



Government of Jammu and Kashmir (UT)

OFFICE OF THE EXECUTIVE ENGINEER

JAL SHAKTI (PHE) MECHANICAL DIVISION SOUTH AWANTIPORA.

E-MAIL ID:-xenphemechsouthawp@gmail.com Fax/phone. 01933-295537



Allotment Order No: 205 of 10/2023

M/S Green Tec Construction
Prop: Pankaj Kumar
Office: C6/55, Yamuna Vihar, Delhi-110054
GST No: 10ALTPK1979J1ZP
E-mail: smlbegusarai@gmail.com
Cell No: 9871027567/9868008567

AA Accorded vide Order
No.
Tech. Sanction Accorded
vide Order No.
Adv. Cost:
Allotted Cost:

62-DB of 2022 Dated:
20/07/2022
EE/JSD/Mech/Awp/JJM/15 of
09/2023
Rs. 39,33,540/-
Rs. 39,33,540/-

Subject:- Supply, Installation, Testing and Commissioning of Electro-Mechanical equipments at water supply scheme Chak Dadoo of Jal Shakti (PHE) Mechanical Division South Awantipora under JJM.

Reference:-
1. This office e-NIT No.: 21 of 2023-24 Dated: 22/09/2023 issued under endorsement No.: JSD/PHE/MDSA/3363-78 Dated: 22/09/2023 read with Corrigendum No.: JSD/PHE/MDSA/3456-58 Dated: 30/09/2023.
2. Superintending Engineer Hydraulic Circle Anantnag/Kulgam (DJJM)'s Office Letter No.: SE/Hyd/Cors/6964-67 Dated: 21-10-2023.
3. Acceptance of rates confirmed by you.

Dear Sir,

For and on behalf of Lt. Governor of J&K U.T contract for execution of aforementioned job is hereby fixed with you on Percentage basis (@ Par of the advertised rates). This is in response to your online bid and subsequent acceptance of rates, specifications, terms and conditions as contained in Annexure "A & B" of this allotment order.

Encl. 13 Ws.

No.: MDSA/ 4044-51

Dated: 25/10/2023

Yours Sincerely

Executive Engineer
Jal Shakti PHE Mechanical Division
(South) Awantipora
(Member JJM)

Copy to the:

1. Chief Engineer Jal Shakti (PHE) Department Srinagar for information.
2. District Development Commissioner (Chairman DJJM) Anantnag for information.
3. Superintending Engineer Jal Shakti (PHE) Mechanical Circle (South) Srinagar for information.
4. Superintending Engineer Jal Shakti (PHE) Hydraulic Circle Anantnag/Kulgam for information.
5. Executive Engineer Jal Shakti (PHE) Division Bijbehara for information & n/a.
6. Provisional Head, TPIA JJM Kashmir, (WAPCOS Limited) Corporate Office 76-C Institutional area Sector-18 Gurugram-122015 (Haryana) for information.
7. Assistant Executive Engineer Jal Shakti (PHE) Mech. Sub Division Bijbehara for information & necessary action. He will ensure execution of work strictly in accordance with the rates, specifications, terms / conditions & within the stipulated time, besides, the cost of work should not exceed beyond allotted cost. In case of any delay in completion of work, the reasons shall be justified.
8. File concerned.

Name of work: Supply, Installation, Testing and Commissioning of Electro-Mechanical equipments at water supply scheme Chak Dadoo of Jai Shakti(PHE) Mechanical Division South Awantipora under J.M.

General Terms and Conditions:-

TIME OF COMPLETION: The scheme shall have to be completed/tested/commissioned within a period of 90 days from the date of issue of this allotment order.

AGREEMENT: A formal agreement deed shall be executed by the firm with the department within a period of 07 days from the date of issue of this allotment order after deposition of performance security @ 05% of allotted cost. However, non drawl of agreement will not prevent the contract from being enforced upon you.

PENALTY: In the event the contractor failing or delaying the work or a part thereof, & or non-complying with any of the terms and conditions of the contract, the NIT & the Agreement, the Department, without prejudice to the remedies available under the law in force in J&K UT, may terminate the contract after seven days' notice, and or recover the amount of loss caused by failure/delay or default of the contractor. The amount of such recoveries shall be determined by the Superintending Engineer PHE Mechanical Circle South Srinagar and or impose a penalty as the Government /Department may determine and or forfeit the performance security and or resort to any or all the remedial actions available under the law in force in the UT of J&K at the time of the dispute.

ARBITRATION: In case of any dispute arising at any stage between the contractor and the Department, the same shall be referred to the Superintending Engineer PHE Mechanical Circle South Srinagar /Govt. of J&K who may give a decision or nominate any other person of Government for arbitration. The decision to such arbitration shall be final and binding on both the parties.

PERFORMANCE SECURITY DEPOSIT: Soon after issuance of allotment order, the firm has to deposit performance security in the shape of CDR/FDR/BG valid for 18 months pledged to Executive Engineer PHE Mechanical Division (South) Awantipora within 07 days which shall be released after expiry of defect liability period/report of concerned AEE (After fulfillment of all contractual obligations). Failing to produce performance security, the firm is liable to be debarred for participation in future tendering in this Division and same shall be recommended to higher offices and other Govt. offices of UT of J&K.

JURISDICTION OF COURT: All disputes pertaining to this contract shall be subject to the jurisdiction of the Courts of J&K UT only.

TERMINATION OF CONTRACT: The department reserves the right to terminate the contract at any stage in case performance of the firm is found un-satisfactory in terms of any or all clauses of the NIT/Contract/Agreement in vogue.

ADVANCE PAYMENT: The Department shall in no case entertain any condition or request of making advance payment of any kind to the contractor during the execution of the work.

TAXES, DUTIES LEVIES etc.:- The rates offered by the Department shall be firm and final. Payment of Income Tax/GST, Octroi, Toll tax, Entry tax, Cess service tax duties and other levies etc. of the central or the UT Government and incidental charges of any shall be the responsibility of the contractor/firm.

FORCE MAJEURE CLAUSE: Any failure or omission to carrying out the provision of the contract shall not give rise to any claim by the department or the contract one against the other if such failure or omission arises from the Act of God which shall include all natural calamities such as fire, floods, earthquakes, hurricane strikes, riots, embargoes from any political or other reasons beyond the control of parties including the war whether declared or not civil war or a state of insurrection.

ENGAGEMENT OF LABOURS: The contractor shall not engage any workman below the age of 18 years. Firm/Contractor shall also comply with the provisions of labour laws and rules framed thereof and as prevalent in the UT of J&K. The contractor shall be responsible for any accident to the human life which may occur during the execution of work, compensation as shall be provided under law or any law will be payable by the contractor.

INSURANCE: The contractor shall insure all work-man at his own cost till the completion of work and take over by the department.

DEFECT LIABILITY PERIOD:- 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) the firm shall have to operate & maintain the scheme as it is required for its successful running & 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.

TRANSIT INSURANCE:- Prior to dispatch, the ordered equipment 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 borne by the tenderer and shall be included in his quoted rates. The department shall pay no extra charges on this account.

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.

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
- 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.

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 TPIQM's 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.

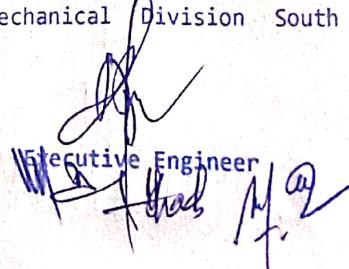
STORAGE AT SITE: The bidder shall at his own cost make arrangements for proper storage especially towards Rain and Snow damages of the equipment/ materials at sites till its erection/completion. For the purpose the bidder shall, with the approval of Engineer in charge construct temporary storage accommodation for equipment/ material at site for which land shall be provided by the department near the site of work.

