



GOVERNMENT OF (U.T) JAMMU & KASHMIR
Office Of The Executive Engineer Jal Shakti (Phe) Deptt.
Ground Water Division Srinagar
Baghi-Ali-Mardan, Nowshara Srinagar.



E- mail: - phegwd@yahoo.com

Tel./ Fax No:- 0194-2411285

M/S Chinar Drillers,
Gowkadal, Srinagar.
Prop: Shabir Ahmad
 Reg. No of Rig: RJ-06-EA-6811
 Cell No: 9419412904
 e-mail: chinardrillers9@gmail.com

Advertised Cost: Rs. 34.85 Lacs
Allotted Cost: Rs. 3350112/-
Time of completion: 45 days
Major Head: District Capex

Allotment Order No: JS-PHE/GWDS/ 44 of 2023-24
DATED: - 04-11-2023

Sub: Allotment for Construction of Gravel Packed Production Well at WSS Babagund, Pulwama under Distt. CAPEX.
Ref: 1) Your tender in response to this office e-NIT NO. PHE/GWD/16 of 2023-24, issued vide endstt. No:- JS-PHE/GWDS/Corrs./ 3005-3020, dated:-08-08-2023 & Tender I.D No: 2023_PHE_225499_1.
2) The Distt. Development Commissioner Pulwama's Order No: 23/ DDCP of 2023 Dated: 27.05.2023 issued vide endorsement NO: DDCP/CAPEX/2023-24/ 839-43.

Dear Sir,

For and on behalf of Lieutenant Governor of Jammu and Kashmir, the contract Construction of Gravel Packed Production Well at WSS Babagund, Pulwama, is allotted to you after negotiation of rates with the contract value of **Rs.3350112/- (Rupees: Thirty Three Lacs Fifty Thousand One Hundred & Twelve Only)** on the following rates, terms and conditions as already accepted by you:-

S.No	Items of NIT	Unit	Qty	Rate	Amount
1.	Boring/Drilling of bore hole of 450-550mm dia for lowering of 250mm nominal Dia.Casing/Strainer pipe assembly by suitable method prescribed in IS: 2800(part1), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire and running charges of all equipment tools, plants and machineries required for the job, all complete as per direction of Engineer-in-charge upto 90m depth below ground level. All kinds of soil (Diameter of casing/strainer pipe of 250mm).	Mtr	90	11300.00	Rs. 1017000.00
2.	Boring/Drilling of bore hole of 450-550mm dia for lowering of 250mm nominal Dia.Casing/Strainer pipe assembly by suitable method prescribed in IS: 2800(part1), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire and running charges of all equipment tools, plants and machineries required for the job, all complete as per direction of Engineer-in-charge beyond 90m and upto 130 m depth below ground level. (The drilling depth may increase or decrease at the time of execution subject to physical conditions). All kinds of soil (Diameter of casing/strainer pipe of 250mm).	Mtr	40	12100.00	Rs.4,84,000.00
3.	Gravel packing in tube well construction in accordance with IS: 4097, including providing gravel fine/medium/coarse in required grading and sizes as per actual requirement all complete as per direction of Engineer-in-charge.	Cum	26	5800.00	Rs.1,50,800.00
4.	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) Fe 410 mild steel screwed and socketed/plain ended casing pipes of required dia, conforming to IS: 4270 of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture including required hire & labour charges, fitting and accessories, all complete for all depths, as per direction of Engineer-in-charge. 250mm nominal dia having minimum wall thickness 7.1 mm. (The length of the casing pipe may increase or decrease at the time of execution of work as per the approved Casing Diagram).	Mtr	100	7000.00	Rs.7,00,000.00
5.	Supplying, assembling, lowering and fixing in vertical position in bore well,	Mtr	27.4	7300.00	Rs.200312.00

(Signature)

Site Selection:

The bidders of the project shall be selected on the basis of lowest price level, wherever possible, on a site-wise basis.

