

# 2021

**BHARAT HEAVY ELECTRICALS LIMITED  
SOLAR BUSINESS DIVISION, BENGALURU  
TENDER DOCUMENT**

**Name: Navit Mahajan  
Designation: Dy. Manager  
BHEL SBD Bangalore**



**NOTICE INVITING TENDER**

1. BHEL/ SBD (A Govt. of India Enterprise) invites Tender for engaging a Contractor for “**Works Contract for Civil Works related to STP for Factory**” in Malleswaram, Bangalore
2. Sealed Bids are invited under single stage two part bid system from the competent agencies with sound technical and financial capabilities, fulfilling the qualifying requirements stated in the tender documents.
3. Interested and eligible parties may study the tender documents carefully visit the works to understand the scope and nature of work, discuss and clarify doubts if any and offer their bids.
4. The salient features of tender documents are as follows:  
The complete Tender documents consists of the following: Tender document- Part ‘A’ (Consists of Volume-I, Volume-II) and Part ‘B’.
5. The tender documents are available for download from the official website of BHEL -[www.bhel.com](http://www.bhel.com). Corrigendum if any will be published in BHEL web site only.
6. In case, tender documents are requested by post, BHEL-SBD shall not be responsible for any delay due to any reasons (including postal delay) either in receiving the agencies request or receipt of tender documents by the agency.
7. Reverse Auction is not applicable for this work.

For all clarifications/ issues related to the tender, please contact:

**(i) Commercial:**

Mr. Navit Mahajan, Dy. Manager / Works Engineering Contract, BHEL-SBD,  
Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012

E-MAIL: [navit@bhel.in](mailto:navit@bhel.in)

Ph. No. +91-080-22182216

or

Mr. BM Hiremani, AGM / WEX & Works Contract Cell, BHEL-SBD,  
Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012

E-MAIL: [hiremani@bhel.in](mailto:hiremani@bhel.in)

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**(ii) Technical:**

Mr. Preetam Kumar Singh, Dy. Engineer/ WEX  
BHEL-SBD, Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012

E-MAIL: [preetam@bhel.in](mailto:preetam@bhel.in)

Ph. No. +91-080-22182216

OR

Mr. Ravi Y., Manager / WEX  
BHEL-SBD, Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012

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# **TENDER DOCUMENT**

## **PART – A**

### **VOLUME - I**

1.	GENERAL INFORMATION
2.	SCOPE OF WORK
3.	ELIGIBILITY CRITERIA
4.	PRICE VARIATION CLAUSE
5.	PAYMENT TERMS
6.	ANNEXURES



<b>1. General Information</b>		
1.1.	Tender Reference Number :	<b>19729</b>
1.2.	Tender Name:	<b>“Works Contract for Civil Works related to STP for Factory”</b>
1.3.	Tender System	Single Stage, Two Part Bid Part – A: Techno-Commercial & PQR Part – B: Price Bid
1.4.	Tender Type	Works Contract
1.5.	Estimated Value of Contract	Not Applicable
1.6.	Duration of Contract	6 Months
1.7.	Qualifying Requirement	As per NIT Terms & Conditions
1.8.	Earnest Money Deposit to accompany Tender	Rs. 64189/-in the form of a crossed Demand Draft/EFT favoring BHEL-SBD, Bengaluru. If submitted through DD, the DD in original should reach to the office of undersigned within 7 days of Part A bid opening. NO EXEMPTION FOR MSME / NSIC since it's a Works Contract
1.9.	Security Deposit	5% of the contract value
1.10.	Cost of Tender documents	<b>NIL</b>
1.11.	Issue of tender documents	As per Enquiry / RFQ / Notification on <a href="http://www.bhel.com">www.bhel.com</a>
1.12.	Pre- BID Meeting	As per Enquiry / RFQ / Notification on <a href="http://www.bhel.com">www.bhel.com</a>
1.13.	Last date for Issue of tender documents	As per Enquiry / RFQ / Notification on <a href="http://www.bhel.com">www.bhel.com</a>
1.14.	Last date for submission of tender doc	As per Enquiry / RFQ / Notification on <a href="http://www.bhel.com">www.bhel.com</a>
1.15.	Date and time of opening of Tender (Part-A)	As per Enquiry / RFQ / Notification on <a href="http://www.bhel.com">www.bhel.com</a>
1.16.	Tender Submission Place	BHEL-SBD WEX TENDER BOX kept outside tender room(Bidder to ensure to put tender bids in specified place & box, BHEL-SBD will not be responsible if bids submitted in other than specified place and tender box
1.17.	Tender Opening Place	BHEL-SBD, Tender room, opposite to IISC, Prof. CNR Rao circle, Malleshwaram, Bengaluru-560012
1.18.	Dealing Officer (For any Clarifications)	Navit mahajan, Dy. Manager – Works Contract Cell Contact No.: 080-2218-2216 Email: <a href="mailto:navit@bhel.in">navit@bhel.in</a>  Hiremani B.M. Addl. General Manager – Works Contract Cell Contact No.: 080-2218-2204 Email: <a href="mailto:hiremani@bhel.in">hiremani@bhel.in</a>
<b>2. SCOPE OF WORK</b>		
2.1.	Works Contract for Civil Works related to STP for Factory. Details as per annexure I	
<b>3. ELIGIBILITY CRITERIA</b>		
3.1.	The Firm of contractor/independent contractor (Proprietor) should be registered and having at least three years existence in business consecutively for the past three financial years.	
3.2.	Bidder to submit declaration for obtaining the essential license under Contract Labor (Regulation & Abolition) Act 1970 after award of work. Form-5 will be issued to successful bidder by BHEL for applying the license. Successful bidder has to get the endorsement in the license for the areas and nature of work which they will be performing as part of the contract.	
3.3.	Bidder should have independent ESI Employer code under ESI Act 1948. Photocopy of letter from ESI Corp. to establish that bidder is independently registered as an employer under ESI to be produced.	
3.4.	Bidder should have independent PF code under Employee Provident Fund and Miscellaneous Provisions Act 1952. Photocopy of letter from PF Commissioner's Office to establish that bidder is independently registered as	



