



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**TENDER DOCUMENT**

**FOR**

**Execution of Civil and Structural Work on BOQ Basis**

**for**

**Coal Handling Plant (4.5 MTPA) at  
Block-B OCP Gorbi, Northern Coalfields Limited, Singrauli, Madhya  
Pradesh  
INDIA**

**Tender No.-HEC/PROJ/CONTRACT CELL/2022/ Block B – C&S/04 Dated – 02.07.2022**



**AN ISO 9001:2008 COMPANY**


**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**(A Government of India Enterprise)**

**RANCHI – 834 004**

**Ph.:0651-2401266**

	<b>HEAVY ENGINEERING CORPORATION LIMITED</b>
	<b>PROJECT DIVISION</b>

Open Tender

**Tender No.-HEC/PROJ/CONTRACT CELL/2022/ Block B – C&S/04 Dated – 02.07.2022**

Dear Sir,

We request you to submit your most competitive offer for the following items as per the given schedule:

Sl. No.	Description of Work	Unit of measure	Remarks
1.	The scope of work shall cover all civil works, supply, fabrication and erection of all building steel structural works, supply of all materials, manpower, machineries, safety, security and storage of all construction equipment and material as elaborated in the subsequent clauses of this Technical Specification on BOQ BASIS for Coal Handling Plant (4.5 MTPA) at Block-B OCP, Northern Coalfields Limited.	As per BOQ (Bill of Quantity)	As per TS of NIT

**ENQUIRY SCHEDULE**

**Schedule of tender receipt : As mentioned in CPP Portal.**

**Schedule of tender opening : As mentioned in CPP Portal.**

**Price Bid opening date : Will be intimated later**

Tender is available on our website in e-procurement section i.e. <https://etenders.gov.in/e procure/app> and in open tender section. Aspiring bidders may go through the tender document. Bidders are required to upload the bid along with all supporting documents including priced part (BoQ) only on the e-tendering website (<https://etenders.gov.in/e procure/app>), on or before the due date and time for submission of bid.

**Tender Cost & EMD** to be uploaded in scan copy and hard copy to be sent sealed in separate envelop superscripted to our office at below mentioned address.

Thanking you,

(C S Prasad)

Incharge (Purchase & CC)/ Project Division,

Heavy Engineering Corporation Limited

HMBP ADM. BUILDING (ANNEXE) DHURWA,

RANCHI-834004

Ph.06512401266,

E-mail: [projectpurchase@hecltd.com](mailto:projectpurchase@hecltd.com)



**INSTRUCTIONS TO TENDERER (ITT)**

1.0 Prospective Tenderers are advised to get register themselves at NIC e-tender portal i.e. <https://etenders.gov.in/eprocure/app>, obtain 'User ID' & 'Password' and go through the 'Self Help files' available in the Home Page after log in to the portal <http://etenders.gov.in>. They should also obtain Class III Digital Signature Certificate (DSC) in parallel which is essentially required for submission of their application. Detailed instructions for online bid submission are attached in **Annexure-3**. No registration fee would be charged from the bidders.

2.0 NOTE: HEC reserves the right to extend / change the schedule of any activity by intimating the bidders through a notification on the e-tender portal.

The Following two covers shall be submitted through online CPP - portal by the bidders. Last date and time of submission of bids (cover I, II) is as per given dates.

Cover-I: - Containing techno-commercial bid and containing Technical Performa (Enclosure-I)

Scan copy of documents to be uploaded required as per Annexure- 1 – Proof of Tender Fee submission document (DD/ BG/ NEFT/ RTGS), SSI/ NSIC/ MSME certificate (for exemption of tender fee) and other relevant documentary evidence (PO copy, performance certificate etc.)

Cover - II: Price Bid (BoQ.xls)

The tenderer shall upload the digitally signed Schedule of price bid in the form of BoQ.xls

*Bidders may please note, the schedule of quantities is attached in the portal. The same (BoQ.xls) shall be downloaded and be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.*

**3.0 Bid Opening Process is as below:-**


Cover-I: Technical bid opening date will be as per given dates. If any clarification is needed from the bidder about the deficiency in his uploaded documents in Cover-I, the bidder will be asked to provide it through Short fall documents folder in e-tendering portal. The bidder shall upload the requisite clarification/ documents within time specified by HEC, failing which tender will be liable for rejection.

Cover-II: The financial bids of the contractors/ firms found to be meeting the qualifying requirements and technical criteria shall be intimated through portal. (Depending on Cover-I evaluation any changes in the date shall be intimated through e-tendering portal).

4.0 **Earnest Money Deposit** – The offers submitted shall be considered valid only when scan copy of EMD document .The scan copy of EMD document in form of DD/BG/Receipt or NEFT/RTGS have to be uploaded with the Techno- Commercial bid (Part 1) only.

Exemption of EMD shall be applicable on submission of valid SSI/NSIC/MSME certificate and as per prevailing govt guidelines. SSI/NSIC/MSME Certificate to be uploaded in Techno Commercial Part 1. EMD detail as per the details mentioned below

The Bidder shall submit EMD of **Rs 7.5 Lacs (Rs. Seven Lacs and fifty Thousand only)** in the form of Bank Guarantee (in prescribed enclosed proforma at *Annexure-4*) / Bank Draft in favour of **Heavy Engineering Corporation Limited, Ranchi** from a Nationalised Bank / Scheduled Indian Bank.

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- a. The validity of the Bank Guarantee shall be for a period of 60 days beyond the validity of the Bid.
- b. Tenders not accompanied with EMD shall be liable for rejection

**The original EMD in form of DD/BG should be reached us through courier or in person before the opening date of tender in following address**

To,

SITE (I/c) /Purchase

PROJECT DIVISION

HMBP ADM. BUILDING (ANNEXE)

DHURWA, RANCHI- 834004

Fax. No. 0651-2401533

Ph. No. 0651-2401266 / 2400562

**Refund of EMD:** The Earnest Money will be retained in the case of successful tenderer. The Earnest Money deposited by the successful bidder will be refunded on receipt of required Security Deposit from the bidder. EMD of the unsuccessful tenderers shall be refunded immediately after finalization of the tender. EMD shall be forfeited if any tenderer withdraw their offer before finalization of the tender.

**5.0 Tender Fee of Rs. 7,500.00** (Rupees seven Thousand five hundred only) in the form of Demand Draft in favour of Heavy Engineering Corporation Ltd., payable at Ranchi

- a) Tenders not accompanied with Tender Fee shall be liable for rejection.

Exemption of Tender Fee shall be applicable on submission of valid SSI/NSIC/MSME certificate and as per prevailing govt. guidelines. SSI/NSIC/MSME Certificate to be uploaded in Techno Commercial Part 1.

#### **6.0 PERIOD OF VALIDITY OF TENDER**

Unless otherwise specified, the Tenderer shall keep his tender valid initially for a period of 180 days from the date of opening of the tender.

#### **7.0 LANGUAGE**

The Tender shall be submitted in English language.

#### **8.0 NO CLAIM OR COMPENSATION FOR SUBMISSION OF TENDER**

The Tenderer who's Tender is not accepted shall not be entitled to claim any costs, charges, expenses of and incidental to or incurred by him through or in connection with his submission of Tenders, even though HEC Ltd may decide to withdraw the Invitation of Tender.

#### **9.0 INCOME TAX / SALES TAX CLEARANCE CERTIFICATE / PAN**

The Tenderer shall furnish the Income Tax Clearance Certificate, Sales Tax Clearance Certificate and copy of PAN with the tender duly countersigned by the respective officer under the seal of the office. Failure to produce the requisite certificate with tender, their quotation is liable to be rejected.

#### **10.0 CONFIDENTIALITY**



Tenderer shall note that all data/ drawings/ specifications enclosed with Tender document are confidential. Tenderer shall keep all data/ drawings in strict confidence and shall not copy or pass on any of the Tender papers etc. to any third party.

**11.0 NOTICES ON BEHALF OF HEC LTD**

Notice and Certificate on behalf of HEC LTD in connection with the Work Order may be given by duly authorised officers of HEC LTD. Any modification which may become necessary in the interim period will be intimated to you as soon as possible.

**12.0 PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

**13.0 Tenderer to note that Work order will be awarded to L-1 firm on complete Package basis. The Lowest Package Cost for the L-1 Firm will be arrived at based on evaluating lowest Combined Costs of all individual items quoted by the Bidders as per BOQ of Price Schedule ( BOQ.xls)**

**14.0 Bill address and GST No.** of HEC will be intimated later before issue of Work order.

**15.0 One Bid Per Bidder:** Each Bidder shall submit only one Bid, either individually, or as a partner in a partnership firm or a partner in a joint venture or a public limited firm. A Bidder who submits or Participate in more than one Bid (other than a subcontractor or in cases of alternatives that have been Permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

**16. Prices** shall not be indicated in this part and in case price is indicated in any form in the techno- commercial (Part II) of offer the bid of Tenderer will be summarily rejected.

**17. Site Visit:**

The Bidder is encouraged to visit and examine the Site of Works and its surroundings, approach road, soil condition, investigation report, existing works, if any, connected to the tendered work, drawings connected to the work, if / as available and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

**18. Notification of Award and Signing Of Agreement:**

The Bidder, whose Bid has been L1, will be notified of the award by the Employer. In the bidding process, the cause of rejection of Bid of any bidder should be intimated to non-qualified bidder through e-Procurement portal. The contractor shall enter into and execute contract agreement in the prescribed form Appendix 6. The cost of the stamp papers for the contract agreement shall be borne by the contractor. Two sets of contract document agreements shall be prepared and signed by both the parties. One of the sets shall be stamped "Original" and the other "Duplicate". The duplicate copy will be supplied to the contractor free of cost and the original is to be retained by the company.



**19. Integrity Pact:**

Bidders are required to submit the Pre-Contract Integrity Pact duly signed, witnessed and uploaded as per enclosed format (Appendix-7) along with the bid in Part-I. This will be signed by the authorized signatory of the bidder(s) with name, designation and seal of the Company. Bidders who do not sign the Integrity Pact shall be disqualified from participation in the Bid process.

Any violation of integrity pact would entail disqualification of the bidders and exclusion from further business dealing as per the provisions and rules of the organization.

Integrity Pact, in respect of this contract shall be operative from the date Integrity Pact is signed by both the parties till the completion of contract. After award of work, IEMs shall look into any issue relating to execution of contract, if specifically raised before them.

Integrity Pact is deemed as a part of the contract.

A person signing Integrity Pact shall not approach the courts while representing this matter to IEMs and he/she will await their decision in the matter.

In case of sub-contracting, the principal contractor shall take the responsibility of adoption of Integrity Pact by the sub-contractor. It is to be ensured that all the subcontracts also sign the Integrity Pact.

The Integrity Pact essentially envisages an agreement between the prospective vendors/bidders and the buyer, committing the persons/officials of both sides, not to resort to any corrupt practices in any aspect/stage of the contract. Only those vendors/bidders, who commit themselves to such a Pact with the buyer, would be considered competent to participate in the bidding process. In other words, entering into this Pact would be a preliminary qualification.

Integrity Pact will be implemented as per the standard operating procedure issued vide circular No.06/05/21 by central vigilance commission letter No. 015 /VGL/091 dated 03.06.2021, with its revision issued from time to time.

HEC appoints competent and credible independent external monitors for this pact. The name and details of all the IEMs at present are as given below:

I) Dr. Bibhuti Bhusan Pattanaik, Ex-MD, CWC  
Address-302, New Shivalik CGHS,  
Plot No. GH-4, Sector-51, Gurugram-122002  
Contact No. 9818372724  
[pattanaik181@yahoo.com](mailto:pattanaik181@yahoo.com)

II) Shri Pradeep Kumar,  
IRSSE (Retired)  
Address- Flat No. C-701, Bestech Park View Spa Apartments, Sector-47, Gurugram-122018  
Contact No. 8130820000  
[pradeepawasthi1981@gmail.com](mailto:pradeepawasthi1981@gmail.com),  
[pradeep.kumar.17@gov.in](mailto:pradeep.kumar.17@gov.in),



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**20. Changes in Firms Constitution to be intimated:**

Previous approval in writing of the In-charge/ Block B shall be obtained before any change is made in the constitution of the Firm. If previous approval is not obtained the same will be treated as a breach of contract and shall have same consequences due to such breach of contract.

21. An Amount of 1% (one percent) of the work value payable to the contractors will be deducted from all Bills towards the worker's welfare under Building and other Construction Worker's Welfare Cess Rules"1998 and Building and other Construction Worker's Welfare Cess Act'1996 (As applicable in the States).

**22.0 Examination of Terms & Conditions- Technical Evaluation**

**Any bidder seeking benefit/preference under MSME/ Make in India or any other policy/ scheme of the Government of India, which is currently in force MUST at the time of bidding itself enclose all relevant documents/ certificates etc. for claiming such benefits. The bidder must also clearly highlight the provisions of the policy and the kind of benefit being sought by it for which it meets the conditions for claiming such benefits. It may be noted that no other benefit/ preference/ concessions which is beyond the scope of the policy or the bidder's entitlement under the policy shall be given/ considered by us. If the bidder fails to claim such benefit and/or fail to submit necessary documents/ certificates in support of its claim at the time of bidding itself, its claim shall not be entertained at a later stage in the bidding process and no opportunity shall be provided to it to submit any document/ certificate.**

**22.1 Evaluation and comparison of bids**

**The bids shall be evaluated on the basis of final Package cost as per format given in BOQ of e-Tender:  
For Goods manufactured within India**

i)	The price of the goods quoted Ex-works
ii)	GST which will be payable on the goods if the contract is awarded.
iii)	The charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the BOQ.
iv)	The installation and training charges including any incidental services, if any as given in Scope of Works of NIT
v)	Deviation to NIT payment terms.

**The comparison between the offers shall be made on comparison of Package cost basis as per BOQ of Price Schedule (BOQ.xls).**

**Price preference to Local suppliers as per Make in India procurement policy of Govt. of India and Department for Promotion of Industry and Internal Trade (DPIIT) order No. P-45021/2/2017-PP (BE-II) dated 04th June, 2020**



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#### A. Eligibility of 'Class-I local supplier', 'Class-II local supplier' and 'Non-local supplier'

- i. Only Class-I local suppliers are eligible to participate in tender if there is sufficient local capacity and local competition irrespective of the purchase value. L1 bidder amongst Class-I local suppliers shall be awarded contract subject meeting other requirements as per tender.
- ii. In procurement of all goods or services not covered above, only 'Class-I local supplier' and 'Class-II local supplier', shall be eligible to bid.

#### B. Tendered goods are not divisible in nature, the following procedure shall be followed to evaluate L1 and award of contract:

- a. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a Class-I local supplier, the contract will be awarded to L1.
- b. If L1 is not from a Class-I local supplier, the lowest bidder among the Class-I local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.
- c. In case such lowest eligible Class-I local supplier fails to match the L1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the Class-I local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.

**For more clarity in this regard, following table is furnished:**

Quantity of Tendered goods	Price quoted by Local suppliers	Finalization of tender
Cannot be Split	L1 is Class-I local supplier	Full Order on Class-I Local supplier
Cannot be Split	Not L1 but Class-I local supplier within L1+20%	Full Order on Class-I Local supplier subject to matching L1 price

#### Definitions of terms applicable to this clause

- ❖ 'Local content ' means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- ❖ 'Class-I Local supplier' means a supplier or service provider whose goods or services offered for procurement, has local content equal to or more than 50% .
- ❖ 'Class-II local supplier' means a supplier or service provider, whose goods or services offered for procurement, has local content equal to or more than 20% but less than 50%.
- ❖ 'Non-Local supplier' means a supplier or service provider, whose goods or services offered for procurement, has local content less than or equal to 20%.
- ❖ 'L1' means the lowest tender or lowest bid or the lowest quotation received in this tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.





- ❖ 'Margin of purchase preference' means the maximum extent to which the price quoted by a Class-I local supplier may be above the L1 for the purpose of purchase preference.

**C. Verification of local content**

- i. The 'Class-I local supplier'/'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to provide self certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made. (Annexure-5)
- ii. In cases of procurement for a value in excess of 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- iii. 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 Finance Rules along with such other actions as may be permissible under law.
- iv. A supplier who has been debarred by any procuring entity for violation of the order of the Department for Promotion of Industry and Internal Trade (DPIIT) order No. P-45021/2/2017- PP (BE-II) dated 04th June, 2020 shall not be eligible for preference under the said order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed in the order of the Department for Promotion of Industry and Internal Trade (DPIIT) order No. P- 45021/2/2017-PP (BE-II) dated 04th June, 2020.

**D. "Class-II local supplier" will NOT get purchase preference in any procurement.**

- 23. "This procurement of goods/services under the reference Tender is covered under Public Procurement policy 2017, revised 16.09.2020 and here in after any further revisions and Order No. F. No. 6/ 18/ 2019 - PPD dated 23.07.2020 issued by Ministry of Finance"**

**"THIS IS TO INFORM TO ALL BIDDERS THAT AS PER OM No. F. No. 6/ 18/ 2019 - PPD dated 23.07.2020 ISSUED BY MINISTRY OF FINANCE, DEPARTMENT OF EXPENDITURE, PUBLIC PROCUREMENT DIVISION. ANY BIDDER FROM A COUNTRY WHICH SHARES A LAND BORDER WITH INDIA WILL BE ELIGIBLE TO BID IN ANY PROCUREMENT WHETHER OF GOODS, SERVICES (INCLUDING TURNKEY PROJECTS) ONLY IF THE BIDDER IS REGISTERED WITH COMPETENT AUTHORITY, WHICH IS SPECIFIED IN ABOVE REFERRED ORDER OF MINISTRY OF FINANCE."**

Format As per Annexure-6 must be signed, stamped and to be submitted along with the bid.

**24. Joint Venture:**

In case the bidder intends to form a Joint Venture, the members should comprise of one lead partner along with associated members/partners (limited to maximum of two associated members/partners excluding lead partner):



Joint Venture details

Name of all partners of a joint venture (not more than 3):

1. Lead partner
2. Partner
3. Partner

Following documents to be provided

- 24.1) A copy of the agreement, duly notarized, entered into by the Joint Venture members.
- 24.2) All members (Lead and associate members) shall furnish:
  - a) Nature of business carried out by the members (Lead and associate members) individually including Sl. No. of the relevant provisions of its Memorandum relating thereto.
  - b) Names and particulars, including addresses of all the Directors/Proprietors/Partners.
  - c) Previous experiences of the Companies for all Joint Venture members executed similar project as well as work.
  - d) Relevant credentials with Reference list of the Joint Venture (Lead and associate members).
  - e) With respect to the Company which is a member of the Joint Venture, a self attested copy of "Certificate of Incorporation" issued under Companies Act, a copy of certified/audited Balance Sheet and a self attested copy of Permanent Account Number (PAN) issued by Income Tax authorities; and similar documents under the provisions of the relevant Foreign Law.
  - f) With respect to a partnership firm which is a member of the Joint Venture, a self attested copy of "Certificate of Registration" as a firm, issued under Indian Partnership Act, a copy of certified/audited Balance Sheet and a self attested copy of Permanent
- 24.3) Lead Partner will be the 'In-charge' of the contract . This authorization shall be evidenced by submitting with the bid a Power of Attorney signed by legally authorized signatories of all the partners.
- 24.4) The JV Agreement must provide that the Lead Partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture and the entire execution of the contract shall be done with active participation of the Lead Partner.
- 24.5) The contract agreement should be signed by each Joint Venture Partners. Subsequent declarations/letters/documents shall be signed by lead partner authorized to sign on behalf of the JV or authorized signatory on behalf of JV.
- 24.6) The Letter of Bid, Undertaking & Integrity Pact should be signed by all the partners of the Joint Venture.
- 24.7) An entity can be a partner in only one Joint Venture. Bid submitted by Joint Venture including the same entity as partner will be rejected.
- 24.8) The JV agreement may specify the share of each individual partner for the purpose of execution of this contract. This is required to fulfill eligibility and also for the purpose of apportioning the value of the contract to that extent to individual partner for subsequent submission in other bids if he intends to do so for the purpose of the qualification in that Bid.
- 24.9) The Earnest Money/Bids Security Bank Guarantee can be submitted by the Joint Venture or one or more partners of the Joint Venture



- 24.10) The bid submission must include documentary evidence to the relationship between Joint Venture partners in the form of JV Agreement to legally bind all partners jointly and severally for the proposed agreement which should set out the principles for the constitution, operation, responsibilities regarding work and financial arrangements, participation (percentage share in the total) and liabilities (joint and several) in respect of each and all of the firms in the Joint Venture. Such JV Agreement must evidence the commitment of the parties to bid for the facilities applied for (if pre-qualified) and to execute the contract for the facilities if their bid is successful.
- 24.11) The JV agreement must specifically state that it is valid for the project for which bidding is done. If JV breaks up midway before award of work and during bid validity period bid will be rejected. If JV breaks up midway before award of work and during bid validity/after award of work/during pendency of contract, in addition to normal penalties as per provision of bid document, all the partners of the JV shall be debarred from participating in future bids for a minimum period of 12 months.
- 24.12) JV agreement shall be registered in accordance with law so as to be legally valid and binding on the members before making any payment.
- 24.13) JV shall open a Bank Account in the name of JV and all payments due to the JV shall be credited by employer to that account only. To facilitate statutory deductions all statutory documents like PAN, GST Registration Certificate with GSTIN, CMPF/EPF Registration etc. in the name of the Joint Venture shall be submitted by JV before making any payment.

**25. INSURANCE:**

- 25.1 HEC will take insurance (Marine-cum-storage-cum Erection Insurance Policy and Worker's Compensation Insurance) for entire work in their name as per the agreement between HEC and NCL. All statutory documents required for logging claim shall be furnished by the bidder. Any such claim logged by the bidder shall be passed on the Insurance Company by HEC and the claim as will be settled by the Insurance Company shall be passed to successful bidder.
- 25.2 The Contractor shall arrange Accident Insurance Policy ( Workmen Compensation Policy) for all his personnel including Specialists / Personnel deputed to site and Contractor's / his sub-contractors' manufacturing works as well as for his Indian engineers & supervisory staff. The Contractor shall also take out for his Indian workmen a separate policy as per Workmen's Compensation Act. The Insurance Clause No- 9 of General Terms and Conditions of Contract should be referred in this regard.

**26. CUSTODY, INTIMATION OF SHORTAGE, MISSING, DAMAGES, LOADING/UNLOADING OF MATERIAL.**

- 26.1 Upon arrival at Works Site, all Construction Materials, all consumables and Machineries, etc., belonging to the Contractor shall assume custody thereof and remain responsible therefore, until the Provisional Acceptance Certificate is issued by the Engineer/ Site In-charge.
- 26.2 Suitable store (covered shed) shall be provided along with appropriate open space for storage of Construction Materials, special tools & tackles, all consumables, etc.,



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- 26.3 Loading and Unloading of the Construction Materials, special tools & tackles, all consumables, etc., supplied by contractor shall also be in the scope of contractor.
- 26.4 The Contractor shall, whether acting as the Employer's agent or as custodian, be responsible for communicating to the Engineer any shortages, missing, breakages, damages, etc. as soon as they come to his notice without prejudice to his obligation.

#### **27. EMPLOYMENT OF LABOUR:**

- 27.1 Contractors are to employ, to the extent possible (as per policy decision of the company valid from time to time), local project affected people and pay wages not less than the minimum wages as per minimum Wages Act of Central or state govt. (whichever is higher).
- 27.2 Payment of Provident Fund for the workmen employed by him for the work as per the law prevailing under provision of CMPF/EPF and allied scheme valid from time to time shall be responsibility of the contractor.
- 27.3 In all the cases mentioned above, the contractor needs to ensure that the employee has become a member of any of the provident fund as the case may be and the unique membership number of the CMPF/EPF or Allied Scheme needs to be submitted to Employer.
- 27.4 In addition to the above, the Contractor shall provide a copy of the updated passbook having entry made in the CMPF/EPF or Allied Scheme(s) of Provident fund as the case may be by the competent authority annually /as and when asked. Bidder shall also submit copies of statutory returns.

#### **Note:**

However, if the basic rate of wages of labour as fixed by CIL (i.e. with respect to HPC wages) is revised during the contract period then the incremental difference shall be reimbursed on actual basis through a suitable mechanism as decided by CIL/Subsidiary.

Payment of Wages to Contractor's labours.	i) For Construction Plant: As per Minimum Wages Act Central/State Govt. (higher).	The latest Rate as per Govt. Notification and as available on the Govt. Website shall be applicable
	(ii) For Operation & Maintenance of Plant: High Power Committee (HPC) Wages of CIL.	The latest Rate as per CIL Notification and as available on the Coal India Limited Website ( <a href="http://www.Coalindia.in">www. Coalindia.in</a> ) shall be applicable.

- 27.5 The Contractor shall comply with statutory requirements of various acts including Child labour (Prohibition & Regulation) Act, 1986 as amended from time to time and all rules, regulations and schemes framed there under from time to time in addition to other applicable labour laws.



