



Tel : 0495 - 2371046

KERALA WATER AUTHORITY

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

No. 1214/D6/2021/PHC-KKD

Dated: 21.01.2022

From

Superintending Engineer

To

Sri. Zubair.V,
Cheruparambil House,
Kodur P.O,
Malappuram.

Sir,

Sub:- JJM 2021-2022 Phase II: Providing FHTCs at Chekkiad Grama Panchayath by the Construction of new RCC OH Tank of capacity 12.50 Lakh Litre, Laying new Gravity main and Laying new Distribution line - Work Order Issuing -Reg-

- Ref:- 1. AS Order Number:- GO.(Rt)No. 489/2021/WRD, dtd:- 18/09/2021 for Rs.3158 Lakhs.
2. TS Order Number :- 13680/2021-22, ,dtd:-23/11/2021, for Rs. 3094 Lakhs.
3. e tender no:- SE/PHC/KKD/06/2021-22,dtd:- 24/11/2021.
4. Order No. KWACE/NR/D3-32992/2021(JJM), Dated:-18/01/2022 of the Chief Engineer , Northern Region, KWA, Kozhikode.

WORK ORDER

With reference to the above, you are hereby informed that your tender for the above work is accepted at an amount of **Rs.22,95,21,797.91/- (Rupees Twenty Two Crore Ninety Five Lakh Twenty One Thousand Seven Hundred & Ninety Seven and Ninety One Paise Only)** which is 9.80% below the tendered PAC of Rs. 254458756/-

You are directed to attend this office on or before **02/02/2022** with required Kerala Stamp paper worth **Rs.1,00,000/-** (0.1% of accepted PAC, Max Rs.1,00,000/-) to execute agreement and to start the work after getting necessary instructions from the Executive Engineer, Project Division, Kozhikode.

1. Before Executing the agreement you should provide Performance guarantee of **Rs.1,14,77,000/- (Rupees One Crore Fourteen Lakh Seventy Seven Thousand Only)** Atleast 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 fulfillment of



contract. It is informed that no interest shall be payable by KWA upon the security deposit or amount payable to the contractor under the contract. The EMD furnished along with tender will be released on receipt of the Performance guarantee and written request. You are not allowed to convert the EMD submitted by you as Performance Guarantee.

2. 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.
3. 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.
4. The work should be completed in all respects within *06 Months* from the date of work order.
5. All the terms and conditions of the NIT and Special conditions shall be binding on the Contract.
6. The contractor shall take over charge of the site within 10 days after executing agreement and commence the work.
7. The Contractor should complete the work in all respect as per scope of work within the accepted PAC of **Rs.22,95,21,797.91/-**
8. 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.
9. Payment will be made to the contractor for the total value of the work plus applicable GST.
10. 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.

Yours faithfully,
Dr.Gireesan P
Superintending Engineer

Copy To

- 1) Chief Engineer (NR), Kerala Water Authority, Kozhikode for favour of information
- 2) Executive Engineer, Project Division, KWA, Kozhikode for necessary action. The date of handing over the site to the contractor shall be reported to this office. The cost for geo tagging (@ Rs.20), Statutory fees for water connection(@Rs.578/-) and Additional Connection Fee (@ Rs.500/-)should be recorded in the measurement book .
- 3) RAO.

Encl:

Accepted Schedule



<u>KERALA WATER AUTHORITY, P.H. CIRCLE, KOZHIKODE</u>						
<u>Accepted Schedule</u>						
JJM 2020-2021 Phase II: Providing FHTCs at Chekkiad Grama Panchayath by the Construction of new RCC OH Tank of capacity 12.50 Lakh Litre, Laying new Gravity main and Laying new Distribution line						
e-Tender No : SE/PHC/KKD/06/2021-22						
Tendered PAC: RS:- 254,458,756						
Accepted Rate: RS:- 229,521,797.91						
Time of completion : 10 Months						
Sl. No.	Item Description	Quantity	Units	Estimated Rate in Rs. P	TOTAL AMOUNT With Taxes (Except GST) in Rs. P	TOTAL AMOUNT In Words
1	2	4.00	5	6.00	53	55
1	Appendix A -Providing FHTC by laying new distribution system- Cost of pipes					
1.001	Supply of DI K9 Pipe Conforming to IS 8329/2000, 200mm Dia.	3950.00	metre	2100.55	8297172.50	INR Eighty Two Lakh Ninety Seven Thousand One Hundred & Seventy Two and Paise Fifty Only
1.002	Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.	2305.00	metre	2811.20	6479816.00	INR Sixty Four Lakh Seventy Nine Thousand Eight Hundred & Sixteen Only
1.003	Supply of DI K9 Pipe Conforming to IS 8329/2000, 350mm Dia.	995.00	metre	4333.00	4311335.00	INR Forty Three Lakh Eleven Thousand Three Hundred & Thirty Five Only



