lakh Thirty Nine Thousand Two Hundred Sixty Five and Twenty Five Paise Only
9.019	13.43.1:Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer	1683.1050	sqm	3.42	5756.22	Rupees Five Thousand Seven Hundred Fifty Six and Twenty One Paise Only
9.02	13.60.1:Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work	1683.1050	sqm	167.618	282118.69	Rupees Two Lakh Eighty Two Thousand One Hundred Eighteen and Sixty Nine Paise Only
9.021	13.61.1:Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work	36.5700	sqm	158.334	5790.27	Rupees Five Thousand Seven Hundred Ninety and Twenty Seven Paise Only
9.022	11.37:Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.	21.2800	sqm	1207.679	25699.41	Rupees Twenty Five Thousand Six Hundred Ninety Nine and Forty Paise Only
9.023	11.41.1:Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.Size of Tile 500x500 mm.	201.8150	sqm	1653.859	333773.55	Rupees Three Lakh Thirty Three Thousand Seven Hundred Seventy Three and Fifty Five Paise Only
9.024	OD42644/2022-2023:Supply, Fabrication and erection of long travel(LT) girder 450mm depth fixing to the base
plate at the existing bracket at site including cutting, hoisting and fixing in position and painting the exposed surface
with two coats of Zinc chromic primer and 2 coats of synthetic enamel paint including cost labour charges and
conveyance of all materials etc. complete and as directed by the departmental officers.	48.6720	quintal	22229.855	1081971.50	Rupees Ten Lakh Eighty One Thousand Nine Hundred Seventy One and Fifty Paise Only
9.025	OD42643/2022-2023:Supply, Fabrication and erection of long travel(LT) rails polished square bars of size
80x80mm thick printed on 11-08-2022 10:42:06 page 53 to the LT girder and painting to the exposed surface as detailed in above item complete.
	5.1000	quintal	10058.51	51298.40	Rupees Fifty One Thousand Two Hundred Ninety Eight and Forty Paise Only



9.026	OD42642/2022-2023:Design, manufacture, supply, testing and commissioning of overhead traverse trolley crane
5T capacity chain pulley block and geared trolley having wall to wall horizontal movement supported on girders
having wall to wall horizontal movement etc. for smooth functioning of crane as per IS specification including all
fittings, conveyance, erection, testing, commissioning and incidental charges etc. including painting the exposed
surface as detailed in item above75(a) with following specifications. a) Type and construction of crane-Single Girder.
b) Safe working load- 5T, c) Span of Crane - 8m, d) Test load - 7.5T, e) Crane operation- Floor level with hand, f)
Length of Travel - Single Girder, g) Chain Pulley Block - Indef brand(Design code IS3832,Hook IS8610,Lead chain
IS6216(Alloy steel grade 80),Hand chain IS2429(MS grade 30), h) Brake Type - Self actuating screw friction and disk
type	2.0000	no	60500	121000.00	Rupees One Lakh Twenty One Thousand Only
9.027	13.71:Lettering with black Japan pint of approved brand and manufacture	3900.0000	per Letter pe	6.171	24066.90	Rupees Twenty Four Thousand Sixty Six and Ninety Paise Only
9.028	16.85:Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement : 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment) . (Old kerb stones shall be supplied by the department free of cost)	66.8000	metre	108.064	7218.68	Rupees Seven Thousand Two Hundred Eighteen and Sixty Seven Paise Only
9.029	16.91.1:Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	133.6000	sqm	1152.8	154014.08	Rupees One Lakh Fifty Four Thousand Fourteen and Eight Paise Only
10	Appendix J: Supply ,erraction testing and comessionnng of One nos. 1000 KVA, 11 KV/3.3KV Transformers.					
10.001	OD61368/2022-2023:Supply of all materials and providing 11KV sub station yard using 4nos. 175x85mm. ISMB joist of 9.5M height, 100x50mm. MS chanel cross arms, 2sets of 200A, 11KV gang operated AB switches with opertating handles of required length,2 sets of 9.6KV,6KA , Lightning Arrestors, 2sets of 11KV, D.O fuses, Pin insulators, Disc insulators and inter connections of the above items using 8mm dia copper wire with proper copper sockets , including all associated civil works and painting of all structurers with two coats of zinchromate primer and aluminium paint, including earthing etc complete as per standard construction practices approved by Kerala Electrical Inspectorate and relevant standards(MS Channel 100x50mm 80M - 1040Kgs, Angle-50x6mm 54 Kgs, Plate -300x300x8mm-32Kgs, Cost Including Fabrication charges 10.25.2-1984 kg, Earth work excavation&back filling (Hard soi)-4cm, Cement Concreate-3.6 cm, 200A 11KV AB Switch-2, 9.6KV,6KA Lightning Arrestor-6, 11KV DO Fuse-2 sets, Pin Insulators-12 nos, Disc Insulators-9nos, 25x6mm GI Strip- 40M-90 kgs, ACSR Conductor-40M-20 kgs, ACSR Conductor-40M-20 kgs, 8mm Copper -60M—30kg, 6 swg Copper-10M-3kg, Painting charges-4 set, Transportation charges-1 set, Conveyance, loading & unloading charges-3 tons)	1.0000	set	499321.878	499321.88	Rupees Four Lakh Ninety Nine Thousand Three Hundred Twenty One and Eighty Seven Paise Only