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. 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.

OEM Certificate: The contractor shall produce all relevant test certificates of the manufacturer to the Engineer in-charge before start of the work. The test certificates of the equipment's on whole or all accessories/ attachments and mountings thereof shall be appended with the invoice at the time of submission of the claim to Divisional office. Failure to do so shall result in non-acceptance of invoice/bills by the Divisional office.

CLARIFICATION: If any clarification is required by the Firm/contractor in relation of technical specifications, the same shall be had from the office of the Assistant Executive Engineer concerned/ Executive Engineer PHE Mechanical Division South Awantipora before the date of start of work.

(Contd. On page 3rd ...)



Executive Engineer
M. A. J. Q.

CONSIGNEE/PAYING AUTHORITY: The consignee/paying authority in respect of electromechanical component and associated civil works shall be the concerned Executive Engineer, Jal Shakti (PHE) Mechanical Division Awantipora. Besides, the supervision of the various components of the civil work shall be carried out by the concerned Division under the overall coordination of the concerned Superintending Engineer Hydraulic Circle.

TERMS OF PAYMENT: All payments to the contractor for fulfilling the contract will be made as per the unit rates of Price Schedule (BOQ). All payments will be made in Indian Currency and will be subject to deduction of Income tax, GST, Cess at source, on the rates as are in vogue at the time of release of payment:-

- a) 65% of the contract value shall be paid on receipt of the material at site (as per the BOQ) in full & verification thereof by the concerned Assistant Executive Engineer.
- b) 15% of the contract value shall be released on installation of ordered equipment/material in full at site.
- c) 10% of the Contract Value shall be released after successful testing and commissioning of the entire equipment on full load, commissioning and trial run.
- d) 10% of the Contract Value shall be released after commissioning of the scheme and satisfactory performance of the equipment for the period as enunciated in warranty clause. However the balance amount can be released against furnishing of Bank Guarantee for an equivalent value valid for three months beyond the expiry of the warranty period of the contract.

WARRANTY:- The Firm/contractor shall be bound for satisfactory performance of equipment/work 12 months after the successful completion of trial run. If during warranty period, any malfunctioning/defect arises, the firm shall have to rectify the same within a period of ten days of receipt of intimation. In case of any failure on the part of the firm to remove the defect, the Department may get the defects rectified by any other agency and cost thereof shall be recovered from the firm and shall be recommended for further punitive action as governed under the relevant clause of contract including blacklisting.

TRIAL RUN:- After completion of work, the firm/contractor will have to make a trial run of the scheme for a period of 03 months during which the manpower required for operation shall be provided by the Department.

EQUIPMENT MAKE: The supplied material/equipments should confirm as per specification of the contract as well as make confirmed by the Firm/contractor.

The work done claim should be supported with Geo tagged photographs before, during and after execution of the job.

SITE OFFICE: - The Firm/Contractor has to maintain at his own cost a suitable site office at the site of work to which the Department sends communications/instructions.

TRAINING OF DEPARTMENTAL STAFF: - The bidder shall arrange at his own cost and risk to depute at least one competent Engineer of the equipment manufacturer to train up to twelve departmental representatives in the operation & maintenance of the equipment at site. This training shall be for duration of at least 04 consecutive months and shall commence from the date of successful commissioning of the equipment or as may be mutually agreed upon. To groups of Departmental Engineers shall also be deputed to bidders/manufacturers works for short duration to obtain training free cost in the operation & maintenance of the equipment.

DRAWING & QUALITY ASSURANCE PLAN: - The Firm/Contractor shall be necessarily furnish within two weeks of the date of placement of this order which shall be approved by the Department within two weeks from the receipt by the consignee:-

- a) Sectional drawing of pumps.
- b) General Arrangement Drawings (GAD)/ layout of the equipment fully dimensioned for pumps, motors, starters, shunt capacitors, panels, delivery manifold, cables etc.
- c) Detailed circuit diagrams of LT Panels, Starters, Shunt Capacitors etc.

Quality assurance plan (QAP) of each piece of equipment to Third Party Inspection Agency (TPA) and Department for their approval.

No manufacturing/fabrication activity shall be started by the Firm without approval of the drawings of each ordered equipment by the competent authority. Additional time consumed due to observations/summary rejection of QAP/GAD shall not be considered in the delivery period of the contract and the bidder shall be wholly and solely held responsible for the delay thus caused.

(Contd. On page...4th ...)

Executive Engineer

[Signature]

INSPECTION & TESTING:- Before dispatch from the works 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. 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. The product/ material at site shall be inspected by Assistant Executive Engineer concerned or any other official(s) of the department 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 supplier upon demand by the department or its representative shall rectify or replace defective unsuitable equipment. The Department reserves the right to nominate his representative for inspection of the goods at the works 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 is 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 be carried on:-

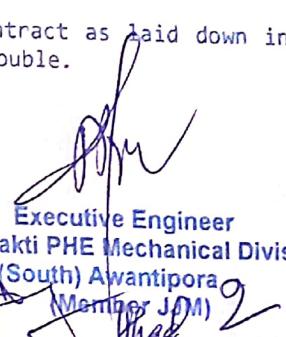
- 1) DG Set \geq 40KVA
- 2) Pumping Unit (Horizontal and Vertical) \geq 40 HP
- 3) Valves $>$ 200 mm
- 4) Pipes of all dia
- 5) HT Transformers \geq 250KVA
- 6) Voltage Stabilizers \geq 150KVA
- 7) Iron Removal Plants

For items other than those manufacturers test certificate shall have to be provided. The HT transformers shall have to be got inspected from the corresponding wing of Power Development department and the necessary certificate shall be submitted along with the manufacturers test certificate.

The work is executed strictly in close supervision of AEE/JE/Supervisory staff concerned. However, the civil work if involved should be executed under close supervision of civil counterpart.

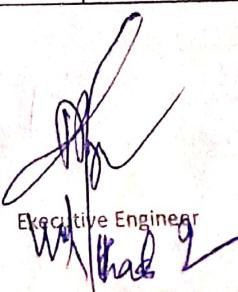
WATCH & WARD OF WORKS: The Firm shall in connection with the work provide and maintain at his own cost all lights, guards, fencing and watching, when and where necessary or required by the Department for the protection of the work or safety and convenience of the Public etc.

All other terms and conditions shall be the part of this contract as laid down in e-NIT/SBD/GFR-2017/e-procurement manual 2019 and PWD form "25" double.



