

Name of the Work:- JIM PHASE II : WSS to Karassery, Kodiyathur, Koodaranhi, Thiruvambady and Omassery Gps in Kozhikode District: Part IV: Construction, Testing and Commissioning of 18 LL GLSR , Providing FHTCs by Laying New Distribution Lines at Omassery Grama Panchayath.

Tender Reference No:- SE/PHC/KKD/27/2022-23.

CPM SCHEDULE

SI No	DESCRIPTION OF WORK	1	2	3	4	5	6	7	8	9
1.	Supply of pipes & specials									
2.	Construction of 19LL GLSR									
3.	Laying, Jointing of pipes & specials									
4.	Supply & fixing of valves, flow meter									
5.	Providing FHTCs & Geo-tagging									
6.	Road restoration									
7.	Trial run & commissioning									



CONSTRUCTION SCHEDULE - GANTT CHART

Name of work : JJM- Phase II- WSS to Karassery, Kodyathur, Koodaranhi, Thiruvambadi and Omassery Grama Panchayaths in Kozhikode District: Providing Functional Household Tap Connections (FHTCs) to Omassery Grama Panchayath by Constructing new RCC OHSR of capacity 19 LL and Distribution System.

Tender No: SE/PHC/KKD/27/2022-23

Name of Tenderer:

SL NO	DESCRIPTION OF ITEM	COMPLETION PERIOD- 2022-2023											
		MO											
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	Supply of pipes & specials	█											
3	Construction Of 19LL GLSR		█										
4	Laying jointing of pipes & specials		█										
5	Supply & fixing of valves ,flow meter			█									
6	Providing FHTCs and Geo- tagging		█										
7	Road restoration			█									
8	Trial run & commissioning								█				

Original completion time



NAME OF PROJECT: JJM PHASE II : WSS to Karassery, Kodyathur, Koodaranhi, Thiruvambady and Omassery Gps in Kozhikode District: Part IV: Construction, Testing and Commissioning of 18 LL GLSR , Providing FHTCs by Laying New Distribution Lines at Omassery Grama Panchayath.

Tender Reference No: SE/PHC/KKD/27/2022 - 23.

TECHNICAL BID

Submitted by

**M/s. REENA ENGINEERS AND CONTRACTORS PVT LTD
GOA**



TECHNICAL BID

SCOPE OF WORK
"PARTICULARS OF CIVIL WORKS"

Omassery is a town in Kozhikode district, Kerala, India and it is a junction between Thiruvambady, Thamarassery, Mukkam, Koduvally, Kodenchery and Kattangal. Omassery is located 29 kilometers southeast of Kozhikode in the eastern part of Kerala; better known as Malabar (Northern Kerala). Omassery is a fast developing place and is well connected to the other parts of the state. Besides that, it is known as the gateway to the hill ranges of Western Ghats in Malabar. Omassery is located at 11°18'0"N 75°58'30"E. The total area of the Panchayat is 25.46 square kilometres and 19 numbers of wards. As of 2001 census the total population of the panchayat is 25,420. Four boundaries of the Thiruvambadi Panchayath are:

South: Chathamangalam and Mukkam panchayath.
East: Mukkam and Kodengeri panchayath.
West: Koduvally Municipality.
North: Thamarassery and Kodencheri Panchayath.

SCOPE OF THE TENDER

Part-I : Design, Construction, Testing and Commissioning of RCC Ground level service reservoir (GLSR) of capacity of 19 Lakh liters at Velimanna, Omasser panchayath.

RCC GROUND LEVEL SERVICE RESERVOIR (GLSR) AT VELIMANNA, OMASSERY

Net Capacity : 19.0 LL
Outlet level of the reservoir : + 111.40 m.
Inlet level of the reservoir : + 115.00 m
No. of chambers : Two

Part-II : Supplying, Laying, Testing and Commissioning of distribution network with Functional Household connections (FHTC) from the GLSR.

1. DI PIPES

Sr. No.	Description of Pipes	Qty (In Mtrs.)
1	500mm DI K7 Pipe (IS 8329/2000)	606.00
2	450mm DI K7 Pipe (IS 8329/2000)	8813.00
3	400mm DI K9 Pipe (IS 8329/2000)	1597.00
4	350mm DI K9 Pipe (IS 8329/2000)	1578.00

5	300mm DI K9 Pipe (IS 8329/2000)	359.00
6	250mm DI K9 Pipe (IS 8329/2000)	2070.00
7	200mm DI K9 Pipe (IS 8329/2000)	16995.00
	TOTAL	32018.00

2. PE PIPES

SI No.	DESCRIPTION OF PIPES	QUANTITY (IN Mtrs.)
	HDPE PIPES	
1	180mm PE Pipe, PE 100, PN 12.5 (IS 4984/2016)	233.00
2	180mm PE Pipe, PE 100, PN 10 (IS 4984/2016)	10867.00
3	160mm PE Pipe, PE 100, PN 10 (IS 4984:2016)	2115.00
4	140mm PE Pipe, PE 100, PN 12.5 (IS 4984/2016)	168.00
5	140mm PE Pipe, PE 100, PN 10 (IS 4984:2016)	2233.00
6	125mm PE Pipe, PE 100, PN 12.5 (IS 4984/2016)	86.00
7	125mm PE Pipe, PE 100, PN 10 (IS 4984/2016)	4475.00
8	110mm PE Pipe, PE 100, PN 12.5 (IS 4984/2016)	597.00
9	110mm PE Pipe, PE 100, PN 10 (IS 4984/2016)	6404.00
10	90mm PE Pipe, PE 100, PN 12.5 (IS 4984/2016)	1211.00
11	90mm PE Pipe, PE 100, PN 10 (IS 4984/2016)	147779.00
	TOTAL	176168.00

3. VALVES

Valves will be supplied as per BOQ.

