Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore

Website: phekashmir.com Email ID: phe.mdns@gmail.com

No.: PHE/MDNS/DB/4271-77

Dated: 31-08-2023

M/s Mawadat Electricals Patawaw Budgam

GST No: 01FLEPM9317Q1ZM

Cell No: 7006792132

Adv. Cost:	Rs 68.764 Lacs
Allotted Cost:	Rs 67.388 Lacs

Subject: Various electromechanical works to be carried out at WSS Bodibugh Hagarpora under JJM.

Reference: 1. This office e-NIT No.: e-NIT No. 04 of 2023-24, S. No. 02 issued under endorsement No.: PHE/MDNS/DB/274-86, dated: 19-04-2023.

2. Authorization awarded by Member Secretary DJJM Superintending Engineer Jal Shakti (PHE) Hydraulic Circle Baramulla/Bandipore HQ at Sopore issued vide No. SE/Hyd/DB/6240-53, dated: 29-08-2023.

Dear Sir,

For and on behalf of Lt. Governor of J&K U.T contract for execution of "Various electromechanical works to be carried out at WSS Bodibugh Hagarpora under JJM" is hereby awarded to your firm on the quoted/negotiated rates, as per 'General Terms & Conditions' and 'Schedule of cost and quantities' annexed herewith as under:

Annexure A: General Terms & Conditions.

Annexure B: Schedule of cost and quantities.

Encl. ___ leaves

Sd/-Executive Engineer Jal Shakti PHE Mechanical Division (North) Sopore

Copy to the:

- 1. Chief Engineer Jal Shakti (PHE) Department Kashmir, Srinagar for favour of information.
- 2. District Development Commissioner _______, for favour of information.
- 3. Superintending Engineer Jal Shakti (PHE) Mechanical Circle (North) Srinagar, for favour of information.
- 4. Superintending Engineer Jal Shakti (PHE) Hydraulic Circle ______ HQ at ______, for favour of information.
- 5. Executive Engineer Jal Shakti (PHE) Division ______, for favour of information.
- 6. Provisional Head, TPIA JJM Kashmir, (WAPCOS Limited) Corporate Office 76-C Institutional area Sector-18 Gurugram-122015 (Haryana) for favour of information.
- 7. Assistant Executive Engineer Jal Shakti (PHE) Mechanical Sub-Division ______ for information & necessary action.
- 8. File concerned.

Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore
Website: phekashmir.com Email ID: phe.mdns@gmail.com

ANNEXURE "A" to this office Allotment Order No: PHE/MDNS/DB/4271-77, dated: 31-08-2023

Name of work: Various electromechanical works to be carried out at WSS Bodibugh Hagarpora under JJM.

General Terms and Conditions

- Completion period: The work shall have to be completed by you strictly in accordance with the approved specification/departmental requirements under the close supervision of the concerned Sub-Division within a period of 90 days, from the date of issuance of allotment order, failing which penalty as per the relevant clause below shall be imposed.
- 2. Third Party Monitoring: The allotted works shall be subject to check by the third-party monitoring agency appointed by the Department in Kashmir. The agency shall check the quality of works executed by the agencies, quality of materials used for construction and quality of machinery installed in each scheme. The TPIAs role shall be that of an assistant to the Employer's Representative for the purpose of monitoring and evaluation of the performance of the Contract during the Contract Period
- 3. **Inspection and Testing Before Dispatch:** Before dispatch from the source of site of the OEM, the electro-mechanical equipment shall be inspected by a third-party inspection agency i.e., M/S CEIL/Rites etc. New Delhi. The charges for the inspection shall be borne by the Department. However, the Firm (Bidder) shall make payment to the Inspection Agency (in case of 3rd Party Inspection) which shall subsequently be reimbursed by the Department. The successful tenderer shall intimate the Department and the Inspecting Agency/Authority in advance regarding the readiness of the equipment for dispatch and shall furnish test certificates.

It shall be responsibility of the suppliers to tie up with the third party nominated for inspection and get necessary inspection of the material done within the delivery period. Any delay on the part of the third party shall not be entertained as an excuse for timely supply of material/execution of work.

The product/ material at site shall be inspected by Assistant Executive Engineer concerned or any other official(s) of the department designated by the concerned Executive Engineer. Any modifications to the works as specified in the specifications considered to be necessary for smooth and trouble-free operation of the equipment by the Department or the third party inspection agency, the firm shall have to execute the same without any extra cost, to the best satisfaction of the department.

The firm shall as such keep the department informed about arrival of material at site. It shall be obligatory on the part of the firm to rectify the defects pointed out by the AEE, if any, and also to incorporate any modification within the scope of work which may be deemed necessary for better performance/finish and workmanship. The firm upon demand by the department or its representative shall rectify or replace defective unsuitable equipment.