10.002	OD61453/2022-2023:Supply of all materials and providing substation yard fencing using 50 x 50 x 6mm angle iron frame work of size 1500x2500mm fitted with weld mesh of 10 gauge and bolted the same to 100 x 50 x 6 mm vertical channel erected at 1500mm c/c and 2500mm above ground level of substation yard and 500 mm below with 300 x300mm plain cement concrete (1:3:6) base using 40 mm granite aggregate and top surface finished neat, earthing as per IS, Including laying of broken granite aggregate in the yard area as per IS.(Cost of MS Items -21.5 kg, Cost Including Fabrication DSR 10.25.2 -21.5 kg, Total For DSR Items Including Cost Index, Cost of Weldmesh-1 sq.m, Conveyance, loading & Unloading charges-25 kgs, Painting charges-1 sqm, Erection, Testing & commissioning charges)	60.0000	sqm	3685.954	221157.24	Rupees Two Lakh Twenty One Thousand One Hundred Fifty Seven and Twenty Four Paise Only
10.003	OD61531/2022-2023:Supply of all materials and providing 2000mm wide 2500mm height weld mesh gate made out of 50 x 50 x 6mm Angles with necessary foundation locking arrangements etc. complete, including painting with two coats of zincchromate primer and aluminium paint as per standards.(Cost of MS Angle-70 kg, Cost Including Fabrication DSR 10.25.2 -70 kgs, Cost of 10 gauge weldmesh-5 sqm, Gate lock & hooks-1 set, Painting charges-5 sqm, Conveyance, loading & unloading charges-70 kgs, Erection, Testing & commissioning charges)	2.0000	no	13235.112	26470.22	Rupees Twenty Six Thousand Four Hundred Seventy and Twenty Two Paise Only
10.004	OD61542/2022-2023:Supply,erection, testing and commissioning of out door type metering unit consisting of the following accessories: Current Transformer, CT Ratio 100/5A, Burden 15VA, Accuracy Class 0.2S, Potential Transformer, PT ratio 11KV/110V, Burden -100VA. Accuracy Class 0.2, The rate shall include the cost of testing the equipment at KSEB and all other incidental expenses. The CT ratio should be fixed only after obtaining the power allocation from KSEB.(Cost of CT/PT-1, Transportation charges-1, Testing Charges-1, Conveyance, loading & unloading charges-1)	1.0000	no	146300.011	146300.01	Rupees One Lakh Forty Six Thousand Three Hundred and One Paise Only
10.005	OD61550/2022-2023:Supply,erection, testing and commissioning of TOD meter with maximum demand in KVA suitable for the above out door metering set housed in a weather proof out door Kiosk.The rate shall include the cost of testing the equipment at KSEB and all other incidental expenses. (TOD Meter-1, Testing charges-1, Cubicle & other accessories-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges, Cost of MS Items DSR 1007 Including CP OH CI-38 kg)	1.0000	set	65782.893	65782.89	Rupees Sixty Five Thousand Seven Hundred Eighty Two and Eighty Nine Paise Only
10.006	OD61616/2022-2023:Supply, erection, testing and commissioning of 11KV, 630A, 350MVA, totally enclosed, single bus bar, floor mounting in metal clad, indoor extensible type flush mounted horizontal isolation and drawout type vacuum circuit breaker one panel system suitable for installation in 3 phase , 3wire, 50Hz. AC,11kv, effectively earthed supply system,comprising of motorised and spring assisted, independent, trip free closing mechanism and all metering equipments indicating V, I, KW, PF etc, numerical protective relays etc. complete as approved by Kerala Electrical Inspectorate and relevant standards. Armoured multi core 2.5 Sqmm copper control cables shall be used for all external & internal interconnections. The cost of control cables both internal and external shall be included in the cost of HT panel.(Cost of VCB panel-1, Transporting charge-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	set	661100.022	661100.02	Rupees Six Lakh Sixty One Thousand One Hundred and Two Paise Only
10.007	OD61621/2022-2023:Supply, erection, testing and commissioning of 3.3KV, 400A, 75MVA, totally enclosed, single bus bar, floor mounting in metal clad, indoor extensible type flush mounted horizontal isolation and drawout type panel board comprising of one nos.Vacuum Circuit Breaker as incomer, and 4 nos. Vacuum Contactors as outgoing. The incomer switchgears, bus coupler & outgoing switchgears should be of drawout type trip free VCBs suitable for installation in 3 phase , 3wire, 50Hz. AC, 3.3kv, effectively earthed supply system,comprising of motorised and spring assisted, independent, suitable for parallel operation, trip free closing mechanism and all metering equipmentsindicating V, I, KW, PF etc,numerical protective relays of reputed make, etc. complete as approved by Kerala Electrical Inspectorate and relevant standards. Armoured multi core 2.5 Sqmm copper control cables shall be used for all external & internal interconnections. The cost of control cables both internal and external shall be included in the cost of 3.3KV panel.(Cost of VCB panel-1, Transporting charge-1, Conveyance, loading & unloading charges-1)	1.0000	no	2122039.511	2122039.51	Rupees Twenty One Lakh Twenty Two Thousand Thirty Nine and Fifty One Paise Only