Executive Engineer
Jal Shakti PHE Mechanical Division
(South) Awantipora
Member JDM 9

Sl.No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Alloted/ Accepted Rate	Amount
1	<p>Supply, Installation, Testing & Commissioning of Submersible Pumping Unit as per IS 8034 with following specification are as under (to be lowered in well casing of dia 200mm)</p> <p>PUMP: Discharge = 4300 GPH Head Range: 95 Mtr Efficiency = Not less than 50% Speed = 2900 Rpm Type of pump Mixed flow, Type of fluid to be handled. Tube well/Clear Water</p> <p>MATERIAL OF CONSTRUCTION Pump Shaft = Stainless Steel SS 410 Impeller = Stainless Steel IMPELLER Impeller is of the enclosed or semi - enclosed type and properly balanced Enclosed Impellers equipped with seal rings on their hubs</p> <p>COUPLING A suitable coupling arrangement provided with pump set</p> <p>NON RETURN VALVE Non Return Valve of the suitable size provided above the pump discharge case</p> <p>MOTOR: Method of starting = Star - Delta Speed = 3000 (Sync) Frequency = 50 ± 3 % Hz Working Voltage = 380-415 ± 15% V, 03 phase Efficiency = Not less than 85% Rating = 17.50 HP</p> <p>Class of insulation = F/Suitable for above parameters</p> <p>Submersible motor should be water filled water lubricated squirrel cage type having capacity for above pumping parameters and working on 3 phase, AC supply ranging from 380 to 415 volts, 50Hz. The motor should be sealed by radial rings to avoid mixing of well water with motor filled water.</p> <p>a) The job includes providing and fitting of interlocking arrangement against any failure of coupling. It must be fabricated out of MS strips of suitable size and length. b) The job includes providing and fitting of appropriate size MS nipple 2 feet long threaded on one end and welded to same size MS flange of thickness (as per Table-17) at other end for 65 mm diameter column pipe as per site requirement. The threaded portion should be as per size of pumping out let for proper fixing.</p> <p>The job includes providing and fitting of R. I. cloth joints/rubber washers with nuts, bolts and washers for all joints of column pipe. The job also includes lowering of pumping unit in the well then proper testing and commissioning of pumping unit on full load at site.</p> <p>Note: Providing of test certificate & Characteristic Curve of pumping equipment is compulsory and pumping unit is to be approved from the concerned Sub Divisional office before procuring. (Make: Kirloskar/Crompton Greaves/KSB/M&P/Lubbi)</p>	2.000	Job	105727.000	212454.00
2	<p>Fabrication, providing, fitting and lowering of C Class column pipe conforming to IS: 1239 of length 10 Rft into the 200 mm casing dia. production well up to the desired depth; The job includes Providing and welding of flanges conforming to IS: 6392, Table-17 and PN 16 to these pipes and welding of flanges in two layers to make the flanged joint strong and leak proof. The pipe of 10 ft length is to be weld on both sides with flanges using welding rod of reputed make. The job includes all types of skilled labours, arrangement of power supply/diesel Generator set etc required for the Job including P/F of suitable size nuts bolts and R.I Gasket in the flanged joints of column pipes. The job further includes cutting of 2 No. rectangular cable slots in each flange.</p> <p>Size: DN 65 Rating: PN 16 Class C (Heavy) (Make: Jindal/TATA/Prakash Surya)</p>	27.000	Job	4300.000	116100.00
3	<p>Providing/supplying and fitting of G.I flanged Rising Main at site. The Pipe shall be hot dip Galvanized, class C conforming 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.</p> <p>Flanges (as per IS 6392/1997 Table:17)</p> <p>Thickness shall conform to IS 6392 Part 1st Table-17. The flange welding shall be carried out in double layers using reputed make electrodes to form strong welding joint.</p> <p>Welding Electrode</p> <p>DC Arc Welding using welding electrode having diameter not less than 4mm.</p> <p>Nuts and Bolts</p> <p>Nuts and Bolts (conforming to IS:1363 Part 1st)</p> <p>Rubber Insertion Gaskets</p> <p>Rubber Insertion Gaskets (conforming to IS: 638/79) to be used between flanged joints. The main technical specifications of the pipe are given here under:</p> <p>Size: DN 80 Rating: PN 16 Class C (Heavy) (Make: Jindal/TATA/Prakash Surya)</p>	20.000	Mtr	1485.000	29700.00
4	<p>Earth work in excavation by mechanical means (Hydraulic Excavator) in trenches for foundation, drains, pipes, cables (not exceeding 1.5 m in width) and for shafts, wells, cesspits and the like not exceeding 10 sqm on plan, including dressing of sides and reaming of bottom lift upto 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as directed. (All kinds of soil 01 meter from cutting edge)</p> <p>The job includes earth work of HT Poles, Gantry etc</p>	35.000	cum	256.850	8989.75
5	Filling available excavated earth in trenches, plinth, sides of foundation etc. In layers not exceeding 20 cm in depth, consolidating each deposited layer by reaming and watering, lead upto 50 m and lift upto 1.5m.	30.000	cum	198.700	5961.00
6	Providing and laying of stone soiling including manual compaction.	6.000	cum	740.000	4440.00
7	Centering and shuttering including strutting, propping etc. and removal of form work for Foundation, footings, bases for columns.	30.000	sqm	315.000	9450.00
8	Providing and laying in position cement concrete of specified grade including curing but excluding the cost of centring and shuttering - all work upto plinth level with 1: 2 : 4 mix (1 cement , 2 coarse sand , 4 graded stone aggregate 20 mm nominal size).	28.000	cum	7019.000	196532.00
9	The job includes CC for HT Poles, Gantry etc				
	Fabrication, providing and fitting of washout Tee. The Tee shall be fabricated out of G I C-class pipe with M.S flanges conforming to BIS 6392/1997 Table 17 (Rating PN16) fastened with weld joints on three ends. The size of the Tee is given Below: Size: ND 80 MM Class: C (Heavy)	1.000	Job	4050.000	4050.00



Executive Engineer
W. H. Shah

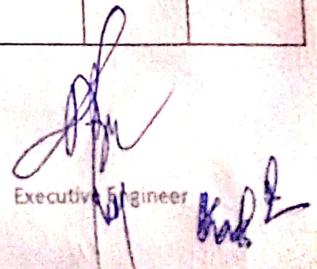
Annexure 'B' to this Office Allotment Order No. 205 of 10/2023 for WSS Chak Dadoo (At Par of the Estt. Rates)