The Department reserves the right to nominate its representative for inspection of the goods at the source of site of the supplier/manufacturers. As such the department at all reasonable times shall have access to the works and to the site and to all workshops and places where work is being executed and where material / manufactured articles and machinery are being obtained.

In case of Sub-Station and power/feeder lines, the firm shall have to obtain a clearance certificate from the concerned inspection Division of the Power Development Department.

The list of electromechanical equipment in which third party inspection from CEIL/RITES is to carried on

- 1) DG Set of >40KVA capacities
- 2) Pumping Unit > 40 HP (Horizontal and Vertical)
- 3) Valves >300 mm
- 4) Pipe of all size
- 5) Iron Removal Plant

For items other than those manufacturers test certificate shall have to be provided.

At the time of installation, the firm will provide Third party inspection of machinery at source of site of respective OEM's which shall be undertaken only for equipment which are not available off the shelf. For rest of the equipment, test certificate, warranty documents along with necessary performance curve and data sheet duly signed by the representative of the OEM/authorized dealer and countersigned by the concerned firm shall be furnished by the firm.

4. **Transit Insurance:** The electro-mechanical equipment required for water supply schemes shall be insured through a Nationalized Insurance Company up to its final destination, against all transit risks. The firm should, therefore, take appropriate insurance policy in advance for covering the transit of the goods, charges for which shall be

Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore Website: phekashmir.com Email ID: phe.mdns@gmail.com

borne by the tenderer and shall be included in his quoted rates. The department shall pay no extra charges on this account.

- 5. **Mode of Dispatch:** The firm/contractor shall be responsible to adhere to transportation rules and regulations and the department shall not be responsible for any accident.
- 6. **Performance Security:** The successful bidder on award of the contract shall furnish a performance security equivalent to 03% of the value of the contract within one week of the issuance of allotment order in the shape of CDR/FDR/Bank Guarantee, valid for a period of three months beyond the completion period of the contract:
 - a. Safeguard against material and manufacturing defects, bad workmanship, improper design etc.
 - b. Successful execution of the contract and fulfillment of the conditions of the agreement.
 - c. Satisfactory performance of equipment in terms of the agreement.

7. Terms of Payment for Electro-Mechanical Component:

- a. 70% (Seventy Percent) payment shall be released on receipt of material/equipment on Pro-Rata as per the allotment order and verification by the concerned Assistant Executive Engineer, thereof.
- b. 20% (Twenty Percent) payment shall be released after installation and testing of the equipment.
- c. Balance 10% (Ten Percent) shall be released after successful commissioning of the system and trial run of 01 month.

However, 10% on account of DLP shall be deducted from each running bill which shall be released after completion of DLP and satisfactory performance of the equipment for the period of 12 months.

- 8. **Warranty:** The firm shall be bound for satisfactory performance of equipment/ works for 12 months after the successful completion of trial run of 01 Month or whichever is later. If during warranty period any malfunctioning/ defects arise, the firm /joint venture shall have to rectify the same within a period of 03 days of receipt of intimation. In case of any failure on the part of the firm/joint venture to remove the defect, the Department may get the defects removed/ repaired by any other agency and cost thereof shall be recovered from the firm / joint venture and shall be recommended for further punitive action as governed under the relevant clause of the contract including blacklisting.
- 9. **Trial Run:** After Completion of the work the firm will have to make a trial run of the scheme for a period of 01 Month during which the bidder will have to operate through staff provided by the department and maintain the executed work to the full satisfaction of the Department. During this period, he will provide training to the staff and will also carry out maintenance work at his cost and risk, if required.
- 10. **Defect Liability Period (DLP):** The defect Liability period shall be for a period of 12 Months which shall commence after the successful completion of Trial run, during the defects Liability period (DLP) as it is required for its successful running and as per Standard Engineering Practices, to the full satisfaction of the department. The bidder shall be responsible to make good & remedy at his own expense any defect in works which is noticed during the DLP. In case any defect remains unattended by the firm at the completion of DLP, the department may extend the DLP for such time as deemed fit for getting the defect rectified subject to a maximum ceiling of 6 Months.
- 11. Liquidated damages (LD): In the event of firm's/joint venture failing, declining, neglecting or delaying the supplies / works or in the event of any damage occurring or being caused by the firm/ joint venture or in the event of any default or failure by the firm in complying with any of the terms and conditions of the contract, the Department shall with or without prejudice to any other remedies available to it under any law for the time being enforce in the UT:
 - a) Terminate the contract after 15 days' notice

and/or

b) Recover the amount of loss caused by damage, failure or default, as may be determined by the department.

and/or

c) Recover the extra cost, if any, involved in allotting contract to other party.

