

Execution of 02 Nos Individual Rural Piped Water Supply Project pertaining to the Baliguda & Tikabali blocks of Kandhamal district including five years Operation and Maintenance”



Engineering & Design Consulting

PHANS4 CONSULTING PVT. LTD.

BID ID NO. : EIC, RWSS-04/20-21

EPC MODE

GOVT. OF ODISHA (R.W.S.S)

PRE BID REVIEW OF RWSS PERTAINING TO PROJECT PERTAINING TO THE BALIGUDA & TIKABALI
BLOCKS OF KANDHAMAL DISTRICT

LOCATION OF THE PROPOSED DISTRICT IN THE STATE OF ODISHA



Rural Piped Water Supply Projects pertaining to Kandhamal District

PRE BID REVIEW OF RWSS PERTAINING TO PROJECT PERTAINING TO THE BALIGUDA & TIKABALI
BLOCKS OF KANDHAMAL DISTRICT

PROJECT BRIEFING

ITEM	DESCRIPTION
BID ID NO	EIC, RWSS-04/20-21
TENDER ID	2020_RWSS_61843_1
PROJECT TITLE	Execution of 02 Nos Individual Rural Piped Water Supply Project pertaining to the Baliguda & Tikabali blocks of Kandhamal district including five years Operation & Maintenance under one Package. 1. Execution of Rural Piped Water Supply Projects pertaining to 14 Nos. GP of Balliguda block of Kandhamal District. 2. Execution of Rural Piped Water Supply Projects pertaining to 11 Nos. GP of Tikabali Block of Kandhamal District.
TYPE OF CONTRACT	Engineering Procurement & Construction (EPC)
NO. OF COVERS	2
MODE OF SUBMISSION	Online
PROJECT COST	197.65 Crores
EMD	1.97 Crores
COMPLETION OF WORK	24 Months (2 Years)
IMPORTANT DATES	Bid Release - 03 – 07 – 2020 Bid Clarification - 09 – 07 – 2020 Bid Submission - 17 – 08 – 2020 @ 5 PM Bid Opening - 21 – 08 – 2020 @ 11 AM
PRE BID MEETING	10 JULY 2020 @ 11 AM
PRE BID MEETING PLACE	EIC RWSS Odisha Bhubaneswar
BID OPENING PLACE	EIC RWSS Odisha Bhubaneswar
TECHNICAL CAPACITY	1. Design, execution and successful commissioning on an EPC /Turnkey basis of either of the following works as a prime contractor during last 7 years upto Bid submission deadline. a) One similar water supply work costing not less than the amount equal to 80% of estimated cost. (Or) b) Two similar water supply works each costing not less than the amount equal to 50% of estimated cost. (Or) c) Three similar water supply works each costing not less than the amount equal to 40% of estimated cost. 2. For demonstrating technical capacity and experience (the "Technical Capacity"), the bidder shall, over the past 7 (seven) financial years preceding the Application Due Date, have experience in the following and have received payments for construction of eligible projects (s) or has undertaken construction of eligible projects by itself in PPP mode, such that the sum total thereof is more than Rs.494.125 crore (The "threshold technical capacity): * This amount should be equivalent to two & half times of the estimated cost of the project for which bids are being invited.
FINANCIAL CAPACITY	(B) Financial Capacity: In order to demonstrate "Financial Capacity"

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	<p>1) The bidder shall have a minimum Net Worth of Rs. 19.765 crore at the close of the preceding financial year (* insert Rs as 10% of the estimated cost of the project for which bids are being invited).</p> <p>2) The bidder shall have a minimum average annual turnover (calculated as total certified payments received for contracts in progress and or completed, within the last 3 financial years divided by of Rs.59.295 Crore (insert Rs. i.e. 30% of the estimated cost of the project).</p>
DETAILED SCOPE OF WORK	<p>The scope of work of each PWS project will broadly include survey, investigation, cost estimate, intake arrangement, raw water, rising main, WTP, CWR, Storage reservoir, pumping station and distribution network, installing raw water pumps, clear water pumps & motors, providing external power supply, internal electrification, installing flow meters, providing automation and SCADA system etc.as detailed at Annex-I of Schedule- B of Draft Agreement and Operation & maintenance of the project during the defect liability period, which is expected to be 01 year. For majors structures the defect liability period shall be 05 years which shall be concurrent with O & M period.</p> <p>(A)- Source & Head Works (B)- Raw water Pumping Main (C)- Water Treatment plant& pump house (D)- Clear water Pumping Main (E)- RCC Storage Reservoir (F)- Distribution Net Work (G)- Mechanical & Electrical Installations (H)- Instrumentation & Automation (I)- House Connections</p>
PERFORMANCE SECURITY	10 % of the contract value