	an employer PF to be produced.
3.5.	<b>Not Applicable</b>
3.6.	Average Annual Financial turnover during the last 3 years ending 31 <sup>st</sup> March of the previous financial year, should be at least <b>Rs. 11,36,137</b> Audited Balance sheet and profit & Loss account OR Turn over Certificate from Chartered Accounted to be enclosed for the FY 2017-18, 2018-19 & 2019-20.
3.7.	Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: a. Three similar completed works costing not less than the amount equal to <b>Rs. 15,14,849 each including Taxes</b> OR b. Two similar works costing not less than the amount equal to <b>Rs. 18,93,562 each including Taxes</b> OR c. One similar completed work costing not less than the amount equal to <b>Rs. 30,29,698 including Taxes</b> Definition of Similar Works: Civil Construction works. Note: The term "Similar works" means vendor should have successfully executed contracts like <b>Civil Works like Excavation, Concrete Works, Masonry Works, Steel Fabrication Works</b> . a. The term 'executed' means the bidder should have achieved the criteria specified in the PQR even if the total contract has not been completed or closed. b. Bidder should not have been banned by "any BHEL unit" or "Government of India" or "Government of Karnataka" or Government of other states in India Bidder to submit following documents as proof of completion/execution of work: 1. P.O copy. 2. Work completion Certificate. BHEL reserves the right for independent verification of Documents.
3.8.	The bidder shall also mention the PAN Number issued by Income Tax Department, copy of the PAN card or PAN number allotment letter shall be submitted along with the tender documents.
3.9.	There should be no litigation or charge under investigation / enquiry / trial against the Tenderer, or conviction in a court of law or suspension or blacklisting by any organization on any ground. During the course of work, if any such information comes to light, the contract may be terminated.
3.10.	The opinion / decision of BHEL regarding the bid shall be final and conclusive. BHEL reserves the right to reject any or all the bids at any time without assigning any reason.
3.11.	In case the bidder has a relative employed in BHEL, the authority inviting tender shall be informed of this fact in writing at the time of submission of tender, failing which the tender may be disqualified, or if such fact comes to light subsequently, the contract may be terminated.
3.12.	If the bidder gives wrong information in his tender or creates conditions favorable for the acceptance of his tender, BHEL reserves the right to reject such tender at any stage.
3.13.	For the works which are continuous in nature, and which require regular interaction and monitoring, the bidder shall have an Office/Establishment in Bengaluru. Absence of such an arrangement may lead to disqualification of the Tenderer.
4.	<b>PRICE VARIATION CLAUSE: Not Applicable</b>
5.	<b>PAYMENT TERMS</b>
5.1.	Payment will be made after 45 Days from the date of completion of work (in-stages as defined below), verification by Engineer-in-Charge and Submission of Invoice. GST will be reimbursed to the contractor after the contractor pays GST, files return and submits a proof of the same to BHEL.
5.2.	1. 1st Payment: After Dismantling of Old Structures & Site Clearance and Earthwork Excavation. 2. 2nd Payment: After laying RCC (including Steel reinforcement for Tank Bottom Slabs). 3. 3rd Payment: After Completing RCC & Steel Reinforcement Fabrication for retaining walls and construction of partition walls including plastering. 4. 4th Payment: After completion of casting of top slab including reinforcement and plastering. 5. 5th Payment: After completion of plumbing works and construction of shed (steel fabrication and roof sheet installation).