	<p>ERW (Electric Resistance Welded) Fe 410 plain slotted (having lot of size 1.6/3.2mm) mild steel threaded and socketed/ Plain bevel ended pipes (type A) of required dia, conforming to IS :8110 of reputed & approved make having wall thickness not less than 7.1 mm including painted with outside surface with two coats of anticorrosive bitumastic paint of approved brand and manufacture including required hire & labour charges, fitting and accessories, all complete for all depths as per direction of Engineer-in-charge. 250mm nominal size dia. (The length of the casing pipe may increase or decrease at the time of execution of work as per the approved Casing Diagram).</p>		4		
6	<p>Development to the tube well in accordance with IS: 2800 (Part I) and IS: 11189 to establish maximum rate of usable water yield without sand content (beyond permissible limit) with required capacity air compressor, running the compressor for required time till well is fully developed measuring yield of well by "V" notch method or any other approved method, measuring static level and draw down etc by step draw down method collecting water samples and getting tested in approved laboratory. Job includes disinfection of tube well, all complete including required hire & labour charges of air compressor tools and accessories etc all as per direction of Engineer-in-charge. The grouting and sealing of tube well has to be done to ensure safe sanitary conditions. The well casing shall be anchored with ISMC-150 and CC-Block. The CC-Block shall be laid of size (2x2x1) meter in M-15 mix, excluding the annular Dia of the well and slopping away from it to prevent contaminated water flowing back into it. The casing pipe has to be anchored by welding ISMC-150 steel bracing of 2-meters length each (04 no. bracings or channels) with cleats and sufficient welding area, bracing embedded within the CC-Block as per the directions of the Site Engineer.</p>	Job	01	200000.00	Rs. 200000.00
7	<p>The job envisages drilling a 125mm diameter test bore well using an Air Rotary Drilling Rig Unit well before the construction of actual production well.. The drilling will be performed in various soil conditions, including boulders, rocks, collapsible strata, saturated soils, and artisan conditions, using ODEX/DTH attachments. The objective is to investigate groundwater both in terms of quality and quantity, by tapping into sufficient aquifer zones. The job encompasses the cost of shifting drilling accessories, tools, bits, casing shoe, consumables such as fuel and lubricants, as well as skilled and unskilled labor. Unforeseen items are also included. Additionally, the cost covers the required pipe materials (MS 125mm), lowering and welding of the casing assembly every 10 feet until the desired depth is reached. The casing will be slotted according to site requirements and as directed by the site engineer. The specifications for the tube well are as follows: MS pipe diameter: 125 mm Casing pipe according to IS 4270: 2001 Drilling method: Air Rotary Method Sample collection of strata after every 10 ft for examination Departmental experts, including a Hydro geologist whose expenses will be covered by the firm, will inspect the progress at each stage to determine aquifer zones. The construction of the production well will be decided based on the lithology analysis of the test bore, duly authenticated by the site engineers, Hydro geologist, drilling staff, and the contracting agency. The decision to construct a full-fledged production bore hole will be made after proper testing and development of the investigation well, ensuring the quality and quantity of water.</p>	Mtrs	130	4600.00	Rs.5,98,000.00
	<p>TOTAL (Rupees: Thirty Three Lacs Fifty Thousand One Hundred & Twelve Only)</p>				Rs.3350112.00


Head Draftsman


Tech: Officer


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TECHNICAL SPECIFICATION

Site Selection:

The bidders shall gather information regarding Tube wells and Dug wells, existing in the vicinity of the proposed sites like their depth, formation encountered, discharge and static water level, wherever possible. As the tender is for fixation of rate contract, list of District and Division wise sites shall be communicated, separately.

On initiating the drilling process, the Contractor is at liberty to make the assessment for availability of adequate discharge of minimum 4000 GPH at the proposed site. For this purpose the bidder shall be free to undertake the electric resistivity mapping of the proposed site and seek an opinion from a hydro-geological expert, who shall be registered with the CGWB or with the Government Organization of the UT of J&K. The charges for this exercise shall be borne by the contractor. However the above exercise shall necessarily be undertaken in presence of Departmental Engineers.

Thereafter, the data regarding strata obtained from ERM mapping shall be compared with the strata chart of the nearest existing well. After satisfying himself about the feasibility of the site for drilling of production tube well, the firm shall start the work at site and if the discharge of the well is below the minimum 4000 GPH discharge, the well shall not be taken over by the concerned Division and no payment shall be made in favour of the bidder.

In case the bidder is not satisfied about the feasibility of proposed site on the basis of ERM etc the bidder is free to choose/propose a more suitable site, which in any case shall be acceptable to the Department as well.

In both situations, the site plan and the preliminary design shall require approval of competent authority i.e. Superintending Engineer PHE Mechanical Circle (North) Srinagar.