Sl.No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Alloted/ Accepted Rate	Amount
10	<p>Supply, Installation, Testing And Commissioning of Ductile Iron double flanged, non-rising spindle Resilient seated gate/sliding valves (PN16) in accordance with BS 5153 part 1 and part 2 / EN 1074 Part 1 & 2/IS 14845 for regulating the water supply outside the pumping units. The body and bonnet of the valve shall be of ductile iron wedge with fully vulcanized EPDM rubber (Approved for drinking water) and NBR seal. The Gate/Sliding valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions. It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve. The valve shall be supplied along with hand wheel.</p> <p>Cost on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work.</p> <p>The job includes providing and fitting of 02 nos. M.S flanges perfectly adaptable to the inbuilt flanges of the valve which shall be fitted with rising main of the pumping unit at appropriate spots as per site requirement.</p> <p>The job includes the cost on account of P/F of nuts, bolts and gasket required for the job.</p> <p>Material of Construction</p> <ul style="list-style-type: none"> • Body: Ductile iron EN-GJS-400-15 / GJS-500-7 (GGG-40/GGG-50) • Bonnet: Ductile iron EN-GJS-400-15/ GJS-500-7 GGG-40/GGG-50) • Bonnet bolts: Stainless steel A2 (DIN EN ISO 3506) • Stem Nut : Brass • Check valve disk: Ductile iron EN-GJS-400-15/ GJS-500-7 (GGG-40/GGG-50) encapsulated with EPDM vulcanize <p>The Test Certificates of Sliding/Gate Valves mentioning the Material of Construction as above duly stamped by OEM shall be provided at the time of supply of material</p> <p>Size: DN 80 mm Rating: PN 1.6/16 (Make: VAG/Kirloskar/Talis//segma flow)</p>	3.000	No	15497.000	46491.00
11	<p>Supply, Installation, Testing And Commissioning of Ductile Iron double flanged, Slanted seat swing check valve (NRV) (PN16) as per EN 1074- Part -3 / BS 5153/IS 5312. The body shall be of ductile cast iron with fully encapsulated vulcanized EPDM rubber (Approved for drinking water). The valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions.</p> <p>It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve.</p> <p>Cost on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work.</p> <p>The job includes providing and fitting of 02 nos. M.S flanges perfectly adaptable to the inbuilt flanges of the valve which shall be fitted with Rising main of the pumping unit at appropriate spots as per site requirement.</p> <p>The job includes the cost on account of P/F of nuts, bolts and gasket required for the job.</p> <p>Material of Construction</p> <ul style="list-style-type: none"> • Body: Ductile iron EN-GJS-400-15 / (GGG-40) • Bonnet: Ductile iron EN-GJS-400-15/ GGG-40) • Bonnet bolts: Stainless steel A2 (DIN EN ISO 3506) • Stem Nut : Brass <p>Supply, Installation, Testing And Commissioning of Ductile Iron double flanged, Slanted seat swing check valve (NRV) (PN16) as per EN 1074- Part -3 / BS 5153. The body shall be of ductile cast iron with fully encapsulated vulcanized EPDM rubber (Approved for drinking water). The valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions.</p> <p>It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve.</p> <p>The Test Certificates of Check Valves (NRVs) mentioning the Material of Construction as above duly stamped by OEM shall be provided at the time of supply of material</p> <p>Size : DN 80 Rating:- PN1.6/16 (Make: VAG/Kirloskar/Talis//segma flow)</p>	3.000	Job	17489.000	52467.00
12	<p>Providing, fitting, testing and commissioning of ARV (Air Release valve) (PN16) as per EN 1074 Part 4/IS 14845 to be fitted to GI rising Main. The ARV Shall have the following specifications: -</p> <ol style="list-style-type: none"> Valve type - single chamber, single orifice. End connection - flanged ends to IS 1538 Test pressure - body / seat 2.5 x PN Sealing ring - EPDM Construction - ductile iron with stainless steel floats Coating - epoxy with corrosion resistance Working temperature (-450c to 650c) <p>Besides the above works, The job also cost on account of P/F R.I gasket, nuts and bolts required for installation of ARV and arrangement of gas cutter/ welding set at site.</p> <p>Material of Construction</p> <ul style="list-style-type: none"> • Body: Ductile iron EN-GJS-400-15 (GGG-40) • Bonnet: Ductile iron EN-GJS-400-15 (GGG-40) • Inner parts: Stainless steel 1.4541 • Float: Stainless steel A4 (exception: DN 50 - PN 10/16 synthetic, from PN 25 of A4) • Sealing: EPDM • Bonnet bolts: Stainless steel A4 (DIN EN ISO 3506) <p>Size: DN 50 Rating: PN 16</p> <p>(Make: VAG/Kirloskar/Talis//segma flow)</p> <p>The Test Certificates of Air Release Valves mentioning the Material of Construction as above duly stamped by OEM shall be provided at the time of supply of material.</p>	2.000	Job	19394.000	38788.00
13	<p>Fabrication, Providing and fitting of 90-120 degree bend/elbow to be fabricated out of Class C GI pipe, 1 m length and flanged on both ends a to make it leak proof. The flanges shall be M.S Flanges conforming to BIS 6392/1997 Table 28 (Rating PN25) and welded on both sides. The job includes nuts, bolts, gaskets etc as per site requirement.</p> <p>Size : DN 80 Class :- C (Heavy)</p>	10.000	No	2797.000	27970.00
14	<p>Fabrication, providing and fitting of split type MS clamps 10 mm thick, 2 ft long and 3 inch wide for lowering and holding of pumping unit fitted. The job includes the cost of required size of nuts and bolts.</p> <p>Size : DN 65</p>	2.000	Job	1499.000	2998.00

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Sl.No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/Accepted Rate	Amount
15	Providing, Fabrication and fitting of Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. The Structural steel is to be utilized for Fabrication of Gantry Platform and any other support required as per site requirement. The Steel may include ISMB, ISMC, ISA (Angle Iron), Chequered plate etc including fabrication of gravel Hooper as per the site requirement. The drawings and Dimensions will be provided by Site In Charge at the time of execution of job.	2150.000	Kg	102.000	219300.00
16	Providing and fitting of M.S 4 inch hinges -6 No. and M.S handle heavy -4 No., Anchor bolts with nuts (M16) of 0.3 m long = 04 No Metallic strip (350mm×50mm×3mm) = 02 No.	1.000	Job	2500.000	2500.00
17	Supply, Installation and testing of 3 Ton motorized chain hoist with hook suspension along travelling trolley of proper specifications having following features The chain hoist shall also have the following characteristics:- Motor: The basic drive of the hoist be provided with 3 phase squirrel cage totally enclosed induction motor having a high starting torque with class "F" insulation. The make of the motor be NGEF / SEIMNS / GEC/Crompton and conform to IS : 325 (RPM-1500) Brake: The hoist shall have instant action, Fail safe electromagnetic disc brake mounted on the end of the motor to ensure minimum safety and reliability when the load is held in its position as soon as the supply to the motor is switched off internally or accidentally. The adjustment & maintenance of break shall be quick and simple. Gears: The hoist shall have precision cut spur and helical gears made of alloy steel mounted on bearings and housed in a dust proof gear box. The lubrication of gears be of high viscosity and temperature for longer life of gears. Load Chain: The load chain be made of high tensile alloy steel having wear resistance and greatest mobility. The chain should be accurately collaborated, tested and have adequate built factor of safety for safer operation. Load chain wheel: Specially designed, perfectly machined wheel providing correct grip of load chain made of malleable cast iron makes the hoist most safe and reliable against any failure. Lifting Hook: The lifting hook shall be forged with provision for free swiveling. Limit Switch: The limit switch shall have snap action, shunt type prevent over hoisting or over lowering to ensure maximum safety of operation. Control: The unit shall be controlled by heavy duty air break direction reversing type bidders and electrically interlocked for safety. Contactors relay, fuses, low voltage transformer be fitted for control voltage and are to be housed in fabricated / pressed sheet steel box dust proof. Push button pendant: The contactors shall be operated by a pendant push button station suspended from hoist by a rope / dog chain to prevent any damage to the pendant cable and for easy operation. Test: The hoist supplied is to be tested at 25% overload and the test certificate of the same be provided at the time of installation. The complete unit as specified above is required to be fitted / tested at site. Besides the above works the job includes Providing and fitting 3-Core 6 sq. mm .50 m submersible cable for providing power supply to motor of chain Hoist including P/F protection device of suitable capacity. The main specifications of the chain Hoist are given below Make = Indef/Pull Lift/Globe Capacity = 3 ton Hoisting speed = 2.4 M/Min Hoist motor H.P. = as per requirement No. Of chain falls = 4 Min. Height of lift = 6 M	1.000	Job	161700.000	161700.00
18	Supply, Installation, Testing And Commissioning of outdoor type Electric Sub Station as per the technical specifications given here under - Specifications conforming to IS: 1180 (Part 1) 2014 with latest amendments Type: HT/LT Transformer (Level-2) Capacity:- 63 KVA Type of cooling: ONAN. Operating conditions: Input = 11000 volts Output = 433 volts AC supply in 3-phase. Terminals: Input=3 No. HT Brass bush rods with insulators, washer, nuts etc. Output=4 No. LT Brass bush rods switch insulators, washers, nuts etc. Core: The core shall be of high permeability to reduce core losses and the strips shall be of suitable size and gauge. Transformer Coils: Suitable number of HT and LT coils in each leg of the core. The transformer coils shall be fabricated out of superior quality aluminum wire/strips, properly wound. The HT transformer is completely filled with suitable grade transformer oil up to required level. The job includes carriage, and all leads and lifts involved. The HT transformer shall be of reputed make from an ISO certified company as per relevant standards and a test certificate shall be provided before installation. The transformer shall also be provided with breather fill with silica gel crystals, conservator with oil level indicator, explosion vent and adequate radiator fins/ Tubes. The impedance of transformer shall be as per IS: 1180 (Part 1) 2014 with latest amendments. (Make: Powerline/GEC/ALBA/JK/Northern) NOTE: The scope of the work shall include obtaining of necessary inspection/clearance certificate from the concerned department for all the required equipment.	1.000	Job	171963.000	171963.00
19	Providing and fitting G.I Channel /Angle/ Flat of sizes including clamps. The job includes fitting of Channels on two poles for the installation of insulators and safety devices, GO Set, Lighting Arrestor etc. It also includes the channels for fitting of LT Meter and LT Distribution Box. The job includes P/F of GI channels at Tapping point for installation of GO Link Set, Pin Insulators Etc as per site requirement Size of Channel= ISMC 75X40MM	450.000	Kg	123.000	55350.00