and/or

Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore Website: phekashmir.com Email ID: phe.mdns@gmail.com

d) Impose Liquidated damages on account of delay beyond the schedule completion period to the tune of 0.5% of the delayed portion of contract every week but not exceeding 10% value of the contract.

and/or

- e) Forfeit the performance security and blacklist the firm.
- 12. **Force Majeure:** Any failure or commission to carry out the provision of the contract shall not give rise to any claim by the department or bidder one against the other if such failure of commission arises from the 'ACT OF GOD' which shall include all natural calamities such as fires, floods, earthquake, hurricane, strikes, riots, embargoes or from any political or other reasons beyond the control of the parties including war, or a state of insurgency.
- 13. **Arbitration:** Any Dispute or difference arising between the department and bidder shall be dealt in accordance with the Arbitration and Conciliation Act 1996 and rules thereof. Any dispute arising between the firm and the department shall be settled within the jurisdiction of UT of Jammu and Kashmir.
- 14. **Penalty clause:** The firm shall ensure that the material/workmanship should conform to NIT specifications and relevant technical codes. In case the firm fails to supply the equipment or does not execute the work in accordance with the specifications or backs out from the contract or there is delay in completion of work beyond the stipulated time, the Department shall terminate the contract and recover the extra cost involved. In addition to this the department shall forfeit the earnest money and performance bank guarantee and may impose penalty up to 10% of the contract value at the discretion of Chief Engineer Jal Shakti (PHE) Dept Kashmir. The firm shall also be liable for all civil and criminal prosecutions under law if the specifications of the supplied equipment/ material used are found in contravention to the specification of the e-NIT.
- 15. **Safety of Govt. Infrastructures:** The firm should ensure the safety of the water supply lines, sewer lines, telephone cables, power cables, storm water drains etc., pipe laying alignment and, if any damage occurs during execution, it should be attended immediately at the cost of the bidder. Failing to attend immediately, the same will be got done by the Department at the risk and cost of the bidder.
- 16. **Firm's risk and insurance:** All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the firm.
- 17. **Subletting of Work: The bidder shall not sublet the whole or part of the work.** The bidder shall not assign the work or any part thereof or any benefit or any interest thereon or any claim arising of the contract, without prior written consent of the allotting authority.
- 18. Work under Bidder's Charge: From the commencement of the work to the completion thereof the same shall be under the bidder's charge. The bidder shall be held responsible for and make good any loss or injuries by fire or other causes / theft and shall hold the Government harmless for any claims for injuries to persons or damage to property happening from any neglect, default, want of proper care and misconduct on the part of the bidder, or any of his employees, during the execution of work. The bidder shall be responsible for the compensation if any, to labour under the existing labour laws of the country.
- 19. **Firm to Maintain Site Office:** The bidder shall provide and maintain, at his own cost a suitable site office at the site of Work to which the Department may send communications/ instructions.
- 20. **Claims to be put in writing:** The Department shall not be liable to the firm for any matter or thing arising out of or in connection with the contract or the execution, completion and maintenance of the work unless the bidder puts a claim in writing in respect thereof before getting the certificate of final completion.
- 21. **Setting out of works:** The bidder shall be responsible for the time and proper setting out of all the works and for the correctness of the positions, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliances, electricity and labour in connection therewith.
- 22. **Labour:** The bidder shall make his own arrangements for the engagement of all types of the labour, required for the execution of the job. No workman below the age of 18 years shall be employed on the works. Also, the bidder shall comply with the provisions of all labour laws and the rules framed there under.
- 23. **Storage at Site:** The bidder shall at his own cost make arrangements for proper storage especially towards Rain and Snow damages of the equipment/ materials at sites till its erection/completion. For the purpose the bidder shall, with the approval of Engineer in charge construct temporary storage accommodation for equipment/ material at site for which land shall be provided by the department near the site of work.

Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore Website: phekashmir.com Email ID: phe.mdns@gmail.com

- 24. **Bidder Death, Becoming Insolvent Or Imprisoned:** In the event of the death or insanity or insolvency or imprisonment of the bidder or where the bidder 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-incharge, be terminated by notice in writing posted at the site of the works.
- 25. **Watch and Ward of Works:** The bidder shall in connection with the work provide and maintain at his own cost all lights, guards, fencing and watch and ward, when and wherever necessary or required by the Department for the protection of the work or safety and convenience of the Public etc.
- 26. **Training of Departmental Staff:** The bidder shall arrange, at his own cost and risk, to depute at least one competent Technical Supervisor, to train up to 04 Departmental representatives in the operation and maintenance of the equipment at site. This training shall be for duration of at least (3) three consecutive months and shall commence from the date of successful commissioning of the equipment or as may be mutually agreed upon.

Two groups of Departmental Engineers shall also be deputed to bidders/manufacturers works for short duration to obtain training free of cost in the operation and maintenance of the equipment, if required by the department.