10.008	OD61635/2022-2023:Supply,erection, testing and commissioning of 1000 KVA, 11KV/3.3KV. 3phase, 50Hz. ONAN cooled , indoor type copper wound distribution transformers, suitable for parallel operation, with HV and LV side cable end box arrangements, on load tap changer with 17 tap positions having +5% to -15% variations in 1.25% steps with RTCC panel including first filling of oil etc. complete with all fittings as per IS 2026 and Kerala Electrical Inspectorate standards. Armoured multi core 2.5 Sqmm copper control cables shall be used for all external & internal interconnections . The cost of control cables both internal and external shall be included in the cost of Transformer.(Transformer 1000 KVA 11KV/3.3KV -1, Pre commissioning test charges-1, Testing / filtering charge of oil-1, 38x6mm copper for neutral earthing-1, Bushings for neutral earthing-1, Cable entry box-1, GI pipe and accessories for breather-1, Neutral CT-1, Transportation Charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	no	3399995.011	3399995.01	Rupees Thirty Three Lakh Ninety Nine Thousand Nine Hundred Ninety Five and One Paise Only
10.009	OD61640/2022-2023:Design,engineering, supply erection,testing and commissioning of indoor type 3.3KV stainless steel make neutral grounding resistor in sheet steel enclosure with IP 23 degree protection with suitable neutral CT for REF protection. The cubicle shall be fabricated out of 3mm sheet steel and painted with anti & rust primer coating followed by two coats of paint of approved shade, as per standards. The resistance shall be of Kerala Electrical Inspectorate and relevant standards. Armoured 2.5 Sqmm copper control cable shall be used for all external interconnections. The cost of control cables both internal and external shall be included in the cost of NGR.(Cost of NGR-1, Transporting charge-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	set	412562.051	412562.05	Rupees Four Lakh Twelve Thousand Five Hundred Sixty Two and Five Paise Only
10.01	OD61653/2022-2023:Supply,erection, testing and commissioning of 8 way MCB distribution board comprising to the following. 100A 4 pole MCCB 1 No. as incomer with 100A 100mA ELCB and 63A 4P MCCB-3Nos. as outgoing, With 100A AI busbars/cables, interconnection, housed in a suitable metal enclosure as per KEI standards.(100A 25 MVA 4P MDO MCCB-1, 63A MCCB-1, 32A MCCB-3, Voltmeters-1, Voltmeter S/S-1, Ammeters(0-100)A-3, 100/5A CL:1 15VA CT-3, MC12A-2, Energy meters-4, Indicating lamps.-3, HRC fuses20A base-12, HRC fuses-2A-12, Fabrication charges-1, Transportation charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	set	255012.615	255012.62	Rupees Two Lakh Fifty Five Thousand Twelve and Sixty One Paise Only
10.011	OD61657/2022-2023:Supply,erection, testing and commissioning of 8 way MCB distribution board comprising to the following. 63A 4 pole MCB 1 No. as incomer with 63A 100mA ELCB and 20A TP MCB-2Nos. & 20A SP MCB- 6 Nos each. as outgoing, With tinned copper busbars/cables, interconnection, housed in a suitable metal enclosure as per KEI standards fixed in open system.(63A 4pole MCB with 100ma ELCB Incomer-1, 20A TP MCB-2, 20A SP MCB-6, DB Cover-1, Copper interconnections-1, Transportation charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	set	27398.635	27398.64	Rupees Twenty Seven Thousand Three Hundred Ninety Eight and Sixty Three Paise Only
10.012	OD61672/2022-2023:Supply,erection, testing and commissioning of MCB distribution board comprising to the following. 40A TPN 4 pole MCB 1 No. as incomer with 40A 30mA ELCB, 18 nos 6 AMPS SP MCB as outgoing, With tinned copper busbars/cables, interconnection, housed in a suitable metal enclosure as per KEI standards fixed in open system.(40A 4pole MCB+30ma ELCB Incomer-1, 6A SP MCB-18, DB Cover-1, Copper interconnections-1, Transportation charges-1, Conveyance, loading & unloading charges-1	1.0000	set	18026.151	18026.15	Rupees Eighteen Thousand Twenty Six and Fifteen Paise Only
10.013	OD61685/2022-2023:Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts&3.3/11kv grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. 1 core 95Sq.mm.3.3kv. XLPE AL Cable(1x95Sqmm, 3.3KV XLPE Cable- Cost of Cable-1, Transportation charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges	20.0000	metre	788.095	15761.90	Rupees Fifteen Thousand Seven Hundred Sixty One and Ninety Paise Only