1.004	Supply of DI K9 Pipe Conforming to IS 8329/2000, 400mm Dia.	6670.00	metre	5377.35	35866924.50	INR Three Crore Fifty Eight Lakh Sixty Six Thousand Nine Hundred & Twenty Four and Paise Fifty Only
1.005	Supply of PE Pipe, PE100, PN8, 90mm dia, conforming to IS 4984/2016.	88080.00	metre	213.70	18822696.00	INR One Crore Eighty Eight Lakh Twenty Two Thousand Six Hundred & Ninety Six Only
1.006	Supply of PE Pipe, PE100, PN8, 110mm dia, conforming to IS 4984/2016	4310.00	metre	321.75	1386742.50	INR Thirteen Lakh Eighty Six Thousand Seven Hundred & Forty Two and Paise Fifty Only
1.007	Supply of PE Pipe, PE100, PN8, 140mm dia, conforming to IS 4984/2016	3120.00	metre	520.35	1623492.00	INR Sixteen Lakh Twenty Three Thousand Four Hundred & Ninety Two Only
1.008	Supply of PE Pipe, PE100, PN8, 160mm dia, conforming to IS 4984/2016.	8705.00	metre	681.80	5935069.00	INR Fifty Nine Lakh Thirty Five Thousand & Sixty Nine Only
1.009	Add 5% cost of specials for PE pipes	27767999.50	L.S	0.05	1388399.98	INR Thirteen Lakh Eighty Eight Thousand Three Hundred & Ninety Nine and Paise Ninety Eight Only
1.01	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.	10.00	No	966.75	9667.50	INR Nine Thousand Six Hundred & Sixty Seven and Paise Fifty Only
1.011	Supply of CI Air Valve with Flanges, Conforming to IS 14845 - 2000, Kinetic Air Valve Type DS1, Size 40mm	50.00	No	2693.75	134687.50	INR One Lakh Thirty Four Thousand Six Hundred & Eighty Seven and Paise Fifty Only
1.012	Supply of CI Air Valve with Flanges, Conforming to IS 14845 - 2000, Kinetic Air Valve Type DS1, Size 80mm.	8.00	No	3568.20	28545.60	INR Twenty Eight Thousand Five Hundred & Forty Five and Paise Sixty Only
1.013	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.	40.00	No	3131.05	125242.00	INR One Lakh Twenty Five Thousand Two Hundred & Forty Two Only



1.014	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 100mm.	5.00	No	4186.85	20934.25	INR Twenty Thousand Nine Hundred & Thirty Four and Paise Twenty Five Only
1.015	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 125mm.	6.00	No	5249.35	31496.10	INR Thirty One Thousand Four Hundred & Ninety Six and Paise Ten Only
1.016	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 150mm.	2.00	No	6770.65	13541.30	INR Thirteen Thousand Five Hundred & Forty One and Paise Thirty Only
1.017	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.	2.00	No	11794.00	23588.00	INR Twenty Three Thousand Five Hundred & Eighty Eight Only
1.018	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 250mm.	3.00	No	18345.20	55035.60	INR Fifty Five Thousand & Thirty Five and Paise Sixty Only
1.019	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 350mm.	2.00	No	31667.35	63334.70	INR Sixty Three Thousand Three Hundred & Thirty Four and Paise Seventy Only
1.02	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 400mm.	2.00	No	45862.05	91724.10	INR Ninety One Thousand Seven Hundred & Twenty Four and Paise Ten Only
1.021	Supplying and fixing 350 mm Electro-Magnetic flow meter with suitable specials with valid calibration as directed by the departmental officer (vide order No.KWA/HO/SP-4014/2012/ flow meter &soft starter dtd.05/09/2012 of MD)	1.00	No	190900.00	190900.00	INR One Lakh Ninety Thousand Nine Hundred Only
1.022	100mm GI pipe medium	100.00	metre	851.00	85100.00	INR Eighty Five Thousand One Hundred Only
1.023	125mm GI pipe medium	60.00	metre	1130.45	67827.00	INR Sixty Seven Thousand Eight Hundred & Twenty Seven Only
1.024	Supply of 150 mm Gi pipe Class B	100.00	metre	1600.00	160000.00	INR One Lakh Sixty Thousand Only



1.025	Add 5% for GI Specials	312927.00	L.S	0.05	15646.35	INR Fifteen Thousand Six Hundred & Forty Six and Paise Thirty Five Only
2	Appendix - B - Providing FHTC by laying new distribution system- Working Charges					
2.001	Providing 15mm (1/2 inch) house connection with 15mm water meter from existing PVC / HDPE mains up to 110 mm dia., up to a length of 5m using 20mm (1/2 inch) PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PP PN 16 Compression / GM / Brass specials viz. brass ferrule, brass hexagonal nipple, GM full way wheel valve, bend, MTA, FTA, couplers, PVC Service Saddle of suitable size etc. and connecting with the mains, testing the joints etc. complete including trenching and refilling in all kinds of soil up to a depth of 1.50m for main line tracing and trench of average cross section 0.3m x 0.75m for laying connection pipe and service pipe, fixing water meter, lighting, watching, providing caution boards, traffic control etc. complete including cost of materials, hire for tools, cost of consumables and labour charges, including the cost of tested Class B Multijet water meter with ISI mark and weather resistant PP / PE meter box of minimum size 300mm x 200mm x 150mm, but excluding charges for cutting the concrete / tarred / bituminous roads etc, and as per the direction of the departmental officers.	4000.00	Nos	7017.69	28070760.00	INR Two Crore Eighty Lakh Seventy Thousand Seven Hundred & Sixty Only



