CONDITIONS OF CONTRACT

FOR

CONSTRUCTION AND COMMISSIONING OF TUBE WELL INCLUDING SUPPLY AND INSTALLATION OF MECHANICAL & ELECTRICAL EQUIPMENTS AND RELATED PIPELINE BY WAY OF CARRYING OUT DEEP DRILLING, DEVELOPMENT & STABILIZATION OF TUBE WELL BY DIRECT ROTARY METHOD OF DRILLING

FOR

CENTRAL UNIVERSITY OF JAMMU

AT

VILLAGE BAGLA, DISTT. SAMBA, JAMMU (J&K)
CONDITIONS OF CONTRACT (CC)

Name of Work: Tender for Construction and commissioning of tube well including supply and installation of mechanical & electrical equipments and related pipeline by way of carrying out deep drilling, development & stabilization of tube well by direct rotary method of drilling in campus of Central University of Jammu located at village Bagla, distt. Samba (J&K).

1.0 INTRODUCTION

The Central University of Jammu (CUJ) has been established by an Act of Parliament in the year 2009. The site allotted for development of permanent campus of Central University of Jammu is located at village Bagla, distt. Samba (J&K) and its terrain is semi-mountainous, undulating and is surrounded by dense bushes and forest cover. The proposed site for tube well located inside said CUJ campus is approx. 25 km from Jammu & around 8 km from Rayha Morh on Jammu – Pathankot Highway (NH1A).

2.0 SCOPE OF WORK

The scope of work included in this tender shall include (but not be limited to) Construction and commissioning of tube well including supply and installation of mechanical & electrical equipments and related pipeline by way of carrying out deep drilling, development & stabilization of tube well by direct rotary method of drilling in campus of Central University of Jammu located at village Bagla, distt. Samba (J&K) and any other services not covered above but required in totality for overall completion of work as per the direction of PMC/ CUJ as per the scope of work, BOQ and specified in condition of contract & elsewhere.

Tenderer is required to bore the hole and construct the tube well upto the depth of meeting the desired water table or upto the depth as per the written instructions of Engineer-in-charge from natural ground level.

All machinery / equipment, drilling accessories, material & POL etc required for said work including their shifting & carriage to site shall have to be done by tenderer at his cost and his quoted rate shall be inclusive of this cost.

Agency is required to back fill the bore hole drilled by them upto ground level, in case it is required by PMC/CUJ to be abandoned.
2.1 DRILLING OF TUBE WELL:

Drilling / Sinking of gravel packed bore hole of 530 mm dia by direct rotary method, down to full bore hole depth / depth required as per instructions of Engineer-in-Charge, till a sufficient rich aquifer of 20 – 40 mts is obtained. The job includes fabrication of liner Assembly, providing & shrouding of Pea shaped Gravel, making of approach road, deploying and shifting of rig and its accessories, erection and leveling of Rig machine, loading / unloading of material of all types, design and fabrication of fishing tools and fishing operations if required.

The rate quoted for above job shall also include cost of POL’s, welding electrodes, providing of water required during drilling, M.S. Flat strips consumables, labour, watch and ward, tools and tackles, taxes, duties, transportation and all types of hire charges of any machinery and equipment, if required. The job consists of drilling of gravel packed bore hole of atleast 530mm dia throughout, and lowering of Liner Assembly consisting of blind and stainer pipes of 300/250/200 mm dia as per the design obtained from Regional Director, Central Ground Water Board, Jammu to suite requirements and conditions of the geological strata pipe which shall be packed by the specified gravel as per IS: 4097 of 1967 with upto date amendments for pea shaped gravel packed tube wells.

The rate quoted for job includes making arrangement for sieve analysis of the strata collected from the site after every 2 mts to 4 mts of drilling, as per the decision of Engineer-in-charge of the site.

The job shall be undertaken on turnkey basis and contractor shall be responsible for finishing the tube well as a Production Well which covers and includes making of all types of arrangements required for drilling a successful tubewell, even if the same are not mentioned in the scope of work, but are required for successful completion of the well as a Production Well.

Note: Before tendering, the tenderer is required, in his own interest and at his own expenses to visit the site and acquaint himself fully with the site conditions and other details connected with the work. Later on at any stage, PMC/CUJ shall not accept any claims etc. of what so ever from the tenderer arising out of any confusion to him.