10.014	OD62003/2022-2023:Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts&3.3/11kv grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. 3 core 150Sq.mm.11kv, XLPE AL Cable(3x150Sqmm, 11KV XLPE Cable, Cost of Cable-1, Transpotation charges-1, Erection, Testing & commissioning charges, Conveyance, loading & unloading charges-1)	300.0000	metre	2242.834	672850.20	Rupees Six Lakh Seventy Two Thousand Eight Hundred Fifty and Twenty Paise Only
10.015	OD62008/2022-2023:Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts&3.3/11kv grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. 3 core 185 Sq.mm.3.3kV XLPE AL Cable.(3x185Sqmm, 3.3KV XLPE Cable, Cost of Cable-1, Transpotation charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	400.0000	metre	2562.095	1024838.00	Rupees Ten Lakh Twenty Four Thousand Eight Hundred Thirty Eight Only
10.016	OD62013/2022-2023:Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts&3.3/11kv grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. 3.5 core 50Sq.mm. AIFY Cable (3.5x50Sqmm Cable, Cost of Cable-1, Transpotation charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	40.0000	metre	604.67	24186.80	Rupees Twenty Four Thousand One Hundred Eighty Six and Eighty Paise Only
10.017	OD62023/2022-2023:Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts&3.3/11kv grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. 4 core 16 Sq.mm.PVC AL. Cable.(4x16Sqmm Cable, Cost of Cable-1, Transpotation charges-1, Erection, Testing & commissioning charges, Conveyance, loading & unloading charges-1	100.0000	metre	361.779	36177.90	Rupees Thirty Six Thousand One Hundred Seventy Seven and Ninety Paise Only
10.018	OD62034/2022-2023:Supply, laying, testing and commissioning of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts&3.3/11kv grade) clamped on wall/ceiling with clamps and saddle clips partly laid in cable tray/partly laid in trench. 4 core 10 Sq.mm.PVC AL. Cable.(4x10 Sqmm Cable, Cost of Cable-1, Transpotation charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	40.0000	metre	311.19	12447.60	Rupees Twelve Thousand Four Hundred Forty Seven and Sixty Paise Only
10.019	OD62038/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards. 1 core 95 Sq.mm.3.3kv,XLPE AL Cable(Indoor)(1x95 Sqmm 3.3KV XLPE cable, Cost of indoor kit-1, Erection, Testing & commissioning charges, Conveyance, loading & unloading charges-1)	4.0000	no	11701.239	46804.96	Rupees Forty Six Thousand Eight Hundred Four and Ninety Five Paise Only
10.02	OD62043/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards. 3 core 150Sq.mm.11kv,XLPE AL Cable(Outdoor)(3x150 Sqmm 11KV XLPE cable, Cost of outdoor kit-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	no	17997.155	17997.16	Rupees Seventeen Thousand Nine Hundred Ninety Seven and Fifteen Paise Only
10.021	OD62045/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards. 3 core 150Sq.mm.11kv,XLPE AL Cable(Outdoor)(3x150 Sqmm 11KV XLPE cable, Cost of outdoor kit-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	1.0000	no	16732.155	16732.16	Rupees Sixteen Thousand Seven Hundred Thirty Two and Fifteen Paise Only



10.022	OD62051/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards. 3 core 150 Sq.mm.11kv,XLPE AL Cable (Indoor), 3x150 Sqmm 11KV XLPE cable, Cost of indoor kit-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	4.0000	no	15622.75	62491.00	Rupees Sixty Two Thousand Four Hundred Ninety One Only
10.023	OD62080/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards. 3.5 core 50Sq.mm. AYFY Cable(3.5x50Sqmm Cable, Cost of Cable Gland-1, Cost of Sockets-4, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	2.0000	no	473.099	946.20	Rupees Nine Hundred Forty Six and Nineteen Paise Only
10.024	OD62100/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards 4 core 16 Sq.mm.PVC AL. Cable.(4x16Sqmm Cable , Cost of Cable Gland-1, Cost of Sockets-4, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	8.0000	no	271.964	2175.71	Rupees Two Thousand One Hundred Seventy Five and Seventy One Paise Only
10.025	OD62101/2022-2023:Supply of all materials and providing end termination of the following size PVC/XLPE insulated, sheathed armoured Aluminium conductor cable (1100 volts & 3.3/11kv grade) for giving power connections to HT Breaker, Transformers, Panel boards etc. complete as per standards. 4 core 10 Sq.mm.PVC AL. Cable.(4x10Sqmm Cable, Cost of Cable Gland-1, Cost of Sockets-4, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	6.0000	no	244.134	1464.80	Rupees One Thousand Four Hundred Sixty Four and Eighty Paise Only
10.026	OD62108/2022-2023:Supply Installation and testing and commissioning of plate earthing with plate electrode 600mm x 600mm and 6 mm thickness - the plate electrode being first fabricated and then galvanized to minimum 100 microns coating thickness, with no bare steel surface left exposed without zinc coating & the installation done as per IS at 3.0M depth at the earthing location, with the connection terminal on the top of the plate electrode above the ground level, and then backfilling watering and compaction using excavated earth mixed with conductivity enhances and moisture retention agents including construction of masonry trough with MS cover as per IS 3043 - 1987. GI 600x600x6mm plate Earth Electrode-1, GI Strips , GI pipe-12, Drilling & Back Filling-1, Conveyance ,loading & Unloading charges-1, Erection, Testing and Commissioning charges, Earth Chamber-1.	11.0000	Hectare	13345.673	146802.40	Rupees One Lakh Forty Six Thousand Eight Hundred Two and Forty Paise Only
10.027	OD62115/2022-2023:Supply, laying and termination of the following sizes of copper strip/wires for earthing of substation, transformers, HTpanel boards,LT panel boards, equipments and inter connection of earth pits etc. 25x6mm copper strips. (25X6mm Cu strip, Cost of Cu strip-1, Fabrication Charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	300.0000	metre	1604.744	481423.20	Rupees Four Lakh Eighty One Thousand Four Hundred Twenty Three and Twenty Paise Only
10.028	OD62131/2022-2023:Supply, laying and termination of the following sizes of copper strip/wires for earthing of substation, transformers, HTpanel boards,LT panel boards, equipments and inter connection of earth pits etc. 25x3mm copper strips. Cost of Cu strip-1, Fabrication Charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges	200.0000	metre	831.094	166218.80	Rupees One Lakh Sixty Six Thousand Two Hundred Eighteen and Eighty Paise Only
10.029	OD62149/2022-2023:Supply, laying and termination of the following sizes of copper strip/wires for earthing of substation, transformers, HTpanel boards,LT panel boards, equipments and inter connection of earth pits etc. 25x6mm copper strips.(Cost of GI strip-1, Fabrication Charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning	400.0000	metre	393.404	157361.60	Rupees One Lakh Fifty Seven Thousand Three Hundred Sixty One and Sixty Paise Only
10.03	OD62154/2022-2023:Supply, laying and termination of the following sizes of copper strip/wires for earthing of substation, transformers, HTpanel boards,LT panel boards, equipments and inter connection of earth pits etc. 32x6mm copper strips.(Cost of GI strip-1, Fabrication Charges-1, Conveyance, loading & unloading charges-1, Erection, Testing & commissioning charges)	400.0000	metre	550.734	220293.60	Rupees Two Lakh Twenty Thousand Two Hundred Ninety Three and Sixty Paise Only