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No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/ Accepted Rate	Amount
20	Supply, Installation, Testing and commissioning of 02 No. 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 pole double insulator, copper or copper alloy high pressure heavy contact assembly, red with bearings, operating handle of 32mm dia GI pipe conforming to IS 1818 1961, 06 No. of insulators, rated voltage 11KV 200A complete as per IS specs. The 11 KV AB switches shall conform to IS 9920 (Part-I to IV) 01 No. GO Set is to be fitted at tapping point and 01 No at HT Transformer (Substation)	2.000	Job	11730.000	23460.00
21	Supply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable for vertical installation	1.000	Job	4983.000	4983.00
22	Supply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With polymer housing Station Type	1.000	Set	7754.000	7754.00
23	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	18.000	Job	347.000	6246.00
24	Tubular pole of specifications ST- 410 (SP-33). The job further includes drilling of holes for installation of various accessories wherever required the job further includes GI wire earthing of pole as per REC standard. The tubular steel poles shall conform to the latest edition of Indian Standard Specification IS: 2713 (Part - I, III); 1980 The materials used in construction of tubular steel poles shall be of the tested quality of steels of minimum tensile strength 540 MPa. The Poles shall be fitted with base plate as per above standard. The poles shall be applied with Red Oxide Primer and two coats of anti-corrosive Red paint at bottom up to the length of 4M and two coats of paint of silver shade for the rest	6.000	No.	20686.000	124116.00
25	P/F of Galvanized nuts, bolts of various sizes as per site requirement.	20.000	Kg	142.000	2840.00
26	P/F Danger Plate with clamps on every HT pole	6.000	No.	153.000	918.00
27	Providing and fixing G I Barbed wire for anti-climbing/ anti-climbing devices. The barbed wire shall be tightly close wrapped around the pole for 10-12 turns, commencing at 2.50m above the datum line.	20.000	Kg	136.000	2720.00
28	Providing and Fitting of PG Clamps	6.000	No.	421.000	2526.00
29	Supply, Installation, Testing And Commissioning of Galvanized stay set with 50 X 8 mm Stay Clamp, Guy insulator (2 No.), Anchor plate (200X200X6mm), nuts and bolts, 2 No.- turn buckle, 1.8 m long, 16 mm diameter solid G.I stay rod & 7/3.15 mm dia. G.I stranded wire complete.	6.000	Set	4922.000	29532.00
30	Providing and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanized steel reinforced) for fitment of various accessories.	600.000	Mtr	56.000	33600.00
31	Supply, Installation, Testing And Commissioning of 35 sq mm XLPE HT cable (ABC type) of 11 KV Grade with following specifications size cross sectional area in square mm)= 3x35 sq mm phases Red, Yellow, Blue The Cable should conform to IS: 8130-1984, IS: 398(Part-IV)-1994, IS: 7098(Part-II)-2011 & IS: 5831-1984 with up to date amendments, if any. The Test Certificate of Cables duly stamped by manufacturer shall be provided at the time of supply of material. (Make: Finolex/Polycab/Havells/L&T)	100.000	Mtr	818.000	81800.00
32	Providing and fitting of anchoring clamps required for holding 3-core 35 sqmm HT AB cable.	6.000	Job	457.000	2742.00
33	Supply, Installation, Testing And Commissioning 11 KV cable termination kit for connecting 35 Sq mm ABC cable (ABC type) with the existing HT line near tapping point and HT transformer.	5.000	Job	8994.000	44970.00
34	Supply, Installation, Testing And Commissioning of LT Distribution box for H.T transformer with MCCB For incomer and SFU for outgoing circuits. The LT distribution Box is to be fitted on GI Channels. Capacity of transformer. 63 KVA.	1.000	Job	28118.000	28118.00
35	Supply, Installation, Testing And Commissioning of PRODIGY LT Meter of following specification complete with all fixtures required for fitment at site Type: 3 Phase, 4 wire Measurements offered: KWh, KVARh, KVAh, KVA Voltage : 3x240V(415v), 50HZ Ib : 40A Imax: 200A Battery: Lithium The Prodigy Meter must be fitted inside the Box, that is to be fitted on GI Channels near LT Distribution Box. Both the enclosures must be symmetrical Make: Secure/ L&T Sealing /Inspection report of Prodigy meter from JKPCL (Concerned) is to be submitted by the firm at the time of charging of SUBSTATION.	1.000	Job	28000.000	28000.00
	Supply, Installation, Testing and Commissioning of Modular motor control panel of appropriate size fabricated out of 14 SWG sheet having required openings/vents and protection Class: IP-55 & fitted with accessories as under: a) Bus bar Chamber: The bus bar chamber shall be fitted at the top of the panel horizontally throughout the length. There shall be 3 Nos. of phase bus bar and 1 No neutral bus bar and 1 No earthing bus bar. The bus bars shall be air insulated and made-up of high conductivity COPPER with current density of suitable rating for 100 Ampere. All panel compartments shall be provided with suitable cable alley and vertical bus bar alley. Suitable segregation shall be provided in between bus bar chamber and adjoining compartments. The bus bar shall be PVC sleeved with color strips of red, yellow, blue and black and the same be arranged in accordance with IS-375 specs. Electrical clearances shall be maintained between phases, neutral and body as per standards. b) Main Circuit Breaker (Incomer MCCB): Qty. = 02 No. of poles = 4 Pole Current Rating = 160- 200A(DN2-250N) Rated operational voltage = 415 V ± 10 % Rated frequency = 50 ± 3%Hz				