	6. Final Payment: After completing of all works in all respects.
5.3.	The Contractor shall file the electronic return of PF/ESI and submit proof of payment of both the employers' and employees' contributions every month. (PF has to be remitted by 15th and ESI by 21st of the succeeding month). Contractor shall submit the challan along with copy of a self-certified list of contract workers (bearing their names and PF/ESI No. and deductions made) for whom the contribution has been submitted by him for the said period.
6.	<b>Annexures</b>
6.1.	Scope of Work – Annexure I
6.2.	Techno-commercial Bid Application – Annexure II
6.3.	Bidder Information – Annexure III
6.4.	Qualification Requirements– Annexure IV
6.5.	Bidder declaration-I– Annexure V
6.6.	Bidder declaration-II– Annexure VI
6.7.	Un-Priced Bid and SAC/ HSN Codes – Annexure VII
6.8.	PPP-MII Format– Annexure VIII
6.9.	Non-Technical deviation– Annexure IX
6.10.	Technical deviation– Annexure X



**ANNEXURE – I SCOPE OF WORK**

- i. Dismantling existing structure including asbestos sheet, steel structure, stone and brick masonry, RCC flooring etc. including working above and below ground level upto 5m.
- ii. Earthwork excavation for foundations and tanks as per site requirements, RCC work for foundation, tanks bases, tank retaining walls, tank roofs, pedestal, plinth and flooring at ground and Mezzanine floors including fabrication of steel reinforcement and centering and shuttering, working above and below ground level upto 5m.
- iii. Filling of low lying areas, tank side packing, and construction of retaining walls using stone masonry as per site conditions.
- iv. Construction of concrete block and burnt brick masonry for main and partition walls as per STP design requirement. Working upto 4m above and 4m below ground level.
- v. Providing 20mm thick plastering using Cement Mortar 1:4 and mixing waterproofing compound to the mortar, to all the exposed surfaces or as per instruction of Engineer In charge.
- vi. Core cutting of diameter upto 160mm in RCC and other walls for fixing of flow pipes as per STP design requirement.
- vii. Making connection of drain or sewer with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix, cement plastering on both the sides with cement mortar 1:3 finished with a floating coat of neat cement and making necessary channels for the drain etc complete – for pipes 100 to 250mm diameter.
- viii. Providing and fixing in position pre-cast RCC manhole cover and frame of required shape and size and approved quality by Engineer In charge.
- ix. Fabrication of structural steel and providing and fixing Galvalume Sheets and accessories for shed work as per STP design.
- x. Providing JCB excavator and tractor for construction work as per requirement.
- xi. The required TMT bars for Steel reinforcement of RCC works will be supplied by BHEL as free issue. (Supply of all other materials, labour and machineries required for carrying out the work falls under the scope of contractor.)

**Salient Features of the Contract**

**SITE ENGINEER:** Contractor has to deploy a site Engineer for the execution of works. The engineer should be Civil Engineer (with Minimum Qualification of Diploma in Civil Engineering). The site Engineer should be conversant for Communication in working languages.

**DEMOLITION WORKS:**

Demolished materials to be removed within 3 days or payment for the same will not be made.

**EXCAVATION:**

- All deep Excavations shall be adequately shored and prevented from slipping.
- As far as possible use mechanical equipment to excavate
- All excavated earth suitable for backfilling shall be stored and used for backfilling wherever required. The surplus earth shall be disposed to the nearest filling yards designated by the statutory bodies.
- Backfilling shall be carried out in layers and compacted using suitable capacity rollers / hand operated vibrators.
- All levels before and after excavation shall be maintained to work out / verify quantity of excavation

**REINFORCEMENT**

- Unless otherwise specified, the reinforcement shall be placed within the following tolerances.
- For effective depth 200mm or less: +/- 10mm
- For effective depth more than 200mm: +/- 15mm
- Unless otherwise specified, actual concrete cover should not deviate from the required nominal cover by +/- 2 to 5 mm.
- The reinforcement shall be clean and free from corrosive pitting, loose rust, loose mill scale, oil and other substances which may adversely affect reinforcement concrete or the bond between the two.
- Spacers or cover blocks shall be of concrete of same strength or PVC