2.2 SHROUDING OF TUBE WELL:

The liner assembly is to be shrouded with gravel of specifications selected on the basis of sieve analysis, as per IS code 4097 of 1967 with latest amendments, all around the liner assemble and all consist of hard quartzite or other suitable material with an average specific gravity of not less than 2.5. The gravel shall not contain more than 2% by weight of thin flat or elongated pieces. The quartzite shall be sub rounded to rounded grains of minimum angular features. The gravel shall be free
from impurities such as clay, dirt, sand, loam. Metallic and organic material. The porosity of gravel, when laid as pack, shall not be less than 25%. The size of gravel shall be determined after analysis of particle size through sieve analysis as per IS 4607 of 1963. The gravel shall have to done as per the directions of Engineer-in-charge.

2.3 DEVELOPMENT AND STABILIZING OF TUBEWELL.

The tube well shall be developed first with Air compressor of suitable capacity to get the water free from sand/clay particles and further development of the tube well shall be done as per decision taken by the Engineer-in-charge in consultation with the CUJ representative concerned. The stabilization of tube well shall be done with over pumping by vertical turbine pump where final water level is up to 50 mtr and with submersible pump where final water level is beyond 50 mtr for sustainable discharge of the tube well. The method of the development shall be as per IS 11189 of 1985 with latest amendments, to get sand / silt free discharge. Final yield test shall be conducted with vertical turbine pump where final water level is up to 50 mtr and with submersible pump where final water level is beyond 50 mtr. The water yield from said drilled bore hole shall be got tested at Govt. approved testing lab / agency and all arrangements for said water testing including payment of testing charges shall be made by tenderer at his own cost and shall be included in his quoted rates. The contractor shall arrange D.G. set / power connection etc. required during development of boring / stabilization process.

2.4 Installation of a signboard fabricated out of MS angle iron and MS sheet of size 5’x3’ at a height of 2’ from ground level depicting therein the name of work, date of start, date of completion, cost, discharge, name of executing agency etc. as per direction of Engineer-in-charge.

2.5 Back shifting & removal of unused/unconsumed material from site and making the site hazard free.

2.6 REPORT

A detailed Draft Report for carrying out the tube well work, covering details of Laboratory Tests Field investigations and recommendations shall be submitted in two hard copies along with soft copy in CD / Pen drive.

After scrutiny and comments by the EPI / CUJ, a Final Report incorporating the comments shall be submitted in six hard copies along with soft copy in CD / Pen drive.
2.7 CODES AND STANDARDS

The work shall be carried out strictly in accordance with CPWD specifications / relevant BIS code & as per direction of PMC/CUJ.

2.8 SPECIFICATIONS

a) The work under the contract shall be carried out in accordance with the schedule of items of work, the particular specifications drawings forming part of this tender document, and the general conditions and other provisions of the tender.

b) The work in general shall be carried out as per latest CPWD specifications New Delhi for Civil Works (updated with correction slips issued up to last date of submission of tender) and latest CPWD specification New Delhi for electrical works (updated with correction slips issued up to last date of submission of tender) unless otherwise specified in the nomenclature of the individual item or in the particular specifications of concerned items of works.

c) For items not covered under latest CPWD specification, for (Civil Works) / latest CPWD specification for Electrical Works and in particular specification or nomenclature of the individual item as above, the work shall be done as per latest relevant BIS codes of practice.

d) In case, specifications are not covered under above paras, the work shall be carried out as per the provisions of technical specifications given in Vol. II B.

e) In case of non-availability of any specification in the above paras or any overlapping provisions, non-clarity on any issue, applicability of particular provision out of above, shall be decided by Engineer-in-Charge whose decision shall be final & binding on the contractor.

f) The contractor is responsible for executing and completing the work in accordance with the specified standards and specification and as per requirements of GRIHA-5 ratings. Construction quality control is intended to provide a comprehensive common and consistent framework of quality control which is comprised of two main elements.

• Testing
• Inspection

g) The contractor shall be responsible for the types of test to be carried out, frequency of testing and stage of testing as stipulated in Indian Standards / CPWD Specifications for relevant works.
The cost of all these tests shall deemed to be included in the item rates quoted by the contractor.