2.002	Providing 15mm (1/2 inch) house connection with 15mm water meter from existing PVC / HDPE mains from 140mm to 200mm dia., up to a length of 5 m using 20mm (1/2 inch) PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PP PN 16 Compression / GM / Brass specials viz. brass ferrule, brass hexagonal nipple, GM full way wheel valve, bend, MTA, FTA, couplers, PVC Service Saddle of suitable size etc. and connecting with the mains, testing the joints etc. complete including trenching and refilling in all kinds of soil up to a depth of 1.50m for main line tracing and trench of average cross section 0.3m x 0.75m for laying connection pipe and service pipe, fixing water meter, lighting, watching, providing caution boards, traffic control etc. complete including cost of materials, hire for tools, cost of consumables and labour charges, including the cost of tested Class B Multijet water meter with ISI mark and weather resistant PP / PE meter box of minimum size 300mm x 200mm x 150mm, but excluding charges for cutting the concrete / tarred / bituminous roads etc, and as per the direction of the departmental officers.	1358.00	Nos	7110.09	9655502.22	INR Ninety Six Lakh Fifty Five Thousand Five Hundred & Two and Paise Twenty Two Only
2.003	Providing additional length of house connection pipe using 20 mm (1/2 inch) PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PN16 specials and testing the joints etc., by trenching and refilling in all kinds of soil with trench of average cross section 0.3m x 0.75m for laying of connection pipe and service pipe, lighting, watching, providing caution boards, traffic control etc., including cost of materials, hire for tools, cost of consumables and labour charges etc. complete, but excluding the cost of cutting of concrete / tarred / bituminous roads etc., and as per the directions of the department officers.	124400.00	metre	177.32	22058608.00	INR Two Crore Twenty Lakh Fifty Eight Thousand Six Hundred & Eight Only



2.004	Providing 20mm (1/2 inch) PVC Air Valve in the water meter assembly for 15mm water connection, using 20mm (1/2 inch) PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PP PN 16 Compression specials including cost of materials, consumables, hire for tools and labour charges etc. complete and as per the directions of the department officers.	150.00	Nos	581.33	87199.50	INR Eighty Seven Thousand One Hundred & Ninety Nine and Paise Fifty Only
2.005	Providing 15mm (1/2 inch) GM Check Valve in the water meter assembly for 15mm water connection, using 20mm (1/2 inch) PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PP PN 16 Compression specials including cost of materials, consumables, hire for tools and labour charges etc. complete and as per the directions of the department officers.	5358.00	Nos	493.73	2645405.34	INR Twenty Six Lakh Forty Five Thousand Four Hundred & Five and Paise Thirty Four Only
2.006	Providing 15mm PVC Tap in the water meter assembly for 15mm connection, using 20mm Indian Standard Class 6 uPVC pipes and specials including cost of materials, consumables, hire charges for tools and labour charges etc. complete and as per the direction of departmental officers.	5358.00	Nos	574.04	3075706.32	INR Thirty Lakh Seventy Five Thousand Seven Hundred & Six and Paise Thirty Two Only
2.007	Providing and Fixing Water Tap post using 75 mm PVC pipe including cost of PVC pipe, filling of sand, concreting and fixing end cap	5358.00	No	315.28	1689270.24	INR Sixteen Lakh Eighty Nine Thousand Two Hundred & Seventy and Paise Twenty Four Only
2.008	Dismantling manually / by mechanical means and disposal of material within 50 metres lead as per direction of Engineer -in-Charge:Bituminous road	4480.00	sqm	88.43	396166.49	INR Three Lakh Ninety Six Thousand One Hundred & Sixty Six and Paise Forty Nine Only
2.009	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 equivalent design mix)	45.00	cum	884.29	39793.05	INR Thirty Nine Thousand Seven Hundred & Ninety Three and Paise Five Only



2.01	Cutting the bituminous / concrete roads with cutting machine for a minimum depth of 200mm along the sides of proposed alignment of the pipe to be laid without causing any damage to other utilities, including the charges for hire and conveyance of tools and plant, cost of consumables and charges for lighting, watching, ribbon fencing, caution boards, traffice diversion, and as per the direction of departmental officers etc. complete, before carrying out the demolition of bituminous / concrete road by mechanical means and carrying out the excavation.	12300.00	metre	30.63	376749.00	INR Three Lakh Seventy Six Thousand Seven Hundred & Forty Nine Only
2.011	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 & lifts, laying in uniform layers with mechanical paver finisher in sub - base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer - in- Charge.	606.00	cum	3128.64	1895958.97	INR Eighteen Lakh Ninety Five Thousand Nine Hundred & Fifty Eight and Paise Ninety Seven Only
2.012	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 Technical Specification Clause 502	4030.00	sqm	55.31	222899.36	INR Two Lakh Twenty Two Thousand Eight Hundred & Ninety Nine and Paise Thirty Six Only
2.013	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 Clause 503.	4045.00	sqm	12.15	49146.75	INR Forty Nine Thousand One Hundred & Forty Six and Paise Seventy Five Only



2.014	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 using penetration grade bitumen or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat of either Type A or Type B or Type C as per Technical Specification Clause 508. Case - I By Manual Means (II)Bitumen (S-65)	4045.00	sqm	159.20	643964.00	INR Six Lakh Forty Three Thousand Nine Hundred & Sixty Four Only
2.015	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 A.By Manual Means:-Case - III : Type C (II)Bitumen (S-65)	4045.00	sqm	63.14	255401.30	INR Two Lakh Fifty Five Thousand Four Hundred & One and Paise Thirty Only
2.016	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	240.00	cum	8040.95	1929836.04	INR Nineteen Lakh Twenty Nine Thousand Eight Hundred & Thirty Six and Paise Four Only