10.031	OD62156/2022-2023:Supply and fixing of 6mm thick checkered plate with required M.S. angle/plate supports over the masonry cable trench at substation and electrical control room. Angle and plate should be painted one coat of primer and two coats of enamel paint as required. 6mm checked plates, cost of plate, Fabrication charge 10.2-1 - 93.52 (Rate), Transportation Charges 2205 steel-0.001 - 92.24 (rate) Say - 93.61 (rate) For 1 Ton- 93612.24	3.0000	tonne	102973.2	308919.60	Rupees Three Lakh Eight Thousand Nine Hundred Nineteen and Sixty Paise Only
10.032	OD62304/2022-2023:Supply and fixing of M.S. angle cable tray for clamping the various sizes of cables in trenches, through walls, & trusses etc. as per KEI standards. (Fabrication charge 10.1-1 - 80.80 (RATE) , Transportation Charges 2205 steel-0.001- 92.24(RATE) Say - 80.89/kg For 1 Ton - 80892.24	3.0000	tonne	88981.2	266943.60	Rupees Two Lakh Sixty Six Thousand Nine Hundred Forty Three and Sixty Paise Only
10.033	OD62161/2022-2023:Supplying, fixing, testing and commissioning of Lead acid cell battery suitable for operation of the switchgears and protective equipments with sufficient Ah capacity at 10hrs rate of discharge assembled with plate positive and pasted negative plates with inter cell, inter raw, interior connections etc. stand and cell insulators, sealed floats, nuts, bolt, washers etc with electrolyte of specific gravity 1.190 and accessories such as voltmeter, Thermometer, Hydrometer, spanners etc with teak wood stand with 3 coats of antiacid paint to accommodate battery.(Cost of Battery-1, Transportation charges-1, Conveyance, loading & unloading charges-1)	1.0000	set	63250.011	63250.01	Rupees Sixty Three Thousand Two Hundred Fifty and One Paise Only
10.034	OD62163/2022-2023:Supplying, fixing, testing and commissioning of automatic twin battery charger with distribution board with all instruments and protective devices etc. complete as per standards.(Cost of Battery charger-1, Transportation charges-1, Unloading charges-1)	1.0000	set	50600.011	50600.01	Rupees Fifty Thousand Six Hundred and One Paise Only
10.035	OD62186/2022-2023:Supply and providing the following safety items approved by Kerala Electrical Inspectorate and relevant standards.(11kv rubber mat-8, 11kv rubber ghouse-2, 11kv danger board-10, Fire bucket with stand-3, First Aid Box-2, Shock treatment chart-4, 5Kg. Fire extinguisher-4, Transportation charges-1, Unloading charges-1)	1.0000	set	65147.522	65147.52	Rupees Sixty Five Thousand One Hundred Forty Seven and Fifty Two Paise Only
10.036	OD62494/2022-2023:Preparation of scheme drawing , getting scheme approval , coordinating statutory inspections and getting energisation sanction from Electrical Inspectorate and KSEBL	1.0000	no	55000	55000.00	Rupees Fifty Five Thousand Only
10.037	OD62442/2022-2023:Wiring to the Light/Fan points with 3/22 PVC insulated copper conductor along with single run 3/22 PVC insulated copper conductor (Green colour) drawn inside suitable size PVC conduit pipe with necessary bends, elbows, junction boxes etc. in open conduit system clamped on struss/wall with suitable clamps and saddle clips including supplying and fixing of 5 Amps flush type control switches fixed on a suitable M.S. box with 3 mm thick hylem sheet cover. (Substation & Pump house) P1Pts1022.50 (rate) Cost of wires1Pts1057.81 (rate) Cost of Switch1Pts 18.75 (rate) Erection Charges - 107.62 (rate)	30.0000	no	1246.289	37388.67	Rupees Thirty Seven Thousand Three Hundred Eighty Eight and Sixty Seven Paise Only
10.038	OD62427/2022-2023:Wiring to the exhaust fan points with 3/22PVC insulated copper conductor alongwith single run 3/22 PVC insulated copper conductor (Green colour) drawn inside suitable size PVC conduit pipe with necessary bends, elbows, junction boxes etc. in open conduit system clamped on struss/wall with suitable clamps and saddle clips including supplying and fixing of 5 Amps flush type control switches fixed on a suitable M.S. box with 3 mm thick hylem sheet cover. Cost conduit Pipes & Fittings1pts1022.50 Cost of wires1pts1058.13 (rate) Cost of Switch1pts 58.75 (rate) Erection Charges - 129.14 (rate)	8.0000	no	1327.689	10621.51	Rupees Ten Thousand Six Hundred Twenty One and Fifty One Paise Only