2.9 REMOVAL OF VEGETATION

The contractor shall clear all vegetation and rubbish etc from the site as may be required to carry out the tube well work and disposes them suitably in areas as per direction of PMC/CUJ.

3.0 QUALIFICATION OF TENDERERS

The bidders are required to fulfill all the eligibility criteria as stipulated in NIT documents and elsewhere in the Tender documents. The price bid of bidders who fulfill the eligibility criteria as per evaluation of EPI shall only be opened. The decision of EPI in this regard shall be final & binding on the bidders.

4.0 EPI reserves its right to take appropriate action including disqualification of bidder(s) as may be deemed fit and proper by EPI at any time without giving any notice to the contractor in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the bidders.

5.0 EPI reserves the right to independently verify the performance of the bidder from the existing owners / users / owners’ consultants. In case tube well work executed by tenderer is found to be performing unsatisfactorily, EPI reserves the right to reject the tender and price bid of such bidder shall not be opened, even if the bidder is meeting the technical and other qualifying requirements.

In such circumstances, the bidder shall have no claim on EPI of whatsoever nature.

6.0 VALIDITY OF TENDER

The bid shall remain valid for acceptance for a period of ninety days (90) from the date of opening of Price Bid of tenders. The earnest money of such tenderer will be forfeited without any prejudice to any right or remedy, who withdraws his tender during the validity period or who changes his offer to his benefits, as same is not acceptable to PMC. The validity period may be extended on mutual consent.

7.0 SITE VISIT

The contractor is expected to visit the site. The contractor shall be deemed to have full knowledge of site, whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
Before bidding, the bidder, at his responsibilities, risk and expenses, should visit the site to ascertain nature of soil, local site conditions such as the working & other constraints at site, approach road to the site, availability of electricity & water at site, applicability of taxes, duties and entry taxes etc and satisfy himself as to the conditions prevalent at the site.

On submission of Bid, the bidder shall be deemed to have inspected the site, its surrounding and acquainted itself with the nature of the ground, accessibility of the site and full extent and nature of all operations necessary for the full and proper execution of the contract.

8.0 ASSURED WATER SUPPLY

As per the recommendation report of Ministry of water resources, Central ground water board, Jammu, received vide letter dtd. 07.08.2014 (copy enclosed) the area under reference is found feasible for construction of low discharge tube wells. Accordingly, the site has been pinpointed for construction of tube well about 300m upstream of the Sujani Khad and defunct tubewell Suchani Khu within the earmarked area of the University. Drilling should be carried out by deploying Direct Rotary rig and should be carried down 350-375m below ground level or till attaining the water bearing strata of about 20-25m thickness whichever is earlier.

Rig may be deployed at the site (320 37’ 25”, 740 59’ 04”) about 900m from the road downstream and left bank of the Patti Khad near defunct tubewell at an elevation 391 m amsl on priority.

Payment to the contractor shall be released for assured water supply only.

9.0 WATER AND ELECTRICITY

The Contractor shall make his own arrangement for Water & Electrical power for construction and other purposes at his own cost and pay requisite electricity and water charges. The Contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

10.0 Pin pointing of site for drilling of tube well shall be done by the PMC/CUJ.

11.0 Drilling of gravel packed bore hole of 530 mm dia throughout for lowering of liner assembly consisting of blind and strainer pipes of 300/250/200 mm dia in all types of strata to suite geological requirements and conditions.

12.0 Rig machine shall be deployed at site within 07 days of issuance of LOI.
13.0 The tenderer must be well equipped with drilling units suitable for drilling for 530 mm dia bore hole in collapsible strata, conglomerate, boulders, gravel, pebbles, slit, clay and rock formations etc.

14.0 The work shall be allotted only if the firm / contractor have their own drilling rig machine.

15.0 The contractor shall arrange for all components of machinery, equipment, drilling rig, support vehicles, tools, tackles and consumables such as electrodes, water, electricity, labour and P.O.L’s and shall not stop the work on any pretext including delayed payments of dues.