In this connection the bidder shall specify the following:

- a) Whether a test bore hole is proposed and if so, its diameter and depth, and also depth of production tube well
- b) Likelihood of increase or decrease of the depth specified above. • Method of drilling with size of bore in different depths.
- c) Types of plain pipe with size, wall thickness and slotted/strainer pipes with opening, may be mentioned.
- d) Guarantee with regard to the verticality of tube well and sand content (ppm) in the discharge from the well at the time of handing over.
- e) Development methods shall be adopted as per the guidelines of CGWB

02. Construction of Production Tube Well:

Based on the exercise conducted during the site selection detailed above, Construction of Production Tube Well shall be initiated by Direct Rotary up to the desired depth as per the code of practice for Construction and Testing of Tube Wells/Bore Wells (Second Revision) IS 2800 (Part-I): 1991 and IS-2800 (Part-II) 1979 in all kinds of soils, boulder, rock, collapsible Strata, saturated soils etc. with the requisite accessories required thereof, including Bentonite mud, foam, water lubricants etc.

The size and length of slotted/strainer Pipes are selected according to the actual requirement and Strata met with in line with the relevant IS Code and the expected discharge and depth of Tube Well.


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03. Casing Pipe:-

The Well casing must be large enough to house the pump and should allow sufficient clearance for installation and efficient operation. The diameter of casing shall not be less than 250 mm with thickness of 7.1mm.

The Well Casing Pipes conforming to IS-4270:1983 and the slotted/ Strainer Pipes conforming to IS-8110:1985 shall be provided by firm at the site of Well construction. The MS Pipe shall be ERW with thickness as specified in IS 4270, Double Bituminous Coated and Bevelled as per IS codes. The welding electrodes used for welding the casing Pipes shall conform to the relevant Standard IS codes. The jigs and fixtures for lowering the casing Pipe shall be provided by the firm. The ball plug or bottom plug, the clamp for holding the casing Pipe and Well cap shall be fabricated out of IS-226:1975. The verticality and alignment of the Well and casing Pipes shall be tested as per IS-2800 (Part-II): 1979.

04. Verticality of Tube Wells:

Tube wells must be perfectly vertical by using a plumb disk. Two disks made out of 3mm thick steel plate are connected together by a rod of 25mm diameter and 3 m long tightened with the help of nuts at the ends. Some holes are punched in plates to facilitate immersion in water.

A knob is fixed on the top nut to which a thin steel wire is attached. The disk is suspended into the tube by the wire passing over a pulley on a tripod. When the disk is lowered into the pipe, the wire is exactly in the center of pipe. When the disks are further lowered down and if the well pipe is not truly vertical, the wire will deviate from the centre and that shall be indicated at the top of pipe.

Absolute verticality is ideal for installation of Submersible Pumping Units.

05. Annular Seal & Well Cap

Sealing the well protects the well from contamination. The annular space must be sealed as per relevant IS codes to prevent any surface contamination from migrating downward and contaminating the water supply.

A vermin-proof well cap shall be designed to keep animals, contaminants from entering the well. It shall be equipped with rubber gaskets and screened vents to ensure air circulation. Coverings shall be custom made to the respective diameter of each well.

06. Well Development:

Well development is the process of removing fine sediment and drilling fluid from the area immediately surrounding the perforations. This increases the well's ability to produce water and maximize production from the aquifer. **The Well development shall be purely as per the relevant IS codes required at site to be decided by the Site in-charge JE/ AEE.**

07. Yield Test:-

Tube well shall be tested for yield by the bidder as per IS: 2800-1979. Yield test is to be performed by the firm in order to establish the following Data;

Static Water Level.

Dynamic Water Level.

Draw-Down

Constant Discharge of the Well.

Safe Yield of the Well for installation of Pumping Unit.

After drilling and developing a well, bidder must stabilize the well with Pumping for at least 30 Hours for Handing Over the Well to the concerned Territorial Division.


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hours, water removal should be stopped and the recovery of the water level monitored. Measurements must be taken at specific time intervals for a 2 hour period or until the level returns to 90 percent of its original level. Once the yield test is complete, it can be decided at what rate the well can be pumped without lowering the water level below the top boundary of the aquifer, the top of the perforations or below the pump intake.

This information shall be used while deciding the pump capacity as pump should have a capacity equal to, or less than, the rate at which the well can supply water for an extended period of time without lowering the water level below the pump intake. That pumping rate is considered the long-term, safe and sustainable pumping rate for the well.