10.039	OD62413/2022-2023:Wiring to the 5 Amps plug points with 3/22 PVC insulated copper conductor along with single run 3/22 PVC insulated copper conductor (Green colour) drawn inside suitable size PVC conduit pipe with necessary bends, elbows, junction boxes etc. in open conduit system clamped on struss/wall with suitable clamps and saddle clips including supplying and fixing of 5 Amps flush type 3 pin plug control switches fixed on a suitable M.S. box with 3 mm thick hylem sheet cover. (Cost conduit Pipes & Fittings-1 pst- 75 (rate) Cost of wires- 1pst – 287.50 (rate) Cost of switch -1pst- 40.00(rate) Cost of Plug Socket-1 pst -37.50 (rate) Conveyance, loading & unloading charges –pst – 62.50 (rate)	10.0000	no	678.425	6784.25	Rupees Six Thousand Seven Hundred Eighty Four and Twenty Five Paise Only
10.04	OD62402/2022-2023:Wiring to the15/20 Amps plug points with 7/22 PVC insulated copper conductor along with single run 3/22 PVC insulated copper conductor (Green colour) drawn inside suitable size PVC conduit pipe with necessary bends, elbows, junction boxes etc. in open conduit system clamped on struss/wall with suitable clamps and saddle clips including supplying and fixing of 5 Amps flush type 3 pin plug control switches fixed on a suitable M.S. box with 3 mm thick hylem sheet cover. (Cost conduit Pipes & Fittings-1 pts- 200 (rate) Cost of wires – 1 pst – 562.50 (rate) Cost of Switch- 1 pst – 116.25 (rate) Cost of Plug Socket- 1 past- 106.25 (rate) Conveyance, loading & unloading charges – 1 pst -62.50 (rate) Erection Charges - 80.71)	8.0000	no	1209.736	9677.89	Rupees Nine Thousand Six Hundred Seventy Seven and Eighty Eight Paise Only
10.041	OD62373/2022-2023:Supplying, fixing of 2 x 20 Watts box type 1200mm LED tube light fittings. (Cost of 2X36W box type F.L-1 set- 2500.00 (rate) Cost of Clamps – 1 set – 85.00 (rate) Conveyance, loading & unloading charges- 1 set - 62.50 (rate) Erection Charges - 80.71 (rate)	20.0000	no	3452.614	69052.28	Rupees Sixty Nine Thousand Fifty Two and Twenty Eight Paise Only
10.042	OD62341/2022-2023:Supplying and fixing 1 x 20 W box type1200mm LED tube light fittings (Cost of 1X36W box type F.L-1 set- 1250.00(rate) Cost of Clamps – 1set (85.00 (rate) Conveyance, loading & unloading charges- 1 set - 62.50) Erection Charges - 80.71)	6.0000	no	1870.825	11224.95	Rupees Eleven Thousand Two Hundred Twenty Four and Ninety Five Paise Only
10.043	OD62334/2022-2023:Supplying and fixing of 1200 mm sweep AC ceiling fan with standard down rod and electronic type regulator (1200 mm Celing fan-1 set - 1500.00 (rate) Cost of Ceiling Fans-1 set - 93.75 (rate) Conveyance, loading & unloading charges – 1set -65 (rate) Erection Charges 107.62 (rate)	4.0000	no	2236.289	8945.16	Rupees Eight Thousand Nine Hundred Forty Five and Fifteen Paise Only
10.044	OD62296/2022-2023:Supplying and fixing of 12" dia single phase light duty 1500 RPM exhaust fan with necessary MS frame work.(Cost of Exhaust Fan-1, Cost of MS frame-1, Conveyance, loading & unloading charges-1)	8.0000	no	7942.572	63540.58	Rupees Sixty Three Thousand Five Hundred Forty and Fifty Seven Paise Only