2.017	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :All kinds of soil	61793.78	cum	558.99	34542103.96	INR Three Crore Forty Five Lakh Forty Two Thousand One Hundred & Three and Paise Ninety Six Only
2.018	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : "Ordinary Rock.	3432.99	cum	811.82	2786972.38	INR Twenty Seven Lakh Eighty Six Thousand Nine Hundred & Seventy Two and Paise Thirty Eight Only
2.019	Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m. Medium Rock (blasting prohibited)	3432.99	cum	1066.55	3661458.68	INR Thirty Six Lakh Sixty One Thousand Four Hundred & Fifty Eight and Paise Sixty Eight Only
2.02	Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals.	40000.00	metre	28.12	1124800.00	INR Eleven Lakh Twenty Four Thousand Eight Hundred Only
2.021	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.	15000.00	metre	96.77	1451550.00	INR Fourteen Lakh Fifty One Thousand Five Hundred & Fifty Only



2.022	Bailing out water with 5 HP engine and pumpset including conveyance to the site, erection, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc. complete.	373.00	Kwh	37.18	13868.14	INR Thirteen Thousand Eight Hundred & Sixty Eight and Paise Fourteen Only
2.023	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials :200 mm dia Ductile Iron Class K-9 Pipes	3950.00	metre	122.86	485297.00	INR Four Lakh Eighty Five Thousand Two Hundred & Ninety Seven Only
2.024	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 250 mm dia Ductile Iron Class K-9 Pipes	2305.00	metre	164.07	378181.35	INR Three Lakh Seventy Eight Thousand One Hundred & Eighty One and Paise Thirty Five Only
2.025	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials :350 mm dia Ductile Iron Class K-9 Pipes	995.00	metre	273.49	272122.55	INR Two Lakh Seventy Two Thousand One Hundred & Twenty Two and Paise Fifty Five Only
2.026	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 400 mm dia Ductile Iron Class K-9 Pipes	6670.00	metre	329.37	2196897.90	INR Twenty One Lakh Ninety Six Thousand Eight Hundred & Ninety Seven and Paise Ninety Only
2.027	"Laying HDPE pipes (IS : 4984)on land portion including conveying within initial lead and aligning the pipes, electro-fusion welding using automatic or semi automatic electrofusion machines, testing the pipe line thus fabricated to suit the hydraulic working pressure and after testing , aligning the pipeline, lowering the pipe in position into the trenches already made, testing the line to suitable pressure with potable water before back filling and leveling the trenches including all labour charge, hire for appliances etc. complete but excluding cost of pipe and fittings. 90 mm OD HDPE pipe"	88080.00	metre	93.87	8268069.60	INR Eighty Two Lakh Sixty Eight Thousand & Sixty Nine and Paise Sixty Only



2.028	Laying HDPE pipes (IS : 4984)on land portion including conveying within initial lead and aligning the pipes, electro-fusion welding using automatic or semi automatic electrofusion machines, testing the pipe line thus fabricated to suit the hydraulic working pressure and after testing , aligning the pipeline, lowering the pipe in position into the trenches already made, testing the line to suitable pressure with potable water before back filling and leveling the trenches including all labour charge, hire for appliances etc. complete but excluding cost of pipe and fittings. 110 mm OD HDPpipe	4310.00	metre	127.30	548663.00	INR Five Lakh Forty Eight Thousand Six Hundred & Sixty Three Only
2.029	Laying HDPE pipes (IS : 4984)on land portion including conveying within initial lead and aligning the pipes, electro-fusion welding using automatic or semi automatic electrofusion machines, testing the pipe line thus fabricated to suit the hydraulic working pressure and after testing , aligning the pipeline, lowering the pipe in position into the trenches already made, testing the line to suitable pressure with potable water before back filling and leveling the trenches including all labour charge, hire for appliances etc. complete but excluding cost of pipe and fittings. 140 mm OD HDPE pipe	3120.00	metre	181.33	565749.60	INR Five Lakh Sixty Five Thousand Seven Hundred & Forty Nine and Paise Sixty Only



2.03	Laying HDPE pipes (IS : 4984)on land portion including conveying within initial lead and aligning the pipes, electro-fusion welding using automatic or semi automatic electrofusion machines, testing the pipe line thus fabricated to suit the hydraulic working pressure and after testing , aligning the pipeline, lowering the pipe in position into the trenches already made, testing the line to suitable pressure with potable water before back filling and leveling the trenches including all labour charge, hire for appliances etc. complete but excluding cost of pipe and fittings. 160 mm OD HDPE pipe	8705.00	metre	216.53	1884893.65	INR Eighteen Lakh Eighty Four Thousand Eight Hundred & Ninety Three and Paise Sixty Five Only
2.031	Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve	10.00	Nos	141.35	1413.50	INR One Thousand Four Hundred & Thirteen and Paise Fifty Only
2.032	Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 40 mm Single acting Air Valve	50.00	Nos	177.78	8889.00	INR Eight Thousand Eight Hundred & Eighty Nine Only
2.033	Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 80 mm Double acting Air Valve	8.00	Nos	220.96	1767.68	INR One Thousand Seven Hundred & Sixty Seven and Paise Sixty Eight Only
2.034	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid seperately) :80 mm diameter. Class I"	40.00	Nos	591.67	23666.80	INR Twenty Three Thousand Six Hundred & Sixty Six and Paise Eighty Only