- Movement of men and material subsequent to fixing in position of the reinforcement is organized such that displacement of the reinforcement will not occur.
- Flame cut and hot bending is absolutely forbidden.
- Cut and bend reinforcement to approved shop drawings and details shall be used.
- Bars to be cold-bend, either mechanically or by hand, but to correct radius using proper tools, machine and platform and confirming to IS 2502
- Do not re-bend without approval. In case of re bending, care shall be taken that the rating of bend is not less than 6 x bar dia. for high strength bars.
- Reinforcement projecting from concrete shall not be bent without approval.
- Cracked end of bars shall not be used

**FORMWORK:**

- Erection of formwork may be from pre-moulded, pre-fabricated, pre-assembled plates or form reasonable enough to transport and erect at site to correct lines and levels as set at site.
- Supports shall be firm and maintained in position by nails, cross bracing, tie-rods, locking bolts, nuts, etc. It shall be rigid and stiff so as to retain its shape during and after concreting.
- Joints shall be water-tight and no cement slurry shall be allowed to get through
- Pre-fabricated or site forms shall be assembled so as to de-shutter without any jerk to the green concrete. For this double wedges shall be used. The wedges shall be nailed. The heads left with, allowing easy removal while de-shuttering.
- Pre-fabricated or site formwork shall be sufficient thickness with supporting spans in both directions. These shall be standardized in size for easy replacement and universal use at site
- Props shall be of steel only. Its spacing shall be as per design. It shall be vertical and plumbed. Base shall be of proper steel plate or timber plank for equal distribution of load
- In case of multi-storied buildings, any upper floor shall be suitably supported on at least one floor below the same, or as approved by the Engineer.
- Props shall be on solid base, plumbed, in straight line, braced horizontally and cross
- Wedges shall be fully secured and nailed with heads left out for easy removal
- All saw dust, dirt, shavings and any other unwanted material shall be cleaned and hosed out.
- Provision shall be made for watching form work while concreting and any other platform needed for movement of workers without any disturbance to the movement.
- Provision shall be made for traffic on form work, not to bear directly on reinforcing steel

**MASONARY & CONCRETE WORKS:**

- Suitable vibrator (Surface vibrator for lean concretes like Floor / Slab etc.) and Pin vibrator for thicker concretes should be used. In case the contractor is found not using the vibrator because of any reason, the concrete lot will be rejected. Contractor will be asked to remove the rejected concrete and provide fresh concrete. The contractor should always have a backup / standby vibrator available at site.
- Maximum allowed limit of free-fall of concrete is 1.5m. Contractor to make suitable arrangements like providing a chute etc. to ensure the same.
- Curing of all masonry and concrete items to be insured as per construction standards and directions of Engineer - In - Charge. Water point to the nearest location will be provided by BHEL. Contractor has to arrange man-power and required mechanism to carrying out curing and other construction activities.
- Contractor to provide a test certificate for Concrete Blocks for masonry works as per IS2185(Part1):2005
- IS-456:2000 to be followed for concrete production, transportation, laying, post-laying and testing.
- Concrete design mix to be approved by BHEL's consultant and Engineer - In - Charge before supply. Concrete supplier to be approved before supply.
- Cement make to be used: ACC / Ultra tech./ Birla Super. Grade: OPC-53 Grade only.
- Sand make and Sample (in-case of Manufactured sand) to be approved before supply. The same will be checked before unloading of material at site.
- Bricks supplied will be tested as per IS1077 (1992).



- While carrying out concreting works, the work has to be carried out continuously till the planned work is completed to avoid joints.

**GENERAL:**

- Contractor to keep the site clean, regular cleaning of site after finishing the days' work to be ensured.
- Pour card / Checklist should be approved by Consultant at shuttering, bar-binding, pre-concrete and post concrete.
- The contractor has to rework at all the stages free of cost if deviations are observed.
- Contractor to arrange for unloading and shifting of construction materials or equipment whenever required.
- Contractor can-not depend on BHEL for support.
- Contractor has to arrange minimum required labour at site as per work requirement. Work should not be delayed due to non-availability of skilled man-power.
- Contractor has to arrange accommodation for the labour, Contractor should not request BHEL for arranging the same.
- Workmen are required to have a valid id proof showing their address and age. Without valid id proof, entry inside the factory premises will not be permitted.
- The vendor should able to arrange the construction equipment like Earth Excavator, Tractor - Trolley, Tipper, Mechanical concrete demolition machines (Electrical Hammer / Compressed air hammer or Hydraulic Breaker and Earth compactor within 24 hours from the scheduled time as per site requirement. The work should not delay because of non-availability of requirement equipment and skilled man-power required to operate the same:

**SAFETY:**

- Contractor has to pay utmost care for the safety of his workmen deployed at the site. The contractor will be responsible for getting the work permit signed on daily basis, from all the concerned agencies, before start of work.
- The contractor will also be responsible for ensuring the use of required PPEs (as mentioned in Work Permit) by his workmen.
- A penalty of Rs. 10,000 per incident will be imposed for non-compliance with the safety norms at site.