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No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Alloted/ Accepted Rate	Amount
36	<p>Ambient temperature = -70°C to 40 °C Type of release = Thermal-Magnetic Overload protection = 0.8 – 1.5 times adjustable Short-circuit protection = 6-10 times adjustable Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 50kA c) Change over Switch Qty = 01 No Rating = 100A Type = Front operated, on load, 4 pole, 415 ± 10 %V, 50 ± 3%Hz. d) Motor Back-up Protection MCCB Qty = 2 No No. of poles = 3P Current Rating = 100A Rated operational voltage = 415 V ± 10 % Rated frequency = 50 ± 3% Hz Ambient temperature = -70°C to 40 °C Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 50kA e. Submersible starters :- Fully automatic star delta starters (MU-G20) Power Specs = 3 Ph, 415 ± 10 % V, 50 ± 3 % Hz. Relay range = 20-32 A Coil Voltage = 380 v Protection = single phasing, phase reversal, phase unbalance (55 ± 5 V). Conformity to standard = IS/IES 60947-4-1 Qty = 2 No's f) Auxiliary MCCB for Heating/Lighting Circuit Breaker = MCCB (Outgoing) Qty. = 1 No. No. of poles = 4P Current Rating = 63A Rated operational voltage = 415 V ± 10 % Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 36kA g) Motor Protection Relay:MM10/Siemens Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections suitable for the Modular Control Panel:- Protections = Thermal Overload with pre-alarm, Short Circuit, Phase Loss, Unbalance, Phase reversal, Under Current, Prolong starting, Locked Rotor & Earth fault. And over current Qty. = 02 No's (01 No. for each starter) h) M-power module for mobile starter for submersible motor 1P/3P 3 wire(for both starters) Quantity – 02 no. IVRS Languages – English , Hindi, Suitable Region- North India i) Over Voltage and Under Voltage Protection relay (02No.) to be fitted separately for both starters The panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A, digital voltmeter of range 0-500 V, and digital frequency meter (01 No each). The enclosure of the panel shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for smooth and noiseless movement of windows and advanced locking arrangements.MUG-30 Make of accessories: L&T/Havells/Siemens/ Schneider</p>	1 000	Job	188581.000	188581.00
37	<p>Supply, Installation, Testing And Commissioning of 40 KVA voltage stabilizer as per specifications below: Type of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi step. Type of Regulator : Double plate type with electrolytic copper contacts. Input voltage :180-400 volts.(3 phase) Output voltage : 415 ± 10% volts. Frequency : 50 ± 3 C/S. Windings : Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried. Insulation : Fiber glass insulations to tested parameters. Cooling : Naturally, Oil cooled (ONAN) Temp. Rise (Max) : 30°C above ambient Mounting : On Uni-directional wheels. Correction rate : 40 volts per step Wave form distortion : virtually nil Duty cycle : 100% continuous. Enclosure : MS sheet enclosure in pressed CGR Sheet powder coated with radiators. Core laminates : High grade, low eddy loss, grain oriented silicon steel laminations. Load : Three phase induction motor load. Load Ampères (continuous) : Overload in 24-hours operation. 10% above continuous Ampere rating. The voltage stabilizer shall have T-oil level indicator gauge preferably glass type tube or otherwise visible to naked eye. The top of the container to have a display panel for housing 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neon indicators for incoming and outgoing phases (06 No's). Insulating media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielectric strength of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels and filled at site up to top level. The voltage Stabilizer shall be accepted with manufacturers duly stamped test certificate and shall have name plate with specifications.</p>	2.000	Job	98233.000	196466.00

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No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Alloted/Accepted Rate	Amount
20	Supply, Installation, Testing And Commissioning of 2 core, 3.5-Core, XLPE, 1 KV and 11KV grade Armoured Aluminum Cable of various sizes conforming to IS: 7098 part 1st as service line from the HT transformer to control panel including necessary thimbling, crimping, taping etc. (Make: Finolex/Polycab/Havells/L&T) The Test Certificate of Cables duly stamped by manufacturer shall be provided at the time of supply of material. Size : 80 sqmm, 3.5 core, LT cable.	120.000	Mtr	497.000	59649.00
30.01	10 sqmm, 2 core, LT cable	160.000	Mtr	162.000	25920.00
30	Providing and fitting of 3-Core flat submersible copper cable conforming to IS: 604 (Part 1st) - 1964 & IS: 694 (Part 2nd) - 1964 for Submersible Pumping Unit and other electrical Equipment. The cable connections terminals shall be fitted with copper thimbles of required size. The main specification of the cable is given below: Size : 16 sqmm (Make: Finolex/Polycab/Havells/L&T)	240.000	Mtr	711.000	170549.00
40	Supply, Installation, Testing And Commissioning of LT, 35 sqmm 1 core, capable to work up to 11 KV, XLPE insulated, galvanized steel strip armoured copper cable conforming to IS: 7098(part -1) 1989 With latest amendments to be utilized for interconnection of various electrical gadgets. The job includes providing and fitting of suitable rating copper thimbles duly crimped and taped at conductor ends by hydraulic crimping tool. The job includes laying of cable in cable tray Size : 35 sqmm (Make: Finolex/Polycab/Havells/L&T) The Test Certificate of Cables duly stamped by manufacturer shall be provided at the time of supply of material.	220.000	Mtr	546.000	120120.00
41	Supply, Installation, Testing And Commissioning perforated cable trays including horizontal and vertical bends, tees, cross members and other accessories as required and duly bolted to walls of building with Geyser bolts including Nuts and Washers etc. Size: 150x50x1.6mm	40.000	Mtr	1000.000	40000.00
42	Supply, Installation, Testing And Commissioning of earthing station for electric substation, LT panel and stabilizer comprising of company fabricated GI earthing electrode as per IS: 3043. The job includes Auguring of bore of required dia/depth for installation of electrode along with backfill compound mixed with soil and all other items required thereof for achieving the best result. The job includes connecting of electric gadgets through GI strip (25x3mm) as per relevant standards. Safe earthing electrode size : 80 mm dia , Length : 2000 mm Back fill compound : 30 kg	7.000	No.	10462.000	73234.00
43	Supply, Installation, Testing And Commissioning of 6 kg CO2 type fire extinguisher manufactured as per IS: 15683 of 2006 with IS mark and comply with DGMS (Approval). The co2 extinguisher should be suitable for class B & C fire and also for fire involving electrical equipment. The cylinder used for fire extinguisher shall be approved by petroleum and explosive safety organization (PESO) as per gas cylinder rules 2004 and as per IS: 7285 of 2004. The body should be made of seamless steel (manganese) confirming to IS: 7285 with IS mark and should be provided with squeeze gnp nozzle and should be filled with co2 confirming to IS: 15222 of 2002 with certificate. The extinguisher shall be provided with manufactures test certificate and hydraulic test certificate by BIS from PESO	2.000	Job	6447.000	12894.00
44	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. The job includes fabrication, providing and fitting of three arm GI structure at the top having 120° angle between arms and each arm having 15° inclination with respect to horizontal plane. Each arm should be of 2' length and size and shape appropriate as per requirement of the luminary. The job also includes providing and fitting of required length of flexible multi strand 2 mm copper wire from each terminal connector to each holding arm. The pole is mounted on 1.2.4 Cement concreting of size not less than 2'x2'x6" (cost of concreting not included in the job) using 04 No anchor bolts of required size not less than 7" in length. The complete job includes earthing in GI Electrode as per relevant IS Code.	2.000	Job	22226.000	44452.00
45	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 Colour Temperature: 4K - 6.5K Beam Angle: 120° - 170° Lumens >12000 Operating Temperature: -20°C to 60°C The LED is pressure die cast aluminium housing with powder coated finish and having Ingress Protection up to IP-68 The LED is properly fitted on the arm of the pole and connected to the copper wire as provided in the high mast pole Make: Phillips/Havells/Syska/Bajaj	6.000	Job	9486.000	56916.00
46	Supply, Installation, Testing And Commissioning of Junction Box with DP 32 A MCB to serve as Main switch for LED Lighting. The job includes connecting the junction box to the main power supply from panel.	2.000	Job	2227.000	4454.00
47	Supply, Installation, Testing And Commissioning of 2KVA fully automatic 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. The voltage stabilizer is to be connected to the heating and lighting circuit of the scheme including the street lights.	1.000	Job	8154.000	8154.00