2.035	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :100 mm diameter. Class I"	5.00	Nos	892.11	4460.55	INR Four Thousand Four Hundred & Sixty and Paise Fifty Five Only
2.036	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :125 mm diameter. Class I"	6.00	Nos	995.40	5972.40	INR Five Thousand Nine Hundred & Seventy Two and Paise Forty Only
2.037	Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :150 mm diameter. Class I"	2.00	Nos	1208.24	2416.48	INR Two Thousand Four Hundred & Sixteen and Paise Forty Eight Only
2.038	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :200 mm diameter. Class I"	2.00	Nos	1567.42	3134.84	INR Three Thousand One Hundred & Thirty Four and Paise Eighty Four Only
2.039	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :250 mm diameter. Class I"	3.00	Nos	2221.93	6665.79	INR Six Thousand Six Hundred & Sixty Five and Paise Seventy Nine Only
2.04	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :350 mm diameter. Class I"	2.00	Nos	3486.25	6972.50	INR Six Thousand Nine Hundred & Seventy Two and Paise Fifty Only
2.041	"Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :400 mm diameter. Class I"	2.00	Nos	4605.05	9210.10	INR Nine Thousand Two Hundred & Ten and Paise Ten Only



2.042	Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :	90.00	quintal	20247.70	1822293.00	INR Eighteen Lakh Twenty Two Thousand Two Hundred & Ninety Three Only
2.043	Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:200 mm dia pipes	790.00	joint	260.40	205716.00	INR Two Lakh Five Thousand Seven Hundred & Sixteen Only
2.044	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	461.00	joint	317.97	146584.17	INR One Lakh Forty Six Thousand Five Hundred & Eighty Four and Paise Seventeen Only
2.045	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	199.00	joint	440.50	87659.50	INR Eighty Seven Thousand Six Hundred & Fifty Nine and Paise Fifty Only
2.046	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:400 mm dia pipes	1334.00	joint	685.61	914603.74	INR Nine Lakh Fourteen Thousand Six Hundred & Three and Paise Seventy Four Only
2.047	Labour for cutting D.I. pipe with steel saw. 200 mm diameter D.I. pipe	79.00	Each Cut	433.43	34240.97	INR Thirty Four Thousand Two Hundred & Forty and Paise Ninety Seven Only
2.048	Labour for cutting D.I. pipe with steel saw.250 mm diameter D.I. pipe	46.00	Each Cut	539.01	24794.46	INR Twenty Four Thousand Seven Hundred & Ninety Four and Paise Forty Six Only
2.049	Labour for cutting D.I. pipe with steel saw 350 mm diameter D.I pipe	20.00	Each Cut	753.04	15060.80	INR Fifteen Thousand & Sixty and Paise Eighty Only
2.05	Labour for cutting DI. pipe with steel saw 400 mm diameter DI pipe	133.00	Each Cut	861.09	114524.97	INR One Lakh Fourteen Thousand Five Hundred & Twenty Four and Paise Ninety Seven Only
2.051	Testing 200mm DI/CI pipeline with potable water to the required test pressure 200 mm dia	3950.00	metre	40.14	158553.00	INR One Lakh Fifty Eight Thousand Five Hundred & Fifty Three Only



2.052	Testing 250mm DI/CI pipeline with potable water to the required test pressure . 250 mm dia	2305.00	metre	51.20	118016.00	INR One Lakh Eighteen Thousand & Sixteen Only
2.053	Testing 350mm DI/CI pipeline with potable water to the required test pressure. 350 mm dia	995.00	metre	68.23	67888.85	INR Sixty Seven Thousand Eight Hundred & Eighty Eight and Paise Eighty Five Only
2.054	Testing 400mm DI/CI pipeline with potable water to the required test pressure.400 mm dia	6670.00	metre	85.98	573486.60	INR Five Lakh Seventy Three Thousand Four Hundred & Eighty Six and Paise Sixty Only
2.055	Supplying and fixing 500mm dia CI manhole cover with frame(medium duty) charges including all cost, labour charges etc complete.	23.00	Nos	7554.14	173745.22	INR One Lakh Seventy Three Thousand Seven Hundred & Forty Five and Paise Twenty Two Only
2.056	Providing and fixing G.I. pipes complete with G.I fittings including trenching and refilling etc. External work 80 mm dia nominal bore	300.00	metre	1026.23	307869.00	INR Three Lakh Seven Thousand Eight Hundred & Sixty Nine Only
2.057	Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 100 mm dia nominal bore	100.00	metre	236.66	23666.00	INR Twenty Three Thousand Six Hundred & Sixty Six Only
2.058	"Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 125 mm dia nominal bore	60.00	metre	265.10	15906.00	INR Fifteen Thousand Nine Hundred & Six Only
2.059	Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 150 mm dia nominal bore	100.00	metre	293.21	29321.00	INR Twenty Nine Thousand Three Hundred & Twenty One Only
2.06	Fabricating MS pipes of size 200mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	100.00	metre	5944.08	594408.00	INR Five Lakh Ninety Four Thousand Four Hundred & Eight Only



2.061	Fabricating MS flanges of diameter 200 mm using 12 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	20.00	Nos	2023.18	40463.60	INR Forty Thousand Four Hundred & Sixty Three and Paise Sixty Only
2.062	Cutting 200 mm (ID) MS pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	60.00	No	212.91	12774.60	INR Twelve Thousand Seven Hundred & Seventy Four and Paise Sixty Only
2.063	Welding 200 mm (ID) MS pipes for making bends and other specials by gas/electric welding machine including cost of gas and welding rods ,all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	60.00	No	814.75	48885.00	INR Forty Eight Thousand Eight Hundred & Eighty Five Only
2.064	Grinding cut and weld edges of 200 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	60.00	No	152.74	9164.40	INR Nine Thousand One Hundred & Sixty Four and Paise Forty Only
2.065	Fabricating MS pipes of size 250mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	100.00	metre	6905.91	690591.00	INR Six Lakh Ninety Thousand Five Hundred & Ninety One Only