**ANNEXURE – II TECHNO-COMMERCIAL BID APPLICATION**

To,

Dy. Manager / WC  
Bharat Heavy Electricals Limited  
Solar Business Division,  
IISc Post, Malleswaram,  
Bengaluru – 560 012

Dear Sir,

I / We hereby offer to carry out the work  
**“Works Contract for Civil Works related to STP Tender Ref. No.19729 SBD for Factory”**

I /We have carefully perused the all the clauses mentioned in NIT and agree to abide with the same.

1. Notice Inviting Tender – Part A Volume 1
2. Notice Inviting Tender – Part A Volume 2
3. Price Bid Format - Part – B

I/ We further agree to execute all the works referred to in the said documents.

I declare that, there was never / is no litigation or charge under investigation / enquiry / trial against me / us, nor conviction in a court of law or suspended or blacklisted by any organization on any grounds.

Signature of Tenderer  
Date:



**ANNEXURE – III Bidder information**

S. No.	DETAILS REQUIRED	Requirement fulfilled (Yes / No / NA/ Value)
1	Name of the Company	
2	Name of Authorized Signatory	
3	Name of Contact person for this tender	
4	Email-id of contact person	
5	Contact number	
6	Bank Account Details (Name of Bank, Branch and Account Number). Cancelled Cheque to be enclosed	
7	Details of Relatives employed in BHEL, Name Designation and Unit - Clause 3.11	
	Relative 1	
	Relative 2	
	Relative 3	



**ANNEXURE – IV Qualification requirements**

S. No.	DETAILS REQUIRED	Requirement fulfilled (Yes / No / NA/ Value)	Whether proof / document enclosed (YES / NO)
1	The Firm of contractor/independent contractor (Proprietor) should be registered and having at least three years existence in business consecutively for the past three financial years.- Clause 3.1		
2	Submission of Declaration of Labor License as per Clause 3.2		
3	ESI Registration No. Clause 3.3		
4	PF Registration No. Clause 3.4		
5	Average turnover of last 3 years - Clause 3.6		
6	Relevant Work Experience – 1- Clause 3.7		
	Relevant Work Experience – 2		
	Relevant Work Experience – 3		
7	PAN No. - Clause 3.8		
8	GST Registration Number		
9	MSME / NSIC Certificate to be enclosed (if applicable)		
10	EMD Details (DD No., Amount, Date & Bank)		
11	PPP-MII Format to be enclosed - Annexure VIII		



**ANNEXURE – V Bidder Declaration -I**

S. No.	DETAILS REQUIRED	Requirement fulfilled (Yes / No / NA/ Value)
1	I have carefully read the Tender Terms and Conditions and I submit my agreement for the same.	
2	I have completely understood the scope of work and submit my agreement to carry out the work as per mentioned in Tender document.	
3	I have quoted rates for the total scope of work mentioned in the tender document	
5	I have understood and accepted the payment terms of BHEL as per cl.5	
6	I am responsible for the safety of workmen deployed and agree to fulfil the requirements as per tender terms	
7	I have understood the LD clause mentioned in this tender and submit my agreement for the same	
8	I agree to participate in the tender and carry out the work (if awarded) ethically and submit my agreement to various requirements in this contract.	
9	Signed and submitted the technical deviations sheet	
10	Signed and submitted the Non-technical deviations sheet	



**ANNEXURE – VI Bidder Declaration -II**

I, -----, aged-----Yrs., S/o -----,

Residing at -----  
-----

Hereby declare as follows:

- (i) That my nationality is \_\_\_\_\_.
- (ii) That I am a major and eligible to enter into contract / my firm / my company is competent to enter into an agreement.
- (iii) I shall employ only such personnel who have not been found unfit for employment in Organizations such as Central / state / Public undertaking by the Police Authorities.
- (iv) I shall not employ persons against whom Criminal cases are pending or under investigation.
- (v) I shall also not employ persons found guilty of offences involving moral turpitude for executing work in BHEL contracts.
- (vi) That there are no Criminal cases/Civil/Labor pending or under investigation against me or my firm or company.
- (vii) I have not been found guilty of offences involving moral turpitude nor any of the company directors / partners of my firm have been found guilty of offences involving moral turpitude.
- (viii) Neither I nor my firm nor my company has been declared insolvent in the past.
- (ix) I have taken due care and efforts to furnish only information which are true in the tender document.
- (x) I shall employ labor who is more than 18 years of age and less than 58 years and having sound physical and mental health.
- (xi) I shall keep Photograph / identity proof / residential proof of the laborers to be employed against this tender and arrange for police verification.
- (xii) I shall employ and deploy suitable qualified personnel for supervision of the work in each shift and additionally as required for monitoring compliance to process requirements and compliance to contract terms & conditions.