- 27. **Final Acceptance:** The equipment/work shall be accepted by the Department only after the system has been tested and has performed satisfactorily in all respects, at site, in accordance with the provisions of the contract.
- 28. **Drawing and Quality Assurance Plans:** The following details shall be necessarily furnished within Two (02) weeks of the date of placement of this order which shall be approved by the Department within two (02) weeks from the receipt by the consignee.
 - 1) Sectional Drawing of Pumps
 - 2) General Arrangement Drawings (G.A.D.) /Layout of the equipment fully dimensioned for pumps, motors, starters, shunt capacitors, panels, delivery manifold, cables etc.
 - 3) Detailed circuit diagrams of LT Panels, starters, shunt capacitors etc.
 - 4) Third Party Inspection Reports and OEM's test certificates to the Department for their approval.

No manufacturing activity shall be started by the firm without approval of the drawings for each ordered equipment/work by the competent authority.

Additional time consumed due to observations/summary rejection of QAP/GAD shall be considered in the delivery period of the contract and the bidder shall be wholly and solely held responsible for the delay, thus caused.

Although no make has been specified in respect of any equipment, the bidder shall furnish QAP/GAD of only those makes which are standard with proven record of satisfactory performance in this Department or any other Government Department in the UT or outside. Thus, the bidder shall have to mandatorily furnish a list of makes and technical data for the tendered equipment which the firm intends to supply, in the cover 1st of the bid so that the Department is fully satisfied about the quality of the equipment.

29. **Operation and Maintenance Manuals:** The bidder shall supply, free of cost to the Department, six complete sets of operation and maintenance manuals for the Pumping Equipment and Electrical Equipment. The delivery of these manuals shall be made by the bidder to the Engineer along with the supply of equipment. The manuals shall be appropriately bound in book form and shall contain all necessary instructions regarding operation, preventive maintenance, repairs, trouble shooting, overhauling etc.

The manuals shall also include detailed drawings of the equipment, circuit diagrams and station layout with all items properly identified. The manuals shall also include the spare parts catalogues with part numbers clearly given, which must tally with index numbers in the drawings.

- 30. **Cleaning Up:** On completion of the works the bidder shall clear away, load into trucks or any other transport and remove from the site all constructional plant, surplus materials, dismantled or otherwise, earth and rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workmanship condition, to the satisfaction of the Department.
- 31. **Power and Water Supply:** The bidder/firm shall make his own arrangement, at his own cost, for all lines, individual power points, etc. to the machinery and plant required by him for the erection, testing and commissioning of the equipment ordered on him. The bidder shall pay for all electrical energy consumed by him

Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore Website: phekashmir.com Email ID: phe.mdns@gmail.com

for this purpose at the prevalent electricity tariff in J&K State. Such charges shall be paid by the bidder/firm direct to the Electricity Corporation and the bidder's final bill shall be settled only after he gets a no outstanding certificate from the Electricity Corporation.

The Government shall not be responsible, and the bidder shall have no claim whatsoever for any interruption in power supply or voltage fluctuation or total cut off at the site. The bidder/firm must provide an alternative source of power, at his own cost, at the site for completion of the work. The bidder shall make his own arrangements for water to be used for the execution/Hydro-testing/ water tightness Test/ Curing, labour colony, Site Office etc.

- 32. Any incidental works required thereof for fitment of the pipes / allied equipment/works etc. shall be deemed within the scope of work.
- 33. The drawings for gantry and other ancillary works shall be provided to the executing agency by the I/C engineer.
- 34. **Agreement:** As soon as letter of award is communicated to the firm, the contract shall be complete and binding upon them, the bidder/firm shall also be required to execute an agreement with the competent authority within **seven days** from the date of issue of letter of award. Failure to execute such an agreement in time shall not however, prevent this contract from being enforced against the firm and the date of delivery of the material/completion of works shall be reckoned from the date of issue of the letter of award in favour of successful firm.
- 35. All other terms and conditions as laid down in Form No. 25 of P.W.D. shall remain in force and binding on successful tenderer.
- 36. Any rules/terms and conditions, if not stipulated in the bidding document, shall be strictly dealt in accordance with the relevant rules/guidelines stipulated in the General Finance Rules (GFR 2017) and Manual for procurement of Works 2019 Government of India.
- 37. Consignee/Paying Authority: The consignee/paying authority in respect of electro-mechanical component and allied civil works shall be the concerned Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore

Sd/-Executive Engineer Jal Shakti PHE Mechanical Division (North) Sopore

Annexure "B" Schedule of cost and quantities to this office Allotment Order No: PHE/MDNS/DB/4271-77, dated: 31-08-2023

Name of work: Various electro-mechanical works to be carried out at WSS Bodibugh Hagarpora under JJM