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PROJECT IMPORTANT INFORMATION		
S.NO	ITEM	DESCIRPTION
1.	Project Beneficiaries	All the villages and habitations and provision for bulk water supply points to en-route covered villages/habitations coming Across in the pipeline network. The bidder has to access the list often-routed villages during survey & site visit and the details along with population shall be submitted with the tender.
2.	Project Design Year	30 years taking base as 2022 year
3.	Project Clear Water Demand	(70 LPCD at consumer end excluding 15 LPCD to be considered as losses and institutional demand) The same has to assessed by the bidder.
4.	Source Of Water	Only surface water sources
5.	Reservoir Level	To be assessed by the bidder
6.	Source Of Raw Water	River/Reservoir. All villages are to be supplied with PWS. The villages which are in the hilly area or at a high altitude & not feasible for boosting/pumping from rising main, alternate arrangement for supply of water is to be made by considering local sources of water. (to be assessed by the bidder)
7.	Intake Location	<p>1. Execution of Mega Piped Water Supply Project pertaining to the Tikabali block of Kandhamal district.</p> <p>Source 1: Salunki River - Mega Rural Piped drinking water supply Scheme to 11 G.P of Tikabali Block, Dist.- Kandhamal, Odisha by constructing weir in River Salunki for diversion of water for storage in constructed storage reservoir by the side of river Salunki of Tikabali G.P.</p> <p>Weir site in Salunki River <u>Co-ordinate:-Latitude: - 20°14'38.53"N Longitude: - 84°20'14.55"E</u>.At selected weir site Government land is available and it is proposed to construct a storage tank.</p> <p>Piped drinking water supply from most of the river in Orissa state cannot be relied throughout the year because except a few River, most of the river goes dry in hot season due to off - taking from hills without snow deposit. So for uninterrupted drinking water supply, the water has to be stored in constructed storage pond.</p> <p>Source 2: Paburia River - Mega Rural Piped drinking water supply scheme to 11 G.P of Tikabali Block, Dist.- Kandhamal, Odisha by constructing weir in River Paburia Nala for diversion of water for storage in constructed storage reservoir by the side of Paburia Nala of Paburia G.P</p> <p>Weir site in Paburia Nala <u>Co-ordinate:-Latitude: - 20°10'4.31"N Longitude: - 84°14'57.78"E</u>. At selected weir site Government land is available and it is proposed to construct a storage tank.</p> <p>Piped drinking water supply from most of the river in Orissa state cannot be relied throughout the year because except a few River, most of the river goes dry in hot season due to off - taking from hills without snow deposit. So for uninterrupted drinking water supply, the water has to be</p>

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		<p>stored in constructed storage pond.</p> <p>Source 3: Giruti River – Mega Rural Piped drinking water supply scheme to 11 G.P of Tikabali Block, Dist.- Kandhamal, Odisha by constructing weir in River Giruti Nala for diversion of water for storage in constructed storage reservoir by the side of Giruti Nala of Giruti G.P.</p> <p>Weir site in Giruti Nala Co-ordinate:-Latitude: - 20°13'57.78"N Longitude: - 84°14'53.07"E. At selected weir site Government land is available and it is proposed to construct a storage tank.</p> <p>Piped drinking water supply from most of the river in Orissa state cannot be relied throughout the year because except a few River, most of the river goes dry in hot season due to off - taking from hills without snow. deposit. So for uninterrupted drinking water supply, the water has to be stored in constructed storage pond</p> <p align="center">2. Execution of Mega Piped Water Supply Project pertaining to the Baliguda Block of Kandhamal district.</p> <p>Source 1:River Khadga (no data available for this source)</p>
8.	Reservoir levels	To be Assessed by the Bidder
9.	Source of raw water	River/Reservoir. All villages are to be supplied with PWS. The villages which are in the hilly area or at a high altitude & not feasible for boosting/pumping from rising main, alternate arrangement for supply of water is to be made by considering local sources of water. (to be assessed by the bidder)
10.	Pipe material for Raw water Rising main	DI of suitable Class confirming to IS: 8329 Hours of flow per day – 20 hours
11.	Pipe material for Clear water rising main	<p>Pipe material:</p> <p>i) Ductile Iron (DI)-suitable class conforming to IS:8329 for all rising mains/transmission mains up to MBRs/Zonal balancing tanks.</p> <p>ii) For in village/habitation distribution system HDPE pipes of required pressure rating to be used from ESR to in village/ habitation distribution level. The dia of HDPE pipe shall be restricted within 160mm.</p> <p>iii) For gravity pipelines from MBR/zonal balancing tanks to the ESR (if provided at villages) or to the beginning of the village boundary, HDPE pipes of required pressure rating shall be used except HDPE pipes up to 160mm.</p> <p>Hours of flow per day: Minimum 8 hours/day (to be assessed by the bidder as per condition)</p>
12.	WTP	Conventional Treatment Capacity – Ultimate design year demand Operation time – 20 hours/day
13.	Supply point at each village /habitation	<ul style="list-style-type: none"> Treated water shall be fed to proposed OHT. Then from ESR/OHT, water will be supplied to the habitation distribution system by gravity/ for elevated areas boosting, pumping stations with sump shall be provided. For newly constructed project, the distribution pipelines will be

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		<p>laid through the village& all the habitation with house service connection and taping facility at public places.</p> <ul style="list-style-type: none"> • House service connection facilities shall be provided in all the consumers of the habitations so as to enable the consumers to collect water. • The total volume of service storage to be provided shall be for 12 hours of the ultimate design flow per day. • This is excluding the storage required for MBR and at WTP. • Minimum ESR capacity shall be 50,000 ltrs (maximum capacity bidder assessment) & shall be filled up twice a day. • Only if the topography permits, the water supply system shall be design to ensure that at least 50% of flow from MBR/ zonal balancing tanks/ ESR shall be through gravity. • There should be provision for one storage reservoir in each village. • Tap point refers to Stand post. Provision for 2 stand post at each habitation shall be provided.
14.	Power Supply	The power supply shall be provided by local Electricity Board at each site via the provision of single dedicated feeder

MEGA PIPED WATER SUPPLY SCHEME TO 11 NOS. GP OF TIKABALI BLOCK

.S.No	Item	Description – Population 2011
1.	11 GP's of Baliguda block	50,798
2.	14 G.P's o Tikabali block	54,420