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No.	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/Accepted Rate	Amount
48	Supply installation, Testing & commissioning of 1000VA Full sine wave power inverter including Providing / Installation of 12V, 180AH Tubular Inverter Battery with trolley and cover with 2 core 4 mm ² Cu (25 m) wiring as per site requirement along with other accessories like SS Combline (02 Nos), 3-pin plugs etc. of reputed make for proper fitment and installation of the item. (Make: Evidel/Luminous)	1.000	Job	34053.000	34053.00
49	Providing, laying & fixing with adhesive/bonding material of insulation rubber mats on the floor of the pump house covering area around electro-mechanical machinery for safeguarding the life & limb of the workmen due to possible leakage of current & short circuit. The floor surface shall be made good & shall be free from dust, grease, foreign material & moisture free. The mats shall be as per IS 15652 2006 & shall have the following specifications Composition: Rubber (synthetic mats for electrical purpose) Thickness - 2.5mm Size - 1M wide The rubber mats shall be accepted with manufacturers test certificate	10.000	Mtr	1205.000	12050.00
50	TOOL KIT For Maintenance :- The Tool Kit for maintenance shall comprise of the following and all the items as mentioned below shall be of providing of tool kit consists of following items (Taparia /Bosch) i. Double ended Spanner (Chrome plated) 02 sets complete ii. Double ended Ring spanners chrome plated 02 sets complete iii. Allen key set black finish 02 sets complete iv. Combination Pliers insulated with thick C.A sleeve, size in mm 165, 210, 256 each - 02 No v. Long nose pliers insulated with thick C.A sleeve, size in mm 165, 205 each - 02 No vi. Side cutting pliers insulated with thick C.A sleeve, size in mm 165, 205 make - 02 No vii. Insulated screw Drivers (Taparia /Bosch) Blade length Blade dia Tip dimensions Quantity 50 3 1.6 x 0.4 02 75 3 1.6 x 0.4 02 100 3 3 x 0.4 02 125 3.5 3.5 x 0.5 02 150 3.5 3.5 x 0.5 02 200 4 4 x 0.6 02 300 5 5 x 0.8 02 viii. Hammer with handle weight - 110 mg, 340 gm , 600 gm -each - 1No .. ix. Heavy duty pipe Wrench length in mm - 200, 300, 600 each - 01 No. RIGID/IRWIN/Maxpower x. Electric Multi-meter ±1No Make: Fluke /Klein xi. Digital Clamp tester capable to measure up to 400A - 1 No. Make: Fluke /Klein xii. Hack saw frame with hack saw blade - 01 no xiii. S-16 MXL S-16 H X L Socket Set (19 sockets + 6 Accessories) - 01 No. Make: Taparia /Bosch Tool kit Make: Taparia /Bosch/Jedlani The tool kit is to be provided in tool box of Make: Taparia /Gear Wrench/ Stanley	1.000	Job	28840.000	28840.00
51	a) Providing of good quality bedding for night stay/Shift consisting of:- i) Mattress with warm cover size 6x3 (6Kg)- 02 No's ii) Quilt with warm cover size 5x8 (6Kg)- 02 No's iii) Pillows with covers - 02 No's iv) Single bed warm blankets with one sided Fur- 02 No's The filling material for mattress, quilt and pillow shall be of good quality cotton b) The job also includes providing of pressure cooker 5ltr 02 No's, Steel patella (utensil) 5ltrs 02 No's, cooking heater 01 No., room heater 01 No., steel buckets 10 litre capacity 01 No., Plastic bucket 10 litre capacity with Mug 02 No's each, steel glasses 05 No's, steel Plates with large spoons and bowls 03 No's each, Cup and Saucer set (01 No. Set) and, 5kg Gas cylinder with burner/ stove. The job also includes providing of thermo-cool 15 x12 along with excel matting of 15'x12' size. The job also includes providing of unbreakable Plastic Chair table set consisting of chairs 04 No's, extra heavy Table 01 No. The job also includes providing of good quality safety Door locks (03 No's) of Godrej, Link locks.	1.000	Job	39619.000	39619.00
52	Fabrication of 7' (L) x 6' (B) x 1.5' (H) angle iron bed for operators with back-height of 2 feet 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.	114.000	Kg	102.000	11628.00
53	Providing of 6.0 meter (20.0 ft) Foldable, portable & compact aluminum Telescopic Ladder, EN131 Certified., built from rust-proof, high-grade aluminum alloy and precise engineered HDPE components to ensure maximum corrosion resistance. It should be designed for use in all climatic and weather conditions and to enhance safety, and a strong grip even on wet surfaces. Ladder should be easy to extend and retract with storage straps, convenient to use, store and carry around. The length of step should be 40-50cm Approximately with distance of 40-50cm between steps.	1.000	Job	19500.000	19500.00
54	Providing and fitting of 19 mm thick multi layered ply sheet of size 6 x 3 feet, 3 No's including cutting, fixing all complete including painting of the play sheet by one coat of primer and two coats of enamel paint.	54.000	sft	154.000	8316.00
55	Providing of 1kw heat convector for operators for winter season.	1.000	Job	1205.000	1205.00
56	Providing and fitting of 01 No. LED (Scroll type) sign board fabricated out of stainless steel and metal showing the names of water supply scheme and the Department. (Size: 6'x16' = 9 sft)	9.000	sft	3998.000	35982.00
57	Providing of CP 12.5WP solar/electrical lantern chargeable on both solar & electrical 220v supply. The solar lantern is to be provided with solar plate (provided in box with lantern).	1.000	Job	1911.000	1911.00
58	Providing of bamboo Ladder, 18 ft long along with 15 ft long link rods and HT Gloves pair (01 No. Each)	1.000	Job	7350.000	7350.00
59	Providing of Industrial Rubber 11 KV Electrical Hand Shock Proof Safety Gloves for handling electrical equipments/connections	4.000	Pairs	750.000	3000.00
60	Providing and fitting of 02 No. angle iron/sheet metal board duly painted showing various specifications of the mechanical and electrical equipment installed at site (01No) and The name of water supply Scheme (01No) of appropriate sizes. The details, drawings and specifications will be provided by Site Incharge.	35.000	sft	250.000	8750.00