S. No.	Description	Unit	Qty.	Rate	Amount
2	WSS Bodibugh Hagarpora (Stage Ist) Providing, fitting, installation, testing and commissioning of VT pumping unit as per IS 1710 of following specifications: A. PUMP 1. Discharge = 21000GPH 2. Type = Self water lubricated, VT pump, open line shaft. 3. Liquid to be handled = Raw Water 4. RPM = 1460 5. Head = 20 Meters 1. Type = Vertical hollow shaft, AC induction 2. Power Supply = 03 Phase, 41 5V± 10% AC 3. Frequency = 50Hz±3% 4. RPM = 1450 Synchronous 5. HP = Corresponding to Head and discharge but not less than 20HP. Rest of Specification/Details are as per clause 6 of as per Annexure "C" of SBD	job	2	6,40,000.00	12,80,000.00
3	Fabrication Providing and fitting of modular control panel as technical specification as per cluase 43 of SDB. The technical details/ Ratings of various components of Modular Control Panel are given Below a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C. Breaking Capacity of 50kA=(02No's) b. Changeover Switch of rating = 100Amp (01No.) c.Bus Bar copper =100A = (01No.) d. Motor Breakup Protection MCCB of rating = Thermal release range 100-125A With S.C. Breaking Capacity of 36kA =(02No's) e. FASD starters: Motor rating 3-phase 415V, 50HZ AC-3 Duty with Relay range of 30-50 Amp (02No's) e. Auxillary MCB for f.Heating/Lighting = 63 Amp.(01No.) Rest of Deatils/Technical specification are as per clause 43 of Annexure "C" of SBD	Job	1	2,34,576.00	2,34,576.00
4	Fabrication of gantry mechanism/CGI shed/pump base by way of providing Structural steel in built up sections, trusses and framed work, including cutting, hoisting, grouting, fixing in position and applying a priming coat of steel primer and 02 coats of paint of approved shade all complete welded. The drawings and Dimensions for Gantry/CGI Shed/pump base etc will be provided by Site In Charge at the time of execution of job.The quantity may vary as it is conditional to civil structure being constructed/as per site requirement. Rest of Specification/Details are as per clause 17 of as per Annexure "C" of SBD	Kg	1250	135.00	1,68,750.00
6	WSS Bodibug Hagarpora (Stage 2nd) Providing, fitting, installation, testing and commissioning of VT pumping unit of following specifications: A. PUMP 1. Discharge = 21000 GPH 2. Type = Self water lubricated, VT pump, open line shaft. 3. Liquid to be handled = Clear Water 4. RPM = 1460 5. Head = 35 Meters, Mover 1. Type = Vertical hollow shaft, AC induction 2. Power Supply = 03 Phase, 41 5V± 10% AC 3. Frequency = 50Hz±3% 4. RPM = 1450 Synchronous 5. HP = Corresponding to Head and discharge but not less than 25HP. Rest of Specification/Details are as per clause 6 of as per Annexure "C" of SBD	job	2	6,60,000.00	13,20,000.00
7	Fabrication Providing and fitting of modular control panel as technical specification as per cluase 43 of SDB. The technical details/ Ratings of various components of Modular Control Panel are given Below a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C. Breaking Capacity of 50kA=(02No's) b. Changeover Switch of rating = 100Amp (01No.) c.Bus Bar copper =100A = (01No.) d. Motor Breakup Protection MCCB of rating = Thermal release range 100-125A With S.C. Breaking Capacity of 36kA =(02No's) e. FASD starters: Motor rating 3-phase 415V, 50HZ AC-3 Duty with Relay range of 30-50 Amp (02No's) e. Auxillary MCB for f.Heating/Lighting = 63 Amp.(01No.) Rest of Deatils/Technical specification are as per clause 43 of Annexure "C" of SBD	Job	1	2,34,576.00	2,34,576.00