2.066	Fabricating MS flanges of diameter 250 mm using 12 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	20.00	Nos	2488.85	49777.00	INR Forty Nine Thousand Seven Hundred & Seventy Seven Only
2.067	Cutting 250 mm (ID) MS pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	60.00	No	262.24	15734.40	INR Fifteen Thousand Seven Hundred & Thirty Four and Paise Forty Only
2.068	Welding 250mm (ID) MS pipes for making bends and other specials by gas/electric welding machine including cost of gas and welding rods ,all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	60.00	No	1003.38	60202.80	INR Sixty Thousand Two Hundred & Two and Paise Eighty Only
2.069	Grinding cut and weld edges of 250 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	60.00	No	188.15	11289.00	INR Eleven Thousand Two Hundred & Eighty Nine Only
2.07	Fabricating MS pipes of size 350mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	70.00	metre	8817.03	617192.10	INR Six Lakh Seventeen Thousand One Hundred & Ninety Two and Paise Ten Only



2.071	Fabricating MS flanges of diameter 350 mm using 12 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	14.00	No	3588.16	50234.24	INR Fifty Thousand Two Hundred & Thirty Four and Paise Twenty Four Only
2.072	Cutting 350 mm (ID) MS pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	42.00	No	360.82	15154.44	INR Fifteen Thousand One Hundred & Fifty Four and Paise Forty Four Only
2.073	Welding 350 mm (ID) MS pipes for making bends and other specials by gas/electric welding machine including cost of gas and welding rods ,all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	42.00	No	1380.57	57983.94	INR Fifty Seven Thousand Nine Hundred & Eighty Three and Paise Ninety Four Only
2.074	Grinding cut and weld edges of 350 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	42.00	No	258.83	10870.86	INR Ten Thousand Eight Hundred & Seventy and Paise Eighty Six Only
2.075	Fabricating MS pipes of size 400mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	50.00	metre	9773.47	488673.50	INR Four Lakh Eighty Eight Thousand Six Hundred & Seventy Three and Paise Fifty Only



2.076	Fabricating MS flanges of diameter 400 mm using 12 mm thick MS plate including cost and conveyance charges of MS plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under coat of primer etc. complete: For pipes fabricated with 8mm thick MS plates.	10.00	No	4145.93	41459.30	INR Forty One Thousand Four Hundred & Fifty Nine and Paise Thirty Only
2.077	Cutting 400 mm (ID) MS pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	30.00	No	410.14	12304.20	INR Twelve Thousand Three Hundred & Four and Paise Twenty Only
2.078	Welding 400 mm (ID) MS pipes for making bends and other specials by gas/electric welding machine including cost of gas and welding rods ,all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	30.00	No	1569.13	47073.90	INR Forty Seven Thousand & Seventy Three and Paise Ninety Only
2.079	Grinding cut and weld edges of 400 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	30.00	No	294.23	8826.90	INR Eight Thousand Eight Hundred & Twenty Six and Paise Ninety Only
2.08	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	153.14	cum	215.37	32981.55	INR Thirty Two Thousand Nine Hundred & Eighty One and Paise Fifty Five Only
2.081	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	301.22	sqm	337.42	101637.99	INR One Lakh One Thousand Six Hundred & Thirty Seven and Paise Ninety Nine Only



2.082	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)	8.21	cum	6857.61	56321.55	INR Fifty Six Thousand Three Hundred & Twenty One and Paise Fifty Five Only
2.083	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)	88.81	cum	8642.31	767540.84	INR Seven Lakh Sixty Seven Thousand Five Hundred & Forty and Paise Eighty Four Only
2.084	Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	297.16	sqm	721.70	214460.37	INR Two Lakh Fourteen Thousand Four Hundred & Sixty and Paise Thirty Seven Only
2.085	Centering and shuttering including strutting, etc. and removal of form for:	96.72	sqm	820.89	79399.76	INR Seventy Nine Thousand Three Hundred & Ninety Nine and Paise Seventy Six Only
2.086	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)	42.97	cum	9142.09	392817.32	INR Three Lakh Ninety Two Thousand Eight Hundred & Seventeen and Paise Thirty Two Only
2.087	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	9600.00	kilogram	98.92	949632.00	INR Nine Lakh Forty Nine Thousand Six Hundred & Thirty Two Only
2.088	Supplying and fixing 150mm CI surface box embeded with RCC slab of size 0.6x0.6x0.15 and 160mm or above size PVC 10Kg/cm2 pipe acting as protection tube with including all cost of conveyance, labour charges etc.complete	108.00	No	2743.15	296260.20	INR Two Lakh Ninety Six Thousand Two Hundred & Sixty and Paise Twenty Only