16.0 Any other job required during the drilling/development/testing of tube well fishing tools, refilling of cavities or any other modifications etc. shall be the responsibility of the contractor and no extra payments shall be made for these works.

17.0 Liner assembly shall be lowered only as and when the same is approved by the PMC/CUJ.

18.0 Tube well shall be gravel packed shrouded with pea shaped gravel of required size during lowering of liner assembly and development of the tube well. The gravel pack shall be as per IS 4097 of 1967 with upto date amendments.

19.0 Anchoring of the liner assembly shall have to be done using 2 nos. parallel ISMB-250 of 5 mts length each and cross members & M.S. angle 40x40x6mm with M.S. plate of 10 mm thickness welded over the joists and liner assembly with central hole of 12.5”, also providing of 2 nos. cement concrete block (1 no. each at both ends of R.S. joist) of size 1.00mtr x 1.00mtr x 1.00mtr.

20.0 Sieve analysis of the strata collected from the tube well shall be conducted in presence of the Engineer-in-charge.

21.0 Liner assembly shall be capped and welded with cap fabricated out of M.S. plate after yield testing of the tube well.

22.0 Anti rust coating shall be applied after cleaning of the liner assembly and before lowering in the drilled tube well.

23.0 The job includes making approach road to actual site of work from the nearest motorable road and shifting of all material / equipments / machinery at site of work.

24.0 The water testing shall be got done at approved Govt. testing lab / agency and all necessary arrangements including payment of testing charges shall be made by tenderer at his own cost included in his quoted rates.
25.0 The contractor shall clear the debris, earth & dismantled material from the site of work / premises on completion of work & leave the premises in proper conditions to the satisfaction of the department.

26.0 The rig units must be equipped with all tools / tackles / fixtures / accessories etc. necessary for assembling and disassembling of the equipment and for successful drilling of the hand pump bore.

27.0 GUARANTEE:

The work executed by the contractor shall be of high quality workmanship.

During guarantee period if any defect is found in any part of the job which may have caused due to bad workmanship, use of inferior material or otherwise in the opinion of the PMC/CUJ, any repair and replacement are required to be made, the contractor shall remove the defect/conduct repair at his own cost within a period of 10 days from the date of issue of notice by the PMC/CUJ to the contractor. In the event of failure on the part of the contractor to remove the defects or repair the defective material within the stipulated period, the PMC/CUJ may get the defects removed or repaired conducted by any other agency and the extra cost so involved shall be recovered from the contractor.

28.0 ENGAGING OF LABOUR

The contractor shall not engage any workman below the age of 18 years.

29.0 Any typographical mistake or omission in the tender shall be subject to correction.

30.0 In case of depleted discharge, yielding of sandy / muddy water, the re-development will be done by the firm during defect liability period of one year.

31.0 ROAD PERMIT AND LICENSE

Road permit for transportation of plant & machinery across state border shall not be issued by CUJ / EPI and will have to be arranged by contractor on his own. Entry tax & Transit Insurance etc of the equipment shall be arranged by the contractor. Nothing extra shall be paid on this account.

The contractor shall arrange for obtaining the license and clearances for the operation (if required) from the local authorities and statutory bodies at his own cost & nothing extra shall be payable.
32.0 Transportation facility at site for the plant & equipments etc and agency’s personnel shall not be provided by PMC/ CUJ. Transportation of machinery/ equipments/ agency’s personnel upto site and further shifting of machinery upto tube well location shall be arranged by agency at their own cost.

33.0 VARIATION IN TAXES, DUTIES, LEVIES & IMPOSITION OF NEW TAXES ETC

i) The bid price shall be inclusive of all taxes including work contract tax / VAT/GST/ Labour Cess or any other tax levied on the transfer of property and goods involved in the “Works Contract” in accordance with the relevant Act in the State Act and rules made there under including amendments, if any. The liability on account of such tax as per the rates of tax prevailing as on seven days prior to last date of bid submission shall be included in the price bid. In case of any variation in the rates of tax after this date, the same shall be paid / recovered from the contractor subject to the submission of documentary evidence and proof of having made the payment at the revised rate.

ii) The Bid Price shall also be inclusive of Service Tax, if applicable on Construction Services as per the rates prevailing as on seven (07) days prior to the last date of submission of tender (including abatement as applicable). In case of any variation in the rate of Service Tax, after this date, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition / deduction to the Contract Price.