**28. CONTRACTORS TECHNICAL PERSONNEL AT SITE**

The contractor shall employ engineering personnel in addition to other supporting staff as detailed below for tenure of the contract for works supervision depending upon the cost of work

- a) A diploma holder (Civil Engineering) with sufficient practical experience for proper execution and supervision of works costing from Rs. 5 Lakhs to 75 lakhs
- b) One Engineer Graduate (Civil Engineering) and one diploma holder (Civil Engineering) with sufficient practical experience for proper execution and supervision of works costing from Rs. 75 Lakhs to 150 lakhs
- c) For works from Rs. 150 lakhs to Rs. 250 lakhs
  - i. Work Manager- 1 no ( Civil Engineering Graduate )
  - ii. Site Engineer- 2 nos (One Engineer Graduate (Civil Engineering)and one diploma holder ( civil engineering))
- d) For works above Rs. 250 lakhs above
  - i. Work Manager- 1 no ( Civil Engineering Graduate )
  - ii. Site Engineer- 3 nos (One Engineer Graduate (Civil Engineering)and two diploma holder ( Civil Engineering))

If the contractor fails to employ the required engineering personnel at site as per the above, the Engineer-In Charge shall impose a penalty for non-engaging the required personnel at site, at the appropriate daily wages rates published by the Government (Finance Department- Enhancement of remuneration of daily wage personnel and persons on the contract appointment) prevailing at the time of such non engagement on a per day basis. This amount shall be deducted from any moneys due to the contractor by way of this contract.

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**Annexure – 1**

PART – I

(To be filled by the bidder and to be uploaded alongwith techno-commercial bid)

Quotation No.....

SI No.	Requisite		Remark
1	Submission of the offer with signed and stamped copy of annexure of commercial Terms & conditions and <b>Technical specification.</b>	Upload the relevant documents	
2	All NIT Items must be quoted otherwise offer shall not be considered as procurement is on BOQ (Bill of Quantity) <b>Basis.</b>	YES/ NO	
3	Class of the bidder (Class-I / Class-II/ Non-Local supplier) must be specified in line with procurement policy of Govt. of India and Department for Promotion of Industry and Internal Trade (DPIIT) order No. P-45021/2/2017-PP (BE-II) dated 04th June, 2020	Class-I/ Class-II/ Non-Local supplier	
4	Declaration of local content as per Annexure -5 (Mandatorily to be enclosed)	Enclosed/ Not Enclosed.	
5	Whether SSI/NSIC/MSME	Yes/ No (In case yes, then upload certificate)	
6	Whether SSI/NSIC/MSME owned by SC/ST/WOMEN Entrepreneurs	Yes/ No	
7	Tender fee (Rs 7500.00) / EMD(Rs. 7.50 Lacs )	Yes/ No (In case yes, then upload scan copy of DD/BG/Online receipt )	
8	F.O.R. Block B, OCP, Gorbi , NCL Site	Yes/ No	
9	Payment Term	Yes/ No	
10	Completion Time (Appendix-3)	Yes/ No	
11	Validity (One hundred and Eighty (180) days from the due date of opening of the tender.)	Yes/ No	
12	L.D. Clause	Yes/ No	

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13	Guarantee Clause	Yes/ No	
14	Performance Bank Guarantee	Yes/ No	
15	Security Deposit	Yes/ No	
16	GST	Yes/ No, Applicable GST (%).....	
17	Inspection	Yes/ No	
18	Integrity Pact as per Appendix-7 ( <b>Without submission of Integrity Pact the bid shall not be considered for further evaluation</b> )	Yes/ No	
19	Whether Terms & Condition/ Note etc. mentioned in the tender enquiry is acceptable to the tenderer	Yes/ No	
20	GCC of HEC to be Accepted	Yes/ No	
21	Declaration as per Annexure -6 (Mandatorily to be enclosed)	Enclosed/ Not Enclosed.	

(Signature of Tenderer with seal)



**PART-II (Price Bid)**

1. The tenderer shall upload the digitally signed Schedule of price bid in the form of BOQ.xls
2. Bidders may please note, the schedule of quantities is attached in the portal. The same (BOQ) shall be downloaded and to be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.
3. Bidders to note that the price as per the offer is strictly to be mentioned under Part-II of Price bid and not to be disclosed in any manner under techno-commercial bid Part-I ,In case price of the bidder is disclosed under techno-commercial bid Part-I , the offer of the firm will be summarily rejected.
4. Bidders are mandatorily required to quote all the items of BOQ, If any item of BOQ is not quoted then it shall be construed that the said Item is also included under scope of Work of the respective bidder and the Price of the same is included/absorbed in the Price of other Quoted Items.



Annexure 3

**Instructions for Online Bid Submission**

***The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.***

***More information useful for submitting online bids on the CPP Portal may be obtained at:***

***<https://eprocure.gov.in/eprocure/app>.***

**REGISTRATION**

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link “Online bidder Enrollment” on the CPP Portal which is free of charge.
- (ii) In case of any clarification please contact M/s NIC, before the schedule time of the submission of bid.  
Contact Person:- **Shri Anil Kumar: 9470520489/7808622224**
- (iii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (iv) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- (v) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- (vi) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ***ensure that they do not lend their DSC's to others which may lead to misuse.***
- (vii) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

**SEARCHING FOR TENDER DOCUMENTS**

- i) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- ii) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iii) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

**PREPARATION OF BIDS**

- i) Bidder should take into account any corrigendum published on the tender document before



submitting their bids.

- ii) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- iii) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- iv) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

**Note:** My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

#### **SUBMISSION OF BIDS**

- i) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- iv) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by as specified in the tender documents. The details of the DD / any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- v) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it

online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

- vi) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- vii) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys.
- viii) Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- ix) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- x) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- xi) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### ASSISTANCE TO BIDDERS

Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 **CPP Portal** Helpdesk.

Note: For any query related to registration and processing on the Portal please visit FAQ available at

<https://etenders.gov.in/eprocure/app?page=FAQFrontEnd&service=page>

You may call the Helpdesk. The 24 x 7 Help Desk Numbers are

0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787

E-Mail: [support-eproc@nic.in](mailto:support-eproc@nic.in) Or You may call to our service provider, :06512400562,06512401266

E-Mail: : [projectpurchase@hecltd.com](mailto:projectpurchase@hecltd.com)



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**Annexure 4**

**BANK GUARANTEE PROFORMA FOR EARNEST MONEY DEPOSIT**

*(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)*

*(TO BE ISSUED BY ANY NATIONALISED/SCHEDULED BANK AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)*

To:

Heavy Engineering Corporation Limited

Ranchi-834004

WHEREAS \_\_\_\_\_ *[name and address of Tenderer]* (hereinafter called "the Tenderer")

shall be submitting its Tender dated \_\_\_\_\_ *[date of the Tender]* for the work. \_\_\_\_\_ *[name of the work]* (hereinafter called "the Tender").

KNOW ALL MEN by these present that we, \_\_\_\_\_ *[name of the bank]* of

*[name of the country]* \_\_\_\_\_ having our registered office at \_\_\_\_\_ *[address of the bank]*

(hereinafter called "the bank"), are bound unto the Heavy Engineering Corporation Limited, P.O. Dhurwa, Dist.

Ranchi (Jharkhand) (hereinafter called "the Purchaser") for the sum of *[amount of the Guarantee in words and figures]* for which payment well and truly to be made to the said Purchaser the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said bank this \_\_\_\_\_ day of \_\_\_\_\_ 200\_.

THE CONDITION of this obligation are:

1. If the Tenderer withdraws its Tender during the period of Tender Validity specified by the Purchaser on the Tender form ; or
2. If the Tenderer withdraws having been notified of the acceptance of its Tender by the Purchaser during the period of Tender Validity :
  - (a) Fails or refuses to execute the Contract Agreement when required ; or
  - (b) Fails or refuses to furnish the Security-cum-Performance Guarantee Security (if any) in accordance with the Tender conditions.

We, \_\_\_\_\_ *[name of the bank]* undertake to pay to the Employer up to the above amount

upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing the occurrence of 1 or both of the 2 (a) or (b) specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including the date \_\_\_\_\_ and any demand in respect thereof should reach the Bank not later than the date of expiry of this guarantee.

For and on behalf of the Bank.

Signature

Name

Designation

Common Seal of Bank

**LOCAL CONTENT DECLARATION**

**Date:**

To,

M/s HEC Ltd ,  
Plant Plaza Road  
Ranchi-834004

**Sub:** Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 04/06/2020 and 16/09/2020.

**Ref:**

I (authorized signatory for M/s ..... ) declare the local content for the complete scope of work of the tender with their location details in the below mentioned table :

Sl. No.	For Complete Scope of NIT & TS	Local Content (in %)	Location details at which local value addition is made (Factory address)
1			

We also certify that the above details are true & correct and if found to be false then it shall be a breach of the Code of Integrity and our bid will be liable to be rejected and we will have no objection against rejection of bid.

For M/s .....

Authorized Signatory  
(with company seal & Name)

**Note :**

1. In case the value of offer (Excluding Taxes) is more than 10 Crores INR , the above declaration will be required to be certified by Practicing CA with MRN & FRN of CA.
2. The Local Content Declaration must be submitted by the bidder during submission of offer along with Techno-commercial Bid. No change in Local Content of declaration will be allowed once the bid is submitted.



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

Annexure – 6

**DECLARATION AS PER CLAUSE NO-23 OF ITT**

To,

M/s HEC Ltd ,  
Plant Plaza Road  
Ranchi-834004

**Sub:- Certificate as per Order No. F. No. 6/ 18/ 2019 - PPD dated 23.07.2020 issued by Ministry of finance (dept of Expenditure)**

I have read the clause the regarding restrictions on procurement from a bidder of a country which shares land border with India and on sub-contracting to contractors from such countries; I/we clarify that we, M/s..... (Name of bidder)are not from such countries or, If from such a country, has been registered with the Competent Authority and will not sub-contract any work to the contractor of such countries unless such contractor is registered with the Competent Authority. I/ we hereby clarify that we, M/s.....(name of bidder) fulfills all requirements in this regard and is eligible to be considered against the tender. [Where applicable, evidence of valid registration by the competent authority must be attached]

For M/s .....

Authorized Signatory  
(with company seal & Name)



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**Annexure-A**

**FORMS OF TENDER**

Sub : TENDER for the Work \_\_\_\_\_

To,

\_\_\_\_\_

Dear Sir,

We offer to execute the Works/Services described above in accordance with the Conditions of Contract accompanying the Tender Document issued to us.

This tender and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any tender you received.

We hereby confirm that this tender complies with the tender validity and tender security required by the tender documents.

Yours faithfully

Authorised Signature :

Name and Title of the Signatory :

Name of Tenderer :

Address :

Date :

(To be filled by the tenderer )



**1.0 INTRODUCTION:**

The present Tender document envisages Work cover all civil works, supply, fabrication and erection of all building steel structural works, supply of all materials, manpower, machineries, safety, security and storage of all construction equipment and material as elaborated in the subsequent clauses of the Technical Specification.

**INFORMATION ON PLANT SITE**

**1.1 Location**

Block B opencast project of NCL (a subsidiary of Coal India Ltd .) is situated in the Singrauli district of Madhya Pradesh. Block B OCP comprising of two geological blocks namely Block-B Block and Block-B Extension Block, lies in the north-western part of the Moher SUB-basin of Singrauli Coalfield . The combined block area lies between the latitude 24°09'32"N to 24°12'43.27"N & longitude 82°32'36"E to 82°37'15.59" E.

**1.2 Communication**

The project area is well connected with road and rail. The project office situated near the northern boundary of the block is on Ranchi- Rewa National Highway (NH-75E) and adjacent to Mahadaiya railway station on Katni-Chopan branch line of East -Central Railway. The project is also connected with NCL (HQ), Singrauli by road. The nearest air-strip is at Myorpur, Dist. - Sonebhadra (U.P.), located at a distance of about 80 km from Singrauli. A helipad exists at Shaktinagar under the command area of NTPC which is about 35 km from the project.

**1.3 Climate**

The Singrauli Coalfield is characterized by tropical climate with three well recognized season's i.e., summer, rainy and winter. During summer, in May/June temperature shoots up to 46°C, whereas the same goes down to 4°C during December/January in winter. Monsoon starts from the end of June/ beginning of July and continues till October. The average annual rainfall is 1000mm, of which, about 95% precipitates during rainy season. Maximum Relative Humidity, during rainy season, varies from 55% to 88%, while it varies from 35% to 55% and 15% to 56% during winter and summer seasons, respectively. Average wind velocity is around 5 km per hour blowing in ESE direction during the major period of the year. The maximum rainfall in 24 hours was recorded as 225 mm on 20.08.1975 at Jhingurdah Rain Gauge Station located in the coalfield.





## HEAVY ENGINEERING CORPORATION LIMITED

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#### INFORMATION

Open Tender is invited for the Work of Civil and Structural on BOQ Basis as per scope described in NIT at following address.

#### Address for Communication

C.S. Prasad

DGM (I/c) (Purchase & CC),

Project Division

HMBP Administrative Building

Heavy Engineering Corporation Ltd.,

Ranchi – 834 004 (Jharkhand)

Phone 0651-2401266

Email id: [projectpurchase@hecltd.com](mailto:projectpurchase@hecltd.com)

#### EMD amount:

EMD amount for Rs 7.50 Lacs (Rs. Seven Lacs fifty Thousand only) payable through Demand Draft / Bank Guarantee. DD in favour of “Heavy Engineering Corporation Ltd” Payable at “State Bank of India, Hatia”. In case EMD is considered to be submitted in the form of BG, the same shall be valid for minimum 6 months from the date of Submission of the tender.

Tender Fee = Rs 7,500 (Rupees Seven Thousand Five Hundred only) payable in form of DD in favour of “Heavy Engineering Corporation Ltd” Payable at “State Bank of India, Hatia.



**SPECIAL CONDITION OF CONTRACT**

**GENERAL**


1. Work to be executed as per the detailed drawing, to be furnished by the successful tenderer as per the specification of NCL and as per contract agreement between NCL & HEC.
2. Time allowed for completion of the total work is **9 months** from the date of issuance of Work order and should be as per Appendix 3.
3. The Contractor/ Successful bidder shall be required to furnish the detailed time bar chart/ PERT Chart for supply and start & completion of the work and shall be required to submit the progress report fortnightly in accordance with approved Time bar Chart/ PERT Chart. However, project progress must confirm within a schedule which will be furnished by the tenderer as per General Condition of Contract (GCC) along with General Technical Condition (GTC).

**General Information to Tenderer**

- 1) Tenderer shall visit the site, to get acquainted with site conditions before quoting against this tender enquiry and for better understanding of the requirements.
- 2) Tenderer should submit documents of similar experience of work related to the scope of work or similar work with respective completion certificate of the work as mentioned in commercial terms and condition at Clause 3 (A) of special condition of contract.
- 3) Tenderer should submit audited balance sheet and Profit & Loss Account of last 3 years (refer Clause 3 (B) of Special Condition of Contract).
- 4) Tenderer should quote their price in the price format as per BOQ ( Price Schedule of BOQ.xls)
- 5) Inspection & testing shall be carried out in presence of HEC/CMPDI/ authorized representative of Northern Coalfields Limited on the basis of drawings and specifications.
- 6) Once the work order is placed on the successful tenderer within the validity period of his offer the awarded price shall remain valid & firm throughout the entire period of the supply & work.

**TIME SCHEDULE**

Time allowed for completion of the total work is **9 months** from the date of issuance of Work order.

	<b>HEAVY ENGINEERING CORPORATION LIMITED</b>
	<b>PROJECT DIVISION</b>

**Tender Notice:**

HEAVY ENGINEERING CORPORATION LIMITED, Ranchi invites offers through online mode from reputed and experienced contractors for the following work against its Open Tender Notice:

Name & Description of Works	Location	Period of completion
The scope of work shall cover all civil works, supply, fabrication and erection of all building steel structural works, supply of all materials, manpower, machineries, safety, security and storage of all construction equipment and material as elaborated in the subsequent clauses of this TS	Block-B OCP Gorbi NCL Singrauli, Madhya Pradesh	9 months from date of Issuance of Work Order.

**2.0 MANDATORY REQUIREMENTS FOR BIDDERS :**

Documents which are not covered under Annexure-1 of INSTRUCTION TO TENDRER and Check-List of Special Condition of Contract are mentioned here shall also be uploaded- .

- a) Experience of similar type of work executed during the last Ten years. Details with value, name of the client etc. are to be mentioned enclosing documentary evidences Completion certificate is mandatory.
- b) Registration of firms with HEC/ any other Govt. / Semi Govt. /agencies. Tenderer have to furnish copy of registration along with offer.
- c) Documentary evidence of adequate financial standing duly certified by Bank.
- d) Labor License and other details of General Condition of Contract.
- e) PAN No.
- f) Constitution and legal status of the tenderer (individual, partnership, co-operative, registered firm etc.), existence of joint ventures or other form of tie up for technology, equipment, financial backing and / or project management etc. to clearly mention with copy of supporting documents along with the offer.
- g) Registration with specific agencies.
- h) Financial standing. Documents to be enclosed with the quotation should be certified by bank, audited profit & loss account, Balance sheet, annual turn-over, access to adequate working capital.
- i) Details of necessary construction equipment /facilities for the job under this tender to be deployed for the project and proof of its availability, equipment proposed to be purchased or hired are to be attached with this offer.
- j) Availability of key personnel for supervision and management of the work indicated.
- k) Information regarding project in hand, current litigation, orders regarding execution/expulsion or black listing if any to be furnished.
- l) The bidders would give a declaration that they have not been banned or delisted by any Government or Quasi Govt. agencies or PSU's. If a bidder has been banned by any Government or



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- Quasi Govt. agencies or PSU's that must be clearly stated and it may not necessarily be a cause for qualifying him. If this declaration is not given, the bid will be rejected as non responsive.
- m) Signed copy of Integrity Pact (Appendix 7) and Affidavit (Appendix 8) as per format enclosed at the end of NIT.

### 3.0 QUALIFYING CRITERIA:

#### A. TECHNICAL QUALIFYING CRITERIA -

- i) Civil and Structural Works related to Conveyor Installation or any Other Industrial Building & Infrastructure for last Ten years ending last day of month previous to one in which bid application are invited should be either of the following:-
1. Three similar completed Works/Project each costing not less than Rs. 1,19,25,300.80 (Rupees One Crores Nineteen Lacs Twenty Five Thousand Three Hundred and Eighty Paise only).  
Or  
Two similar completed Works/Project each costing not less than Rs. 1,49,06,626.00 (Rupees One Crores Forty Nine Lacs Six Thousand Six Hundred Twenty Six only).  
Or  
One similar completed Work/Project each costing not less than Rs 2,38,50,601.60 (Rupees Two Crore Thirty Eight Lacs Fifty Thousand Six Hundred one and sixty paise only)

The definition of similar works/ Projects shall be **Civil & Structural construction works related to Conveyor System**  
or  
**Any Other Industrial Installation.**

**Note:- The above value shall be exclusive of GST**

The intending tenderer must submit documentary evidence in support of above in the form of

- (i) Certified copy of work orders as per above scope of Work/Project.
- (ii) Completion certificate indicating value and period of work/project, The TDS certificate be submitted during clarification, if any. Further **part completion certificate of works/projects** will not be entertained.
- (iii) Documents to be submitted for work executed in India only with valid completion certificate from customer however work executed outside India to be submitted with duly certified through authorized office of Govt. of India. The experience towards overseas jobs, if submitted, should be vetted/endorsed by the relevant\* embassy/high commission concerned, towards authenticity of document in English or translated in English language.  
(\*Relevant embassy/High Commission means the embassy/High Commission in India of the country where the bidder has executed the said work or country of origin of the bidder OR the Indian embassy in the country where bidder has executed the work or country of origin of the



bidder.)

- (iv) Cost of previous completed work(s) shall be given a simple weightage of 5% per year to bring them at current price level, while evaluating the qualification requirement of the bidder, such weightage shall be considered after end date of completion. The year can be considered as suitable consecutive 365 days till the last day of month previous to one in which bid has been invited. Updating will be considered for full or part of the year (total no. of days / 365) i.e. considering 365 days in a year, till the last day of month previous to one in which bid has been invited

- 2). Joint Venture (JV) of maximum three comprising of One Lead Partner and other two Associate Members/Joint Venture Partners (refer Clause No-24 of Instruction to Tenderer) shall be allowed for participation in the bid.**

The above qualification criteria shall be fulfilled by JV in the following manner.

The qualifying criteria parameter e.g. experience of the individual partners of the J.V will be added together as deliberated hereinafter towards fulfillment of qualification criteria related to experience.

- a) In case of completion of single work/project of similar nature costing, not less than the amount equal to Rs 2,38,50,601.60 (Rupees Two Crores Thirty Eight Lacs Fifty Thousand Six Hundred one and sixty paisa only)
- i) Any of the JV partner shall have the experience of having completed successfully a single work/project of similar nature equal to Rs 2,38,50,601.60
- b) In case of completion of two works/projects of similar nature each costing not less than the amount equal to Rs. 1,49,06,626.00 (Rupees One Crore Forty Nine Lacs Six Thousand Six Hundred Twenty Six only):-
- i) Any one partner can match the above requirement.
- OR
- ii) At least two partners should each have completed at least one work/project of similar nature each costing not less than the amount equal to Rs. 1,49,06,626.00
- c) In case of completion of three works/projects of similar nature, each costing not less than the amount equal to Rs. 1,19,25,300.80 (Rupees One Crores Nineteen Lacs Twenty Five Thousand Three Hundred and Eighty Paisa only)-
- i) Any one partner can match the above requirement.
- OR
- ii) Any two partners shall match the above requirement through completion of at least two



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works/projects by one partner and one work by other partner of similar nature each costing not less than the amount equal to Rs. 1,19,25,300.80.

OR

- iii) All the three partners shall match the above requirement through completion of at least one work/project of similar nature each costing not less than the amount equal to Rs. 1,19,25,300.80.

**However, during fulfillment of any of the above criteria one of the partners, who is the Lead Partner (refer Clause No- 24 of Instruction to Tenderer) , shall have:-**

- i) **Maximum participating share in J.V. and**
- ii) **Experience of having completed successfully a single work/project of similar nature equal to at least Rs. 1,19,25,300.80.**
- iii) Experience for those works/projects only shall be considered for evaluation purposes, which match eligibility requirement stipulated above, on or before the last day of month previous to one in which tender has been invited (publication date of NIT). The experience of incomplete/ ongoing works/projects as on last date of eligibility period will not be considered for evaluation. If the referred work/project includes construction as well as maintenance after construction, the experience of such work/project may be considered as 'acceptable' if the construction part is completed as on the last date of 'eligibility period', even if maintenance work/project is ongoing, and the certificate issued clearly stipulates the same.
- iv) Completion of works/projects means completion of works/projects by undertaking entire responsibility from Supply, Installation, and successful completion. In all the above cases, while considering the value of completed works/projects, the full value of completed work/project be considered whether or not the date of commencement is within the said 10 (Ten) years period.
- v) **Data to be furnished by the Bidders:**
- a) **Start date & end date of each qualifying experience (similar nature)**
- b) **Work order Number /Agreement Number of each experience**
- c) **Name & address of Employer/Work Order issuing authority of each experience**
- d) **In case the experience has been earned by the bidder as a partner in a joint venture firm/partnership firm then the proportionate value of experience in proportion to actual share of bidder in that joint venture firm/ partnership firm will be considered against eligibility else it shall be taken as 100%.**
- (Note: This shall be adopted in e-Procurement Guidelines for Woks and Services.)**
- e) **Executed Value of work against each experience**
- f) **In case the bidder is a Joint Venture, work experience as above may be furnished as the work experience of the bidder.**



**B. FINANCIAL QUALIFYING CRITERIA**

**Annual Turn-Over**

- 1) Average annual financial turnover during last 3 years, ending 31<sup>st</sup> March of previous financial year should not be less than Rs 89,43,975.60 (Rupees Eighty Nine Lacs Forty Three Thousand Nine Hundred Seventy Five and Sixty Paise Only) . In this regard, Audited Profit & loss account, Balance sheet have to be furnished.
- 2) For JV ( refer Clause No-24 of Instruction to Tenderer) Average annual financial turnover during last 3 years will be evaluated based on Audited Profit & loss account, Balance sheet for Lead Partner Only. Average annual financial turnover during last 3 years, ending 31<sup>st</sup> March of previous financial year for Lead Partner should not be less than Rs 89,43,975.60 (Rupees Eighty Nine Lacs Forty Three Thousand Nine Hundred Seventy Five and Sixty Paise Only)  
(The “Previous financial year” shall be computed with respect to the e-Publication date of NIT) The intending bidders must submit the Financial Turnover certificate (with UDIN No.) issued by a Practicing Chartered Accountant having a membership number with Institute of Chartered Accountants of India, containing the information as furnished by bidder online.

**Working Capital:**

- I) The bidder must produce the evidence of adequacy of a minimum working capital of Rs 59,62,650.40 (Rupees Fifty Nine Lacs Sixty Two Thousand Six Hundred Fifty and Forty Paise Only) of the work.  
Banker’s Certificate (Scheduled Bank) shall be produced regarding availability of access to credit (issued within 3 (Three) months prior to date of submission of Bid) to meet the above Qualifying criteria.
- II) For JV ( refer Clause No-24 of Instruction to Tenderer) minimum Working Capital will be evaluated for Lead Partner Only and the same should not be less than Rs 59,62,650.40 (Rupees Fifty Nine Lacs Sixty Two Thousand Six Hundred Fifty and Forty Paise Only) of the work.

**2.3 VALIDITY PERIOD OF OFFER**

The rates offered in Part III should be valid for **180 days (One hundred eighty days)** from the date of opening of Part - I of the tender.