4. RCC Valve Chambers

RCC Valve chambers must be constructed for all the valves fitted in the tank compound having sufficient size and as per the standard specification. The design of the same shall be got approved by the Executive Engineer -in-charge of the site in advance. The inside dimension shall not be less than 1.2 m x 1.2 m for valves above and up to 150 mm. Heavy duty CI man hole cover 500 mm size for the valve chamber shall be provided with proper locking arrangement.

5. Anchor Blocks

Anchor blocks should be provided wherever necessary, as per the direction of the Engineer-in-charge, to avoid dislocation of the pipes. The design of the anchor block provided should be got approved by the Executive Engineer before commencement of work.

6. ROAD RESTORATION WORKS IN PWD AND LSGD ROADS

Restoration of road surfaces that are dismantled/ damaged during this work is included in the scope of this tender. Trenches shall be refilled in layers not exceeding 20cm in depth and shall be consolidated by watering and ramming. Excess earth if any shall be disposed as directed by Engineer-in-charge and all government rules and procedures in this regard shall be strictly observed.

All the PWD/ LSGD roads with tarred surface shall be restored to the original condition as per MORTH standards (specified in BOQ). Roads with concrete surface shall be restored with 15cm depth in the trenches which shall be concreted in two layers, bottom layer shall be 10cm thick with PCC 1:3:6 using 40mm graded stone aggregate and top layer shall be 5cm thick with P:C:C 1:2:4 using 20mm aggregates. If tiled surfaces are dismantled, the same shall be restored back to the original position with dismantled tiles or new tiles, if the dismantled tiles are damaged. No separate claim will be entertained for the same.

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"BRIEF DESCRIPTION OF THE SYSTEMS OFFERED"

Upon the award of the project work, We Reena Engineers & Contractors Pvt Ltd shall conduct the survey of the proposed alignment with necessary equipment and with the support of our engineers and Plumbers any appropriate modifications on the route and the alignment shall be identified and incorporated considering the practical aspects of speedy implementation of the Work.

Copy of the findings shall be submitted to the department. We will cross verify the hydraulic parameters and the flow requirement of each segment and suitably modify the pipe specification if necessary and to the advantage of the system in large.

Necessary approvals will be obtained if there are any significant changes made in the design output. Design and detail engineering with drawings of all other project component shall be made and submitted for the department's approval. A micro level project schedule shall be prepared for each segment to plan the project execution strictly to perform the work within the time frame specified in the tender.

The supply of pipes, valves and fittings as per the final BOQ shall be procured from the Manufacturers of repute as per the tender specifications. A third-party inspection shall be conducted along with KWA representative before the dispatch of the materials from the respective manufacturers.

1. Supply of Sluice valves

Sluice valves of various sizes DI D/F (PN 1.6) will be supplied and shall be provided for scour arrangements. The scour valves will be provided with scour Tee and Scour delivery system at every valley or, at places where the water can be drained out conveniently. The valves will conform to the relevant BIS standards and shall bear ISI marking wherever applicable.

2. Supply of Air valves

Air valves shall be invariably provided at essential locations inside a valve chamber and all Air valve shall be supported with same size of control valve below it.

3. Supply of Specials

The necessary specials such as Bends, Tees for fixing Air valves, Scour Tees for Scour arrangements, Tail pieces for fixing Valves, Pipes for scour delivery arrangements, all conforming to BIS/ISO standards will be supplied and installed by the tenderer for the completion of work.

4. Pre- Delivery Inspection of Pipes and Specials

Necessary arrangements for third party inspection will be made before the delivery of Pipes at site.

5. Storage of Materials

The conveyance, unloading and stacking of materials procured for the project will be met by us as directed.

6. Trenching

Trenching for pipe laying shall be done as per the KWA specifications and as directed by the departmental officers in all classes of soil.

7. Laying of Pipes

Pipes shall be laid in straight line in trenches so that the body directly rests on the soil bed. Handling of pipes to lay in trenches or on any support structure will be done carefully and proper equipments will be used for the purpose.

8. Fabrication

Any fabrication work shall be got approved by the Engineer in charge before actual fabrication. The schedule of site fabrication shall be intimated to the Engineer in charge in advance to enable him to inspect the fabrication and welding work.

9. Road Restoration works

All PWD roads damaged due to trenching for pipe laying shall be restored to its original status with the approval of concerned department.

All NIT conditions will be followed in Toto and civil, pipe laying works stipulated in NIT will be undertaken.

(Managing Director)

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METHOD OF EXECUTION

For different size pipe, the laying work will be done simultaneously.

If we are the lowest Bidder, after receiving work order we will sign agreement with Department. After that we will do theoretical study as per NIT and price schedule (BOQ) basis.

Materials like Pipes & Valves will be procured from reputed companies from Chennai, Kolkata, Mumbai and Pune. The above material will be inspected jointly by KWA officials and your deputed Third Party and then material will be delivered on site and the laying of pipeline work will be commenced.

For Higher Diameter pipes, the laid pipeline will be tested after every 500 mtr. and for lower diameter, the laid pipeline will be tested after every 1000 mtr.

Meantime the road will be temporarily restored with quarry dust after laying pipe line.

Meantime Valves Chambers and Anchor Blocks will be constructed.

After completion of 80% laying work, we will start the road restoration work.

After completion of work, we will be commissioning the said scheme.