[Signature with Name & seal of the Tenderer]

Date :  
Place :



**ANNEXURE VII Unpriced BID and HSN / SAC Codes**

SI.NO	Item description	SAC/HSN	Unit	Quantity	Percentage allocation
1	<b>DISMANTLING STEEL STRUCTURE:</b> Dismantling existing steel structures in built up sections like staircase, truss, columns, purlins etc in angles, tees, flats and channels including all gusset plates, bolts and nuts, cutting rivets, welding etc. using gas cutting or mechanical cutting tools. Stacking the serviceable materials and disposing the unserviceable materials to the steel scrap yard inside factory premises including necessary scaffolding tools and plants up to working height of 10.00m also including the cost of all materials, labour and shifting of materials etc complete	To be filled by bidder	Kg	2000.00	0.2
2	<b>DISMANTLING RCC WORKS:</b> Dismantling of existing structure comprising of Reinforced Cement Concrete by manually or by mechanical means including T&P, sorting the dismantled materials and stacking the serviceable materials including steel reinforcement and shifting to steel scrap yard with all lifts complete and disposal of unserviceable materials into the identified bins inside the factory premises etc. including the cost of all materials, labour and shifting of materials etc complete.	To be filled by bidder	cum	5.00	0.3
3	<b>DISMANTLING MASONRY WORKS:</b> Dismantling of existing structure comprising of Stone/Brick Masonry by manually or by mechanical means including T&P, sorting the dismantled materials and stacking the serviceable materials and shifting to identified store with all lifts complete and disposal of unserviceable materials into the identified bins inside the factory premises etc. including the cost of all materials, labour and shifting of materials etc complete.	To be filled by bidder	cum	72.00	3.00
4	<b>EARTHWORK EXCAVATION:</b> Earthwork excavation by manual or mechanical means for foundation, culverts, water supply and sanitary lines and electrical conduits etc. either in pits or trenches 1.5m and above in width and not exceeding 7m depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges and shifting it to the place identified by Engineer In charge inside factory premises etc complete.	To be filled by bidder	cum	1120.00	6.74
5	<b>CLOSE TIMBERING:</b> Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete. Measurements to be taken if the face area timbered. Upto 7m depth.	To be filled by bidder	sqm	165.00	0.65
6	<b>WET-MIX:</b> Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform	To be filled by bidder	cum	48.00	3.01



	layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Chair				
7	<b>PCC 1:4:8 :</b> Providing and laying PCC 1:4:8 using 40mm and downsize graded coarse aggregate and fine aggregate machine mixed, concrete laid in layers not exceeding 15cm thick well compacted in foundation including cost of all materials, labour, HOM of machinery, curing etc complete..	To be filled by bidder	cum	24.00	3.3
8	<b>RCC M25:</b> Providing and laying in position machine batched and machine mixed design mix m25 grade cement concrete for reinforced cement concrete work using 20mm and downsize coarse aggregate and using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in- charge. Sample RCC cubes to be casted and tested as per IS:456 for every batch and timely test reports to be submitted to Engineer In charge. Including providing pockets for all shapes and sized and at all levels/ heights as per GFC. Cost of curing included.	To be filled by bidder	cum	146.91	27.92
9	<b>CENTERING &amp; SHUTTERING FOR ROOF/ SLABS:</b> Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for roofs, landings, suspended floors, landings, balconies, and likes, thickness upto 300mm including cost of all materials, labour etc complete.	To be filled by bidder	sqm	146.40	2.41
10	<b>CENTERING &amp; SHUTTERING FOR WALLS:</b> Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for walls thickness upto 300mm including cost of all materials, labour etc complete.	To be filled by bidder	sqm	629.34	9.11
11	<b>CENTERING &amp; SHUTTERING FOR BEAMS AND LINTELS:</b> Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for roof beams, tie beams, lintel beams and plinths beams and any other beams including cost of all materials, labour etc complete..	To be filled by bidder	sqm	75.00	0.98
12	<b>BAR BINDING LABOUR TMT REINFORCEMENT:</b> Labour charges for binding TMT steel reinforcement of Fe 500 Grade for RCC works including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with 18 SWG black annealed binding wire (double fold) and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks, and wastage shall not be measured and paid), providing PVC cover blocks and including cost of all materials excluding TMT reinforcement including loading, unloading	To be filled by bidder	Kg	18364.00	10.12