- 2.4 ONE BID PER BIDDER:** Each Bidder shall submit only one Bid, either individually, or as a partner in a partnership firm or a partner in a joint venture or a public limited firm. A Bidder who submits or Participate in more than one Bid (other than a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

The Bidder, at the Bidder's own responsibility, cost and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.



It shall be deemed that the tenderer has visited the site/ area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether he actually visits the site/ area or not and has taken all the factors into account while quoting his rates and prices.

Site investigation reports: The bidder, in preparing the bid, shall rely on the site investigation report referred to in the bid document, supplemented by any information available to the Bidder.

**3.0 ADDITIONAL INFORMATION TO TENDERER**

- a) All correspondences/ documents made by the tenderer shall be in English Language and the data/measurement related results in Metric Units only, unless otherwise specified.
- b) Tenderer shall quote strictly as per proforma. If any part/ portion of scope are excluded from his offer and the quotation of the tenderer may be liable to get rejected.
- c) Tenderer shall submit credentials of past works done for similar nature of work supported with documentary evidence like performance certificate/ completion certificate issued by client/end user.
- d) During the course of execution of the contract, the department has the right to award additional work or deletion of work or advise removal/ repair /re-fabricate the work already executed.
- e) Technical specifications, drawings and bill of materials to be the basis of content of work, assignment and defining responsibility.
- f) The offer shall clearly indicate any assumption made in respect of specification, data or any other details that have not been mentioned in this tender but considered necessary for meeting the specified functional and duty requirements. Any such assumptions not indicated during tendering stage, will not be binding on HEC.
- g) Approval of various procedures submitted by the successful tenderer shall not relieve the tenderer of his responsibilities towards completion of work as defined in the contract. During the course of execution, if any additions/ alterations are found necessary and intimated to the tenderer before fabrication/installation/erection/testing/successful completion of the equipment, the same shall be implemented by the tenderer without any extra cost.
- h) All necessary facilities including tools, tackles, safety appliances, measuring & testing equipment/ instruments, accessories & material handling equipment, etc. shall be provided by the successful tenderer to enable stage wise inspection of the system during erection, testing & completion of work at site.
- i) The Successful tenderer shall be solely responsible for obtaining necessary clearance from various statutory bodies including those of Central & State Government, as applicable, during the course of manufacture / fabrication, testing, transportation, erection and successful completion of the work as per TS at site.
- j) The successful tenderer will be required to sign contract agreement within 30 days of placement of work order (format enclosed at Appendix 6)





**3.1 CONTRACT PRICE**

In accordance with Scope of Work, Supply & Services indicated in technical specifications of the tender paper and the tenderer to furnish their offer in the format given at **price bid** in online mode only (as per BOQ.xls).

**3.2 PRICE BASIS**

The basic price to be indicated for the scope of work shall include dismantling, supply, fabrication, transportation, erection, construction, modification etc. and all necessary civil & structural works required for completion of the project in all respect on BOQ BASIS for Coal Handling Plant (4.5 MTPA) at Block-B OCP, Northern Coalfields Limited. All the works including construction, fabrication, testing, erection, etc. shall be done strictly as per relevant BIS Code of Practices. Wherever no Indian Standard is available, British, American, German, Soviet or other international standards may be used only as per its applicability and justification. GST as applicable to be shown separately in the given Proforma. (BoQ.xls)

a) Contract Price shall remain firm and binding and shall not be subject to any escalation on any account whatsoever except for statutory variations of taxes & duties within contractual completion. Reimbursement will be made against submission of documentary evidences.

b) The Contract Price stated in above shall include for ensuring availability of special tools & tackles, instruments, appliances for erection, operation and maintenance, etc. till erection, testing, successful Commissioning and handing over of the plant & equipment to end user.

**3.3 TERMS OF PAYMENT**

Refer clause no. 32.0 of General Condition of Contract (GCC as part of this NIT)

**3.3.1 PRICE BREAK-UP FOR PAYMENT**

The contract Price Break Up for set up shall be interlinked with the agreed detailed PERT network of contractor setting forth his starting and completion dates for the various key phases of works prepared as per condition of this contract. The Price Schedule duly approved by HEC shall be integral part of the Contract. Any payment under the contract shall be made only as per Price Break Up after approval of the same by the Project Manager/ Site –In charge Gorbi Block B/ HEC.

**3.3.2 APPLICATION FOR PAYMENT**

The contractor shall submit application for the payment in the prescribed proforma of HEC.

Each such application shall state the amount claimed and shall set forth in detail, in the order of the payment schedule, particulars of the works including the works executed at site and of the equipment shipped/ brought on to the site pursuant to the contract upto the date mentioned in the application and for the period covered since the last preceding certificate, if any.

Every interim payment certificate shall certify the contract value of the works executed upto the date mentioned in the application for the payment certificate, provided that no sum shall be included in any interim payment certificate in respect of the works that, according to the decision of the Project



Manager/ Site In charge Gorbi Block B/HEC, does not comply with the contract, or has been performed, at the date of certificate prematurely.

### **3.3.3 MODE OF PAYMENT**

All payments under the contract shall be made as Progressive Payment after signing the Contract. For erection, progressive payments shall only be made after the issue of certificates by Site In charge /HEC or representative of HEC deputed for field quality surveillance for the successful completion of quality check points involved in the quantum of work billed.

3.3.4 All the payments (through **E-payment mode**) by HEC shall be made to the contractor subject to the satisfactory inspection report from the competent authority. The payment shall be made in INR after withholding of any taxes, duties, cess or fees at source, applicable as per Indian law and adjustment on account of penalty payable by the contractor, if any.

#### **PROGRESSIVE PAYMENT:**

**Note: No mobilization advance will be admissible.**

- 1) For payment Contractor shall submit monthly bill for progressive payment to HEC with reference to Price Schedule duly approved by HEC. After award of the contract, the successful tenderer will be required to raise bills as per Price schedule for payment by HEC.
- 2) All Invoices/ Bills for the performance and execution of the Contract by Contractor with respect to their portion of works shall be raised on HEC along with all required supporting documents on Monthly Basis in accordance with the above mentioned Price Schedule.
- 3) HEC shall then raise Invoices/Bills under cover of their letters separately for purpose of Contractors Scope containing particulars of the respective bills. On basis of such separate invoices of Contractor's Scope, HEC shall make payments to the Contractors within 15 days time on receipt of such payments from NCL.
- 4) If at any stage during Contract execution, till final settlement and closure of Contract, it is found that some excess/over payment has been made to Contractors, the same shall be recovered forthwith by HEC from the subsequent bills or any amount of the Contractor that may be remaining with HEC and in that event, such excess amount, which is more than the amount due to HEC, the Contractor shall be liable to pay this amount separately.
- 5) All the above payment schedules shall be guided as per the NIT's Payment Mode, for which the Bank Guarantee as stipulated in the same or proportion of Contractor's Value of Works shall be furnished to HEC.

In case a claim is made by NCL Block B on HEC's Bank Guarantee, submitted for this Project, then, a claim on Back-to-Back Basis of Contractor's for their portion of work shall automatically be made by HEC and Guarantees furnished by Contractor shall incorporate a suitable clause to reflect the same.



- 6) The Contractor shall be paid on pro rata basis for the executed part of erection series, on the basis of measurement certificate & MB duly authenticated by the engineer in charge of HEC /Officer of HEC concerned in line with clause no 4.1, 4.2, 4.3, 4.4, 4.5 & 4.6 of GCC of HEC.

**3.4 PAYING AUTHORITY:**

DGM (I/C) Finance  
Finance Department  
Project Division  
HMBP ADMIN Building,  
Heavy Engineering Corporation Limited,  
Ranchi - 834004

**The R. A. bill to be submitted (in Quadruplicate) with proper documentation.**

**3.5 GENERAL CONDITION OF CONTRACT**

Tenderer shall abide by the General condition of contract of Heavy Engineering Corporation Ltd. Ranchi, a copy of GCC of Works Contract can be downloaded from the site [www.hecltd.com](http://www.hecltd.com) for ready reference.

**4.0 The tenderers are required to upload duly signed and sealed complete set of NIT documents as a token of acceptance for all the terms & condition of the NIT. They are also required to submit a declaration for “NO DEVIATION” from the NIT terms & condition on their letter head.**

- a. Tenderer shall furnish copy of all statutory obligations of Government of India, State Government applicable at site such as labour rules, minimum wages act, & payment of wages, etc. and the purchaser shall not be liable for any action on statutes applicable to non-fulfillment of statutory obligations by the bidders.
- b. Tenderer shall must attach/ furnish copy of followings:-
1. PAN No.,
  2. Labour License
  3. EPF registration No.
  4. ESIC registration no. wherever applicable
  5. Income tax clearance duly counter signed by income tax officer of the circle concerned under the seal of the office.
  6. GST registration certificate indicating GST registration no.
  7. Registration of firms with HEC/ any other Govt./ Semi Govt. Organization. Copy of same to be enclosed.
- c. **Experience of similar type of work executed during the last Ten years. Details with value, name of the client etc. are to be mentioned enclosing documentary evidences. Completion certificate is MANDATORY.**
- d. Constitution and legal status of the tenderer (individual, partnership, co-operative, registered firm etc.), existence of joint ventures or other tie up for technology, equipment, financial backing



and/ or project management etc. to clearly mention with copy of supporting documents along with the offer.

- e. Registration with HEC, or any other Government /Semi Government organization / agencies .Tenderer have to furnish copy of registration along with offer.
- f. Details of necessary equipment /facility for the job under this tender to be deployed for the project and proof of its availability, equipment proposed to be purchased or hired are to be attached with this offer.
- g. Availability of key personnel for supervision and management of the work indicated along with organization chart & detailed list of manpower to be deployed for the work covered under this tender enquiry.
- h. Information regarding project in hand, current litigation, orders regarding execution/expulsion or back listing if any to be furnished.
- i. Capacity of the tenderer to take up a new work/ project under consideration in addition to his present commitment. Bid Capacity of the tenderer to take up a new work/ project under consideration in addition to his present commitment.

**5.0 PRICE BID** - The Tender shall comprise Price Bid only as per the format enclosed with tender as **BOQ.xls**. Offer without EMD will not be considered and will be rejected. The price bid shall be opened only after the Techno Commercial terms are accepted by bidders. If the offer is not submitted as per the above instructions & within time the same can be rejected.

**6.0 ACCEPTANCE OF TENDER:**

Tender may be accepted for full. Any incomplete tender in any respect is liable to be rejected without any notice. The company is having rights to reject any tender without assigning any reason for which no question can be asked anywhere.

There is no obligation on our part to accept delayed/ late tender received after the due date of opening of tender and these are liable to be summarily rejected.

**Tenderer shall submit the tender documents along with the tender duly signed & stamped on each page as a token of acceptance.**

**7.0 SECURITY DEPOSIT (SD)**

On acceptance of the Tender, Security Deposit will be applicable as per Clause No-3 of General Terms and Conditions of Contract wherein the Successful Tenderer shall furnish a Security Deposit in any of the forms Demand Draft/ Bank Guarantee. DD in favour of "Heavy Engineering Corporation Ltd" Payable at "State Bank of India, Hatia. If it is submitted in the form of a Bank Guarantee, the same shall be from any of the Nationalised Banks or Scheduled Banks in Ranchi and enforceable at Ranchi. The proforma for the BG is attached.



The Public Sector Enterprises or State/ Central Govt. Undertakings will not be required to submit Security Deposit, but however they shall submit “Performance Guarantee Bond” in lieu of Security Deposit in the format as per **Appendix-1**.

The Bank Guarantee for Security Deposit shall be for the due and faithful performance of the Contract and shall remain binding notwithstanding such variations, alterations or extensions of time as may be made, given, conceded or agreed to between the Contractor and the Employer.

The Bank Guarantee for Security Deposit shall remain in full force and effect during the period of the Contract and shall continue to be valid up-to 30 days after the expiry of the Guarantee period. The Bank Guarantee shall provide for extension of validity on demand by the Employer. Such extension of validity shall be confirmed by the guarantor bank without any reference to the Contractor.

#### **7.0 ARBITRATION**

- a) All Disputes or differences, whatsoever, arising between the parties out of or in relation to the construction, meaning and operation or effect of this Contract or breach there of shall be settled amicably. If, however, the parties are not able to resolve them amicably, the same shall be settled by arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration as per the provision of Arbitration Conciliation Act 1996 and the award made in pursuance there of shall be binding on the parties. The Arbitrator/ Arbitrators will give reasoned award.
- b) Work under the contract shall continued by the Bidders during arbitration proceeding unless otherwise directed in writing by HEC/ NCL or unless the matter is such that work cannot be continued until decision of the arbitrators or of the umpire , as the case may be, is obtained and save as those which are otherwise expressly provided in the contract, no payment due or payable by the purchaser shall be withheld on arbitration proceeding unless it is the subject matter or on the subject matter thereof.
- c) The Venue of arbitration shall be Ranchi, Jharkhand

#### **8.0 RISK AND COST**

If the bidders fail to complete the work and fail to comply with such notice, the Employer shall have at its option the right to take the affected Facilities wholly or in part out of the Contractor's hands and may complete the Facilities, as envisaged in the Contract either departmentally or by awarding fresh Contract(s) to execute the same, at risk and cost of the Contractor.

#### **9.0 NO CLAIM OR COMPENSATION FOR SUBMISSION OF TENDER**

The Tenderer whose offer is not accepted shall not be entitled to claim any costs, charges, expenses or incidental to or incurred by him through or in connection with his submission of Tenderer, even though



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HEC Ltd may decide to withdraw the invitation of Tender. NO PRICE ESCALATION will be considered for successful tenderer till completion of the project.

### 10. NOTICES ON BEHALF OF HEC LTD

Notice and certificate on behalf of HEC LTD in connection with the Work order may be given by duly authorized officers of HEC LTD. Any modification which may become necessary in the interim period will be intimated to you as soon as possible.

### 11. JURIDICTION OF COURT

The contract shall be governed and interpreted in accordance with the laws in force in India. The Hon'ble Jharkhand High Court of Ranchi shall have the exclusive jurisdiction over all matters of disputes.

### 12. PRICE ESCALATION:

No price escalation is admissible for execution of the scope of work after issue of LOI/work order. No extra payments shall be admissible to the contractor, consequent on any alleged misunderstanding or miscalculation or arising of any other mistake or factor not specifically provided in the offer.

### 13.0 ENCLOSURE (Check List)

**The following documents are mandatory to be submitted along with tabulating details with page number (in one page) along with techno-commercial bid**

Tender Fee/ Valid exemption certificate
Copy of EMD Draft/ Bank Guarantee (Original in separate sealed envelope)
NIT signed copy
Power of Attorney
No Deviation Certificate on Letter Head of the Company ( Appendix 4 & 5)
Affidavit of bidder ( Appendix 8)
Evidence of access to financial resources to meet the qualification requirements
Details of the major construction equipment to be used for the work ( Appendix 2)
Full details of plant and maintenance facilities together with the details of laboratory personnel, workshop personnel including fitters, mechanics, machinists etc. ( Appendix 2)
Copies of original documents, defining the constitution or legal status, place of registration and principal place of business
Details of experience for similar nature and complexity of work executed in last 10 years with performance certificate of the same work. (to qualify as per commercial terms and condition)



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Financial reports of last three years : Balance sheet, Profit and loss statement, auditor's report, etc.
Integrity pact with HEC strictly on non-judicial stamp paper of Rs. 100/- duly signed and stamped (Appendix 7)
Information about litigation, if any, in which bidder is involved(Current or during last five years)
Declaration by the bidder regarding non- banning or delisting by other Govt./quasi-Govt. agencies or PSU
Copy of GST Registration
Permanent Income Tax account Number (PAN)
Copy of Registration with PF authorities
Organization chart showing personnel capabilities
Details of Bankers; Information on Bid capacity
Time Schedule ( Appendix 3)

#### 14. GENERAL OBLIGATIONS:

The contractor shall deposit specified amount of Earnest Money (EMD) along with the offer.

The Earnest Money will be converted in to Security Deposit (SD) for the successful tenderer. This will form the initial Security Deposit. Subsequently a deduction at the rate of 10% (or as specified) from all "On account" payments to the contractor will be made till the total Security Deposit becomes 10% of the tender/ contract value ( refer Clause No- 3 of General Terms and Conditions of Contract)

EMD and SD to be deposited in the form of Demand Draft (drawn in favour of Heavy Engineering Corporation Ltd.). No interest shall be payable on the Earnest Money or the Security Deposit or the amount payable to the contractor under contract.

When the amount deducted from monthly "On account" bill aggregates to Rs. 5 Lakh or above, the contractor may have the option to convert the cash portion into Bank Guarantee. The Bank Guarantee (BG) shall be valid for the complete contract period including maintenance/ performance guarantee period (wherever applicable). In case of any extension of time is granted to the contractor for the completion of the work under this contract, the contractor shall simultaneously arrange for the extension of time validity of the BG.

All compensations or other sum of money payable by the contractor to the employer under the terms of contract with the employer or under any other contract with the employer shall, without prejudice to



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any other mode of recovery, be recoverable from such contractor by way of deduction of payment or encashment of Bank Guarantee.

The contractor shall, when called upon to do so by the employer, enter into and execute a contract agreement at his own cost. Unless specifically mentioned Contract agreement to be signed for value of work order of Rs. One lakh or more.

The original contract document shall be signed on non-judicial stamp paper of value not below Rs.100 by the employer and the contractor. This document will be retained by the employer (In charge Contract cell or his representative empowered as authorized signatory and Contract cell will be the custodian of original contract) and an authenticated copy thereof to be given to the contractor.

The contractor shall be presumed to have satisfied himself about the quantum & nature of work and all associated working environment. He shall also be presumed to have satisfied himself the correctness and sufficiency of the tender for the work as quoted by him in the tender schedule and it will be justified to assume by employer that rates and prices quoted shall cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the work.

It is understood and agreed that no extra payments shall be admissible to the contractor, consequent on any alleged misunderstanding or miscalculation or arising of any other mistake or factor not specifically provided in the contract.

All contracts documents are complementary to one another and what is required by one shall be as fully and effectually binding on a contractor as if the same is required by another documents; the intention of the documents is to include all - labour, material, equipment and transport and any other measure necessary for prompt and efficient execution of the work to be arranged by the contractor.

The contractor shall not at any time assign or sublet his contract or any part thereof to any person or allow such person to become in any way interested therein in any manner whatsoever, without prior permission in writing of the employer. Any contravention of this condition shall entitle the employer to rescind the contract and shall also render such contractor liable for payment to the employer in respect of any loss or damage arising out of or ensuing from such rescission or contract. Provided further that where the subletting of work by the contractor in any case, is permitted by the employer, such subletting shall never be deemed to establish any contractual relationship between the subcontractor and the employer, and that the contractor shall not at any time, be absolved of any obligation or responsibility under the contract or any part thereof and shall continue to be responsible for all acts of omission and commission of the subcontractor, his agents, servants or workmen as fully and effectually as if the same were acts of omission and commission of the contractor, his agents, workmen, as the case may be.





All the contracts or terms thereof entered into between the employer and the contractor under these General Conditions of Contract shall be governed and regulated by the relevant laws being in force from time to time in the territory of India related to contracts. The contract shall strictly conform to the provisions, of any law related to works or any regulations and bye-laws made by any local authority. In case the contractor foresee that variation in specification and drawings are necessary in view of the provisions of the law or regulations or bye- laws, he shall immediately inform the employer/ appropriate authority in writing specifying proposed variations and the reasons for such variations. The contractor shall take further action as per written instruction of the employer (appropriate authority).

The contractor shall, when he is not personally present on the site of work, invariably place and keep on such site a properly qualified agent, duly authorized and empowered to act on his behalf and receive on his behalf orders and instructions from the employer or his representative related to such work. The contractor shall furnish the name, designation of the agent. Any change in the agent to be suitably informed to the employer in written.

All notices, communications, references and complaints issued by employer or his representative or contractors shall be treated valid, if it is in writing.

The work as per defined specification and quality standard shall be completed within the time specified in the order or within extended time subsequently communicated to the contractor in writing.

- a) If there be any amount of extra additional work of any kind or other special circumstances of any kind whatsoever which may occur be such as fairly entitle the contractor to an extension of time for completion of work, the contractor shall make a request letter to the employer detailing the situation within 15 days of such work has been commenced or such circumstances have arisen. The employer/ his representative will analyze and decide the amount of such extension and issue extension of time in writing.
- b) If the contractor fails to complete the work within the time prescribed or within extended time, the contractor shall be liable to pay the employer a Liquidated Damage (LD) at the rate of 0.5 % of the value of unfinished part of the work per delayed week maximum up to 10 % of the total project Contract value. Or depending on the work it can be specifically defined in the work order/ acceptance of the tender. The employer may without prejudice to any other mode of recovery deduct the amount of such damages from any money in his hand due or which may become due to the contractor. The payment or deduction of such damages shall not relieve the contractor of his obligation to complete the works or of any other obligations and liabilities under the contract.
- c) If the employer feels that the contractor in spite of imposition of LD may further delay the completion of work, the employer shall have the right to terminate the contract and forfeit the security deposit to the extent of 10% of the assignment value towards LD.



- d) No land/ building belonging to or in possession of the employer shall be occupied by the contractor without permission of the employer. The contractor shall not use or permit use of the site for any purposes other than that for executing assigned work. Land/ building rent, unless otherwise stipulated, shall be payable by the contractor.
- e) In consequence to any difficulty in obtaining materials, the employer may, without any liability therefore, agree to endeavor to obtain or assist the contractor in obtaining the required quantities of such material. But if there be any delay or failure in obtaining the aforesaid materials of required quantities thereof, this will not relieve the contractor from his obligation to complete the assigned work as per the quality, quantity and time schedule.
- f) If, at any time, any material, which the contractor would normally have to arrange himself, is supplied by the employer, either at the contractor's request or in view of avoiding possible delay, the recovery of cost of such material shall be made from contractor's bill at actual rate or at market price (calculated on landed basis, whichever is higher) along with interest rate of 10% per annum.
- g) All the assistance extended to the contractor in the form of land, building, machinery, equipment, water, and power, etc. to be utilized economically and in proper manner. After completion of the work these shall be handed over by the contractor in good/ working condition to the respective authorities.
- h) The contractor shall not sell, or otherwise dispose off, or remove except for the purpose of work any material which may be obtained as a result of excavation. All such items shall be the property of the employer.
- i) The contractor shall indemnify and keep indemnified the employer for all losses and claims for injures or damages to any person or property whatsoever which may arise out of or in consequence of the construction and maintenance of the works and against all claims demands proceeding damages costs charges and expenses whatsoever in respect thereof or relation thereto.
- j) If any bribe, commission, gift or reward is given, promised or offered or attempted to be given by or on behalf of the contractor or his partner, agent or servant or by any other person on his behalf to any officer or employee of the employer or to any other person on his behalf for obtaining the contract or any other contract from the employer or for any other favour, without prejudice to any legal proceedings which may be instituted against the contractor in a court of law, it shall be open to the employer to rescind the contract and all other contracts which the contractor has entered into with the employer and to deduct any money due to the contractor under the contract or any other contract with the employer any loss or damage to the employer resulting from such rescission.
- k) The contractor shall not lend, or borrow from, or have any pecuniary dealings or transactions either directly or indirectly with any employee of the employer, and if the employer has reasons to believe that the contractor has contravened the provision of this sub-clause the employer shall be entitled forthwith to rescind the contract and all other contracts with employer.



**Chapters of Main Contract Terms and Conditions**

<b>Sl no.</b>	<b>Chapter Description</b>	<b>Chapter No.</b>
1.	Chapter I	General Terms & Conditions of Contract
2.	Chapter II	General Technical Condition
3.	Chapter III	Erection Conditions of Contract
4.	Chapter IV	Safety Code



**CHAPTER I GENERAL TERMS AND CONDITIONS OF CONTRACT**

**1. DEFINITIONS:**

- i. The word "Company" or "Employer" or "Owner" wherever occurs in the conditions, means Heavy Engineering Corporation Limited having Client as NCL
- ii. The word "Principal Employer" or "Engineer" wherever occurs, means the authorized representative or any other officer specially deputed by HEC for the purpose of contract.
- iii. The word "Contractor"/"Contractors" or "Manufacturer" wherever occurs means the successful Bidder/Bidders who has/have deposited the necessary Earnest Money and has/have been given written intimation about the acceptance of tender and shall include legal representative of such individual or persons composing a firm or a company or the successors and permitted assignees of such individual, firm or company, as the case may be.
- iv. "The Site" shall mean site of the contract work including land and any building and erections thereon and any other land allotted by the company for contractor's use in the performance of the contract.
- v. The term "sub-contractor", as employed herein, includes those having a direct contract with contractor either on piece rate, items rate, time rate or on any other basis and it includes one who furnishes work to a special design according to the plans or specifications of this work but does not include one who merely supplied materials. vi. "Consulting Engineer"/"Consultant" shall mean any firm or person duly appointed as such from time to time by the owner.
- vi. 'Accepting authority' shall mean the management of the company and includes an authorised representative of the company or any other person or body of persons empowered in this behalf by the company.
- vii. A 'Day' shall mean a day of 24 hours from midnight to midnight.
- viii. Site In-Charge as authorized/deputed by Owner Company will be the Engineer-in-Charge of this work and will be responsible for supervising and administering the contract, certifying payment due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. Site In-Charge as authorized/deputed by Owner Company /Engineer-in-Charge may further appoint his representatives and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under the Delegation of Powers of the company. However, overall responsibility, as far as the contract is concerned will be that of the Engineer-in-charge/Designated Officer-in-charge.
- ix. The 'contract' shall mean the notice inviting tender, the tender as accepted by the Principal Employer and the formal agreement executed between the company and the contractor together with the documents referred to therein including conditions of contract, special conditions, if any, specifications, designs & drawings including those to be submitted during progress of work, scope of work, Price schedule/schedule of quantities with rates and amounts. Until the formal agreement is signed between the Owner and Contractor, LOA/Work Order together with Contract Document, shall constitute the Contract.
- x. The 'contract' shall mean the notice inviting tender, the tender as accepted by the company and the formal agreement executed between the company and the contractor together with the documents



referred to therein including conditions of contract, special conditions, if any, specifications, designs & drawings including those to be submitted during progress of work, scope of work, Price schedule/schedule of quantities with rates and amounts. Until the formal agreement is signed between the Owner and Contractor, LOA/Work Order together with Contract Document, shall constitute the Contract.