S. No.	Description	Unit	Qty.	Rate	Amount
8	Fabrication of gantry mechanism/CGI shed/pump base by way of providing Structural steel in built up sections, trusses and framed work, including cutting, hoisting, grouting, fixing in position and applying a priming coat of steel primer and 02 coats of paint of approved shade all complete welded. The drawings and Dimensions for Gantry/CGI Shed/pump base etc will be provided by Site In Charge at the time of execution of job.The quantity may vary as it is conditional to civil structure being constructed/as per site requirement. Rest of Specification/Details are as per clause 17 of as per Annexure "C" of SBD	Kg	1150	135.00	1,55,250.00
9	Common Electromechanical works for both stages Ist and 2nd				
10	Providing, fitting, testing and commissioning of manually operated copper wound, 3-phase, AC power supply multi step voltage stabilizer. Rating: 50KVA Manufacturers test certificate to be apended and rest of specification as per clause 45 of as per Annexure "C" of SBD.	job	4	1,07,401.00	4,29,604.00
11	Providing, fitting and successful testing of 02 MT capacity, chain pulley block with monorail of spur gear type with a minimum lift of 06 mtrs robust chain as per IS 3832:2005. The equipment shall be heavy duty type. The job includes supply of suitable diameter and length soft flexible steel Sling (Qty = 02 Nos) for hoisting of above chain pulley block. "Test Certificate of manufacturer is Mandatory" Rest of Specification/Details are as per clause 24 of as per Annexure "C" of SBD	Job	2	44,473.00	88,946.00
12	Providing/supplying and fitting of 150mm G.I flanged Rising Main including delivery manifold with washout arrangement at site. The Pipe shall be hot dip Galvanized, class B confirming to IS 1239. The job includes providing and fitting of M.S. Flanges conforming to BIS 6392/1997 Table 17 (Rating PN16). The flanges shall be double welded both from inside and outside of the pipe using standard electrode of reputed make. Flanges (as per IS 6392/1997 Table:17) Thickness shall conform to IS 6392 Part 1st Table-17. Detailed specification as per cluase "8" of of SBD. The quantity may vary as it is conditional to civil structure being constructed/as per site requirement.	Meter	200	2,893.00	5,78,600.00
13	Providing and fitting of 150mm GI bend with flanges The Flanges shall be MS conforming to BIS 6392/1997 Table 17 (Rating PN16) and welded on both sides. The job includes prividing and fitting of nuts, bolts, gaskets etc as per site requirement. Rest specification as per cluase "15" of SBDThe quantity may vary as it is conditional to civil structure being constructed/as per site requirement.	job	12	5,728.00	68,736.00
14	Providing and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate/sluice valves as per IS14846 for regulating the water supply outside the pumping units. Size: DN150mm PN:1.6/16 Rest of Specification/Details are as per clause 12 of as per Annexure "C" of SBD	Job	6	25,977.00	1,55,862.00
15	Providing and fitting of Ductile Iron double flanged, Slanted seat swing check valve(NRV) as per IS 5312. Size: 150mm PN: 1.6/16 Rest of Specification/Details are as per clause 13 of as per Annexure "C" of SBD	Job	5	32,205.00	1,61,025.00
16	Fabrication, providing and fitting of split type MS clamps12 mm thick, 2.5 ft long and 3 inch wide for lowering and holding of VT pumping unit fitted. The job includes the cost of required size of nuts and bolts. Size: 150mm/As per site requirment. Rest of Specification/Details are as per clause 16 of as per Annexure "C" of SBD	job	4	3,200.00	12,800.00
17	Creation of pole mounted, outdoor type Electric Sub Station by way of S/I/T/C of 11/0.433 KVA, 3 Phase Distribution Transformer with Bimetallic Terminal connectors Energy level -2 Aluminum wound Specifications conforming to IS: 1180 (Part 1) 2014 with latest amendments Type of cooling: ONAN. Rating: 200 KVA HT Transformer, 3 phase (Level 2). Manufacturers certificate be apended and rest of specification as per cluase 26 of as per Annexure "C" of SBD	Job	1	3,82,996.00	3,82,996.00
18	Supply, installation, erection of 9 mtrs long H.T pope of specifications ST410 (SP-33). The job further includes drilling of holes for installation of various accessories wherever required the job further includes G.I wire earthing of pole as per REC standard as per Clause 32/as per site requirement.	Job	10	20,686.00	2,06,860.00
19	Cement bottoming 1:2:4 mix as per REC mix as per REC standards 0.5 cum/pole	job	10	3,539.00	35,390.00
20	P/F of Galvanized nuts, bolts of various sizes as per site requirement.as per details in Clause 33 of as per Annexure "C" of SBD/as per site requirement.	Kg	50	142.00	7,100.00
21	GI Barbed wire for Anti Climbing with fixtures /as per site requirement.	kg	50	136.00	6,800.00
22	P/F Danger Plate with clamps as per details in Clause 34 of as per Annexure "C" of SBD	No	10	153.00	1,530.00
23	Wedge connecters/PG Clamps/as per site requirement. Providing and fitting G.I Channel /platform for T-bed/Angle/ Flat /Riser of sizes including clamps as per	No Ka	1200	421.00	2,526.00
	Clause 27 of as per Annexure "C" of SBD/as per site requirement.	Kg	1200	123.00	1,47,600.00