	and transportation, labour, HOM of machinery, scaffolding and all other incidental charges etc complete. The required TMT steel reinforcement will be supplied by BHEL as free issue.				
13	<b>CC SOLID BLOCK MASONRY:</b> Providing and laying autoclaved aerated cement blocks masonry with 150mm/230,,/300mm thick AAC blocks in super structure above plinth level and up to floor five level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar, including hoisting and setting in position, including cost of required scaffolding, labour, materials, curing, cost of shifting of materials etc complete.	To be filled by bidder	cum	13.00	0.52
14	<b>BURNT BRICK MASONRY CM1:4:</b> Providing and constructing burnt brick masonry with approved quality of non-modular bricks of standard size of class designation 7.5 N per sqmm with cement mortar 1:4 for basement and superstructure including cost of materials, labour charges, scaffolding, curing etc complete.	To be filled by bidder	cum	10.00	1.52
15	<b>20MM PLASTERING CM1:4:</b> Providing 20mm thick cement plaster in single coat with cement mortar 1:4 to masonry & concrete surface to both interior and exterior surfaces including rounding off corners and edges, smooth lime rendering to the internal walls, including providing and removing scaffolding, cost of materials, labour, curing etc., complete. Working height upto 10m.	To be filled by bidder	sqm	1214.82	10.54
16	<b>WATERPROOFING MIXTURE FOR CONCRETE:</b> Providing and mixing integral crystalline admixture for water proofing treatment to RCC structures like basement raft, retaining walls, reservoir, sewage & water treatment plant, tunnels/ subways and bridge deck etc. at the time of transporting of concrete into the drum of the ready mix truck, using integral crystalline admixture @ 0.80% (minimum) to the weight of cement content per cubic meter of concrete or higher as recommended by the manufacturer's specification in reinforced cement concrete at the site of work. The material shall met the requirements as specified in ACI - 212 - 3R - 2010 i.e. by reducing permeability of concrete by more than 90% , compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure. The crystalline admixture shall be carried out all complete as per specification and the direction of Engineer In Charge. The product performance shall carry guarantee for 10 years against any leakage	To be filled by bidder	Kg	423.10	3.89
17	<b>CORE CUTTING FOR HOLES:</b> Providing core cutting of holes in reinforced concrete using power driven drill upto a depth of 250mm in RCC surfaces. Diameter of hole upto 160mm. Working depth upto 5m. Including the cost of disposal of broken debris to the identified bins and including the cost of all material, labour, machineries etc complete.	To be filled by bidder	Nos	20.00	0.12
18	<b>DRAIN CONNECTION:</b> Making connection of drain or sewer line with existing manhole including breaking into	To be filled by	Nos	20.00	0.3



	and making good the walls, floor with cement concrete 1:2:4 mix cement plastered on both sides with cement mortar 1:3, finished with a floating coat of neat cement and making necessary channels for the drain etc complete – For pipes 100 to 250mm diameter.	bidder			
19	<b>MANHOLE COVER:</b> Providing and fixing in position precast RCC manhole cover and frame of size 600mm x 600mm and quality approved by Engineer In Charge. Including the cost of setting and fixing charges, labour, materials etc complete.	To be filled by bidder	Nos	15.00	0.66
20	<b>FILLING AVAILABLE EXCAVATED EARTH:</b> Filling available excavated earth (excluding rock) in sides of foundation upto plinth in layers not exceeding 20cms. In depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 5m including cost of all labour etc. complete.	To be filled by bidder	cum	300.00	1.57
21	<b>FABRICATION OF STRUCTURAL STEEL:</b> Supplying fabricating and erecting MS structure for all spans as per approved design and drawing. The work includes cutting, straightening, placing in positions of MS structural members and welding wherever necessary and applying two coat of enamel paint over one coat of red oxide primer coat to all members including cost of all members, labour charges & hire charges of machineries for cutting, welding, grinding & erection equipment, etc. complete.	To be filled by bidder	Kg	2625.56	6.35
22	<b>GALVALUME SHEET FIXING:</b> Supplying and fixing percolated galvalume profile steel sheets (shape, size and pitch of corrugation as approved by Engineer In Charge). 0.50mm Thick (no negative tolerance accepted) with zinc coating of 120gm per sqm as per IS: 277, in 550 MPa steel grade, 5-7 microns' epoxy primer on both sides of the sheet and polyester top coat of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12m or as desired by Engineer In Charge. The sheet shall be fixed using self-drilling/ self-tapping screws of size (5.5 x55mm) with SBDM seal complete up to any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	To be filled by bidder	sqm	240.00	3.58
23	<b>GALVALUME SHEET ACCESSORIES:</b> Providing and installing of approved make pre painted Galvalume iron accessories of 0.5mm (no negative tolerance accepted) total coated thickness with zinc coating of 120gm per sqm as per IS:277, in 240 MPa steel grade, 5-7 microns' epoxy primer on both sides of the sheet and polyester top coat of 15-18 microns for plain, ridges, plain gutter, plain flashing, corner trim etc. to be fixed over existing purlins, rafters, channels and trusses, using self-drilling/ self-tapping screws including the cost of all materials, labour, safety equipment, HOM etc complete.	To be filled by bidder	Rmt	46.00	0.4
24	<b>HIRING OF JCB EXCAVATOR:</b> Providing JCB excavator with fuel and driver / operator and all other staff on daily working basis including the cost of all	To be filled by bidder	Day	10.00	2.18