- xi. The 'works' shall mean and include the furnishing of Structure , labour, and the services in accordance with the contract or parts thereof as the case may be and shall also include all extra or additional, altered or substituted works or any work of emergent nature, which in the opinion of the Engineer-incharge, become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.
- xii. "Specification" shall mean the technical specifications forming a part of the contract and such other schedules and drawings as may be mutually agreed upon.
- xiii. 'Contract price' shall mean the total sum for which tender is accepted by the company.
- xiv. 'Written notice' shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an office of the Corporation/Company for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.
- xv. "Letter of Acceptance" of the tender shall mean the official notice issued by the company notifying the contractor that his tender has been accepted.
- xvi. "Date of Contract" shall mean the date on which both the parties have signed the contract agreement.
- xvii. "Manufacturer's Works' or Contractor's Works" shall mean the place of work used by the Manufacturer, the Contractor, their collaborators or sub-contractors for the performance of the works.
- xviii. "Inspector" shall mean the Owner or any person nominated by the Owner from time to time, to inspect the equipment stores or Works under the contract and/or the duly authorised representative of the owner.
- xix. When the words "Approved", "Subject to Approval", "Satisfactory", "Equal to", "Proper", "Requested", "As directed", "Where directed", "When directed", "Determined by", "Accepted", "Permitted", or words and phrases of like import are used, the approval, judgment, direction etc. is understood to be a function of the Owner/Engineer/Engineer-in-Charge.
- xx. "Final Acceptance" shall mean the owner's written acceptance of the works performed under the contract, after successful completion of performance.
- xxi. "Drawings"/"Plans" shall mean all :
  - (a) Drawings furnished by the owner/consultant as a basis for proposals,
  - (b) Supplementary drawings furnished by the Owner/Consultant to clarify and to define in greater detail the intent of the contract,
  - (c) Drawings submitted by the contractor with his proposal provided such drawings are acceptable to the Owner/Consultant,
  - (d) drawings furnished by the Owner/Consultant to the Contractor during the progress of the work, and
  - (e) engineering data and drawings submitted by the Contractor during the progress of the work provided such drawings are acceptable to the Engineer,

- xxix. "Codes" shall mean the following, including the latest amendments, and/or replacements, if any:
- (a) Standards of Bureau of Indian Standards relevant to the works under the contract and their specifications.
  - (b) Other Internationally approved Standards and/or rules and regulations touching the subject matter of the contract.
    - (i) A.S.M.E. Test codes.
    - (ii) A.I.E.E. Test codes.
    - (iii) American Society of Materials Testing Codes.
    - (iv) Indian Electricity Act and Rules and Regulations made thereunder.
    - (v) Indian Explosive Act and Rules and Regulations made thereunder.
    - (vi) Indian Petroleum Act and Rules and Regulations made thereunder.
    - (vii) Indian Mines Act and Rules and Regulations made thereunder.
  - (c) Any other laws, rules, regulations and Acts applicable in the country with respect to labour, safety, compensation, insurance etc.
- xxx. Words importing singular only shall also include the plural and vice-versa where the context so requires. Words importing "Person" shall include firms, companies, corporations, and associations or bodies of individuals, whether incorporated or not.
- xxxi. Terms and expressions, not defined herein, shall have the same meaning as are assigned to them in the Indian Sale of Goods Act, failing that in the Indian Contract Act, and failing that in the General Clauses Act.
- xxxii. "Government Approvals" shall mean all permits, licenses, authorizations, consents, clearances, decrees, waivers, privileges, approvals from and filing with government instrumentalities necessary for the development, construction and operation of the plant/project.
- xxxiii. "Month" shall mean a calendar month according to the Gregorian calendar.
- xxxiv. "Bank Guarantee" shall mean the Bank Guarantee to be provided by Contractor against instant NIT.

**2. CONTRACT DOCUMENTS:**

The following documents shall constitute the contract documents:

- (i) Articles of Agreement,
  - (ii) Notice Inviting Tender,
  - (iii) Letter of Acceptance of LOA (Letter of Award).
  - (iv) Letter of Acceptance of Work Order.
  - (v) Specifications, where it is part of Tender Documents,
  - (vi) Scope of works/ Bills of quantities/ Schedule of works/ quantities and
  - (vii) Contract Drawings/finalized work programme.
- 2.1 The Contractor shall enter into a Contract Agreement with the Owner within 15 (Fifteen) days from the date of 'Acceptance of LOA/Work Order'. The performance Bank Guarantee for the proper fulfillment of



the contract shall be furnished by the contractor in the prescribed form within ten (10) days of 'Acceptance of LOA/Work Order'.

- 2.2 The agreement will be signed in two originals and the contractor shall be provided with one signed original.
- 2.3 The contract shall be considered as having come into force from the date of the letter of acceptance of LOA/Work Order issued by the owner.
- 2.4 The laws applicable to this contract shall be the laws in force in India. The courts of Jharkhand, India shall have exclusive jurisdiction in all matters arising under this contract.

**3.0 CONTRACT PERFORMANCE GUARANTEE/ SECURITY DEPOSIT:**

**3.1 Security Deposit** shall consist of two parts:

- a) Performance Security for 5% of Contract amount to be submitted at award of work and
  - b) Retention Money for 5% of Contract amount to be recovered from running bills. The security deposit shall bear no interest.
- 3.1.1 Performance Security should be 5% of contract amount and should be submitted by the successful bidder within 10 days of issue of LOA/Work Order in the form of Bank Guarantee given in the bid document from any schedule bank acceptable to the owner. The Earnest Money/ Bid Security deposited may be adjusted against the Performance security at bidder's Option.
- 3.1.2 If performance security is provided by the successful bidder in the form of bank guarantee it shall be issued either -
- (a) at Bidder's option by a Scheduled Bank as per provisions of cl.3. above. The BG shall contain complete postal address, telephone number, fax number and email address of both out station bank issuing the BG as well as its local operating branch.
- 3.1.3 Retention Money should be deducted at 5% from running bills. Total of performance security and Retention Money should not exceed 10% of contract amount or lesser sum indicated in the bid document.
- Retention Money may be released against equivalent Bank Guarantee.
- 3.2** The Guarantee amount shall be payable to the Employer without any condition whatsoever.
- 3.3** Performance Security / Retention Money shall be converted into Performance Guarantee on successful completion of work in accordance with contract Performance security/ Retention Money/ security deposit submitted in the form of BG which shall be valid for 90 days after the end date of scheduled completion and to be extended for minimum period of 1(one) year in one instance which must cover the time period of 90 days beyond completion of 12 calendar month from completion of work as per TS of NIT.
- 3.4** The Company shall be at liberty to deduct/appropriate from the Contract Performance Guarantee/Security Deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract, and the amount appropriated from the Contract Performance Guarantee/Security Deposit shall have to be restored by Contractor subsequently.
- 3.5** Performance Security deposit shall be returned to the Contractor after successful completion of 12



# HEAVY ENGINEERING CORPORATION LIMITED

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calendar months from completion of work as per TS of NIT without any interest after certification from Site I/c Block B against no defect. The balance SD i.e. Retention Money shall be released without any interest after successful completion of entire period of the 12 calendar month from completion of work as per TS of NIT. Any defect/defects in the work, if detected during 12 calendar month from completion of work as per TS of NIT shall be rectified and shall be replaced to the satisfaction of the Engineer/ Site In-charge.

Note:-

(i) The Bank Guarantee issued by a scheduled bank shall be operative at its branch situated at Ranchi (Jharkhand) or if the issuing bank does not have any branch at Ranchi then Bank Guarantee shall be operative at any of its Kolkata Branch.

(ii) The Bank Guarantee (BG) issued by the issuing Bank on behalf of contractor in favour of "Heavy Engineering Corporation Limited" shall be in paper form as well as issued under "Structured Financial Messaging System (SFMS)".

The details of beneficiary for issue of Bank Guarantee (BG) under SFMS platform is furnished below:  
A. State Bank of India as advising Bank of HEC:

1	Name of the Beneficiary and his details	i	Name	Heavy Engineering Corporation Limited
		ii	Area	Ranchi
		iii	Name of Bank	State Bank of India
		iv	Bank Account No.	30073880917
		v	Swift No.	SBININBB387
2	Beneficiary Bank Branch and Address	i	Name of Bank	State Bank of India
		ii	Bank Branch name	SME Branch, MECON Campus
		iii	Branch code	09620
		iv	Beneficiary Bank Branch IFSC	SBIN0009620
		v	Beneficiary Bank Address	SME Branch, MECON Campus, Doranda-834002 (Jharkhand)

Failure of the successful bidder to comply with the requirement as above shall constitute sufficient ground for cancellation of the award of work and forfeiture of the bid security/ earnest money.

In addition to the above penal measures, the bidder will not be allowed to participate in the re-tendering process. The bidder may also be debarred from participating in future tenders in the subsidiary for a minimum period of 12 Months.

#### 4.0 ASSIGNMENT AND SUBLETTING OF CONTRACT:

4.1 The contractor may, after informing the SITE I/c Block B/ designated officer Site In charge, with proper justification for acceptance, assign or sub-let the contract or any part thereof other than for raw materials, for minor detail or any part of the plant for which makes are identified in the contract document.





Suppliers of the equipment/system not identified in the contract document or any change in the identified supplier mentioned in the contract document can be changed and same may be informed to engineer in charge/ designated officer in charge, with proper justification for acceptance. The experience list of the equipment/system vendors under consideration by the contractor for this contract over the list mentioned in the contract document shall be furnished to the engineer in charge/ designated officer in charge prior to procurement of all such items/ equipment. Such assignment of sub-letting shall not relieve the contractor from any obligation, duty or responsibility under the contract. Any assignment as above without prior information of engineer shall be void.

- 4.2** For components/equipments procured by the contractors for the purposes of the contract, after obtaining the written approval of the owner, the contractor's purchase specifications and enquiries shall call for quality plans to be submitted by the suppliers along with their proposals. The quality plans called for from the vendors shall set out, during the various stages of manufacture and installation, the quality practices and procedures followed by the vendor's quality control organisation, the relevant reference documents/standards used, acceptance level, inspection documentation raised, etc. Such quality plans of the successful vendor shall be discussed and finalised in consultation with the engineer and shall form a part of the purchase order/contract between the contractor and the vendor. Within 3 weeks of the release of the same purchase order/contracts for such bought out items/ components, a copy of the same without price details but together with detailed purchase specifications, quality plans and delivery conditions shall be furnished to the engineer by the contractor.

**5.0 TIME - THE ESSENCE OF CONTRACT:**

- 5.1** The date of commencement shall be the issue of Work Order. Total time period for completing total scope of work described in TS will be 9 months after issue of Work Order.
- 5.2** The contractor shall submit a detailed PERT network within the time frame agreed above consisting of adequate number of activities covering various key phases of the works such as procurement, shipment and field activities within fifteen (15) days after the date of acceptance of LOA/Work Order. This network shall also indicate the interface facilities to be provided by the owner and the dates by which such facilities are needed.
- 5.3** The above PERT network shall be reviewed and periodic review reports shall be submitted by the contractor as directed by the engineer.

**6.0 CONTRACT PRICE:**

- 6.1** The prices quoted by the contractor as per BOQ (Bill of Quantity) in Price Bid (BOQ.xls) for the entire scope of the work including those covered under the Technical specifications and documents and shall be treated as the contract price.

**7.0 DEDUCTIONS FROM CONTRACT PRICE:**

- 7.1** All costs, damages or expenses which the owner may have paid, for which under the contract the contractor is liable, will be claimed by the owner. All such claims shall be billed by the owner to the



contractor regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the contractor to properly identify such claims. Such claims shall be paid by the contractor within fifteen (15) days of the receipt of the corresponding bills and if not paid by the contractor within the said period, the owner may then deduct the amount, from any moneys due or becoming due by him to the contractor under the contract or may be recovered by actions of law or otherwise, if the contractor fails to satisfy the owner of such claims.

**8.0 PACKING, FORWARDING AND SHIPMENT:**

**8.1** The contractor, wherever applicable, shall after proper painting, pack and crate all equipment in such a manner as to protect them from deterioration and damage during rail and road transportation to the site and storage at the site till the time of erection/ field work. The contractor shall be held responsible for all damages due to improper workman ship.

**9.0 DEMURRAGE, WHARFAGE, ETC.:**

**9.1** All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the contractor.

**9.0 INSURANCE:**

HEC will take insurance (Marine-cum-storage-cum Erection Insurance Policy and Worker's Compensation Insurance) for entire work in their name as per the agreement between HEC and NCL. All statutory documents required for logging claim shall be furnished by the bidder. Any such claim logged by the bidder shall be passed on the Insurance Company by HEC and the claim as will be settled by the Insurance Company shall be passed to successful bidder.

**9.1** In order to adequately cover the works under such composite and comprehensive insurance, the Contractor shall fulfill the necessary requirements / obligations.

**9.2** The Contractor shall arrange Accident Insurance Policy for all his personnel including Specialists / Personnel deputed to site and Contractor's / his sub-contractors' manufacturing works as well as for his Indian engineers & supervisory staff. The Contractor shall also take out for his Indian workmen a separate policy as per Workmen's Compensation Act.

**9.3** In all cases, the Contractor shall lodge the claims with the Underwriters and also settle the claims. All claims shall be settled in India However, the Contractor shall proceed with the repairs and / or replacement of the equipment / components without waiting for the settlement of the claims. In case of seizure of materials by concerned authorities, the Contractor shall arrange prompt release against bond, security or cash as required. Employer will extend all assistance to the Contractor in such a case. Upon completion of replacement/ repair, the claim amount received from Insurance Company, if any by the Employer shall be refunded to the Contractor.



- 9.4 All the insurance claims shall be processed by the Contractor and the items which are missing / damaged in transit or during handling, storage, erection and during successful completion of work as per TS, shall be replaced / repaired by them without any extra cost to the Employer.
- 9.5 The employer at its discretion may arrange for the insurance cover at its own expense. In such an event, the amount quoted towards 'Comprehensive/ Transit, Storage cum erection insurance' in 'Summary Price Schedule', shall not be payable to the contractor. However, processing of all the insurance claims shall be the responsibility of the contractor. Also, the Contractor shall perform all the obligations as mentioned in sub-clauses above.

**10.0 LIABILITY FOR ACCIDENTS AND DAMAGES:**

- 10.1 Under the contract, the contractor shall be responsible for loss or damage to the plant until the plant is taken over in accordance with clause entitled 'Taking Over' in section technical terms and conditions of contract of this volume.

**11.0 LIQUIDATED DAMAGES FOR DELAY IN COMPLETION:**

- 11.1 If the contractor fails to maintain the required progress in terms of the agreed time and progress chart or to complete the work and clear the site on or before the date of completion of contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation/ Liquidated Damages @ half percent (1/2%) of the contract price per week of delay. The aggregate of such compensation/ compensations shall not exceed 10 (ten) percent of the total value as shown in the contract.

This will also apply to items or group of items for which separate period of completion has been specified. The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with the company.

- 11.1.1 The company, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent of the contract value of the works for each week or part of the week subject to a ceiling of 10% of the contract price.
- 11.1.2 The company, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.
- 11.1.3 The company, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
- 11.1.4 In the event of such termination of the contract as described in clauses 11.1.2 or 11.1.3 or both, the



company, shall be entitled to recover L.D. upto ten percent (10%) of the contract value besides recovery of compensation for damage/loss for termination as provided in Clause 16 of General Terms and Conditions of Contract.

- 11.2 The company may waive the payment of compensation, depending upon merit of the case, on request received from the contractor if the entire work is completed within the date as specified in the contract or as validly extended without stipulating any penalty.

**12.0 CONTRACTOR'S DEFAULT:**

- 12.1 If the contractor shall neglect to execute the works with the diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him, in writing by the engineer in connection with the works or shall contravene the provisions of the contract, the owner may give notice in writing to the contractor to make good the failure, neglect or contravention complained of. Should the contractor fail to comply with the notice within thirty (30) days from the date of service thereof, then and in such case the owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the contractor may have neglected to do or if the owner shall think fit, it shall be lawful for him, without prejudice to any other right he may have under the contract, to take the works wholly or in part thereof and in that event the owner shall have free use of all contractor's equipment that may have been at the time on the site in connection with the works without being responsible to the contractor for fair wear and tear thereof and to the exclusion of any right of the contractor over the same, and the owner shall be entitled to retain and apply any balance which may otherwise be due on the contract by him to the contractor, or such part thereof as may be necessary, the payment of the cost of executing the said part of the works or of completing the works as the case may be. If the cost of completing the works or executing a part thereof as aforesaid shall exceed the balance due to the contractor, the contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the contractor shall have to pay if the completion of works is delayed.

- 12.2 In addition, such action by the owner as aforesaid shall not relieve the contractor of his liability to pay liquidated damages for delay in completion of works as defined in clause 15.0 of this section.

- 12.3 The termination of the contract under this clause shall not entitle the contractor to reduce the value of the performance bank guarantee nor the time thereof. The performance guarantee shall be valid for the full value and for the full period of the contract including guarantee period.

- 12.4 The bidding documents will clearly state that, if the contractor fails to complete the work and the order is cancelled, the amount due to him on account of work executed by him, if payable, shall be paid to him only after due recoveries as per the provisions of the contract and that too after alternative arrangements to complete the work has been made.

**13.0 FORCE MAJEURE:**

- 13.1 Force majeure is herein defined as any cause which is beyond the control of the contractor or the owner as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:



- (a) natural phenomena, including but not limited to floods, draughts, earthquakes and epidemics:
- (b) acts of any government, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes,

Provided either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.

**13.2** (a) The successful bidder/ contractor will advise, in the event of his having resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the clause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition . In the event of delay lasting over two months, if arising out of Force Majeure, the contract may be terminated at the discretion of the company.

(b) For delays arising out of Force Majeure, the bidder/ contractor will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither company nor the bidder shall be liable to pay extra costs (like increase in rates, remobilisation advance, idle charges for labour and machinery etc.) Provided it is mutually established that the Force Majeure conditions did actually exist.

(c) If any of the Force Majeure conditions exists in the place of operation of the bidder even at the time of submission of bid he will categorically specify them in his bid and state whether they have been taken into consideration in their quotations.

**13.3** The contractor or the owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above. The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after contractor's performance of his obligations has been delayed for other causes.

**14.0 DELAYS BY OWNER OR HIS AUTHORISED AGENT:**

**14.1** In case the contractor's performance is delayed due to any act of omission on the part of the owner or his authorised agents, then the contractor shall be given due extension of time for the completion of the works, to the extent such omission on the part of the owner has caused delay in the contractor's performance of his work. Regarding reasonableness or otherwise of the extension of time, the decision of the engineer shall be final.

**15.0 EXTENSION OF DATE OF COMPLETION:**

**15.1** On happening of any events causing delay as stated hereinafter, the contractor shall intimate immediately in writing the Site I/c Block B/Authorized Engineer:

- a. due to any reasons defined as Force Majeure.
- b. non-availability of stores which are the responsibility of the owner to supply
- c. non-availability or breakdown of tools and plant to be made available or made available by the owner
- d. delay on the part of the contractors or tradesmen engaged by the owner not forming part of the



- contract, holding up further progress of the work
- e. non-availability of working drawings/work programme in time, which are to be made available by the company during progress of the work
  - f. any other causes which, at the sole discretion of the company is beyond the control of the contractor.
- 15.2** A "Hindrance Register" shall be maintained by both the Company and the Contractor at site to record the various hindrances, as mentioned above, encountered during the course of execution.
- 15.3** The contractor may request the company in writing for extension of time within 14 days of happening of such event causing delay stating also, if practicable, the period for which extension is desired. The company may, considering the eligibility of the request, give a fair and reasonable extension of time for completion of the work. Such extension shall be communicated to the contractor in writing by the company through the Site I/c Block B/Authorized Engineer within 1 month of the date of receipt of such request. The contractor shall however use his best efforts to prevent or make good the delay by putting his endeavors constantly as may be reasonably required of him to the satisfaction of the Engineer-in-charge.
- 15.4** Provisional extension of time may also be granted by the Site I/c Block B/Authorized Engineer during the course of execution, on written request for extension of time within 15 (fifteen) days of happening of such events as stated above, reserving the company's right to impose/ waive liquidated damages at the time of granting final extension of time as per contract agreement.
- 15.5** When the period fixed for the completion of the contract is about to expire, the question of extension of the contract may be considered at the instance of the Contractor or the Company or the both. The extension will have to be by party's agreement, expressed or implied.
- 15.6** In case the Contractor does not apply for grant of extension of time within 15 (fifteen) days of hindrance occurring in execution of the work and the Company wants to continue with the work beyond the stipulated date of completion for reason of the work having been hindered, the Site I/c Block B/Authorized Engineer at his sole discretion can grant provisional extension of time even in the absence of application from the Contractor. Such extension of time granted by the Site I/c Block B/Authorized Engineer is valid provided the Contractor accepts the same either expressly or implied by his actions before and subsequent to the date of completion. Such extension of time shall be without prejudice to Company's right to levy compensation under the relevant clause of contract.
- 16.0** **TERMINATION, SUSPENSION, CANCELLATION & FORECLOSURE OF CONTRACT:**
- 16.1** The owner shall, in addition to other remedial steps to be taken as provided in the conditions of contract, be entitled to cancel the contract in full or in part, if the contractor :
- a. makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-in-charge, then on the expiry of the period as specified in the notice
- or
- b. commits default/breach in complying with any of the terms and conditions of the contract and does



not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-in-charge, then on the expiry of the period as may be specified by the Engineer-in-charge in a notice in writing

or

- c. fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the company, then on the expiry of the period as may be specified by the Engineer in-charge in a notice in writing.

Or

- d. shall offer or give or agree to give any person in the service of the company or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other contract for the company.

Or

- e. Shall try to obtain a contract with the company by way of of ring tendering or other non- bonafide method of competitive tendering.

Or

- f. transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Engineer-in-charge. The Engineer-in-charge may by giving a written notice, cancel the whole contract or portion of it in default.

**16.2** The owner shall in such an event give fifteen (15) days notice in writing to the contractor of his decision to do so.

**16.3** The contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to the work terminated and terms satisfactory to the owner, stop all further subcontracting or purchasing activity related to the work terminated, and assist the owner in maintenance, protection, and disposition of the works acquired under the contract by the owner.

**16.4** The contract shall stand terminated under the following circumstances unless the owner is satisfied that the legal representatives of the individual contractor or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the contract and the owner shall in any way not be liable to payment of any compensation to the estate of deceased contractor and/or to the surviving partners of the contractor's firm on account of the termination of the contract.:

- a. If the contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of insolvency act for the time being in force, or makes any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any insolvency act.
- b. In the case of the contractor being a company, its affairs are under liquidation either by a resolution passed by the company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganisation, or a receiver or manager is appointed by the court on the



application by the debenture holders of the company, if any.

- c. If the contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21 days.
  - d. On the death of the contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the company is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the contract. The decision of the company in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.
- 16.5** If the contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the contractor is a partnership concern and one of the partners dies, then unless the owner is satisfied that the legal representatives of the individual contractor or of the proprietor of the proprietary concern and in the case of partnership the surviving partners, are capable of carrying out and completing the contract the owner shall be entitled to cancel the contract as to its incomplete part without being in any way liable to payment of any compensation to the estate of deceased contractor and/or to the surviving partners of the contractor's firm on account of the cancellation of the contract.

The decision of the owner that the legal representatives of the deceased contractor or surviving partners of the contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the owner shall not hold the estate of the deceased contractor and/or the surviving partners of the estate of the deceased contractor and/or the surviving partners of the contractor's firm liable to damages for not completing the contract.

- 16.6** On cancellation of the contract or on termination of the contract, the Engineer-in-charge shall have powers
- a. To take possession of the site and any materials, constructional plant, implements, stores, etc. thereon.
  - b. In such an event, the contractor shall be liable for loss/damage suffered by the employer because of action under this clause and to compensate for this loss or damage, the employer shall be entitled to recover higher of the following:
    - I. Forfeiture of security deposit comprising of performance guarantee and retention money and additional performance security, if any, at the disposal of the employer.
    - or
    - II. 20% of values of incomplete work (Contract Value minus already executed value of the work).
- The amount to be recovered from the contractor as determined above, shall, without prejudice to any other right or remedy available to the employer as per law or as per agreement, will be recovered from any money due to the contractor on any account or under any other contract and in the event of any shortfall, the contractor shall be liable to pay the same within 30 days. In case of failure to pay the same the amount shall be debt payable.