08. **Disinfecting the well:**

The bidder shall disinfect the tube well with chlorine. The concentration must be at least 200 milligrams of chlorine per litre of water present in the well and must be left in the well for at least 8-12 hours to ensure any bacteria present are destroyed.

TERMS & CONDITIONS

- **Defects Liability Period:** The defects liability period shall be a period of 07 months which shall commence after the successful completion of trial run, the bidder shall be responsible to make good the defects and replace the defective parts in full or partly as per directions of site engineer at his own expense of the firm any defect in works which is noticed during the DLP. In case any defect remains un-attended by the firm at the completion of DLP, the department may extend DLP for such time as deemed fit for getting the defect rectified subject to a maximum ceiling of 06 months.
- **Earnest Money:** The earnest money enclosed with the tender in the shape of CDR No: 0413889 dated: 01-11-2023 for an amount of Rs. 1,74,000/= pledged to the Executive Engineer, (JAL SHAKTI) PHE Ground Water Division, Srinagar is adjusted towards performance security will be released in favour of the firm after successful completion of the job.
- **Terms of payment:** Subject to availability of funds 90% payment shall be released after successful completion of well as per the specifications laid only after verification from concerned Assistant Ex. Engineer, and Balance 10% shall be released after defect liability period.
- **Failure to execute the work:** In case the firm/agency fails to execute the job as per the terms and conditions of allotment order/NIT the earnest money deposited shall be forfeited. The earnest money shall be refunded in favour of un-successful tenderers immediately only after finalization of the contract, whereas it shall be retained in case of successful tenderer and treated as security deposit to be refunded after successful completion of the contract.
- **Contractor dying, becoming insolvent or imprisoned:** In the event of the death or insanity or insolvency or imprisonment of the contractor or where the contractor being a partnership or firm becomes dissolved or being corporation goes into liquidation, voluntary or otherwise, the contract may, in the option of the Engineer-in-charge, be terminated by notice in writing posted at the site of the works.
- **Suspension of the works by the Contractor:** In case of the Firm/Agency failing to execute the job the department has the right to get the work executed through some other firm/agency or of its own at the risk and cost of the defaulters.
- **Availability of funds:** The demand of funds under an appropriate head of account stands submitted to the concerned quarters and the payments shall be made only after the availability of funds. No claim for payment will be entertained till the funds are released. Moreover, a test report of the water is to be apprehended with the bill before payment.


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- **Penalty Clause:** In the event of the successful tenderer failing, declining, neglecting or delaying execution of work in time and in the event of any damage occurring/being caused by the successful tenderer or in the event of any default or failure by the successful tenderer in complying with any terms and conditions of the contract, the department shall without prejudice to any other remedy available to it under the law for the time being in force:
 - a) Terminate the contract after 10 days' notice. and /or
 - b) Recover the amount of loss caused by damage/failure or
 - c) Impose 0.5% per week subject to a maximum of 10%.
 - d) Forfeit the earnest money deposit/security deposits.
- **Taxes and duties:** The allotted rates are inclusive of all taxes/levies whatsoever applicable and including of GST.
- **No Payment** shall be made to the agency till the agency produces their GST No.
- **Agreement:** This allotment is subject to the condition that the firm shall execute an agreement within the completion period of work, failing which the said allotment would be recommended for cancelation and the tenders would be floated afresh.
- **Before/after execution** The firm shall have to take Geo-Tag photographs of Hand pump well before execution, during execution and after execution of work.
- **General:-**
All other terms and conditions shall remain same as laid down in the above referred and PWD Form No.24 (Double)

Rates/Quantities/

Checked as per approved Comparative Statement

Head Draftsman

Executive Engineer,
Jal Shakti (PHE) Deptt.
Ground Water Division, Srinagar.

No: - JS-PHE/GWDS/Corrs. / 6384-36

Dated: - 04-11-2023

Copy to the:-

01. Chief Engineer Kashmir (Jal Shakti) PHE Deptt. Srinagar for favour of information, please.
02. District Development Commissioner Pulwama for favour of information, please.
03. Superintending Engineer (Jal Shakti) PHE Mechanical Circle North Srinagar for favour of information.
- 4-5. Executive Engineer Jal Shakti (PHE) Division Pulwama/ Shopian for information.
06. Assistant Executive Engineer (Jal Shakti) PHE Drilling Sub-Division 2nd for information.
- 07-09. H.A/ Head Draftsman/Assistant Accounts Officer divisional office for information.
10. File concerned.