	materials and labour etc complete.				
25	<b>HIRING OF TRACTOR &amp; TROLLEY:</b> Providing Tractor with trolley with fuel and driver / operator and all other staff on daily working basis including the cost of all materials and labour etc complete.	To be filled by bidder	Day	15.00	0.63
<b>Total Quoted Amount for the Work</b>					To be filled by bidder
<b>GST- %age</b>					To be filled by bidder
<b>GST - Value</b>					Auto Calculated
<b>Grand Total</b>					Auto Calculated
<b>Landed Cost (Grand Total)</b>					Auto Calculated

Bidder to indicate SAC / HSN Code

( SEAL & SIGN OF BIDDER)



**ANNEXURE VIII, PPP-MII Format**

**FORMAT FOR VERIFICATION OF LOCAL CONTENT UNDER PREFERENCE TO MAKE IN INDIA ORDER**

(To be submitted with the offer)

[Applicable for procurement value from Rs. 5.00 Lac to Rs. 10.00 Crore]

Self-certification giving the percentage of local content, in line with PPP-MII order, if applicable [to be submitted on the letter head of the issuer.]

Item Name **Works Contract for Civil Works related to STP for Factory**

Enquiry No. : **19729**

Project : **Works Contract for Civil Works related to STP for Factory** Applicable percentage of Local Content.....

(Bidder to indicate local content in percentage)

We have read and understood the provisions of “Public Procurement (Preference to Make in India) Order, 2017” dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any [hereinafter, “PPP-MII Order”] issued by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

In line with the provisions of the PPP-MII Order, We, M/s. .... [Enter the name of the Bidder] [hereinafter, “Local Supplier”] submits self-certification to M/s. Bharat Heavy Electricals Limited [hereinafter, BHEL] regarding Local Content in Goods/Services/Works to be supplied by the Local Supplier **Works Contract for Civil Works related to STP for Factory** (Enter the name of the Equipment/Item for Project), wherein we have agreed to abide by the terms and conditions of the PPP-MII Order.

Details of location at which local value addition will be made is as follows:

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We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

For and on behalf of, Date:

Authorized Signatory

(With Company Seal & Signature)

Note: This is a guiding format. In case the bidder submits the certificate in a format different from the above, the same may be considered provided it meets the intent and purpose, as may be ascertained by BHEL.



**ANNEXURE IX, NON-TECHNICAL DEVIATION**

<b>SI No.</b>	<b>Volume</b>	<b>Part/Clause SI no.</b>	<b>NIT requirement</b>	<b>Bidder's Deviation</b>

**Total No. of deviations proposed by the Bidder- \_\_\_\_\_ nos.**

**BIDDER'S SIGN & SEAL:**

Note: The Offers should be in full conformity with the terms and conditions of this tender. Incorrect and incomplete tenders are liable to be rejected. Deviations, if any, should only be mentioned as per formats for Non-Technical Deviations (i.e. General Terms & Conditions, Commercial Terms etc.) & Technical Deviations (i.e. Scope of Work, Modalities of Contract etc.). BHEL at its discretion whether to give any further chance to a bidder in case of any deviation or reject the same offer.



**ANNEXURE X, TECHNICAL DEVIATION**

SI No.	Volume	CLAUSE NO.	NIT requirement	Bidder's Deviation

Total No. of deviations proposed by the Bidder- \_\_\_\_\_ NOS.

Place:

Date:

Signature & Seal of the bidder:

Note: The Offers should be in full conformity with the terms and conditions of this tender. Incorrect and incomplete tenders are liable to be rejected. Deviations, if any, should only be mentioned as per formats for Non-Technical Deviations (i.e. General Terms & Conditions, Commercial Terms etc.) & Technical Deviations (i.e. Scope of Work, Modalities of Contract etc.). BHEL at its discretion whether to give any further chance to a bidder in case of any deviation or reject the same offer.