In the event of above course being adopted by the Engineer-in-charge, the contractor shall have no





claim to compensation for any loss sustained by him by reasons of his having purchased materials, equipment or entered into agreement or made advances on any account or with a view to the execution of work or performance of the contract. And in case action is taken under any of provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum for any work thereof or actually performed under this contract unless and until the engineer-in-charge has certified in writing the performance of such work and value payable in respect thereof and he shall only be entitled to be paid the value so certified.

The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the company shall not however arise in the case of termination of the contract for death/demise of the contractor.

- 16.7** Suspension of work - The company shall have power to suspend the progress of the work or any part thereof and the Engineer-in-charge may direct the contractor in writing to suspend the work, for such period and in such manner as may be specified therein, on account of any default on the part of the contractor, or for proper execution of the work for reasons other than any default on the part of the contractor, or on ground of safety of the work or part thereof. In the event of suspension for reason other than any default on the part of the contractor, extension of time shall be allowed by the company equal to the period of such suspension. Any necessary and demonstrable costs incurred by the contractor as a result of such suspension of the works will be paid by the owner, provided such costs are substantiated to the satisfaction of the engineer. The owner shall not be responsible for any liabilities if suspension or delay is due to some default on the part of the contractor or his sub- contractor.

The work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor. In the event of termination or suspension of the contract, on account of default on the part of the contractor, as narrated hereinbefore, the security deposit and other dues of this work or any other work done under this company shall be forfeited and brought under the absolute disposal of the company provided, that the amount so forfeited shall not exceed 10% of the contract value

- 16.8** Foreclosure of contract in full or in part - If at any time after acceptance of the tender, the company decides to abandon or reduce the scope of the work for any reason whatsoever the company, through its Engineer-in-charge, shall give notice in writing to that effect to the contractor. In the event of abandonment/reduction in the scope of work, the company shall be liable
- a. to pay the contractor at the contract rates full amount for works executed and measured at site upto the date of such abandonment/reduction in the work.
  - b. to pay reasonable amount assessed and certified by the Engineer-in-charge of the expenditure incurred, if any, by the contractor on preliminary works at site. e.g. temporary access roads, temporary construction for labour and staff quarters, office accommodation, storage of materials, water storage tanks and supply for the work including supply to labour/staff quarters, office, etc.
  - c. to pay for the materials brought to site or to be delivered at site, which the contractor is legally liable to pay, for the purpose of consumption in works carried out or were to be carried out but for the foreclosure, including the cost of purchase and transportation and cost of delivery of such materials. The materials to be taken over by the company should be in good condition and the company may



allow at its discretion the contractor to retain the materials in full or part if so desired by him and to be transported by the contractor from site to his place.

- d. to take back the materials issued by the company but remaining unused, if any, in the work on the date of abandonment/reduction in the work, at the original issued price less allowance for any deterioration or damage caused while in custody of the contractor
- e. to pay for the transportation of tools and plants of the contractor from site to contractor's place or to any other destination, whichever is less. The contractor shall, if required by the Engineer-in-charge, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Engineer-in-charge to assess the amount payable in terms of para 16.8 (b), (c) and (e) above, the contractor shall not have any claim for compensation whatsoever either for abandonment or for reduction in the scope of work, other than those as specified above.

**17.0 NO WAIVER OF RIGHTS:**

Neither the inspection by the owner or the engineer or any of their officials, employees or agents nor any order by the owner or the engineer for payment of money or any payment for or acceptance of, the whole or any part of the works by the owner or the engineer, nor any extension of time, nor any possession taken by the engineer shall operate as a waiver of any provision of the contract, or of any power herein reserved to the owner, or any right to damages herein provided, nor shall any waiver of any breach in the contract be held to be a waiver of any other or subsequent breach.

**18.0 CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF CONTRACTOR:**

No interim payment certificate of the engineer, nor any sum paid on account, by the owner, nor any extension of time for execution of the works granted by the engineer shall affect or prejudice the rights of the owner against the contractor or relieve the contractor of his obligations for the due performance of the contract, or be interpreted as approval of the works done or of the equipment furnished and no certificate shall create liability for the owner to pay for alterations, amendments, variations or additional works not ordered, in writing, by the engineer or discharge the liability of the contractor for the payment of damages whether due, ascertained, or certified or not, or any sum against the payment of which he is bound to indemnify the owner, nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the contractor against the owner

**19.0 GRAFTS AND COMMISSIONS ETC.:**

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one of his or their behalf in relation to the obtaining or to the execution of this or any other contract with the owner, shall, in addition to any criminal liability which it may incur, subject the contractor to the cancellation of this and all other contracts and also to payment of any loss or damage to the owner resulting from any cancellation. The owner shall then be entitled to deduct the amount so payable from any moneys otherwise due to the contractor under the contract.



**20.0 LANGUAGE AND MEASURES:**

All documents pertaining to the contract including specifications, schedules notices, correspondence, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in the contract.

**21.0 RELEASE OF INFORMATION:**

The contractor shall not communicate or use in advertising, publicity, sales releases or in any other medium photographs or other reproduction of the works under this contract, or descriptions of the site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the owner.

**22.0 CONSTRUCTION OF THE CONTRACT:**

**22.1** The contract shall in all respects be construed and governed accordingly to Indian Laws.

**22.2** It is clearly understood that the total consideration for the contract (s) has been broken up into various components only for the convenience of payment of advance under the contract (s) and for the measurement of deviations or modifications under the contract (s).

**23.0 COMPLETION OF CONTRACT:**

Unless otherwise terminated under the provisions of any other relevant clause, this contract shall be deemed to have been completed at the expiration of the guarantee period as provided for under the clause entitled 'Guarantee' in this section.

**24.0 ENFORCEMENT OF TERMS:**

The failure of either party to enforce at any time of the provisions of this contract or any rights in respect thereto or to exercise any option herein provided, shall in no way be construed to be a waiver of such provisions, rights or options or in any way to affect the validity of the contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have hereunder.

**25.0 SITE IN-CHARGE/ ENGINEER'S DECISION:**

**25.1** In respect of all matters which are left to the decision of the engineer including the granting or withholding of the certificates, the engineer shall, if required to do so by the contractor give in writing a decision thereon.

**25.2** If in the opinion of the contractor, a decision made by the engineer is not in accordance with the meaning and intent of the contract, the contractor may file with the engineer within fifteen (15) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as acceptance of the engineer's decision and the decision shall become final and binding.

**25.3** The engineer's decision and the filing of the written objection thereto shall be a condition precedent to



the right to any legal proceedings. It is the intent of the agreement that there shall be no delay in the execution of the works and the decision of the engineer as rendered shall be promptly observed.

**26.0 GUARANTEE/ DEFECT LIABILITY:**

**26.1** The contractor shall warrant in accordance with the contract documents and be free from defects in manufacture, construction and workmanship for a period of twelve calendar months (12) commencing immediately upon the satisfactory completion of work as per TS of NIT.

**27.0 DEFENCE OF SUITS:**

If any action in court is brought against the owner or engineer or an officer or agent of the owner. for the failure or neglect on the part of the contractor to perform any acts, matters, covenants or things under the contract, or for damage or injury caused by the alleged omission or negligence on the part of the contractor, his agents, representatives or his sub- contractors, workmen, suppliers or employees, the contractor shall in all such cases indemnify and keep the owner, and the engineer and/or his representative, harmless from all losses, damages, expenses or decrees arising of such action.

**28.0 LIMITATIONS OF LIABILITIES:**

The final payment by the owner in pursuance of the contract shall mean, the release of the contractor from all his liabilities under the contract. Such final payment shall be made only at the end of the guarantee period as detailed in clause 26 above and till such time as the contractual liabilities and responsibilities of the contractor, shall prevail. All other payments made under the contract shall be treated as on account payments.

**29.0 MARGINAL NOTES**

The marginal notes to any clause of the contract shall not affect or control the construction of such clause.

**30.0 TAXES, PERMITS & LICENCES:**

The contractor shall be liable and pay all- Indian taxes, [other than Goods and Services Tax (GST) and GST (Compensation to State) Cess if applicable] duties, levies, royalties, whether local, municipal, provincial or central, lawfully assessed against the owner or the contractor in pursuance of the contract. In addition, the contractor shall be responsible for payment of all Indian duties, levies and taxes lawfully assessed against the contractor for his personal income and property only.

The contractor, along with his bills, shall submit proper documents in the name of the Owner Company to enable the Owner Company to claim Input Tax Credit under the applicable laws. The invoice shall be in compliance with the relevant rules.

Owner Company is entitled to avail Input Tax Credit on account of: CGST, SGST/UTGST, IGST and GST (Compensation to State) Cess, as applicable for indigenous product/ imported products. Hence set off allowed against CGST, SGST/UTGST, IGST and GST (Compensation to State) Cess as per relevant rules/act.



Contractor shall submit relevant document as desired by HEC/NCL at the time of supply, along with the bills/invoice as per relevant rules for enabling Owner Company to claim Input tax credit benefit.

**31.0 PROGRESS REPORTS AND PHOTOGRAPHS:**

During the various stages of the works in the pursuance of the contract, the contractor shall at his own cost submit periodic progress reports as may be reasonably required by the engineer with such materials as charts, net-works, photographs, test certificates, etc. such progress report shall be in the form and size as may be required by the engineer and shall be submitted in at least three (3) copies.

**32.0 PAYMENT:**

**32.1** The payment to the contractor for the performance of the works under the contract will be made by the owner as per the guidelines and conditions specified herein. All payment made during the contract shall be on account payments only. The final payment will be made on completion of all the works and on fulfillment by the contractor of all his liabilities under the contract.

**32.2 Currency of payment**

All payments under the contract shall be in Indian Rupees only.

**32.3 Due dates for payment**

Owner will make progressive payment as and when the payment is due as per the terms of payment set forth in the accompanying technical specifications. Payment will become due and payable by the owner within thirty (30) days from the date of receipt of contractor's bill/invoice/debit note by the owner, provided the documents submitted are complete in all respects.

**32.5 Interim Payment**

**32.5.1** The contractor shall submit running bill for the payment in the prescribed proforma of the owner to be supplied in due course at the time of payment.

**32.5.2** Each such running bill shall state the amount claimed and shall set forth in detail, in the order of the payment schedule, particulars of the works including the works executed at site and of the Structure shipped/brought on to the site pursuant to the contract up to the date mentioned in the bill and for the period covered since the last preceding certificate, if any.

**32.5.3** Every interim payment claim shall indicate the contract value of the works executed up to the date mentioned in the running bill, provided that no sum shall be included in any running bill in respect of the works that, according to the decision of the engineer, does not comply with the contract, or has been performed, at the date of certificate prematurely.

**32.6 TERMS OF PAYMENTS:**

**32.6.1 Payment:** Since the total job is on BOQ basis, any payment to the Contractor before the final payment shall be treated as provisional payment towards the total contract value.

The Contractor may at intervals of not less than one month submit claims/ bills for payment on account of work done after proper scrutiny and certification of the same by the Employer. The Price schedule



shall be made in respect of the following:

- a) Civil construction including foundation and buildings
- b) Structural fabrication and erection

All such payments shall be made by the Employer online/ through RTGS/NEFT within a month from the date of the submission of claims/bills. Any sum due from the Contractor shall be deducted from the first or next subsequent on account of payments as the case may be, in general the following procedure of payment shall be followed:

**32.6.2 Civil/Structural Works:**

- a) 95% payment on progress of work completed, duly measured and certified by the Engineer/ Site- In charge.
- b) 5 % on issue of final completion certificate issued from Site I/c Block B of the instant work as per TS of NIT.

- Note-
- a. The Documents required to be submitted for 95% payment are- GST Invoice, GSTR1, Wage sheet, submission of PF & ESI, Proof of payment made to workers, Measurement sheet duly certified by Site In-Charge.
  - b. The Documents required to be submitted for 5% Payment on issue of Final Completion certificate, Supplementary Invoice, duly certified by Site I/c Block B.

**32.6.3 Final Bill:**

As soon as possible after completion of the works to the satisfaction of the Employer the Contractor shall forward a certified from Site I/c Block B as final bill. It shall be accompanied by all relevant documents. The Contractor shall be paid full and final payment only after deduction of amounts paid against on account bill and any other amount due etc. payable by Contractor.

In cases final Acceptance Test is not completed for reasons not attributable to the contractor, the payment which is to be released after Final Acceptance certificate will be released against equivalent amount of Bank Guarantee with validity up to actual completion (Initial BG validity should for 1(one) year and to be extended till actual completion of respective tests from time to time) of respective tests.

**33.0 SETTLEMENT OF DISPUTES:**

It is incumbent upon the contractor to avoid litigation and disputes during the course of execution. However, if such disputes take place between the contractor and the department, effort shall be made first to settle the disputes at the company level.

The contractor should make request in writing to the Engineer-in-charge for settlement of such disputes/ claims within 30 (thirty) days of arising of the cause of dispute/ claim failing which no disputes/ claims of the contractor shall be entertained by the company.



Effort shall be made to resolve the dispute in two stages. In first stage dispute shall be referred to Site In-Charge. If difference still persists the dispute shall be referred to a committee constituted by the owner. If differences still persist, the settlement of the dispute shall be resolve in the following manner:

Disputes relating to the commercial contracts with Central Public Sector Enterprises / Govt. Departments (except Railways, Income Tax, Customs & excise duties)/ State Public Sector Enterprises shall be referred by either party for Arbitration to the PMA (Permanent Machinery of Arbitration) in the department of Public Enterprises.

In case of parties other than Govt. Agencies, the redressal of the dispute may be sought through Arbitration (THE ARBITRATION AND CONCILIATION ACT, 1996 as amended by AMENDMENT ACT of 2015).

**33 A. SETTLEMENT OF DISPUTES THROUGH ARBITRATION:**

If the parties fail to resolve the disputes/differences by in house mechanism, then, depending on the position of the case, either the employer/owner or the contractor shall give notice to other party to refer the matter to arbitration instead of directly approaching Court. The contractor shall, however, be entitled to invoke arbitration clause only after exhausting the remedy available under the clause 33.

In case of parties other than Govt. agencies, the redressal of disputes/differences shall be sought through Sole Arbitration as under.

**Sole Arbitration:**

In the event of any question, dispute or difference arising under these terms & conditions or any condition contained in this contract or interpretation of the terms of, or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of a person, appointed to be the arbitrator by the Competent Authority. The award of the arbitrator shall be final and binding on the parties of this Contract.

(a) In the event of the Arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reason, or his/her award being set aside by the court for any reason, it shall be lawful for the Competent Authority to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid.

(b) It is further a term of this contract that no person other than the person appointed by the Competent Authority as aforesaid should act as arbitrator and that, if for any reason that is not possible, the matter is not to be referred to Arbitration at all.

Subject as aforesaid, Arbitration and Conciliation Act, 1996 as amended by Amendment Act of 2015, and the rules there under and any statutory modification thereof for the time being in force shall be deemed to apply to the Arbitration proceedings under this clause.

The venue of arbitration shall be the place from which the contract is issued i.e Ranchi- Jharkhand and the Competent Authority at his discretion may determine.



## HEAVY ENGINEERING CORPORATION LIMITED

### PROJECT DIVISION

Applicable Law: The contracts shall be interpreted in accordance with the laws of the Union of India.

Contracts with Partnership firm/Joint Venture:

The Partnership firm /Joint Venture is required to submit written consent of all the partners to above arbitration clause at the time of submission of bid.

34. The company reserves the right to deduct/withhold any amount towards taxes, levies, etc. and to deal with such amount in terms of the provisions of the Statute or in terms of the direction of any Statutory authority and the company shall only provide with certificate towards such deduction and shall not be responsible for any reason whatsoever.
35. E-WAY BILL: The e-way bill required in connection with supply of goods or services, if any, shall be arranged by the contractor/supplier. However, the e-way bill will be arranged by Owner Company if provisions of the relevant Act and the rules made there under specifically states that the e-way bill is required to be issued by recipient of goods.
36. In the event of recovery of any claim towards LD Charges, Penalty, fee, fine or any other charges (except EMD) from the contractor/supplier, the same will be recovered along with the applicable GST and the amount shall be adjusted with the payment to be made to the contractor/supplier against their bill/invoice or any other dues.
- 37. Discrepancies in contract documents & Adjustments thereof**
  - 37.1 In the event of varying or conflicting provision in any of the document(s) forming part of the contract, the Accepting Authority's decision/ clarification shall hold good with regard to the intention of the document or contract as the case may be.
  - 37.2 Any error in description, quantity or rate in Bill of Quantities or any omission there from, shall not vitiate the contract or release the contractor from discharging his obligations under the contract including execution of work according to the Drawings and Specifications forming part of the particular contract document.
- 38. Custody, Intimation of Shortage, Missing, Damages, loading/unloading of material.**
  - 38.1 Upon arrival at Works Site, all Materials, special tools & tackles, all consumables, etc., the Contractor shall assume custody thereof their own materials supplied from their own account and remain responsible therefore, until the completion of Work as per TS of NIT issued by the Engineer/ Site- In charge.
39. EMPLOYMENT OF LABOUR:
  - 39.1 Contractors are to employ, to the extent possible (as per policy decision of the company valid from time to time), local project affected people and pay wages not less than the minimum wages as per minimum Wages Act of Central or state govt. (whichever is higher).





# HEAVY ENGINEERING CORPORATION LIMITED

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Payment of Provident Fund for the workmen employed by him for the work as per the law prevailing under provision of CMPF/EPF and allied scheme valid from time to time shall be responsibility of the contractor.

In all the cases mentioned above, the contractor needs to ensure that the employee has become a member of any of the provident fund as the case may be and the unique membership number of the CMPF/EPF or Allied Scheme needs to be submitted to Employer.

In addition to the above, the Contractor shall provide a copy of the updated passbook having entry made in the CMPF/EPF or Allied Scheme(s) of Provident fund as the case may be by the competent authority annually /as and when asked. Bidder shall also submit copies of statutory returns.

Note:

However, if the basic rate of wages of labour as fixed by CIL (i.e. with respect to HPC wages) is revised during the contract period then the incremental difference shall be reimbursed on actual basis through a suitable mechanism as decided by CIL/Subsidiary.

Payment of Wages to Contractor's labours.	i) For Construction Plant: As per Minimum Wages Act Central/State Govt. (higher).	The latest Rate as per Govt. Notification and as available on the Govt. Website shall be applicable
	(ii) For Operation & Maintenance of Plant: High Power Committee (HPC) Wages of CIL.	The latest Rate as per CIL Notification and as available on the Coal India Limited Website (www. Coal india.in) shall be applicable.

39.2 The Contractor shall comply with statutory requirements of various acts including Child labour (Prohibition & Regulation) Act, 1986 as amended from time to time and all rules, regulations and schemes framed there under from time to time in addition to other applicable labour laws.

39.3 The payment to the contractor's labourers has to be made through Bank only.

39.4 Bonus is to be paid to the contract workers engaged by the Contractors as per the provisions of Payment of Bonus Act, 1965 as amended from time to time.

39.5 The contractors shall register themselves on the Contract labour Payment Management Portal (CLPMP) of CIL within 30 days of issue of work order and will have to enter and update periodically the following details in the portal:

a. Work Order details

b. Details of Contractor workers and payment of wages in respect of each Work Order each month.

39.6 Contractors should deploy suitably experienced workers as mentioned in relevant Govt. circular.

40. CHANGED QUANTITY



- 40.1. The owner reserves the right to vary the quantities of items or groups of items to be ordered as specified in the accompanying technical specifications, as may be necessary, during the execution of the contract. The Owner also reserves the right to add any extra Items/work which is required as per Client for completion of Project.



**Chapter II GENERAL TECHNICAL CONDITIONS**

**1.0 GENERAL:**

This part covers technical conditions pursuant to the contract and will form an integral part of the contract. The following provisions shall supplement all the detailed technical specifications and requirements brought out in the accompanying technical specifications. The contractor's proposal shall be based on the use of equipment and materials complying fully with the requirements, specified herein. It is recognized that the contractor may have standardized on the use of certain components, materials, processes or procedures different than those specified herein. Alternate proposals offering similar equipment based on the manufacturer's standard practice will also be considered provided such proposals meet the specified designs, standard and performance requirements and are acceptable to the owner.

**2.0 REFERENCE STANDARDS:**

2.1 The codes and/or standards referred to in these specifications shall govern, in all cases wherever such references are made. In case of a conflict between such codes and/or standards and the specifications, the latter shall govern. Such codes and/or standards referred to shall mean the latest revisions, amendments/changes adopted and published by the relevant agencies. In case of any further conflict in this matter, the same shall be referred to the engineer whose decision shall be final and binding.

2.2 Other internationally acceptable standards which ensure equal or higher performance than those specified shall also be accepted.

**3.0 QUALITY ASSURANCE:**

**3.1 Quality Assurance Programme**

To ensure that the equipment and services under the scope of this contract whether manufactured or performed within the contractor's works or at his sub-contractor's premises or at the owner's site or at any other place of work are in accordance with the specifications, the contractor shall adopt suitable quality assurance programme to control such activities all points necessary. Such programme shall be outlined by the contractor and shall be finally accepted by the engineer after discussions before the issue of letter of acceptance of tender.

A quality assurance programme of the contractor shall generally cover the following:

- a. his organization structure for the management and implementation of the proposed quality assurance programme:
- b. documentation control system:
- c. qualification data for bidder's key personnel:
- d. the procedure for purchase of materials, parts components and selection of services including vendor analysis, source inspection, incoming raw-material inspection, verification of materials purchased etc.:



- e. system for shop manufacturing and site erection control including process control fabrication and assembly controls:
- f. control of non-conforming items and system for corrective actions:
- g. inspection and test procedure both for manufacture and field activities:
- h. control of calibration and testing of measuring and testing equipment:
- i. system for indication and appraisal of inspection status:
- j. system for quality audits:
- k. system for authorising release of manufactured product to the owner:
- l. system for maintenance of records:
- m. system for handling storage and delivery: and
- n. a quality plan detailing out the specific quality control procedure adopted for controlling
- o. the quality characteristics relevant to each item of equipment furnished and each work different stages executed at work site.

### **3.2 Quality Assurance Documents**

The contractor shall be required to submit the following Quality Assurance Documents within three weeks after dispatch of the equipment:

- i. all non-destructive examination procedures stress relief and weld repair procedure actually used during fabrication.
- ii. welder and welding operator qualification certificates.
- iii. welder identification list, listing welder's and welding operator's qualification procedure and welding identification symbols.
- iv. material mill test reports on components as specified by the specification.
- v. the inspection plan with verification, inspection plan check points, verification sketches, if used, and methods used to verify that the inspection and testing points in the inspection plan were performed satisfactorily.
- vi. sketches and drawings used for indicating the method of traceability of the radiographs to the location on the equipment.
- vii. all non-destructive examination result reports including radiography interpretation reports.
- viii. stress relief time temperature charts.
- ix. factory test results for testing required as per applicable codes and standard referred in the specifications.
- x. the engineer or his duly authorised representative reserves the right to carry out quality audit and quality surveillance of the systems and procedures of the contractor/his vendor's quality management and control activities.

### **4.0 ENGINEER'S SUPERVISION**

4.1 To eliminate delays and avoid disputes and litigation it is agreed between the parties to the contract that all matters and questions shall be referred to the engineer and his decision shall be final.

4.2 The work shall be performed under the direction and supervision of the engineer.



The scope of the duties of the engineer, pursuant to the Contract, will include but not be limited to the following:

- a. interpretation of all the terms and conditions of these documents and specification.
- b. review and interpretation of all the contractor's drawings, engineering data etc.
- c. witness or authorize his representative to witness tests and trials either at the manufacturer's works or at site, or at any place where work is performed under the contract.
- d. inspect, accept or reject any equipment, material and work under the contract.
- e. issue certificate of acceptance and/or progressive payment and final payment certificates.
- f. review and suggest modifications and improvements in completion schedules from time to time.
- g. supervise the quality assurance programme implementation at all stages of the works.
- h. to receive and endorse the dispatch documents enabling the contractor to clear the consignments.

#### 5.0 INSPECTION, TESTING AND INSPECTION CERTIFICATE:

5.1 The engineer, his duly authorized representative and/or outside inspection agency acting on behalf of the owner shall have at all reasonable times access to the contractor's premises or works and shall have the power at all reasonable times to inspect and examine the materials and workmanship of the works during its manufacture or erection and if part of the works is being manufactured or assembled at other premises or works, the contractor shall obtain for the engineer and for his duly authorized representative permission to inspect as if the works were manufactured or assembled on the contractor's own premises or works .

5.2 The contractor shall give the Engineer/Inspector fifteen (15) days written notice of any material being ready for testing. Such tests shall be to the contractor's account except for the expenses of the Inspector. The Engineer/Inspector, unless witnessing of the tests is virtually waived, will attend such tests within fifteen (15) days of the date on which the equipment is notified, as being ready for test/inspection, failing which the contractor may proceed with the test which shall be deemed to have been made in the Inspector's presence and he shall forthwith forward to the Inspector duly certified copies of tests in triplicate.

5.3 The Engineer or Inspector shall within fifteen (15) days from the date of inspection as defined herein give notice in writing to the contractor, of any objection to any drawings and all or any equipment and workmanship which in his opinion is not in accordance with the contract. The contractor shall give due consideration to such objections and shall either make the modifications that may be necessary to meet the said objections or shall confirm in writing to the Engineer/Inspector giving reasons therein, that no modifications are necessary to comply with the contract.