iii) If a new tax, duty or levy is imposed under statute or law in India after the date seven (07) days prior to the last date of submission of tender and the contractor becomes liable there under to pay and actually pays the said new tax, duty or levy for bonafide use on the works contracted, the same shall be reimbursed to the contractor against documentary evidence of proof of payment, provided that the amount thus claimed is not paid / payable under price variation provision of the Contract.

iv) The payment / reimbursement of statutory variations in the rates of tax and / or of new tax, duty or levy imposed under statute or law in India as per para (i), (ii) & (iii) above, would be restricted only to direct transaction between the EPI and the Contractor.

v) Rates shall remain firm till completion of entire works and shall be inclusive of all taxes, entry tax, duties, VAT/ WCT/GST, Labour Cess and other levies etc as applicable.
34.0 SECURITY DEPOSIT

“Within 10 (ten) days from the date of issue of letter of intent, the agency shall submit to EPI a Security Deposit / Bank Guarantee in accordance with the prescribed Performa (Enclosed), from any Nationalized Bank / Scheduled Bank equivalent to 5% of the contract value for the due and proper execution of the contract. This bank guarantee shall remain valid upto one (1) month after the expiry of completion period.

In case the agency fails to submit the Security Deposit Bank Guarantee of the requisite amount within the stipulated period, letter of intent will stand withdrawn and EMD of agency shall be forfeited.

35.0 RETENTION MONEY

The Retention Money shall be deducted from each running bill of the agency at 5% of the gross value of the Running Account Bill. The Earnest Money Deposited by the bidder in the form of Demand Draft will be treated as part of the Retention Money. On successful completion and handing over of job after expiry of completion period, the Retention Money shall be refunded to the agency or on payment of the amount of the final bill whichever is later.

36.0 COMPLETION PERIOD

The time for carrying out tube well work at site will be 3 (three) month. The date of start of contract shall be reckoned 10 (ten) days from the date of issue of LOI/ Work order.

37.0 ESCALATION

No escalation on account of material, labour, fuel & tool and tackles etc. involved due to any reason, shall be entertained.

38.0 PAYMENT TERMS

i) The bill shall be submitted by Contractor against the actual work done at site. Detailed measurement of items and abstract of bill are to be submitted to PMC along with bill/ running bills for checking and verification by PMC. The payment due to the contractor shall be made within fifteen (15) working days of getting the bill certified by the Engineer-In-Charge and release of payment clearance and subsequently the payment by CUJ.

ii) No advance of any kind shall be paid.

iii) 80% payment shall be released after completion of work.
iv) Balance 20% shall be released after successful completion of the entire work.

v) The payment shall be made in favour of the agency through RTGS transfer / by multi city cheque.

vi) The statutory deductions such as income tax, sales tax, GST or any other taxes & duties etc. shall be made time to time from the payment released to the agency. The above taxes & duties are deemed to be included in the Agency’s price and nothing extra shall be payable to the agency in this regard.

vii) The service tax and cess, if applicable, on the subject work shall be reimbursed to the Agency on submission of proof of depositing the same with Statutory Authority.

viii) Invoice should be raised by Contractor in the name of Engineering Projects (India) Ltd., at Project Office : CUJ campus, village Bagla, distt. Samba (J&K) on account of CUJ, Jammu with copy to EPI-PMD, NRO, New Delhi.

ix) No claim regarding delay in release of payment to agency due to delay in receipt of payment from CUJ will be entertained.

39.0 INSURANCE

Insurance policy for their equipments & Insurance coverage for their personnel to be deployed at site shall be arranged by the agency on their own cost.

40.0 LIQUIDATED DAMAGES

In case of delay in execution of work due to reason attributable to tenderer, liquidated damages shall be charged at the rate of two percent (2%) of the contract value per week, subject to maximum of ten percent (10%) of the total value of the contract.