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No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Allotted/ Accepted Rate	Amount
61	<p>Providing, installation, testing and commissioning of 'Silent type' AIR COOLED Diesel Generator set of 40 KVA Rating at 1800 RPM and 3 Phase. The DG Set shall be able to operate at 1800 mtrs ASL efficiently without causing any malfunctioning. The DG Set shall comprise of Diesel Engine and Alternator coupled together with heavy duty flexible coupling and mounted on M. S. Base Frame along with all standard accessories. Control Panel, Battery, M. S. Canopy duly painted and conforming to noise reduction norms as per environmental protection rules 1986 as laid down by Ministry of Environmental (Protection) and Forest, read with GSR-371(E) Dated 17-05-2002 at S. No. 95 for emissions limits, and GSR-371(E) Dated 17-05-2002 at S. No. 94 (Paragraph 1 and 3) for noise limits for the DG Set and as per the latest amendments if any. The engine shall conform to IS-10000(BS-649/B.S. 5514 amended up to date. The DG Set should be rated for continuous duty with overload provision of 10% for the period not exceeding one hour in twelve hours.</p> <p>Make: Eicher/ Stamford/KOEL I-Green/Kirloskar/Cummins/Mahindra</p> <p>A) ALTERNATOR :-</p> <p>Make: CG/ Stamford/KOEL I-Green/Leroy-Somer</p> <p>The alternator shall be self-excited, self-regulated for 40 KVA rating and shall be brushless, continuous duty. The alternator shall be screen protected drip proof enclosure, and horizontal foot mounted in double bearing construction. The alternator shall conform to IS-4722 / IEC-34/BS2613</p> <ul style="list-style-type: none"> a) Rated Output : 40 KVA (At 1800mtrs ASL) b) Rated Speed : 1500 RPM c) Efficiency at full load 0.8 P.f. = Not less than 86.00% or as per relevant IS code d) total distortion factor = less than 3% e) Voltage : 415 V at 50 Hz f) Class of Insulation : H g) Enclosure : IP 23 h) Governor = Electronic Standards <p>The alternators shall be in accordance with the following standards as are applicable</p> <ul style="list-style-type: none"> a. IS-4722/IS-2613 1970 The performance of rotating electrical machines b. IS-4589/BS 269 rules for method of declaring of efficiency of electrical machines <p>B) DIESEL ENGINE (Prime Mover)</p> <p>Make: CG/ Stamford/KOEL I-Green/Eicher/Kirloskar</p> <p>The Prime Mover shall be diesel driven to develop requisite BHP as per ISO-8528-part- I at 1500 RPM for the alternator rated as above with ambient temperature ranging from -10C to +45C with 70% humidity.</p> <ul style="list-style-type: none"> a) Speed: 1500 RPM c) Cooling System : Water cooled d) Method of Start: Electric Start with a Key e) Rated BHP : Suitable for 40.00 KVA rating output at 1800mtrs ASL as per ISO-8528-part- I <p>The engine shall be fitted with following accessories:-</p> <ol style="list-style-type: none"> 1) Fuel Tank The capacity of the fuel tank shall be so as to last for 12 hours of continuous running on full load. The fuel tank shall be mounted on an angle iron frame of suitable height and fabricated out of M.S. Sheet of 4 mm Thickness duly painted and fitted with connections for inlet, outlet and return and also to be provided with air vent, drain with valve, level indicator and fuel pipes complete in all respects. 2) Battery Battery suitable for above capacity DG set 3) Starting System Providing and Fitting of Terminals, Leads, C/W Charging Dynamo and fitted with 12 Volt Starting System. The system shall be able of starting of DG set with 20-30 Sec even in winter conditions with ambient temp down to 50C 4) Engine Instrument Panel: The Engine Instrument Panel shall be fitted with starting switch with keys, Lube Oil Gauge, Temperature & Pressure Gauge, Speedometer, Kilowatt Hour Meter etc and all other accessories as required. 5) Safety Control: The D. G. Set shall be provided & fitted with all the safety controls i.e. for Low lube oil Pressure indication, High water temperature indication, RPM indication, water temperature indication, battery charging indication etc. C. Standard Control Panel: The Control Panel shall be fabricated out of steel sheet 1.5 mm thick duly pre-treated and aesthetically finished. It shall be totally enclosed, dust, vermin proof with IP-53 degree of protection as per IS 2147-62. The panel shall consist of following instruments: <ul style="list-style-type: none"> a) 0 - 600 V, AC Voltmeter of class 1.5 accuracy with phase selector switch b) A.C Ammeter of Class 1.5 accuracy c) HRC Fuses of required rating d) One No MCCB of required rating e) Frequency Meter f) Power factor meter g) Pilot Lamps h) Energy Metre i) Push Button Switch for ON-OFF operation. <p>All the above components shall be properly mounted duly wired and shall be of reputed make.</p> <p>D) Canopy.</p> <p>The Canopy of the D. G. Set shall be fabricated out of M. S. Sheet of required gauge so as to withstand the snow load etc, duly painted. The Canopy shall be as per the Norms of the as laid down in the environmental protection rules 1986 of Ministry of Environmental (Protection) and Forest, read with GSR-371(E) Dated 17-05-2002 at S. No 95 for emissions limits, and GSR-371(E) Dated 17-05-2002 at S No 94 (Paragraph 1 and 3) for noise limits for the DG Set and as per the latest amendments if any.</p> <p>The following jobs are also included in the scope of work.</p> <p>The job includes providing of 50 ltrs of HSD for initial testing of DG set at site.</p> 	1.000	Job	707805.00	707805.00

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Sl.No	Description of Work / Item(s) with technical specifications	No. of Qty	Units	Alloted/ Accepted Rate	Amount
62	Supply, Installation, Testing And Commissioning of L.T. 1 core, capable to work up to 11 KV, XLPE insulated, galvanized steel strip armored copper cable conforming to IS - 7090(part -1) 1988 With latest amendments to be fitted from D.G Set to Modular control panel. The job includes providing and fitting of suitable rating copper thimbles duly crimped and tinned at conductor ends by hydraulic crimping tool. The job includes earth work in excavation wherever required for laying of cable underground Size:- 35 sqmm (Make: Finolex/Polycab/Havells/L&T)	130.000	Mtr	546.000	70980.00
63	Supply, Installation, Testing And Commissioning of OFF-Load (Side operated) Changeover Switch in Separate SS Enclosure as below Capacity - 250Amp, 415V, 50hz Type OFF Load Voltage 415V No of Poles 4 Operation Side Operated Standard Conformity IS / IEC 60947 - 1&3 Make: L&T/Havells/Siemens/ Schenelder/ABB	2.000	Job	23000.000	46000.00
64	Providing, Installation, Testing & Commissioning of complete switchgear unit for protection of D.G Set consisting of 200A MCCB 3-pole, 415 V, 50 KV breaking capacity housed properly in cubical enclosure made up of M.S SWG - 16 sheet steel (outdoor type) duly powder painted with anti-corrosive paint comprising of three compartments for incoming / outgoing circuits and MCCB. The panel should have adequate double locking Arrangement with Cu- Bus Bar 12x40 mm with Bakelite insulation and LT Arrangement selector switches, phase indicators. The equipment should be installed at appropriate height in a stand consisting of 50 x 50 x 6 mm angle grouted in ground with appropriate cement bottoming as per the IS standard. Make: L&T/Havells/Siemens/ Schenelder/ABB	1.000	Job	39422.000	39422.00
65	Colour Coated ROOFING Providing fitting and Installation of HI RIB Colour Coated sheet roofing including upto any pitch in horizontal vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and limpet washers. The Roofing sheets shall be manufactured from zinc/ aluminum alloy coated high tensile steel. Thickness of Sheet 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm Material Steel / Stainless Steel/Pre Coated GI Profile Sheets Colour Blue/green/red/as desired by site incharge Surface Treatment Colour Coated Usage/Application Roofing/Walls Manufacturing Technique Cold Rolled	70.000	sqm	852.500	59675.00
66	Providing fitting and Installation of ridges or hips of 60 cm wide overall in HI RIB Colour Coated sheets fixed with polymer coated J. or L. hooks, bolts and nuts 8 mm dia G.I. limpet and bitumen washers complete. Thickness= 0.50mm Width = 60 cm Length= 14 feet	5.000	Mtr	690.850	3454.25
Total in Figures:		3933540.000			
Total in Words: Rupees Thirty-Nine Lac, Thirty-Three Thousand, Five Hundred & Forty Only					

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