5.4 When the factory tests have been completed at the contractor's or sub-contractor's works, the Engineer Inspector shall issue a certificate to this effect within fifteen (15) days after completion of tests but if the tests are not witnessed by the Engineer/Inspector, the certificate shall be issued within fifteen (15) days of the receipt of the contractor's test certificate by the Engineer/Inspector. Failure of the Engineer/Inspector to issue such a certificate shall not prevent the contractor from proceeding with the



works. The completion of these tests or the issue of the certificate shall not bind the owner to accept the equipment should it, on further tests after erection, be found not to comply with the contract.

5.5 In all cases where the contract provides for tests whether at the premises or works of the contractor or of any sub-contractor, the contractor, except where otherwise specified, shall provide free of charge such items as labour, materials, electricity, fuel, water, stores, apparatus and instruments as may be reasonably demanded by the Engineer/Inspector or his authorized representative to carry out effectively such tests of the equipment in accordance with the contract and shall give facilities to the Engineer/Inspector or to his authorised representative to accomplish testing.

5.6 The inspection by Engineer and issue of Inspection Certificate thereon shall in no way limit the liabilities and responsibilities of the contractor in respect of the agreed quality assurance programme forming a part of the contract.

#### 6.0 PACKING:

6.1 All the equipment shall be suitably protected, coated, covered or boxed and crated to prevent damage or deterioration during transit, handling and storage at site till the time of erection. While packing all the materials, the limitation from the point of view of availability of railway wagon sizes in India should be taken into account. The contractor shall be responsible for any loss or damage during transportation, handling and storage due to improper packing .

#### 7.0 PROTECTION:

All coated surfaces shall be protected against abrasions, impact, discoloration and any other damages. All exposed threaded portions shall be suitably protected with either a metallic or a non-metallic protecting device. All ends of all valves and piping and conduit equipment connections shall be properly sealed with suitable devices to protect them from damage. The parts which are likely to get rusted, due to exposure to weather, should also be properly treated and protected in a suitable manner.

#### 8 PRESERVATIVE SHOP COATING:

8.1 All exposed metallic surfaces subject to corrosion shall be protected by shop application of suitable coatings. All surfaces which will not be easily accessible after the shop assembly, shall beforehand be treated and protected for the life of the equipment. All surfaces shall be thoroughly cleaned of all mill scale, oxide and other coatings and prepared in the shop. The surfaces that are to be finish painted after installation or require corrosion protection until installation, shall be shop painted with at least two coats of primer. Transformers and other electrical equipment, if included shall be shop finished with one or more coats of primer and two coats of high grade resistance enamel. The finished colours shall be as per manufacturer's standards, to be selected and specified by the engineering at a later date.

8.2 Shop primer for all steel surface which will be exposed to operating temperature below 95°C shall be selected by the contractor, after obtaining specific approval of the engineer regarding the quality of primer proposed to be applied. Special high temperature primer shall be used on surfaces exposed to temperatures higher than 95°C and such primers shall also be subject to the approval of the engineer.



8.3 All other steel surfaces which are not to be painted shall be coated with suitable dust preventive compound subject to the approval of the engineer.

**9.0 PROTECTIVE GUARDS:**

Suitable guards shall be provided for protection of personnel on all exposed rotating and/or moving machine parts. All such guards with necessary spares and accessories shall be designed for easy installation and removal for maintenance purposes.

**10.0 DESIGN CO-ORDINATION:**

The contractor shall be responsible for the selection and design of appropriate equipment to provide the best coordinated performance of the entire system. The basic design requirements are detailed out in Technical Specifications. The design of various components, sub-assemblies and assemblies shall be so done, so that it facilitates easy field assembly and maintenance. All the rotating components shall be so selected that the natural frequency of the complete unit is not critical at or close to the operating range of the unit.

**11.0 TOOLS AND TACKLES:**

The contractor shall supply with the equipment one complete set of all special tools and tackles for the erection, assembly, dis-assembly and maintenance of the equipment. However, these tools and tackles shall be separately packed and brought on to site.

**12.0 NOISE LEVEL:**

The equivalent 'A' weighted sound level measured at a distance of 1.5 metres above floor level in elevation and one metre horizontally from the base of any equipment furnished and installed under these specifications, expressed in decibels to a reference of 0.0002 microbar, shall not exceed 85 dBA.

**13.0 TAKING OVER:**

Upon successful completion of all the tests to be performed at site on equipment furnished and erected by the contractor, the engineer shall issue to the contractor a taking over certificate as a proof of the final acceptance of the equipment. Such certificate shall not unreasonably be withheld nor will the engineer delay the issuance thereof, on account of minor omissions or defects which do not affect the commercial operation and/or cause any serious risk to the equipment. Such certificate shall not relieve the contractor of any of his obligations which otherwise survive, by the terms and conditions of the contract after issuance of such certificate.

**14.0 INDIAN STANDARDS:**

Normally Indian Standards as published by BUREAU OF INDIAN STANDARDS shall be followed. Wherever relevant Indian Standard is not published by the BIS, International Standards or American Standard or



German Standard or British Standard, as decided by the Engineer in consultations with the Consultants employed by the Owner, shall be followed.

**15.0 WELDING:**

If the manufacturer has special requirements relating to the welding procedures for welds at the terminals of the equipment to be procured by the owner under separate specifications, the requirements shall be submitted to the engineer in advance of commencement of erection work.

**16.0 SERVICE BY THE OWNER:**

16.1 The following services shall be provided by the owner:

- i. Construction/ drinking water at one point within 100 metres of the work site, charges to be decided by the company.
- ii. Auxiliary power for construction at one point within 100 metres of the work site, charges to be decided by the company.

16.2 In the event of the contractor requiring these services at parameters other than those specified above, for any systems, equipment, instrument etc. he shall make the necessary arrangements himself.





### **CHAPTER III ERECTION CONDITIONS OF CONTRACT**

#### **1.0 GENERAL:**

1.1 The following shall supplement the conditions already contained in the other parts of these specifications and documents and shall govern that portion of the work of this contract to be performed at site.

1.2 The contractor upon signing of the contract shall, in addition to a project co-ordinator, nominate another responsible officer as his representative at site suitably designated for the purpose of overall responsibility and co-ordination of the works to be performed at site. Such person shall function from the site office of the contractor during the pendency of contract.

#### **2.0 REGULATION OF LOCAL AUTHORITIES AND STATUTES:**

2.1 The contractor shall comply with all the rules and regulations of local authorities during the performance of his field activities. He shall also comply with the minimum wages act, 1948 and the payment of wages act (both of the Government of India and the local State Government) and the rules made there under in respect of any employee or workman employed or engaged by him or his sub-contractor. The contractor shall make all necessary payments of the Provident Fund for the workmen employed by him for the work as per the laws prevailing under provisions of CMPF and Allied Schemes and CMPF and Miscellaneous Provisions Act 1948 or Employees Provident Fund and Miscellaneous Provisions Act 1952 as the case may be.

2.2 All registration and statutory inspection fees, if any, in respect of his work pursuant to this contract shall be to the account of the contractor. However, any registration, statutory inspection fees lawfully payable under the provisions of the rules and regulations of the Government and any other statutory laws and its amendments from time to time during erection in respect of the plant equipment ultimately to be owned by the owner, shall be to the account of the owner. Should any such inspection or registration need to be arranged due to the fault of the contractor or his sub-contractor, the additional fees for such inspection and/or registration shall be borne by the contractor.

#### **3.0 OWNER'S LIEN ON STRUCTURE:**

The owner shall have lien on all structure including those of the contractor brought to the site for the purpose of erection, testing of the plant. No material brought to the site shall be removed from the site by the contractor and/or his subcontractors without the prior written approval of the engineer.

#### **4.0 INSPECTION, TESTING AND INSPECTION CERTIFICATES:**

The provisions of the clause entitled inspection testing and inspection certificates under section GTC shall also be applicable to the erection portion of the works. The engineer shall have the right to re-inspect any structure though previously inspected and approved by him, at the contractor's works, before and after the same are constructed and/or erected at site. If by the above inspection, the engineer rejects any work or equipment, the contractor shall make good for such rejection either by replacement or



modifications/repairs as may be necessary, to the satisfaction of the engineer. Such replacement will also include the replacement or re-execution of such of those works of other contractors and/or agencies, which might have got damaged or affected by the replacements or re-work done to the contractor's work.

**5.0 ACCESS TO SITE AND WORKS ON SITE:**

5.1 Suitable access to and possession of the site shall be accorded to the contractor by the owner in reasonable time.

5.2 The owner shall have the necessary foundations to be provided by him ready, as per the agreed schedule for the execution of the individual phases of works.

5.3 The works so far as it is carried out on the owner's premises, shall be carried out at such time as the owner may approve and the owner shall give the contractor reasonable facilities for carrying out the works. 5.4 In the execution of the works, no persons other than the contractor or his duly appointed representative, subcontractor and workmen, shall be allowed to do work on the site, except by the special permission, in writing of the engineer or his representative.

**6.0 CONTRACTOR'S SITE OFFICE ESTABLISHMENT:**

The contractor shall establish a site office at the site and keep posted an authorized representative for the purpose of the contract. Any written order or instruction of the engineer or his duly authorized representative shall be communicated to the said authorized resident representing the contractor and the same shall be deemed to have been communicated to the contractor at his legal address.

**7.0 CO-OPERATION WITH OTHER CONTRACTORS:**

7.1 The contractor shall co-operate with all other contractors or tradesmen of the owner, who may be performing other works on behalf of the owner and the workmen who may be employed by the owner 'and doing work in the vicinity of the works under the contract. The contractor shall also so arrange to perform his work as to minimise, to the maximum extent possible, interference with the work of other contractors and his workmen. Any injury or damage that may be sustained in the employees of the other contractors and the owner, due to the contractor's work shall promptly be made good at his own expense. The engineer shall determine the resolution of any difference or conflict that may arise between the contractor and other contractors or between the contractor and the workmen of the owner in regard to their work. If the works of the contractor is delayed because of any acts or omissions of another contractor, the contractor shall have no claim against the owner on that account other than an extension of time for completing his works.

7.2 The engineer shall be notified promptly by the contractor of any defects in the other contractor's works that could affect the contractor's works. The engineer shall determine the corrective measures if any, required rectifying this situation after inspection of the works and such decisions by the engineer shall be binding on the contractor.



**8.0 DISCIPLINE OF WORKMEN:**

The contractor shall adhere to the disciplinary procedure set by the engineer in respect of his employees and workmen at site. The engineer shall be at liberty to object to the presence of any representative or employees of the contractor at the site, if in the opinion of the engineer such employee has mis-conducted himself or be incompetent or negligent or otherwise undesirable and then the contractor shall remove such a person objected to and provide in his place a competent replacement.

**9.0 CONTRACTOR'S FIELD OPERATION:**

9.1 The contractor shall keep the engineer informed in advance regarding his field activity plans and schedules for carrying out each part of the works. Any review of such plan or schedule or method of work by the engineer shall not relieve the contractor of any of his responsibilities towards the field activities. Such reviews shall also not be considered as an assumption of any risk or liability by the engineer or the owner or any of his representatives and no claim of the contractor will be entertained because of the failure or inefficiency of any such plan or schedule or method of work reviewed. The contractor shall be solely responsible for the safety, adequacy and efficiency of plant and equipment and his erection methods.

9.2 The contractor shall have complete responsibility for the conditions of the work site including the safety of all persons employed by him or his sub-contractor and all the properties under his custody during the performance of the work. This requirement shall apply continuously till the completion of the contract and shall not be limited to normal working hours. The construction review by the engineer is not intended to include review of contractor's safety measures in, on or near the work-site, and their adequacy or otherwise.

**10.0 PHOTOGRAPHS AND PROGRESS REPORT:**

10.1 The contractor shall furnish three (3) prints each to the engineer of progress photographs of the work done at site. Photographs shall be taken as and when indicated by the engineer or his representative. Photographs shall be adequate in size and number to indicate various stages of erection. Each photograph shall contain the date, the name of the contractor and the title of the photograph.

10.2 The above photographs shall accompany the monthly progress report detailing out the progress achieved on all erection activities as compared to the schedules. The report shall also indicate the reasons for the variance between the scheduled and actual progress and the action proposed for corrective measures wherever necessary.

**11.0 MAN-POWER REPORT:**

11.1 The contractor shall submit to the engineer, on the first day of every month, a man hour schedule for the month, detailing the man hours scheduled for the month, skill wise and area wise.

11.2 The contractor shall also submit to the engineer on the first day of every month, a man power report of the previous months detailing the number of persons scheduled to have been employed and actually employed, skill wise and areas of employment of such labour.



**12.0 PROTECTION WORK:**

The contractor shall have total responsibility for protecting his works till it is finally taken over the engineer. No claim will be entertained by the owner or the engineer for any damage or loss to the contractor's works and the contractor shall be responsible for the complete restoration of the damaged works to its original condition to comply with the specifications and drawings. Should any such damage to the contractor's works occur because of other party not under his supervision or control, the contractor shall make his claim directly with the party concerned. If dis-agreement or conflict or dispute develops between the contractor and the other party or parties concerned regarding the responsibility for damage to the contractor's works the same shall be resolved as per the provisions of the clause 7.0 above entitled cooperation with other contractors. The contractor shall not cause any delay in the repair of such damaged works because of any delay in the resolution of such disputes. The contractor shall proceed to repair the work immediately and the cause thereof will be assigned pending resolution of such dispute.

**13.0 EMPLOYMENT OF LABOUR:**

13.1 The contractor will be expected to employ on the work only his regular skilled employees with experience of his particular work. No female labour shall be employed after darkness no persons below the age of eighteen years shall be employed.

13.2 All traveling expenses including provisions of all necessary transport to and from site lodging allowances and other payments to contractor's employees shall be the sole responsibility of the contractor. 13.3 The hour of work on the site shall be decided by the owner and the contractor shall adhere to it. Working hours will normally be eight (8) hours per day- Monday to Saturday. 13.4 Contractor's employees shall wear identification badges while on work at site.

13.5 In case the owner becomes liable to pay any wages or dues to the labour or to any Government agency under any of the provisions of the Minimum Wages Act, Workmen compensation Act, Contract Labour Regulation Abolition Act, CMPF Act/EPF Act or any other law due to act of omission of the contractor, the owner may make such payments and shall recover the same from the contractor's bills.

**14.0 FACILITIES TO BE PROVIDED BY THE OWNER:**

**14.1 Space**

The contractor shall advise the owner within thirty (30) days from the date of acceptance of the letter of award, about his exact requirement of space for his office, mess-rooms storage area, pre-assembly and fabrication areas, labour colony area, toilets, etc. The above requirement shall be reviewed by the engineer and space will be allotted to the contractor for construction of his temporary structures like office, storage sheds, labour and staff colony and other utilities etc. for his own as well as his sub-contractor's use.

**14.2 Electricity**



The contractor shall submit to the engineer within thirty (30) days from the date of acceptance of the award letter, his electrical power requirements, if any, to allow the planning of the temporary electrical distribution by the engineer. The contractor shall be provided with supply of electricity for the purposes of the contract, only at one point in the project site. The contractor shall make his own further distribution arrangement. All temporary wiring must comply with local regulations and will be subject to engineer's inspection and approval before connection to supply. Power supply for labour colonies shall also be provided at one point. The contractor shall be charged for the power supplied at work site and labour colonies at prevalent rate of power supplied by State Electricity Board.

#### 14.3 Water

Supply of water will be made available for the construction purposes at an agreed single point within 100 metres of the work site. And further distribution will be the responsibility of the contractor. The contractor shall be charged for the water supplied at work site @ 1 % of the value of civil works and shall be deducted from the contractor's running/final bills.

#### 15.0 FACILITIES TO BE PROVIDED BY THE CONTRACTOR:

##### 15.1 Tools, tackles and scaffoldings

The contractor shall provide all the construction equipment, tools, tackles and scaffoldings required for preassembly, erection, testing and completion of work as per TS of the NIT covered under the contract. He shall submit a list of all such materials to the engineer before the commencement of pre-assembly at site. These tools and tackles shall not be removed from the site without the written permission of the engineer.

##### 15.2 Communication

The owner will extend the telephone & telex facilities, if available at site, for purposes of contract. The contractor shall be charged at actual for such facilities.

##### 15.3 First - aid

15.3.1 The contractor shall provide necessary first-aid facilities for all his employees, representatives and workmen working at the site. Enough number of contractor's personnel shall be trained in administering first-aid.

15.3.2 The owner will provide the contractor, in case of an emergency, the services of an ambulance for transportation to the nearest hospital.

##### 15.4 Cleanliness

15.4.1 The contractor shall be responsible for keeping the entire area allotted to him clean and free from rubbish, debris etc. during the period of contract. The contractor shall employ enough number of special personnel to thoroughly clean his work area at least once in a day. All such rubbish and scrap material shall be stacked or disposed in a place to be identified by the engineer. Materials and stores shall be so arranged to permit easy cleaning of the area in areas where equipment might drip oil and cause damage to the floor surface, a suitable protective cover of a flame resistant, oil proof sheet shall be provided to protect the floor from such damage.



15.4.2 Similarly the labour colony, the offices and the residential areas of the contractor's employees and workmen shall be kept clean and neat to the entire satisfaction of the engineer. Proper sanitary arrangement shall be provided by the contractor, in the work areas, office and residential areas of the contractor.

**16.0 LINES AND GRADES:**

All the works shall be performed to the lines, grades and elevations indicated on the drawings. The contractor shall be responsible to locate and layout the works. Basic horizontal and vertical control points will be established and marked by the engineer at site at suitable points. These points shall be used as datum for the works under the contract. The contractor shall inform the engineer well in advance of the times and places at which he wishes to do work in the area allotted to him, so that suitable datum points may be established and checked by the engineer to enable the contractor to proceed with his works. Any work done without being properly located may be removed and/or dismantled by the engineer at contractor's expense.

**17.0 FIRE PROTECTION:**

17.1 The work procedures that are to be used during the erection shall be those which minimise fire hazards to the extent practicable. Combustible materials, combustible waste and rubbish shall be collected and removed from the site at least once each day. Fuels, oils and volatile or flammable materials shall be stored away from the construction and equipment and materials storage areas in safe containers. Untreated canvas paper, plastic or other flammable flexible materials shall not at all be used at site for any other purpose unless otherwise specified. If any such materials are received with the equipment at the site, the same shall be removed and replaced with acceptable material before moving into the construction area or storage.

17.2 Similarly corrugated paper fabricated cartons etc. will not be permitted in the construction area either for storage or for handling of materials. All such materials used shall be water proof and flame resistant type. All the other materials such as working drawings, plants, etc. which are combustible but are essential for the works to be executed shall be protected against combustion resulting from welding sparks, cutting flames and other similar fire sources.

17.3 All the contractor's supervisory personnel and sufficient number of workers shall be trained for firefighting and shall be assigned specific fire protection duties. Enough of such trained personnel must be available at the site during the entire period of the contract.

17.4 The contractor shall provide enough fire protection equipment of the types and number for the warehouses, office, temporary structures, labour colony area etc. Access to such fire protection equipment, shall be easy and kept open at all times.

**18.0 SECURITY:**

The contractor shall have total responsibility for all structures and materials in his custody stored, loose, semi assembled and/or erected by him at site. The contractor shall make suitable security arrangements



including employment of security personnel to ensure the protection of all materials, equipment and works from theft, fire, pilferage and any other damages and loss. All materials of the contractor shall enter and leave the project site only with the written permission of the engineer in the prescribed manner.

**19.0 CONTRACTOR'S AREA LIMITS:**

The engineer will mark-out the boundary limits of access roads, parking spaces, storage and construction areas for the contractor and the contractor shall not trespass the areas not so marked out for him. The contractor shall be responsible to ensure that none of his personnel move out of the areas marked out for his operations. In case of such a need for the contractor's personnel to work out of the areas marked out for him, the same shall be done only with the written permission of the engineer.

**20.0 CONTRACTOR'S CO-OPERATION WITH THE OWNER:**

In cases where the performance of the erection work by the contractor affects the operation of the system facilities of the owner, such erection work of the contractor shall be scheduled to be performed only in the manner stipulated by the engineer and the same shall be acceptable at all times to the contractor. The engineer may impose such restrictions on the facilities provided to the contractor such as electricity, water, etc. as he may think fit in the interest of the owner and the contractor shall strictly adhere etc. such restrictions and cooperate with the engineer. It will be the responsibility of the contractor to provide all necessary temporary instrumentation and other measuring devices required during start-up and operation of the equipment systems, which are erected by him. The contractor shall also be responsible for flushing and initial filling of all the oil and lubricants required for the equipment furnished and erected by him, so as to make such equipment ready for operation. The contractor shall be responsible for supplying such flushing oil and other lubricants unless otherwise specified elsewhere in these documents & specifications.

**21.0 PRE-COMMISSIONING TRIALS AND INITIAL OPERATIONS:**

The pre-commissioning trials and initial operations of the equipment furnished and erected by the contractor shall be the responsibility of the contractor as detailed in relevant clauses in section GTC. The contractor shall provide, in addition, test instruments, calibrating devices, etc. and the labour required for the successful performance of these trials. It is anticipated that the above test may prolong for a long time, the contractor's workmen required for the above test shall always be present at site during such trials.

**22.0 MATERIALS HANDLING AND STORAGE:**

22.1 All the equipment furnished under the contract and arriving at site shall be promptly received, unloaded and transported and stored in the storage spaces by the contractor.

22.2 Contractor shall be responsible for examining all the shipment and notify the engineer immediately or any damage, shortage, discrepancy, etc. for the purpose of engineer's information only. The contractor shall submit to the engineer every week a report detailing all the receipts during the week. However, the



contractor shall be solely responsible for any shortages or damage in transit, handling and/or in storage and erection of the equipment at the site. Any demurrage, wharfage and other such charges claimed by the transporters, railways etc. shall be to the account of the contractor.

22.3 The contractor shall maintain an accurate and exhaustive record detailing out the /1st of all equipment received by him for the purpose of erection and keep such record open for the inspection of the engineer at any time.

22.4 All equipment shall be handled very carefully to prevent any damage or loss. No bare wire ropes, slings, etc. shall be used for unloading and/or handling of the equipment without the specific written permission of the engineer. The equipment stored shall be properly protected to prevent damage either to the equipment or to the floor where they are stored. The equipment from the store shall be moved to the actual location at the appropriate time so as to avoid damage of such equipment at site.

22.5 The contractor shall ensure that all the packing materials and protection devices used for the various equipment during transit and storage are removed before the equipment are installed.

22.6 The consumable and other supplies likely to deteriorate due to storage must be thoroughly protected and stored in a suitable manner to prevent damage or deterioration in quality by storage.

22.7 All the materials stored in the open or duty location must be covered with suitable weather-proof and flameproof covering materials wherever applicable.

22.8 If the materials belonging to the contractor are stored in areas other than those earmarked for him, the engineer will have the right to get it move to the area earmarked for the contractor at the contractor's cost.

22.9 The contractor shall be responsible for making suitable indoor storage facilities to store all equipment which require indoor storage. Normally, all the electrical equipment such as motors, control gear, generators, exciters and consumable like electrodes, lubricants etc. shall be stored in the closed storage space. The engineer, in addition, may direct the contractor to move certain other materials which in his opinion will require indoor storage, to indoor storage areas which the contractor shall strictly comply with.

#### 23.0 CONSTRUCTION MANAGEMENT:

23.1 The field activities of the contractors working at site will be co-ordinate by the engineer and the engineer's decision shall be final in resolving any disputes or conflicts between the contractor and other contractors and tradesmen of the owner regarding scheduling and co-ordination of work. Such decision by the engineer shall not be a cause for extra compensation or extension of time for the contractor.

23.2 The engineer shall hold weekly meetings of all the contractors working at site, at a time and a place to be designated by the engineer. The contractor shall attend such meetings and take notes of discussions during the meeting and the decisions of the engineer and shall strictly adhere to those decisions in performing his works. In addition to the above weekly meetings, the engineer may call for other meetings either with individual contractors or with selected number of contractors and in such a case the contractor, if called will also attend such meetings.





23.3 Time is the essence of the contract and the contractor shall be responsible for performance this works in accordance with the specified construction schedule. If at any time, the contractor is falling behind the schedule, he shall take necessary action to make good for such delays by increasing his work force or by working overtime or otherwise accelerate the progress of the work to comply with the schedule and shall communicate such actions in writing to the engineer, satisfying that his action will compensate for the delay. The contractor shall not be allowed any extra compensation for such action.

23.4 The engineer shall however not be responsible for provision of additional labour and/or materials or supply or any other services to the contractor except for the co- ordination work between various contractors as set out earlier.

**24.0 FIELD OFFICE RECORDS:**

The contractor shall maintain at his site office up-to-date copies of all drawings, specifications and other contract documents and any other supplementary data complete with all the latest revisions thereto. The contractor shall also maintain in addition the continuous record of all changes to the above contract documents, drawings, specifications; supplementary data, etc. effected at the field and on completion of his total assignment under the contract shall incorporate all such changes on the drawings and other engineering data to indicate as installed condition of the equipment furnished and erected under the contract.

Such drawings and engineering data shall be submitted to the engineer in required number of copies. Daily work programme with progress of the previous day and deployment of labour related to work programme and attendance of workmen deployed during the previous day shall be maintained in a register.