S. No.	Description	Unit	Qty.	Rate	Amount
25	Supply, Installation, Testing and commissioning of Polymeric Gang operated Air break switch, outdoor type, triple pole, suitable for vertical installation, single break provided with locking arrangement at both ON and OFF position consisting of HT post double insulator, copper or copper alloy high pressure heavy contact assembly, rod with bearings, operating handle and 2 length of 32mm dia. GI pipe conforming to IS 1818 1961, 06 No. of insulators, rated voltage 11KV 200A complete as per IS specs as per Clause 28 of as per Annexure "C" of SBD	Set	2	11,730.00	23,460.00
26	Supply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable for vertical installation as per Clause 29 of as per Annexure "C" of SBD	Set	1	4,983.00	4,983.00
27	Supply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With polymer housing, Station Type as per Clause 30	Set	1	7,754.00	7,754.00
28	Supply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, Lighting impulse 75KV Positive, and 80 KV Negative , creepage distance 320 mm.	No	3	596.00	1,788.00
29	Supply and fitting of 11 KV polymeric composite pin insulator 12 KV, 5KN, Lighting impulse 75KV Positive, and 80 KV Negative , creepage distance 320 mm as per Clause 31/as per site requirement.	No.	30	347.00	10,410.00
30	Painting of poles Red oxide as per Clause 37	lit	10	306.00	3,060.00
31	Painting of poles Aluminum paint as per Clause 38	lit	10	510.00	5,100.00
33	Earthing of substation —Excavation of earth pit of dia 650 mm & depth 3000 mm, installation of Earthing pipe of 40 mm Nominal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral earthing of size 25 mm x 3 mm for connection of transformer body,neutral,G.O Set, lightening arrestor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts,refilled with earth enhancement materials and earth Chamber made of brick masonary with RCC slab cover.	Job	10	1,755.00	1,755.00
34	P/L of ACSR conductor of size 0.05 as per the relevant IS standard as per clause 78	Meter	200	60.00	12,000.00
35	Providing and fitting of LT Distribution box for HT transformer Capacity of transformer: 200 KVA Rest of Deatils/Technical specification are as per clause 42 of as per Annexure "C" of SBD. The job includes providing and fitting of required size cable, thimbles, clamps and fixtures etc required for the job.	job	1	1,05,767.00	1,05,767.00
36	Galvanised stay set with 50x8mm stay clamp, guy insulator(02No.),anchor plate(200x200x6mm),nuts and bolts,2No. Turnbuckels,1.8m long,16mm diameter solid GS stay rod and 7/3.15mm dia GI standerd wire complete.	set	2	4,922.00	9,844.00
37	Supply, Installation, testing and commissioning of 3-phase, 4-wire Trivectometer with suitable ring type CT complete unit as per latest IEC Standard. The required size cable for input and output connections (as per site requirement) with all allied accessories, transportation charges, labour component, earthing etc are included in the job.	Job	2	27,000.00	54,000.00
38	Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 No each) as per Clause 62	Unit	1	7,350.00	7,350.00
39	Electrification and illumination of pump house by way of providing & fitting Eight No. of lighting points and Two No. of heating points viz: a) Wiring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multistranded copper conductor insulated, unsheathed 1.1 KV grade ISI marked with length as required upto control panel as per site requirment. b) PVC conduit/ channel 1.5" and 1" to be fitted on walls of pump house as per site requirment. c) Eight No. of Bulb holders (angle type or any other type) with eight No. of 12Watt LED bulbs . d) Modular Switch boards with frame to be fitted on walls of pump house consisting of ISI marked items like 10A switches, indicator, 03 pin flash type socket for lighting (As per requirment) and combined 16A switch and 05 pin flash type socket(02No)for heating . The job includes cost on account of material, skilled labour,tools and tackes, including screws, cement nails, rawl plugs and other consumable items as per site requirement.	Job	2	28,000.00	56,000.00
40	Illumination of Premises: Providing and erection of 9 Mtr long Hot Dip Galvanized octagonal pole (single Section) with bottom 150mm, top 75mm wide, thickness 3mm with 70 Microns Zinc coating having inside arrangement for providing of power connection along with following items. 1) 3 Way Terminal Connector 20 Amp. 2) 3 No MCB 8 Amp. Rest of Deatils/Technical specification are as per clause 51 of as per Annexure "C" of SBD	Job	1	22,226.00	22,226.00
41	Providing, Installation and testing of 2KVA fully automatic copper wound voltage stabilizer with input voltage 70-240 V and output 220 V. The stabilizer shall be installed and connected to the electric circuit as per location provided by site in charge.	Job	1	8,154.00	8,154.00