41.0 The PMC / CUJ reserves the right to terminate the contract, after giving 07 (seven) days notice, if in PMC / CUJ’s opinion, it is construed that the agency is not discharging the services specified to the complete satisfaction of the PMC /CUJ in the agreed time frame and in such case the Security Deposit of the agency shall be forfeited

42.0 The agency shall be responsible for all claims, damages, losses or expenses including attorney’s fees, arising out of or resulting from the performance of the services contemplated in this contract provided that any such claims, damage, loss or expense is caused by any negligent act, error, any Sub Consultant or associate thereof, or any directly or indirectly employed by the agency.
43.0 The agency shall be bound to sign the site order book as and when required by Engineer-In-Charge at Site and carry out compliance of instruction promptly to the satisfaction of Engineer-In-Charge.

44.0 TOOLS & TACKLES, SAFETY AND PRECAUTIONARY MEASURES

All equipments, plants, tools and tackles shall be arranged by the contractor for carrying out the tube well work complete in all respects. Similarly all safety and precautionary measures such as reptile repellents, insecticides etc. as required shall be arranged by the Contractor.

The agency shall make all necessary safety arrangement at site and indemnify EPI against any consequence of accident at site.

45.0 QUANTITY VARIATION

The Quantities and locations mentioned in the BOQ are tentative and are subject to variation both on lower as well as on higher side. However, the quantity actually executed at site shall be paid as per contract provision without any variation in the rates.

46.0 In case the performance of the contractor/ agency is found unsatisfactory. The work order / contract shall be terminated by EPI at any time by giving seven day’s notice in writing for the non performance or any default and violation of the terms of the contract by the Agency.

47.0 The Contractor shall follow all rules & regulations of Labour laws and other statutory requirements.

48.0 EPI is awarding this Contract on behalf of CUJ. In case M/s. EPI cease to be PMC, the right and responsibility etc. of EPI in the Contract shall get automatically transferred to CUJ or their nominated agency shall operate this Contract.

49.0 The EPI/ CUJ will not be responsible for the delay/ stoppage of work and losses, if any, suffered by the Agency due to force majeure conditions like natural calamities, civil disturbances, strikes, war, etc. EPI/ CUJ shall not be liable in any way to bear such losses and no compensation of any kind whatsoever will be payable by EPI/ CUJ to the Agency.

50.0 DISPUTE RESOLUTION

All the disputes of any nature shall be settled through mutual settlement only. There is no Arbitration clause in this contact.

The courts in Delhi/ New Delhi alone will have jurisdiction to deal with matters arising from the contract, to the exclusion of all other courts.
### 51.0 LIST OF PREFERRED MAKES

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of items</th>
<th>List of approved manufactures / brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MS pipe / slotted pipe</td>
<td>Jindal, TATA, Prakash Surya</td>
</tr>
<tr>
<td>2</td>
<td>Submersible pump set</td>
<td>KSB, CRI, Mak, Lubi</td>
</tr>
<tr>
<td>3</td>
<td>GI pipe</td>
<td>Jindal, TATA, Prakash Surya</td>
</tr>
<tr>
<td>4</td>
<td>Electric panel board</td>
<td>L&amp;T, Siemens, Schneider electric, Control &amp; contracts</td>
</tr>
<tr>
<td>5</td>
<td>MCCB / MCB</td>
<td>L&amp;T, Siemens, Schneider electric</td>
</tr>
<tr>
<td>6</td>
<td>Automatic servo transformer</td>
<td>Electric field, Jai Maa, PI</td>
</tr>
<tr>
<td>7</td>
<td>HT / LT ALAR XLPE cable</td>
<td>Havells, Gloster, Polycab</td>
</tr>
<tr>
<td>8</td>
<td>PVC insulated copper conductor</td>
<td>Skytone, Havells, Polycab</td>
</tr>
<tr>
<td>9</td>
<td>Meter and instrument selector switches,</td>
<td>Rishline (L&amp;T), AE, Kappa, Kaycee</td>
</tr>
<tr>
<td></td>
<td>CT indicating lamps</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cable lugs</td>
<td>Comet, Dowells, Multi, lapp kabel</td>
</tr>
<tr>
<td>11</td>
<td>Cable glands</td>
<td>Comet, Dowells, Multi, gripwell</td>
</tr>
</tbody>
</table>

Encl: Recommendation report received from Ministry of Water Resources, Central Ground Water Board, Feb’ 2013 (5 pages)