This register shall be signed by authorised representative of the contractor which will then be checked and signed by the owner's representative. Every three months this register shall be deposited to the owner which shall then be owners property.

**25.0 CONTRACTOR'S MATERIALS BROUGHT ON TO SITE**

25.1 The contractor shall bring to site all equipment, parts, materials, including construction equipment, tools and tackles for the purpose of the works with intimation to the engineer. All such goods shall, from the time of their being brought vest in the owner, but may be used for the purpose of the works only and shall not on any account be removed or taken away by the contractor without the written permission of the engineer. The contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage thereto.

25.2 The owner shall have a lien on such goods for any sum or sums which may at any time be due or owing to him by the contractor, under, in respect of or by reasons of the contract. After giving a fifteen (15) days' notice in writing of his intention to do so, the owner shall be at liberty to sell and dispose of any such goods, in such manner as he shall think fit including public auction or private treaty and to apply the proceeds in or towards the satisfaction of such sum or sums due as aforesaid.



25.3 After the completion of the works, the contractor shall remove from the site under the direction of the engineer the materials such as construction equipment, erection tools and tackles, scaffolding etc. with the written permission of the engineer. If the contractor fails to remove such materials, within 15 days of issue of a notice by the engineer to do so then the engineer shall have the liberty to dispose of such materials as detailed under clause 25.2 above and credit the proceeds thereto the account of the contractor.

#### 26.0 PROTECTION OF PROPERTY AND CONTRACTOR'S LIABILITY

26.1 The contractor shall be responsible for any damage resulting from his operations. He shall also be responsible for protection of all persons including members of public and employees of the owner and the employees of other contractors and sub-contractors and all public and private property including structures, buildings, other plants and equipment and utilities either above or below the ground.

26.2 The contractor will ensure provision of necessary safety equipment such as barriers, sign-boards, warning lights and alarms, etc. to provide adequate protection to persons and property. The contractor shall be responsible to give reasonable notice to the engineer and the owners of public or private property and utilities when such property and utilities are likely to get damaged or injured during the performance of his works and shall make all necessary arrangements with such owners, related to removal and/or replacement or protection of such property and utilities.

#### 27.0 PAINTING

All exposed metal parts of the equipment including pipings, structure railing etc. wherever applicable, after installation unless otherwise surface protected, shall be first painted with atleast one coat of suitable primer which matches the shop primer paint used, after thoroughly cleaning all such parts of all dirt, rust, scales, greases, oils and other foreign materials by wire brushing, scarping or sand blasting, and the same being inspected and approved by the engineer for painting. Afterwards, the above parts shall be finished with two coats of alloyed resin machinery enamel paints. The quality of the finish paint shall be as per the standards of ISI or equivalent and to be of the colour as approved by the engineer.

#### 28.0 UNFAVOURABLE WORKING CONDITIONS:

The contractor shall confine all his field operations to those works which can be performed without subjecting the equipment and materials to adverse effects, during inclement weather conditions, like monsoon, storms, etc. and during other unfavorable construction conditions. No field activities shall be performed by the contractor under conditions which might adversely affect quality and efficiency thereof, unless special precautions or measures are taken by the contractor in a proper and satisfactory manner in performance of such works and with concurrence of the engineer. Such unfavorable construction conditions will in no way relieve the contractor of his responsibility to perform works as per the schedule.

#### 29.0 PROTECTION OF MONUMENTS AND REFERENCE POINTS:



The contractor shall ensure that any finds such as relic, antiquity, coins, fossils, etc. which he might come across during the course of performance of his works either during excavation or elsewhere, are properly protected and handed over to the engineer. Similarly the contractor shall ensure that the bench marks, reference points, etc., which are marked out either with the help of engineer or by the engineer shall not be disturbed in any way during the performance of his works. If any work is to be performed which disturb such references, the same shall be done only after these are transferred to other suitable locations under the direction of the engineer. The contractor shall provide all necessary materials and assistance for such relocation of reference points etc.

### 30.0 WORK AND SAFETY REGULATIONS

30.1 The contractor shall ensure proper safety of all the workmen, materials plant and equipment belonging to him or the Company or to others, working at or near the site. The contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislation and the engineer-in-charge as he may deem necessary.

30.2 The contractor will notify well in advance to the engineer-in-charge of his intention to bring to the site any container filled with liquid or gaseous fuel or explosive or petroleum substance or such chemicals which may involve hazards. The engineer-in-charge shall have the right to prescribe the conditions, under which such container is to be stored, handled and used during the performance of the works and the contractor shall strictly adhere to and comply with such instructions. The engineer-in-charge shall have the right at his sole discretion to inspect any such container or such construction plant/equipment for which material in the container is required to be used and if in his opinion, its use is not safe, he may forbid its' use. No claim due to such prohibition shall be entertained by the owner. Nor the owner shall entertain any claim of the contractor towards additional safety provisions/conditions to be provided for constructed as per engineer-in-charge's instructions.

Further any such decision of engineer-in-charge shall not, in any way, absolve the contractor of his responsibilities, and in case, use of such a container or entry thereof into the site area is forbidden by engineer-in-charge, the contractor shall use alternative methods with the approval of engineer-in-charge without any cost implication to Company or extension of work schedule.

30.3 Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosives, the contractor shall be responsible for carrying out such provision and/or storage in accordance with the rules and regulations laid down in Petroleum Act 1934, Explosives Act 1948, and Petroleum and Carbide of Calcium Manual Published by the Chief Inspector of Explosives of India. All such storage shall have prior approval of the engineer in- charge. In case, any approvals are necessary from the Chief Inspector (Explosive) or any statutory authorities, the contractor shall be responsible for obtaining the same.

30.4 All equipment used in construction and erection by contractor shall meet Indian, International Standards and where such standards do not exist, the contractor shall ensure these to be absolutely safe. All equipment shall be strictly operated and maintained by the contractor in accordance with



manufacturer's operation manual and safety instructions and per Guidelines/Rules of the Company in this regard.

30.5 Periodical Examinations and all tests for all lifting/hoisting equipment and tackles shall be carried out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules enforced from time to time. A register of such examinations and tests shall be properly maintained by the contractor and will be promptly produced as and when desired by engineer-in-charge or by the person authorized by him.

30.6 The contract shall be fully responsible for the safe storage of his and his sub contractor's radio-active sources in accordance with BARC/DAE Rules and other applicable provisions. All precautionary measures stipulated by BARC/DAE in connection storage and handling of such material will be taken by contractor.

30.7 The contractor shall provide suitable safety equipment of prescribed standard to all employee and workmen according to the need, as may be directed by engineer-in-charge who will also have right to examine these safety equipment to determine their suitability, reliability, acceptability and adaptability.

30.8 Where explosives are to be used, the same shall be used under the direct control and supervision of an expert, experienced, qualified and competent person strictly accordance with the code practices/rules framed under Indian Explosives Act pertaining to handling, storage and use of the explosives.

30.9 The contractor shall provide safe working conditions to all workmen and employees at the site including safe means of access, railings, stairs, ladders, scaffoldings etc. The scaffoldings, stairs, ladders etc; shall be erected under the control and supervision of an experienced and competent person. For erection, good and standard quality of material only shall be used by the contractor.

30.10 The contractor shall not interfere or disturb electric fuses" wiring and other electrical equipment belonging to the owner or other contractors under any circumstances, whatsoever, unless expressly permitted in writing by the Company to handle such fuses, wiring or electrical equipment.

30.11 Before the contractor connects any electrical appliances to any plug or socket belonging to the other contractor or owner, he shall:

a satisfy the engineer that the appliances is in good working condition

b inform the engineer of the maximum current rating, voltage and phases of the appliances.

c obtain permission of the engineer detailing the sockets to which the appliances may be connected.

30.12 The engineer will not grant permission to connect until he is satisfied that: a the appliance is in good condition and is fitted with a suitable plug. b the appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.

30.13 No electric cable is in use by the contractor/owner will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.

30.14 No repair work shall be carried out on any live equipment. The equipment shall must be declared safe by engineer-in-charge and a permit to work shall be issued by engineering- charge before any repair work is carried out by the contractor. While working on electric lines/equipments whether alive or dead,



suitable type and sufficient quantity of tools will have to be provided by contractor to electricians/workmen/officers.

30.15 The contractor shall employ necessary number of qualified, full time electricians/electrical supervisors to maintain in his temporary electrical installations.

30.16 The Contractor shall employ full time officer as per Safety norms of Government of India exclusively as safety officer to supervise safety aspects of the equipment and workmen who will co-ordinate with the project safety officer. In case of work being carried out through subcontractors, the sub-contractor's workmen/employees will also be considered as the contractor's employees/workmen for above purpose. The name and address of a such safety officer of contractor will be promptly informed in writing to engineer-in-charge with a copy to safety officer-in charge before he starts work or immediately after any change of the incumbent is made during currency of the contract.

30.17 In case any accident occurs during the construction/erection or other associated activities undertaken by the contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the contractor to promptly inform the same to the company's engineer-in-charge in prescribed form and also to all the authorities envisaged under the applicable laws.

30.18 The engineer-in-charge shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such case contractor shall be informed in writing about the nature of hazards and injury/accident and he shall comply to remove short comings promptly. The contractor after stopping the specific work, can, if felt necessary, appeal against the order of stoppage of work to the General Manager of the project within 3 days of such stoppage of work and decision of the project G.M in this respect shall be conclusive and binding on the contractor.

30.19 The contractor shall not be entitled for any damages/compensation for stoppage of work due to safety reasons as provided in para 31.18 above and the period of such stoppage of work will not be taken as an extension of time for completion of work and will not be the ground for waiver of levy of liquidated damages.

30.20 The contractor shall follow and comply with all the Company safety rules relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without demur, protest or content or reservation. In case of any inconformity between statutory requirement and the Company safety rules referred above, the later shall be binding on the contractor unless the statutory provisions are more stringent.

30.21 If the contractor fails in providing safe working environment as per the Company safety rules or continues the work even after being instructed to stop work by engineer-incharge as provided in para 31.18 above, the contractor shall promptly pay to the Company, on demand i.e. by the owner compensation at the rate of Rs. 5,000/= per day or part there of till the instructions are complied with an so certified by Engineer/ Site In-charge. However in case of accident taking place causing injury to any individual, the provisions contained in para

30.22 shall also apply in addition to compensation mentioned in this para.



30.22 If the contractor does not take all safety precautions and/or fails to comply with the safety rules as prescribed by the Company or under the applicable laws for the safety of the equipment and plant and for the safety of personnel and the contractor does not prevent hazardous conditions which cause injury to his own employees or employees of other contractors, or the Company employees or any other person who are at site or adjacent thereto, the contractor shall be responsible for payment of compensation under the relevant provisions of the workmen's compensation act and rules framed there under or any other applicable laws as applicable from time to time.

Permanent disablement shall have same meaning as indicated in workmen's compensation act. The compensation mentioned above shall be in addition to the compensation payable to the workmen/employees under the relevant provisions of the workmen's compensation act and rules framed there under or any other applicable laws as applicable from time to time.

In case the owner is made to pay such compensation then the contractor is liable to reimburse the owner such amount.

#### 31.0 CODE REQUIREMENTS:

The erection requirements and procedures to be followed during the installation of the equipment shall be in accordance with the relevant Indian Boiler Regulations. ASME codes and accepted good engineering practice', the engineer's drawings and other applicable Indian recognized codes and the laws and regulations of the Government of India.

#### 32.0 FOUNDATION DRESSING AND GROUTING:

32.1 The surfaces of foundations shall be dressed to bring the top surface of the foundations to the required level, prior to placement of equipment/equipment bases on the foundations.

32.2 All the equipment bases and structural steel base plates shall be grouted and finished as per these specifications unless otherwise recommended by the equipment manufacturer.

32.3 The concrete foundation surfaces shall be properly prepared by chipping, grinding as required to bring the type of such foundation to the required level, to provide the necessary roughness for bondage and to assure enough bearing strength. All laitance and surface film shall be removed and cleaned.

#### 32.4 Grouting mix

The grouting mixtures shall be composed of Portland cement, sand and water. The Portland cement to be used shall conform to ISI No. 269 or equivalent, sand shall conform to ISI NO.383/2386 or equivalent. The grout proportions for flat based where the grouting space does not exceed 35 mm shall be 50 Kg bag of cement to 75 Kg of sand. Only the required quantity of water shall be added so as to make the mix quaky and flowable and the mix shall not show excess water on top when it is being puddled in place. For thicker grout beds upto 65 mm, the amount of sand shall be increased to 105 Kg per bag of cement. Bases which are hollow and are to be filed full of grouting shall be filled to a level of 25 mm above the outside rim with a mortar mix in the volumetric proportions of one bag of cement and 1.5 bags sand and 1.5 part 6 mm granite gravel. An acceptable plasticiser may be added to the grout mixes in a proportion



recommended by the plasticisers manufacturer. All such grouts shall be thoroughly mixed for not less than five minutes in an approved mechanical mixer and shall be used immediately after mixing.

### **32.5 Placing of grout**

32.5.1 After the base has been prepared, its alignment and level has been checked and approved and before actually placing the grout a low dam shall be set around the base at distance that will permit pouring and manipulation of the grout. The height of such dam shall be at least 25 mm above the bottom of the base. Suitable size and number of chains shall be introduced under the base before placing the grout, so that such chains can be moved back and forth to push the grout into every part of the space under the base.

32.5.2 The grout shall be poured either through grout holes if provided or shall be poured at one side or at two adjacent sides giving it a pressure head to make the grout move in a solid mass under the base and out in the opposite side. Pouring shall be continued until the entire space below the base is thoroughly filled and the grout stands at least 25 mm higher all around than the bottom of the base. Enough care should be taken to avoid any air or water pockets beneath the bases.

### **32.6 Finishing of the edges of the grout**

The poured grout should be allowed to stand undisturbed until it is well set. Immediately thereafter, the dam shall be removed and grout which extends beyond the edges of the structural or equipment base plates shall be cut off flush and removed. The edges of the grout shall then be pointed and finished with 1:2 cement mortar pressed firmly to bond with the body of the grout and smoothed with a tool to present a smooth vertical surface. The work shall be done in a clean and scientific manner and the adjacent floor spaces, exposed edges of the foundations, and structural steel and equipment base plates shall be thoroughly cleaned of any spillage of the grout.

### **32.7 Checking of equipment after grouting**

After the grout is set and cured, the contractor shall check and verify the alignment of equipment, alignment of shafts of rotating machinery, the slopes of bearing pedestals, centering of rotors with respect to their sealing bores, couplings, etc. as applicable and the like items to ensure that no displacement had taken place during grouting. The values recorded prior to grouting shall be used during such post grouting checkup and verifications.



**Chapter IV: SAFETY CODE**

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and handhold shall be provided on the ladder and the ladder shall be given an inclination not steeper than  $1/4$  to 1 (  $1/4$  horizontal and 1 vertical).
2. Scaffolding of staging more than 3.6 m (12ft). above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm (3ft) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft) above ground level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3ft).
5. Safety means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m (30ft) in length while the width between side rails in rung ladder shall in no case be less than 20 cm (11 ½”) for ladder upto and including 3 m (10ft) in length. For longer ladders, this width should be increased at least ¼” for additional 30 cm (1ft.) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
6. Excavation and Trenching: All trenches 1.2 m (4ft) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof. Ladder shall extend from bottom of the trench to at least 90 cm (3ft) above the surface of the ground. The side of the trenches which are 1.5 m (5ft) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m (5ft) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
7. Demolition: before any demolition work is commenced and also during the progress of the work,





- i. All roads and open areas adjacent to the work site shall either be closed or suitably protected.
  - ii. No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged .
  - iii. All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned:- The following safety equipment shall invariably be provided.
- i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
  - ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
  - iii) Those engaged in welding works shall be provided with welder's protective eye-shields.
  - iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
  - v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning Signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measures are adhered to:-
    - a) Entry for workers into the line shall not be allowed except under supervision of the Engineering Assistant or any other higher officer.
    - b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
    - c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
    - d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
    - e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
    - f) The area should be barricaded or condoned of by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
    - g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
    - h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.



- i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.
- k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- l) The workers engaged for cleaning the manholes / sewers should be properly trained before allowing to work in the manhole.
- m) The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers ( when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- p) The extents to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
- vi) The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-
- a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
- c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- d) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
- e) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
- f) Overall shall be worn by working painters during the whole of working period.
- g) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
9. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.



10. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:-

i). (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.

(b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

ii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.

iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of q hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.

12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.

15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.

16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.



**ON-LINE PRICE BID- BOQ ( FOR REFERENCE ONLY)**

Sl.No.	Name of the work	Unit	Quoted Price for items as per BOQ (exclusive of GST)
I	The scope of work shall cover all civil works, supply, fabrication and erection of all building steel structural works, supply of all materials, manpower, machineries, safety, security and storage of all construction equipment and material as elaborated in the subsequent clauses of the Technical Specification on BOQ BASIS for Coal Handling Plant (4.5 MTPA) at Block-B OCP, Northern Coalfields Limited..	Items as per BOQ	XXXXXXXXXXXXXXXXXXXXX <b>(NOT TO BE QUOTED HERE)</b>
II	GST ( in Rupees )  Rate - % (GST rate to be indicated in percentage)		
III	Total Package Price inclusive of GST ( in Rupees )		

**NOTE:**

1. Tenderer to note that Work order will be awarded to L-1 firm on complete Package basis. The Lowest Package Cost for the L-1 Firm will be arrived at based on evaluating lowest Combined Costs of all individual items quoted by the Bidders as per BOQ of Price Schedule ( BOQ.xls)
2. The tenderer shall upload the digitally signed Schedule of price bid in the form of BOQ.xls
3. Bidders may please note, the schedule of quantities is attached in the portal. The same (BOQ) shall be downloaded and to be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.



4. Bidders to note that the price as per the offer is strictly to be mentioned under Part-II of Price bid and not to be disclosed in any manner under techno-commercial bid Part-I ,In case price of the bidder is disclosed under techno-commercial bid Part-I , the offer of the firm will be summarily rejected.
5. Bidders are mandatorily required to quote all the items of BOQ, If any item of BOQ is not quoted then it shall be construed that the said Item is also included under scope of Work of the respective bidder and the Price of the same is included/absorbed in the Price of other Quoted Items.
6. The Price is strictly to be quoted in the BOQ.xls and not to be mentioned anywhere in the Techno-Commercial Bid. In case any Price Indication is found in the Techno-Commercial Bid (other than BOQ.xls), the Tendered offer of the bidder will be summarily rejected.



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**Appendix -1**

**BANK GUARANTEE PROFORMA FOR PERFORMANCE SECURITY/GUARANTEE**

*(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)  
(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK  
AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)*

To:

Heavy Engineering Corporation Limited, P.O. :

Dhurwa,

Dist. : Ranchi (Jharkhand)

In consideration of the Heavy Engineering Corporation Limited, having its Registered office at P.O. Dhurwa, Dist. Ranchi (Jharkhand) (hereinafter called to as the "Employer" which expression shall unless repugnant to the context or meaning thereof, include all successors, administrators and assigns) having awarded to *[Name & Address of the Contractor]* (hereinafter called to as "Contractor" which expression shall unless repugnant to the context of meaning thereof include its successors, administrators, executors and assigns) the work \_\_\_\_\_ *[Name of the Work]* by issue of Letter of Award No.

\_\_\_\_\_ *[Work Order/Letter of Intent No.]* and the same having been unequivocally accepted by the Contractor resulting into a Contract Agreement dated valued at \_\_\_\_\_ *[value of Work Order]* (hereinafter called 'the Contract') and the Employer having agreed to accept Performance Bank Guarantee of \_\_\_\_\_ *[indicate figure]*% of

the Contract Sum \_\_\_\_\_ *[amount in figures and words]* from a

Nationalized/Scheduled Bank for due performance of the work executed by the Contractor as per the terms & conditions contained in the said Contract.

We, \_\_\_\_\_ *[name of the Bank]*, of \_\_\_\_\_ *[address of the Bank]* (hereinafter called to as "Bank" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand and or, all money payable by the Contractor to the extent of *[amount of*

*guarantee in figures and words ]*, at any time from \_\_\_\_\_ to \_\_\_\_\_ without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrecoverable and shall continue to be

enforceable as per the terms & conditions contained in the said Contract.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time, to extend the validity of time of Performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this Guarantee, to postpone, from time to time, the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants contained or implied in the Contract, between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor in first instance, without proceeding against the Contractor and notwithstanding any security or other Guarantee that the Employer may have in relation to the Contractor's liabilities.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

For and on behalf of the Bank.

Signature Name \_\_\_\_\_

Designation \_\_\_\_\_

Common Seal of Bank \_\_\_\_\_



# HEAVY ENGINEERING CORPORATION LIMITED

## PROJECT DIVISION

APPENDIX-2

Schedule of Constructional plant and Equipment required for Construction, Execution. Completion and Maintenance works with details of each to be employed by the Tenderer for the contract.

Sl. No	Description	Details	Approximate date when it will be employed at site	Period of retention at site

NB: A separate sheet may, if required, be used for giving the details in the proforma mentioned above. The sheet shall be duly signed and stitched to the tender.





TIME SCHEDULE

Description	NIT Time Schedule	Bidder's Schedule
The scope of work shall cover all civil works, supply, fabrication and erection of all building steel structural works, supply of all materials, manpower, machineries, safety, security and storage of all construction equipment and material as elaborated in the subsequent clauses of the Technical Specification	9 months from date of issuance of Work Order	



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

APPENDIX-4

FORM FOR DEVIATIONS FROM THE TENDER DOCUMENT

We have examined the Tender Documents and understood all the requirements. We hereby confirm that the Scope of Work and other details of our offer conform to Tender Specifications No. \_\_\_\_\_ excepting for deviations listed below. We understand that Employer/Employer’s representative will not entertain any deviations other than those specified below and accepted by Employer/Employer’s representative in writing:

Refer Clause no. of Tender Specifications	Deviations	Justification for the deviation

Name of the Work..... Signature: ..... Specification  
No..... Name: ..... Designation: .....  
Tenderer’s seal with date:



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

APPENDIX-5

FORM FOR DEVIATIONS FROM THE TENDER DOCUMENT

We have examined the Tender Documents and understood all the requirements. We hereby confirm that the Scope of Work and other details of our offer conform to Tender Specifications No. \_\_\_\_\_ excepting for commercial deviations listed below. We understand that Employer/Employer’s representative will not entertain any deviations other than those specified below and accepted by Employer/Employer’s representative in writing:

Refer Clause no. of GCC	Deviations	Justification for the deviation

Name of the Work.....

No.....

Signature: ..... Specification

Name: .....

Designation: .....

Tenderer’s seal with date:

**FORMAT FOR CONTRACT AGREEMENT**

**(On Non- Judicial Stamp Paper)**

Agreement No. \_\_\_\_\_

Dated: \_\_\_\_\_

THIS ARTICLE OF AGREEMENT made on this \_\_\_\_\_ day of \_\_\_\_\_ 200\_

between the Heavy Engineering Corporation Limited, a Employer registered under the Indian Companies Act. 1956 with its registered office at Ranchi, Govt. of India Undertaking, P.O. Dhurwa (Pin-834004) Dist. : Ranchi (Jharkhand), (hereinafter referred to as the Employer which expression where the context so admit shall include its successors in interest and assign) of the one Part and \_\_\_\_\_ (hereinafter referred to as "the Contractor" which expression where the context so admit shall include its heirs, executors, administrators legal representatives, successors in business and assign) of the other part.

WHEREAS, the Employer invited bid for the Work " \_\_\_\_\_ " and the bid of the Contractor has been accepted by the Employer vide their Letter No

\_\_\_\_\_ dt. \_\_\_\_\_ for a sum of

\_\_\_\_\_ *[Contract sum in figure & words]*

WHEREAS the Contractor has agreed to execute the works on the terms & conditions as stipulated in the Bid and subsequent amendments thereto for a sum of \_\_\_\_\_ *[Contract sum in figure & words]* for successful completion of the work.

**NOW THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED AS FOLLOWS:**

1. In pursuance of the Agreement aforesaid and in consideration for the payment of the sum of *[Contract sum in figure & words]* and/or such sum as may be payable to the contractor, the Contractor shall upon and subject to the said terms & conditions execute and complete the work shown upon in the said drawings and described in the said scope of work as provided for in the said conditions.
2. The time shall be considered as one of the essence of the contract and time for completion of the contract shall be 09 months from the date of placement of LOA/Work Order.
3. The parties hereto shall respectively and faithfully abide by and submit themselves to the terms & conditions and stipulations contained in this agreement and perform and discharge their part of contract accordingly.
4. This final Agreement has been arrived at between the parties after due consideration of the correspondences, documents, meetings and negotiations held from time to time. The following documents shall constitute the Contract between the Employer and the Contractor. And each shall be read and construed as an integral part of the Contract

<u>Part</u>	<u>Description of Documents</u>
01.	Article of Agreement.
02.	Detailed Bid Notice.
03.	Notification of Award
04.	The Bid and Prices Schedules submitted by the Contractor
05.	Conditions of Contract
06.	Financial terms and conditions
07.	Technical Specifications and drawings
08.	Any Other Documents

5. The Contract shall be executed within the purview of the Indian Laws.

In witness whereof the parties hereto have hereunder affixed their signatures at Ranchi on the day, month and year written as above.