3	Appendix - D : Design, Construction, Testing and Commissioning of 12.5Lakh Ltr. Capacity OH Service Reservoir at Vazhayil					
3.001	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	783.00	sqm	14.87	11643.21	INR Eleven Thousand Six Hundred & Forty Three and Paise Twenty One Only
3.002	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	550.00	sqm	109.63	60296.50	INR Sixty Thousand Two Hundred & Ninety Six and Paise Fifty Only
3.003	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	428.32	cum	215.37	92246.42	INR Ninety Two Thousand Two Hundred & Forty Six and Paise Forty Two Only
3.004	Extra for every additional lift 1.5 m or part there of in excavation / banking excavated or stacked materials.All kinds of soil	228.43	cum	107.04	24451.47	INR Twenty Four Thousand Four Hundred & Fifty One and Paise Forty Seven Only
3.005	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	286.56	cum	417.44	119623.28	INR One Lakh Nineteen Thousand Six Hundred & Twenty Three and Paise Twenty Eight Only
3.006	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	386.74	sqm	337.42	130494.82	INR One Lakh Thirty Thousand Four Hundred & Ninety Four and Paise Eighty Two Only



3.007	Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	767.07	sqm	721.70	553592.98	INR Five Lakh Fifty Three Thousand Five Hundred & Ninety Two and Paise Ninety Eight Only
3.008	Centering and shuttering including strutting, etc. and removal of form for:	881.24	sqm	820.89	723400.28	INR Seven Lakh Twenty Three Thousand Four Hundred and Paise Twenty Eight Only
3.009	Centering and shuttering including strutting, etc. and removal of form for:	2320.75	sqm	653.89	1517515.87	INR Fifteen Lakh Seventeen Thousand Five Hundred & Fifteen and Paise Eighty Seven Only
3.01	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts	832.08	sqm	869.05	723121.73	INR Seven Lakh Twenty Three Thousand One Hundred & Twenty One and Paise Seventy Three Only
3.011	Centering and shuttering including strutting, etc. and removal of form for:Stairs, (excluding landings) except spiral - staircases)	46.81	sqm	737.12	34502.38	INR Thirty Four Thousand Five Hundred & Two and Paise Thirty Eight Only
3.012	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)	42.22	cum	6857.61	289507.72	INR Two Lakh Eighty Nine Thousand Five Hundred & Seven and Paise Seventy Two Only
3.013	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	28.54	cum	9142.09	260915.25	INR Two Lakh Sixty Thousand Nine Hundred & Fifteen and Paise Twenty Five Only



3.014	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	192.77	cum	9472.55	1825985.57	INR Eighteen Lakh Twenty Five Thousand Nine Hundred & Eighty Five and Paise Fifty Seven Only
3.015	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	496.48	cum	11135.00	5528293.67	INR Fifty Five Lakh Twenty Eight Thousand Two Hundred & Ninety Three and Paise Sixty Seven Only
3.016	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	92526.60	kilogram	98.92	9152730.88	INR Ninety One Lakh Fifty Two Thousand Seven Hundred & Thirty and Paise Eighty Eight Only



3.017	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	8.22	cum	6665.30	54808.76	INR Fifty Four Thousand Eight Hundred & Eight and Paise Seventy Six Only
3.018	12 mm cement plaster finished with a floating coat of neat cement of mix:	1823.91	sqm	403.73	736368.40	INR Seven Lakh Thirty Six Thousand Three Hundred & Sixty Eight and Paise Forty Only
3.019	15 mm cement plaster 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall.	1451.17	sqm	468.33	679625.98	INR Six Lakh Seventy Nine Thousand Six Hundred & Twenty Five and Paise Ninety Eight Only
3.02	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	478.89	kg	1.43	684.81	INR Six Hundred & Eighty Four and Paise Eighty One Only
3.021	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer	2323.86	sqm	71.09	165203.49	INR One Lakh Sixty Five Thousand Two Hundred & Three and Paise Forty Nine Only
3.022	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work	2323.86	sqm	152.34	354017.44	INR Three Lakh Fifty Four Thousand & Seventeen and Paise Forty Four Only
3.023	Lettering with black Japan pint of approved brand and manufacture	600.00	Letterxcm l	5.59	3354.00	INR Three Thousand Three Hundred & Fifty Four Only
3.024	Item Shifted to head 14 as item 14.74Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.	160.00	kg	155.13	24820.80	INR Twenty Four Thousand Eight Hundred & Twenty and Paise Eighty Only
3.025	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.	3069.18	kg	187.20	574550.50	INR Five Lakh Seventy Four Thousand Five Hundred & Fifty and Paise Fifty Only



3.026	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.	141.03	cum	260.19	36695.12	INR Thirty Six Thousand Six Hundred & Ninety Five and Paise Twelve Only
3.027	Filling water with 5000 litre tankers fitted in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set, hire for tanker lorry, tools and other appliances and cost of water etc. complete."(Ref. No. 000, Technical Circular)"	1252.64	Kilo litre	185.67	232578.23	INR Two Lakh Thirty Two Thousand Five Hundred & Seventy Eight and Paise Twenty Three Only
3.028	Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:	26.13	quintal	10422.24	272333.13	INR Two Lakh Seventy Two Thousand Three Hundred & Thirty Three and Paise Thirteen Only
3.029	Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:	6.76	quintal	8821.66	59616.78	INR Fifty Nine Thousand Six Hundred & Sixteen and Paise Seventy Eight Only
3.03	Providing and laying S & S C.I standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class):	2.80	quintal	6301.89	17645.29	INR Seventeen Thousand Six Hundred & Forty Five and Paise Twenty Nine Only
3.031	Supplying and fixing Mechanical water level indicator.	2.00	No	10000.00	20000.00	INR Twenty Thousand Only