10.045	OD62291/2022-2023:Supplying, erection and testing steel tubular swaged poles as per IS 2713 (Part II) - 1980 of height 7.5M above ground level and 1.5M below ground level bottom 139.7 mm dia and 114.3 mm dia for middle and 88.9 mm dia for top including providing base plate providing concreting in foundation, construction of pillar accomodating fuse and switch housed in weather proof box including wiring to the light fitting with 2 runs of 3/20 PVC insulated copper conductor. Supplying and fixing a 4 way 30 A rated terminal block include the weather proof box. The pole shall be painted with one coat of primer and two coats of enamel paint as required by the Engineer in charge. The street pole shall be as per the drawing enclosed.(M.S pipe 139.7mm-5, M.S pipe 114.3 mm-2, M.S pipe 88.9 mm-2, Single bracket type-1, Fabrication charges-1, Painting charges-1, Junction Box-1, PVC wire-10, Transportation charges-1, Conveyance, loading & unloading charges-1, Earth work excavation&back filling (Hard soil)-1, Cement Concreate(1:3:6)-.06)	12.0000	no	25339.534	304074.41	Rupees Three Lakh Four Thousand Seventy Four and Forty Paise Only
10.046	OD62275/2022-2023:Supplying and fixing street light fittings with all accessories and 150 watts LED lamp fixed with above poles.(Cost of Street Light Fittings-1, Cost of Clamps-1, Conveyance, loading & unloading charges-1	12.0000	no	11052.998	132635.98	Rupees One Lakh Thirty Two Thousand Six Hundred Thirty Five and Ninety Seven Paise Only
10.047	OD62267/2022-2023:Supplying, fixing of the 16 A SP MCBs in a suitable size MS enclosure and angle iron frame for controlling street lights.(Cost of MCB-1, Cost of MCB Box-1, Conveyance, loading & unloading charges-1)	1.0000	no	2320.318	2320.32	Rupees Two Thousand Three Hundred Twenty and Thirty One Paise Only
11	Appendix H: Transformer building					
11.001	2.31:Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared	337.6000	sqm	16.324	5510.98	Rupees Five Thousand Five Hundred Ten and Ninety Eight Paise Only
11.002	2.1.1:Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5m in width as well as 10 sqm on plan including disposal of excavated earth up to 50 m and lift up to 1.5 m, disposed soil to be levelled and neatly dressed:All Kinds of soil	337.6000	sqm	120.604	40715.91	Rupees Forty Thousand Seven Hundred Fifteen and Ninety One Paise Only
11.003	2.6.1:Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly	47.6280	cum	236.907	11283.41	Rupees Eleven Thousand Two Hundred Eighty Three and Forty Paise Only
11.004	2.7.1:Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly	13.6080	cum	459.217	6249.02	Rupees Six Thousand Two Hundred Forty Nine and Two Paise Only
11.005	2.7.3:Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly	6.8040	cum	1324.059	9008.90	Rupees Nine Thousand Eight and Eighty Nine Paise Only
11.006	50.6.7.2:Laterate masonry with neatly dressed laterate stone of size 40x20x15cm or nearest size in cement mortar 1:6 for super structure above plinth level up to floor two level including all cost of materials, labour charges etc.	6.0120	cum	8765.603	52698.81	Rupees Fifty Two Thousand Six Hundred Ninety Eight and Eighty Paise Only
11.007	4.1.8:Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)	22.0860	cum	7543.36	166602.65	Rupees One Lakh Sixty Six Thousand Six Hundred Two and Sixty Four Paise Only
11.008	5.33.1:Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering,	23.9800	cum	10419.805	249866.92	Rupees Two Lakh Forty Nine Thousand Eight Hundred Sixty Six and Ninety Two Paise Only
11.009	5.33.2:Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering,	37.2090	cum	12248.522	455755.26	Rupees Four Lakh Fifty Five Thousand Seven Hundred Fifty Five and Twenty Five Paise Only
11.01	5.9.1:Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	10.0800	sqm	371.162	3741.31	Rupees Three Thousand Seven Hundred Forty One and Thirty One Paise Only



11.011	5.9.3:Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	61.3000	sqm	902.946	55350.59	Rupees Fifty Five Thousand Three Hundred Fifty and Fifty Eight Paise Only
11.012	5.9.5:Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers	155.0900	sqm	719.268	111551.27	Rupees One Lakh Eleven Thousand Five Hundred Fifty One and Twenty Seven Paise Only
11.013	5.9.6:Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts	84.7000	sqm	955.933	80967.53	Rupees Eighty Thousand Nine Hundred Sixty Seven and Fifty Two Paise Only
11.014	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	4895.1200	kilogram	108.812	532647.80	Rupees Five Lakh Thirty Two Thousand Six Hundred Forty Seven and Seventy Nine Paise Only
11.015	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-	51.5040	cum	582.043	29977.54	Rupees Twenty Nine Thousand Nine Hundred Seventy Seven and Fifty Four Paise Only
11.016	50.6.1.5:Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete	51.6620	cum	7334.83	378931.99	Rupees Three Lakh Seventy Eight Thousand Nine Hundred Thirty One and Ninety Eight Paise Only
11.017	13.1.1:12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)	704.8700	sqm	350.688	247189.45	Rupees Two Lakh Forty Seven Thousand One Hundred Eighty Nine and Forty Five Paise Only
11.018	10.6.1:Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside	36.0000	sqm	3837.942	138165.91	Rupees One Lakh Thirty Eight Thousand One Hundred Sixty Five and Ninety One Paise Only
11.019	21.1.1.1:Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size,	19.3500	kg	552.398	10688.90	Rupees Ten Thousand Six Hundred Eighty Eight and Ninety Paise Only
11.02	21.3.1:Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic	19.3500	sqm	1302.411	25201.65	Rupees Twenty Five Thousand Two Hundred One and Sixty Five Paise Only
11.021	9.48.2:Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to openings/ wooden frames with rawl plugs screws etc	690.0000	kg	239.074	164961.06	Rupees One Lakh Sixty Four Thousand Nine Hundred Sixty One and Six Paise Only
11.022	13.43.1:Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer	704.8700	sqm	3.42	2410.66	Rupees Two Thousand Four Hundred Ten and Sixty Five Paise Only
11.023	13.60.1:Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work	704.8700	sqm	170	119827.90	Rupees One Lakh Nineteen Thousand Eight Hundred Twenty Seven and Ninety Paise Only
11.024	13.61.1:Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work	53.2500	sqm	160.334	8537.79	Rupees Eight Thousand Five Hundred Thirty Seven and Seventy Eight Paise Only
11.025	13.71:Lettering with black Japan pint of approved brand and manufacture	3900.0000	per Letter per cm height	6.171	24066.90	Rupees Twenty Four Thousand Sixty Six and Ninety Paise Only
12	Appendix I: supply, installation and commissioning of CW pump at CW pump house near 18 mld wtp KOOLIMAD					