S. No.	Description	Unit	Qty.	Rate	Amount
42	Providing, installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type) on top of octagonal pole Having following specs: Input: 90-240 V 50 Hz Power Factor: >0.9 Rest of Deatils/Technical specification are as per clause 52 of as per Annexure "C" of SBD	Job	3	9,486.00	28,458.00
43	Fabrication of 6'x3' (4No's) angle iron beds having 2' height using 50x50x6mm angle iron by way of providing and fitting of Structural steel in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete welded as per clause 59 of as per Annexure "C" of SBD	Kg	164	135.00	22,140.00
44	Providing and fitting of 19mm Ply wood board to be fitted on the angle iron beds. The job includes cutting and fixing of Ply wood on angle iron beds of item no. 47 for resting. Rest of Deatils/Technical specification are as per clause 60 of as per Annexure "C" of SBD	Sft	72	154.00	11,088.00
45	Supply, installation, Testing & commissioning of 1000VA Full Sine wave power inverter with 12V, 180AH Tubular inverter Battery Rest of Deatils/Technical specification are as per clause 55 of as per Annexure "C" of SBD	Job	2	34,053.00	68,106.00
46	Supply, installation of 6 kg Co2 type fire extinguisher manufactured as per IS:15683 OF 2006 with IS mark and comply with DGMS(Approval) . Rest of details as per specification in clause 50 of as per Annexure "C" of SBD	Job	4	6,447.00	25,788.00
47	Providing, laying & fixing with adhesive/bonding material of insulation rubber mats on the floor of the pump house, covering area around electromechanical machinery for safeguarding the life & limb of the workmen due to possible leakage of current & short circuit. Rest of Deatils/Technical specification are as per clause 56 of as per Annexure "C" of SBD	Meters	12	1,205.00	14,460.00
48	Providing and fitting of 50sqmm Ariel Bunched HT Cable,11KV Grade(3x50+1x70 Sq. mm)XLPE(3C+Earth) from the existing HT line near tapping point to Sub Station including clamps,fixtures etc /as per site requirment.	Meter	120	930.00	1,11,600.00
49	P/F of 11 KV cable termination kit for connecting 50 Sq mm HT cable (ABC type) near tapping points.	set	4	8,994.00	35,976.00
50	Providing and Fitting of 70 sqmm, 3.5 core LT 1.1 KV, XLPE Armoured Aluminium Cable conforming to IS: 7089 part 1st as service line from the HT transformer to control panel as per clause 72 of as per Annexure "C" of SBD/as per site requirement.	Meter	140	780.00	1,09,200.00
51	Providing and Fitting of 10 sqmm, 1.1KV 2 core PVC Insulated Sheathed 2 Core copper cable for connecting Lighting pole with power supply conforming to IS: 694:2010.	Meter	50	260.00	13,000.00
52	Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, 25 Sq. mm PVC insulated copper cable for internal connections as per IS 694 along with thimbling as per requirment at site.	Meters	180	394.00	70,920.00
53	Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, 35 Sq. mm PVC insulated copper cable for internal connections as per IS 694 along with thimbling as per requirment at site.	Meters	180	546.00	98,280.00

S. No.	Description	Unit	Qty.	Rate	Amount
	Bio-toilet of size 4/x4/x8/ with FRP bio-digester tank of capacity 700 liters with anaerobic bacterial				
	incolumn 200 liters complete with all accessories:				
	Providing/construction/installation/commissioning of onsite brick masonry constructed/pre cast, re-				
	inforced concrete constructed/fiber reinforced plastic constructed toilet block with bio-digester super				
	structure shall be:				
	General specifications				
	.On site constructed/ factory made				
	.Single unit/ paneled form as per site requirement				
	. Easy to maintain and clean				
	.All weather protection				
	.Well ventilated				
	.Shall have no effect on natural calamity with regard to Effluent drawn out				
	.Shall be feasible for operation under -15 to 40 degree celcius temperature.				
54	Technical specification for onsite constructed/pre cast RCC toilet super structure	job	1	1,49,600.00	1,49,600.00
	. Toilet block size: 4ft x4ft x 8ft				
	.Material-Precast concrete M25, onsite brick masonry or fiber reinforced Plastic				
	Desired features of toilet block:				
	.Tiles- upto 3ft on side walls or as material of construction				
	,Floor-Tiles or as material of construction				
	.Paint on outside walls and inside walls as per material of construction				
	. Western toilet sheet made of ceramic (as per site requirement)				
	.Taps and flushing system- Water tap at a nominal height of minimum 13inches for Orissa Pan				
	.Flushing system				
	.Electric wire to connect the bulb				
	Stand for water tank-Mild steel of ISA 40x 40 x5mm with CGI roof and proper frost protection during				
	winter				
	Door-PVC/AL/FRP any other water proof material				
Total advertised/estimated cost:					68,76,414.00
	Percentage quoted by L1 firm				-2.00%
	Total allotted cost: Rupees Sixty Seven Lakh Thirty Eight Thousand Eight Hundred and	Eighty Fi	ve Only		67,38,885.00

Sd/-Executive Engineer Jal Shakti (PHE) Mechanical Division (North) Sopore