3.032	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :All kinds of soil (Ref. Item No. 2.10.1 of DSR)	92.00	cum	558.99	51427.08	INR Fifty One Thousand Four Hundred & Twenty Seven and Paise Eight Only
3.033	Supply of uPVC Pipe, IS 4985: 2000 , 6kg/cm ² , 200mm Dia.	100.00	metre	998.75	99875.00	INR Ninety Nine Thousand Eight Hundred & Seventy Five Only
3.034	Laying UPVC pipes of class 2 to class 6 and specials, lowering to the trenches already made, placing in position aligning the pipe line to the lines and levels and jointing the pipes and specials with solvent cement and testing the pipe line with water to the required test pressure (excluding cost of pipes and specials). 200 mm nominal outer dia pipes.	100.00	metre	287.48	28748.00	INR Twenty Eight Thousand Seven Hundred & Forty Eight Only
3.035	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	103.50	sqm	1017.91	105353.69	INR One Lakh Five Thousand Three Hundred & Fifty Three and Paise Sixty Nine Only
3.036	Providing lighting arrester using for OH tank	1.00	No	75000.00	75000.00	INR Seventy Five Thousand Only
3.037	Supply of DI K9 Pipe Conforming to IS 8329/2000, 200mm Dia.	4.00	metre	2100.55	8402.20	INR Eight Thousand Four Hundred & Two and Paise Twenty Only



3.038	Supply of DI K9 Pipe Conforming to IS 8329/2000, 350mm Dia.	4.00	metre	4333.00	17332.00	INR Seventeen Thousand Three Hundred & Thirty Two Only
3.039	Supply of DI K9 Pipe Conforming to IS 8329/2000, 400mm Dia.	2.00	metre	5377.35	10754.70	INR Ten Thousand Seven Hundred & Fifty Four and Paise Seventy Only
3.04	Providing and laying Double Flanged (Screwed / Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS: 8329 :	84.00	metre	3436.45	288661.80	INR Two Lakh Eighty Eight Thousand Six Hundred & Sixty One and Paise Eighty Only
3.041	Providing and laying Double Flanged (Screwed / Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS: 8329 :	100.00	metre	7885.14	788514.00	INR Seven Lakh Eighty Eight Thousand Five Hundred & Fourteen Only
3.042	Providing and laying Double Flanged (Screwed / Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS: 8329 :	50.00	metre	10116.96	505848.00	INR Five Lakh Five Thousand Eight Hundred & Forty Eight Only
4	Appendix : E Construction of Compound wall					
4.001	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	26.01	cum	215.37	5601.99	INR Five Thousand Six Hundred & One and Paise Ninety Nine Only
4.002	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	2.89	cum	417.44	1206.82	INR One Thousand Two Hundred & Six and Paise Eighty Two Only
4.003	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	119.20	sqm	337.42	40220.46	INR Forty Thousand Two Hundred & Twenty and Paise Forty Six Only



4.004	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)	8.66	cum	6857.61	59352.61	INR Fifty Nine Thousand Three Hundred & Fifty Two and Paise Sixty One Only
4.005	Centering and shuttering including strutting, etc. and removal of form for:	23.36	sqm	653.89	15275.52	INR Fifteen Thousand Two Hundred & Seventy Five and Paise Fifty Two Only
4.006	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts	7.20	sqm	869.05	6257.16	INR Six Thousand Two Hundred & Fifty Seven and Paise Sixteen Only
4.007	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:	28.60	cum	7249.94	207348.28	INR Two Lakh Seven Thousand Three Hundred & Forty Eight and Paise Twenty Eight Only
4.008	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	3.67	cum	8040.95	29526.37	INR Twenty Nine Thousand Five Hundred & Twenty Six and Paise Thirty Seven Only
4.009	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.	37.60	cum	7968.75	299656.88	INR Two Lakh Ninety Nine Thousand Six Hundred & Fifty Six and Paise Eighty Eight Only
4.01	12 mm cement plaster finished with a floating coat of neat cement of mix:	464.00	sqm	388.79	180398.56	INR One Lakh Eighty Thousand Three Hundred & Ninety Eight and Paise Fifty Six Only
4.011	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	220.32	kilogram	98.92	21794.15	INR Twenty One Thousand Seven Hundred & Ninety Four and Paise Fifteen Only



4.012	Finishing walls with Acrylic Smooth exterior paint of required shade:New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	464.00	sqm	195.11	90531.04	INR Ninety Thousand Five Hundred & Thirty One and Paise Four Only
4.013	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.	301.92	kg	187.20	56519.42	INR Fifty Six Thousand Five Hundred & Nineteen and Paise Forty Two Only
Total in Figures					254458756	INR Twenty Five Crore Forty Four Lakh Fifty Eight Thousand Seven Hundred & Fifty Six and Paise Four Only
Quoted Rate in Figures			Less (-)	9.80%	229521797.91	INR Twenty Two Crore Ninety Five Lakh Twenty One Thousand Seven Hundred & Ninety Seven and Paise Ninety One Only
Quoted Rate in Words		INR Twenty Two Crore Ninety Five Lakh Twenty One Thousand Seven Hundred & Ninety Seven and Paise Ninety One Only				



JJM 2020-2021 Phase II: Providing FHTCs at Chekkiad Grama Panchayath by the Construction of new RCC OH Tank of capacity 12.50 Lakh Litre, Laying new Gravity main and Laying new Distribution line

e-Tender No : SE/PHC/KKD/06/2021-22

Abstract

Tendered PAC	=	Rs. 254,458,756
Accepted Rate	=	Rs. 229,521,797.91
% over all Excess / Below	=	$\frac{229521797.91-257758756}{254458756} \times 100$
	=	-9.80 % Beow Tendered PAC