12.001	<p>OD85619/2022-2023:Supply and erection of 355 HP CF pump set with the following specification,1. Pump Supply, erection, testing and commissioning of KWA pre-qualified reputed make Centrifugal pump sets with Bronze/SS impeller, SS shaft and CI pump casing with suitable type base plate with coupling, coupling guard foundation bolts & nuts etc. complete suitable for coupling the pump and motor above the base plate etc. complete including providing suitable concrete foundation including cost of cement sand and metal etc. complete. The duty condition is as follows. Discharge 255LPS, Speed up to 1500RPM, Total Head 140m, Suction Head 0m, Length of suction pipe 3m, size of pumping main 600 mm dia DI k9 pipe for the length of 8927m. Alternatively the inlet & outlet levels, type, size & length of pumping main etc. can be given. Modification may done for monoblock pumpset. 2. Motor Supply, erection, testing and commissioning of KWA pre-qualified reputed make horizontal solid shaft foot mounted TEFC squirrel cage induction motor suitable for the above pump working 3 phase 50Hz AC supply, working voltage 440V (select the suitable). The motor shall confirm to IEEE/IS 325 including providing suitable concrete foundation including cost of cement sand and metal etc. Complete for 440V motors digital motor protection relay shall be included in starter as per per IE rules. Flexible coupling shall be used for coupling of pumps and motors. 3. Starter Supply, erection, testing and commissioning of suitable rating (Fully Automatic starter with air break contact for less than 100HP and for above 100 HP FCMA starters to be used.) starter suitable for the above motor with over voltage and under voltage protection, single phase preventer, over load relay with motor protection relay with main contractor and bypass contractor as per IE rules and code of practice etc. complete.</p> <p>4. Panel board (suitable for operating three pump sets but two pump set at a time) Supply, erection, testing and commissioning of cubical type floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable capacity MCCB as incomer and 3 Nos of suitable capacity MCCB as out going(the MCCBs are interlocking with each other suitably) providing suitable size Aluminium bus bar inter connect the above MCCBs and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch etc. Complete and provided with a common earth bus for the entire panel and interconnect with the MCCBs as per IE rules and code of practice. The panel shall be fitted on a common base frame on suitable foundation. (Specification may be modified according to no of motors working at a time)</p> <p>5. Cabling work Supply, laying, testing and commissioning of suitable size XLPE cables for the above pump set from transformer panel board to starter and from starter to motor considering energy conservation. 6. Earthing Supply of all materials and providing suitable earthing by using suitable size pipe/plate earthing GI/copper strip buried in ground and giving double earthing to motor, starter, panel board etc. as per IE standards.7. Capacitor Supply, erection, testing and commissioning of heavy duty APP capacitor for the motor to get a power factor above 0.95. The capacitor shall confirm to IS 2834. 8. Valves Supply of suitable size best quality heavy duty ISI marked CI double flanged sluice valve and Non return valve with suitable pressure rating. Fitting of valved shall include proper RCC support especially for Non return valves. In case of positive suction pump set sluice valve should be in suction as well as delivery sides for easy repair works. 9. Suction and delivery pipe connections Supply and fitting of suitable size best quality GI/MS pipe pf thickness not less than 8mm for a total length of 10m. suitable for the above pumpset and suitable size foot valve and connecting the suction pipe and valve with suitable flanges, nut and bolts IR sheet etc. complete and connecting the delivery side of the pump with the valves and suitable specials to connect with the pumping main. If the dia of suction pipe is above 80mm CI pipes and specials shall be provided. 10. Additional two year warranty</p>	1065.0000	HP (Horse power)	27230.629	29000619.89	Rupees Two Crore Ninety Lakh Six Hundred Nineteen and Eighty Eight Paise Only
Total in Figures					389278152	Rupees Thirty Eight Crore Ninety Two Lakh Seventy Eight Thousand One Hundred Fifty Two and Forty Two Paise Only



List of ALQR items

E Tender No. SE/PHC/ KKD/48/2022-23 dt. 19.10.22.

S.L. No	S.L.No as per BoQ	Specification
		ALQR Items
1	9.019	13.43.1:Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer
2	11.022	13.43.1:Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer

Jal Jeevan Mission (JJM)-JJM PHASE II 2021-22: CWSS to Karassery, Kodyathur, Thiruvambady And Koodaranjhi Grama Panchayaths in Kozhikode District: Part I: Supplying, Laying, Testing and Commissioning of CWPM and CWGM, Construction of CW pump house, Supply and erection of Transformer & pump sets.

Additional Performance Guarantee Calculation Sheet

Contract No: SE/PHC/KKD/48/2022-23

Sl. No.	Item Description	Quantity	Units	Estimated Rate in <div>Rs. P</div>	Amount	Quoted Rate of L1	10% Below Quoted (X)	(X-10)%	Additional Performance Guarantee Amount
9.019	13.43.1:Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer	1683.1050	sqm	71.1	119668.77	3.420	-95	0.85	101718.45
11.022	13.43.1:Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer	704.8700	sqm	71.1	50116.26	3.420	-95	0.85	42598.82
						Total Amount144317.27			
						Round off Amount144500			