< Non Judicial Stamp Paper of Rs. 100>

**INTEGRITY PACT**

*[Instructions : Bidders are advised to submit the Integrity Pact document duly signed, stamped and accepted on each page mentioning the Tender No. and date.]*

**INTEGRITY PACT**

*Between*

**Heavy Engineering Corporation Limited, Ranchi (HEC) hereinafter referred to as**

**“The Principal”,**

*And*

..... , **hereinafter referred to as “The Bidder/ Contractor”**

**Preamble**

The principal intends to award, under laid down organizational procedures, contracts for ..... The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources and of fairness and transparency in its relations with its Bidder(s) and Contractor(s).

In order to achieve these goals, the Principal cooperates with the international Non- Governmental Organization “Transparency International” (TI). Following TI’s national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

**Section 1 – Commitments of the Principal:-**

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles :-
  - i. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise or or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
  - ii. The Principal will, during the tender process treat all Bidders with equity and reason.  
The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/ additional information through which the Bidders could obtain an advantage in relation to the tender process or the contract execution.
  - iii. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal



offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

**Section 2 – Commitments of the Bidder/ Contractor**

- (1) The Bidder/ Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
  - i. The Bidder/ Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind what-so-ever during the tender process or during the execution of the contract.
  - ii. The Bidder/ Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non- submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
  - iii. The Bidder/ Contractor will not commit any offence under the relevant Anti- Corruption Laws of India, further the Bidder/ Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - iv. The Bidder/ Contractor will , when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder/ Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

**Section 3 – Disqualification from tender process and exclusion from future contracts.**

If the Bidder/ Contractor, before contract award has committed a transgression

through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder/ Contractor from the tender process or to terminate the contract if already signed for such reason.

- (1) If the Bidder/Contractor has committed a transgression through a violation of section- 2 such as to put his reliability or credibility into question, the principal is entitled also to exclude the



Bidder/Contractor from future contract award processes. The imposition and duration of exclusion will be determined by the severity of the transgression. The severity will be determined by circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of damage. The exclusion will be imposed for a minimum of six months and maximum of 3 years.

- (2) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freshly and after obtaining independent legal advice.
- (3) If the Bidder/Contractor can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
- (4) A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

#### **Section 4 – Compensation for Damages**

- (1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3% of the value of the offer or the amount equivalent to Earnest Money Deposit/ Bid Security, whichever is higher.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.
- (3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the terminate of the contract after the contract award has caused no damage or less damage that the amount of the liquidated damages, the Bidder/ Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

#### **Section 5 – Previous transgression**

- (1) The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract if already awarded can be terminated for such reason.





**Section 6 – Equal treatment of all Bidders/ Contractors/ Subcontractors.**

- (1) The Bidder / Contractor undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreement with identical conditions as this one with all Bidders, Contractors and subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

**Section 7– Criminal charges against violating Bidders / Contractors /Subcontractors**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the principal will inform the Vigilance Office.

**Section 8 – Independent External Monitor/ Monitors (Three in number depending on the size of the contract) ( to be decided by the Chairperson of the Principal)**

- (1) The Principal appoints competent and credible External Independent Monitor for this Pact. The task of the monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- (3) The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the monitor, upon his request and demonstration of a valid Interest, Unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder Contractor /Subcontractor with confidentiality.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- (6) The monitor will submit a written report to the Chairperson of the Board of the principal within 8 to 10 weeks from the date of reference or intimation to him by the "Principal" and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) Monitor shall be entitled to compensation on the same terms as being extended to / provided to outside expert committee members / Chairman as prevailing with Principal.
- (8) If the Monitor has reported to the Chairperson of the Board, a substantiated suspicion of an offence under relevant anti corruption law of India, and the Chairperson has not within reasonable time, taken visible action to proceed against such offences or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (9) The word 'Monitor' would include both singular and plural.

**Section 9 – Pact Duration**

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ agreed during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairperson of the Principal..

**Section 10 – Other provisions**

- (1) This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Ranchi.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a Joint Venture, this agreement must be signed by all partners or Joint Venture members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

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(For & on behalf of the Principal)  
(Office Seal)

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(For & on behalf of Bidder/ Contractor) (Office Seal)

Place: ..... Date: .....

Witness 1: ..... (Name & Address) .....

Witness 2: ..... (Name & Address) .....

**AFFIDAVIT**

(NON JUDICIAL STAMP PAPER OF Rs. 50/-)

I..... Partner/Legal Attorney  
 Proprietor/Accredited Representative of M/s.  
 ..... Solemnly declared that:

1. I/We are submitting tender for the work  
 .....  
 .....  
 against Tender Notice No. ----- dated -----
  
2. None of the partners of our firm is relative of employee of Northern Coalfields Limited and Heavy Engineering Corporation Limited.
  
3. All information furnished by me / us in respect of fulfillment of eligibility criteria and information given in this Bid is complete, correct and true.
  
4. All documents / credentials submitted along with this tender are genuine, authentic, true and valid.
  
5. If, any information or document submitted is found to be false /incorrect at any time, Employer may cancel my Bid and action as deemed fit may be taken against me /us including termination of the contract, forfeiture of all dues including Earnest Money and blacklisting of our firm and all Partners of the firm etc.

Signature of the Tenderer

Dated-----

**Seal of Notary**



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**End of Commercial Part**



**HEAVY ENGINEERING CORPORATION LIMITED**

**PROJECT DIVISION**

**COAL HANDLING PLANT (4.5 MTPA) BLOCK-B PROJECT, NCL**

**TECHNICAL SPECIFICATION**  
**FOR**  
**EXECUTION OF CIVIL & STRUCTURAL WORKS**  
**FOR**  
**COAL HANDLING PLANT (4.5 MTPA)**  
**AT**  
**BLOCK – B OCP**  
**NORTHERN COALFIELDS LIMITED, SINGRAULI**



## **CIVIL AND STRUCTURAL WORKS**

### **1. SCOPE OF WORK**

#### **1.1 GENERAL**

- 1.1.1 The scope of work shall cover all civil works, supply, fabrication and erection of all building steel structural works, supply of all materials, manpower, machineries, safety, security and storage of all construction equipment and material as elaborated in the subsequent clauses of this TS.
- 1.1.2 All works envisaged under this scope of work shall generally be carried out by the successful Bidder based on approved working drawings, technical specifications and specification mentioned in the BOQ.
- 1.1.3 Any Items not listed in the BOQ but later required for work completion as per the technical requirement / approved drawings shall be included in the BOQ based on the lasted DSR or rate analysis approved by HEC and the same shall be accepted by the successful bidder.
- 1.1.4 The scopes of work also include sampling & testing of construction material on the specimens taken during execution of the work. A third party, approved by the Employer shall perform the testing.
- 1.1.5 Setting & fixing of co-ordinates, levels, alignment etc. as per the working drawings provided by HEC is also the part of this scope of work.
- 1.1.6 Temporary approach road, site office, cement & other construction material storage go-downs and fabrication yard for reinforcement, inserts etc. shall be constructed by the successful bidder at his own cost.
- 1.1.7 All construction equipment required for execution of the work shall be arranged, procured / hired by successful bidder at his own cost along with operators, skilled & semi-skilled personnel.
- 1.1.8 The successful bidder shall furnish requirement of construction water based on daily peak requirement, average requirement & lean requirement throughout in course of execution of the project. Construction water shall be provided by the Employer at a single point each for site works, at the boundary of battery limit. The Successful Bidder shall make his own arrangement to tap and lay necessary piping, fittings etc. from the source to the user points.
- 1.1.9 Establishment of site office, proper storage and complete watch and ward shall be in the scope of tenderer. All temporary buildings, structures, office, stores etc. as required for construction purpose to be removed / dismantle after completion of the work.

#### **1.2 SCOPE OF SERVICES**

- 1.2.1 The Successful Bidder shall supply all material for civil & structural works, paint/primer materials, shuttering materials, sheeting, material for fabrication including transportation, delivery and storage of all materials, including site bolts, fixtures, all consumables, handling equipments, labour etc. complete in all respect.



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- 1.2.2 The Successful Bidder shall provide all temporary ladders, scaffoldings, false work, platforms, supports, tools, tackles, consumable and other necessary materials as required.
- 1.2.3 The Successful Bidder shall carry out inspection of all civil & structural materials and their testing and as per approved QAP and/or as directed by engineer-in-charge.
- 1.2.4 Inspection and testing of all civil & structural works: All tests required for materials, quality of work and any other tests as required/desired by the Engineer-in-charge shall be at Contractor's cost. The frequency and mode of testing shall be as per latest relevant BIS codes.

### 1.3 CIVIL & STRUCTURAL WORKS

**a) Main office**

Main office building shall be of RCC frame structure with brick cladding etc.

**b) Canteen, First aid centre & Electrical maintenance cum testing room**

Canteen, first aid centre & Electrical maintenance cum testing room building shall be of RCC frame structure with brick cladding etc.

**c) Security post/Time office**

Security post/time office building shall be of RCC frame structure with brick cladding etc.

**d) Pump House & Water Reservoir**

Pump house building shall be of RCC frame structure with brick cladding including equipment foundation etc.

### 2. PERT NETWORK

After the issue of letter of award, the bidder will prepare a master plan in PERT NETWORK only incorporating all the major activities for the successful execution of civil & structural works submit it to customer for his approval and comments.

### 3. TECHNICAL SPECIFICATIONS

**3.1** All workmanship, materials and work items shall confirm to relevant IS / BIS / MORTH / NBC STANDARDS. In case of items not adequately covered by above mentioned Indian Standards, the CPWD / NBO practices shall be followed.

**3.2** Safety Measures for Civil & Structural Works

In respect of safety, Part -7 Constructional Practices & Safety of National Building Code – 2005 shall be followed. All necessary safety measures to be adopted as recommended by relevant IS / BIS code to protect adjunct / nearby structure, workmen etc.

All works shall be carried out as per the item description and design & drawing supplied and as per the relevant IS / BIS / NBC – 05 and as per direction of the Engineer-in-Charge.

### 4. OTHER WORKS/REQUIREMENTS

- i. Earthwork in excavation



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Excavation of earth for all types of soil for construction of all the civil structures is covered in the scope of this contract. Final levelling and dressing of ground in and around the proposed construction area for drainage purpose is under the scope of this contract and shall be done by the contractor as per technical and functional requirement. The ground will be provided in as it is condition. The depth and size of the excavation will be as per approved system requirement and as per detail design drawings. If Blasting is required, the contractor has to prepare the site and carry out blast hole drilling as per the requirement. The contractor will be responsible for drilling in all gradients/ terrain as per requirement of the work.

Blasting will be done departmentally by NCL on chargeable basis. However, the drilling pattern and blast design parameters are to be decided mutually by the technical representative of the contractor and the project officials on day-to-day basis so as to avoid any dispute on fragmentation of rock and powder factor.

- ii. Development works such as Grading/levelling/dressing of site, etc.

Site grading/levelling shall be done by the bidder within boundary limit of the proposed construction area under the scope of work as per technical/functional and drainage requirement.

- iii. Construction, Fabrication, Erection and Supervision

- a) Clearance of site before start of work

Site will be handed over to the contractor in 'as it is' condition. Any site preparation work including cleaning, cutting, filling, levelling, grading, removal, etc. before start of the actual work shall be done by the contractor to the full satisfaction of Engineer-in-charge.

- b) Site Clearance after completion of work

After the completion of work the contractor shall remove scaffolding, sheds rubbish and surplus materials except which are required for rectification of defects. Contractor shall hand over the site in clean and tidy condition after cleaning the total area including floor, drains etc. fit for the use by the owner.

- c) Layout and Levels

The layout and levels of all structures, etc. shall be laid by the contractor at his own cost from the general grid of the plot and bench marks given by the Engineer-in-charge for checking the detailed layout and correctness of the layout and levels. But the contractor shall be solely responsible for correctness of layout and levels.

- d) Construction Method and Equipment

The Contractor shall submit drawings and write ups indicating a broad outline of how he intends to execute the work.

All construction machineries and equipments such as batching plant, vibrator, welding machine, gas cutting equipments, etc. shall have to be arranged by the contractor.





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e) Installation/Erection and Supervision

It will be the contractor's responsibility to bring, receive and keep the materials in safe custody in proper condition. Responsibility of handling the materials during manufacturing, transit and handling at site rests with the contractor. All the equipment will have to be installed and fitted with accessories as per approved drawing. Entire tools and tackles, manpower and any other material required for successful installation will be supplied by the contractor.

f) Inspection and testing

All tests required for materials, quality of work and any other tests as required/desired by the Engineer-in-charge shall be at Contractor's cost. The frequency and mode of testing shall be as per latest relevant BIS codes.

iv. Construction Engineer / Supervisor/Surveyors

Qualified and experienced construction Engineer/ skilled supervisor of trade capable and surveyors to handle execution and survey work shall to be deployed by the bidder. The contractor should furnish the list of such technical staff/officers along with the bid documents and ensure the presence of the same during construction period at the site.

v. Responsibility of Successful bidder

a) The bidder shall have the obligation to pay the wage/ salary to various categories of its workers/ employee as per latest State Government's minimum wage circular.

b) Sub-contractor also will have to pay CPF to all categories of workers/employee employed by him as per prevailing rules.

c) The workers engaged should be covered under Group Insurance Scheme.

d) The Sub-contractor shall employ his labour based on available fronts and available materials from time to time. No idle labour charge and cost arising out of any such circumstances, what so ever, shall be paid to the Sub-contractor.

e) Sub-contractor shall use optimum energy and shall take special attention to avoid wastage and misuse of power / energy / water.

f) The Sub-contractor to adopt such process / method of work that generates minimum environmental pollution.

vi. Wherever required dewatering shall be done by the contractor to avoid damage of equipment, structural, etc. and timely completion of work.

vii. As per system requirement envisaged in the NIT documents, various parameters, specifications may undergo changes during detail engineering stage. This shall be carried out by the contractor.

viii. The Successful bidder shall be solely responsible for obtaining necessary clearance from various statutory bodies including those of Central & State Government, as applicable, during the course of all



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safety regulations, code of practices for power supply, manufacture / fabrication, installation, transportation, testing, erection at site without any increase in cost.

- ix. All Mines Acts and regulations will be followed during construction stage
- x. Miscellaneous Works

All brick work, doors, windows, finishes including architectural treatment, plinth protection, water proofing, damp proofing, glazing etc.

- a) All brickwork shall be carried out as per relevant IS codes and shall be plastered on both faces with 15 mm thick cement mortar 1:6 (cement/sand). All external walls shall be of full brickwork. RCC ceiling shall be plastered with 6 mm thick plaster. The scope also includes providing and fixing all doors, windows, rolling shutters, finishes, damp proofing, inserts, anchor bolts, embedments, stairs nosing, railings ladders, edge protection angle, etc. Doors and windows shall be of steel frames and suitably glazed. Openings on external walls of the buildings shall be provided with sunshades.
- b) All equipment foundations.
- c) Cable trenches shall be provided with chequered plate or with pre-cast RCC covers. Cable trenches as well as pre-cast cover shall be provided with edge protection angles. All embedment/block cuts as required elsewhere in these specifications shall be provided, or cable tray can also be provided.
- d) All corners and edges in openings shall be protected with angle of minimum size 75 mm x 75 mm x 8 mm with suitable lugs embedded in concrete. Similarly all edges of concrete members coming in contact with flow of coal or any other moving material shall be provided with similar edging for protection.
- e) Floodlight towers and crossovers shall be provided wherever required. Monorail girders and fixtures shall be provided for monorails at locations required and described elsewhere in these specifications or drawings.
- f) All RCC work to be done under this specification unless specified, otherwise, shall be of controlled concrete of grade M-25 of IS 456 (Latest) and shall be made with fresh cement.
- g) All RCC work in water retaining structures shall be of concrete of grade M-30 of IS 456 (Latest) and shall be made with fresh cement.
- h) Rebars of high yield strength, high bond, deformed bars of grade Fe 500 conforming to IS: 1786 shall be used.
- i) Structural Painting Work

All structural steel work shall have one shop coat and one site coat of red oxide zinc chromate and two field coats of synthetic enamel paints as specified elsewhere. However, bidders are to mention the thickness of painting in microns. Field coats shall be applied at two different stages i.e. after erection and before handing over the plant as per directions of HEC Site official.



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Painting shall be done as per standard procedure and instructions of HEC/NCL/Consultant. Painting shall be carried out after thoroughly cleaning all such parts of all dirt, rust, scales, greases, oils and other foreign materials by wire brushing, scarping or sand blasting, and the same being inspected and approved by the HEC's/NCL's/Consultant's Engineer and/or his duly authorized representative for painting. The quality of the finish paint shall be as per the standards of ISI or equivalent and to be of the colour as approved by the HEC's/NCL's/Consultant's Engineer

#### 5. SAMPLES / INSPECTION/ QAC

- 5.1 Samples of the materials proposed to be used shall be submitted at the bidder's cost for approval of the Engineer, if so desired.
- 5.2 All bidder's materials shall be inspected and passed by Engineer from time to time at the source of supplies, manufacturing workshops or at site. The bidder should provide all facilities for such inspection free of cost. Notwithstanding, any inspection at the source, the Engineer shall have liberty to reject any materials brought to site which do not conform to specification without being liable for compensation.
- 5.3 Any materials brought to site and rejected by the Engineer shall be removed by the bidder from the site of work or the site earmarked for materials at his own cost and within the time stipulated by the Engineer.
- 5.4 Works like setting layout, level, dismantling, excavation, dewatering shoring, laying PCC ,bar bending etc. to be carried out by the bidder, which will be finally inspected by the engineer or his authorized representative before laying RCC works. All rectification etc. if so required shall be done free of cost by the bidder. No concreting to be done without permission of engineer.
- 5.5 Cube test, slump test etc. have to be performed time to time to ensure the specification of works and facility for sampling shall be arranged by the bidder for onward testing in lab at contactor's cost. A site laboratory to be established by the successful bidder for above purpose and mix design/ specific test as required to be performed at established laboratory of repute as directed by the Engineer.

#### 6. SAFETY

The contractor is to prepare a safety code of practice for this operation for approval by the purchaser.

##### 6.1 Safety Code – General

- i. Suitable scaffolds shall be provided for workmen for work that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable foot holds and hand holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 horizontal to 1 vertical.
- ii. Scaffolding or staging more than 3.25 metres above the ground or floor, slung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 metre high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends there of with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structures.



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- iii. Working platform, gangways and stairways shall be so constructed that they do not suddenly or unequally change level, and if height of a platform or gangway or stairway is more than 1.25 metre above ground level or floor level, it shall be closely boarded, have adequate width and be suitably fenced, as described above.
- iv. Every opening in floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing with a minimum height of 1 metre.
- v. Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 metres in length. Width between side rails in a rung ladder shall in no case be less than 30 cm for ladders up to and including 3 metres in length. For longer ladders this width shall be increased at least 6 mm for each additional 30 cm of length. Uniform step spacing shall not exceed 30 cm. All scaffolding, ladders and other safety devices mentioned or described herein, shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use.
- vi. Adequate precautions shall be taken to prevent danger from electrical equipment. When workers are employed on electrical installations which are already energised, insulating mats, working apparel such as gloves, sleeves and boots, as may be necessary shall be provided. Workers shall not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
- vii. No materials on any of the sites shall be so stacked or placed as to cause danger of inconvenience to any person or the public.
- viii. The contractor shall provide all necessary fencing and lights to protect public from accident and shall be bound to bear expenses of defence of every suit action or other proceedings at law that neglect of the above precautions and so pay any damages and costs which may be awarded in any such suit, action or proceeding in such persons or which may with the consent of the contractor be paid to compromise any claim by any such person.
- ix. Excavation and Trenching - All trenches, 1.6 metres or more in depth, shall at all times be supplied with at least one ladder for each 20 metres in length or fraction thereof. Ladder shall be extended from bottom of trench to at least 1 metre above surface of the ground. Sides of a trench which is 1.5 metres or more in depth shall be stepped to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. Excavated materials shall not be placed within 1.5 metre of edge of trench or half of depth of trench, whichever is more. Cutting shall be done from top to bottom. Under no circumstances shall undermining or undercutting be done.
- x. Demolition - Before any demolition work is commenced and also during the process of the work:
  - a) All roads and open areas adjacent to the work-site shall either be closed or suitably protected.
  - b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by operator shall remain electrically charged.
  - c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion, or flooding. No floor, roof or other part of a building shall be so overloaded with debris or materials as to render it unsafe.



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- xi. All necessary personnel safety equipment as considered adequate by the Engineer-in-charge shall be available for use of persons employed on the site and maintained in a condition suitable for immediate use, and the contractor shall take adequate steps to ensure proper use of equipment by these concerned.
  - a) Workers employed on mixing asphaltic materials, cement and lime mortar / concrete shall be provided with protective gloves.
  - b) Those engaged in handling any materials which is injurious to eyes shall be provided with protective goggles.
  - c) Those engaged in welding works shall be provided with welder's protective eyes shield.
  - d) When workers are employed in sewers and manholes which are in use, the contractor shall ensure that manhole covers are opened and manholes are ventilated at least for an hour before workers are allowed to get into them. Manholes so opened are cordoned off with suitable railing and provided with warning signal or boards to prevent accident to public.
  - e) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- xii. The contractor shall not employ man below the age of 18 and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting, the following precautions shall be taken:
  - a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
  - b) Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or when a surface having lead paint is being dry rubbed and scraped.
  - c) Overalls shall be supplied by the contractor to workmen and adequate facilities shall be provided to enable working painters to wash during and on recession of work.
- xiii. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following:
  - a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept in good repair and in good working order. They shall be regularly tested and certified as appropriate.
  - b) Every rope used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
  - c) Every crane driver of hoisting appliance/ operator shall be properly qualified and no person under the age of 21 years shall be in charge of any hoisting machine including any scaffold, winch or give signals to operator.



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- d) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of sub-tension, safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with safe working load. In case of a hoisting machine having a variable safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond safe working load except for the purpose of testing.
  - e) In case of departmental machine, safe working load shall be notified by Engineer-in-charge. As regards contractor's machine, the contractor shall notify safe working load of each machine to the Engineer-in-charge wherever he brings it to site of work, and shall get it verified by the Engineer-in-charge.
  - f) Motors, gearing, transmission, electric wiring and at near dangerous parts of hoisting appliance shall be provided with efficient safeguards.
  - g) Hoisting appliances shall be provided with such means as will reduce to the minimum risk of accidental descent of load. Adequate precautions shall be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced.
- xiv. Adequate washing facilities shall be provided at or near places of work.

### 6.2 Application

These safety provisions shall be brought to the notice of all concerned by display on notice board at a permanent place at the work spot. Persons responsible for ensuring compliance with the safety code shall be named by the contractor. To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the contractor shall be open to inspection by the Engineer-in-charge or his representatives and the Inspecting Officers as defined in the contractor's Labour Regulations.

When work is done near any place where there is risk of drowning, all necessary safety and rescue equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision made for prompt first aid treatment for all injuries likely to be sustained during the course of the work.

Notwithstanding the above conditions (i) to (xiv), the contractor is not exempted from the operation of any other Act or Rules in force.

**COAL HANDLING PLANT, BLOCK-B PROJECT, NCL**

**CIVIL & STRUCTURAL WORK  
ESTIMATED BILL OF QUANTITY**

Item No.	Item Description	Unit	Estimated Quantity
1	Site grading, surface dressing, levelling of the ground including removing vegetation, grass brush, wood, tree, deposited coal etc., and In-equagrading not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m outside the periphery of the area cleared and lift upto 2m as directed by Engineer.	SQM	1,800.00
2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 500 metres lead as per direction of Engineer-in-charge.	CUM	1.00
3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 500 metres lead as per direction of Engineer-in-charge.	CUM	1.00
4	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas including getting out and disposal of excavated earth lead upto 50 m and lift upto 4 m, as directed by Engineer-in-charge. (Soft/Ordinary Rock)	CUM	900.00
5	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas including getting out and disposal of excavated earth lead upto 50 m and lift upto 4 m, as directed by Engineer-in-charge. (Hard Rock-blasting prohibited)	CUM	50.00
6	Available earth- Earth work in backfilling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.	CUM	700.00
7	Disposal of excavated earth/moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 2 km for all lifts, complete as per directions of Engineer-in-charge.	CUM	250.00
8	Supplying, stacking and laying of boulder / stone / aggregate / brick soling including packing filling interstices with smaller size stones / bricks dry and wet consolidation with moorum as coarse aggregate in foundation, floor, trenches, pits and pavements including watering, ramming, consolidating and dressing with mechanical means and tamping complete as per drawing and specification and as per directions of Engineer-in-charge.	CUM	10.00
9	Providing and laying plain cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) in all places as per drawing, including cost of centering & shuttering with all materials, labours, tools and tackles etc., complete as directed by Er. incharge.	CUM	105.00
10	Providing and laying plain cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) in all places as per drawing, including cost of centering & shuttering with all materials, labours, tools and tackles etc., complete as directed by Er. incharge.	CUM	265.00
11	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work above plinth level upto floor V level as per drawing, using cement content as per approved design mix, including labour, mechanical vibrator, ramming, 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.	CUM	295.00
12	Providing and laying in position machine batched and machine mixed design mix M-30 grade cement concrete for reinforced cement concrete work in all places as per drawing, using cement content as per approved design mix, including labour, mechanical vibrator, ramming, 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.	CUM	325.00
13	Supplying and Fixing in position TMT Grade Fe 500D reinforcement conforming to IS1786 at all levels and positions including the cost of transport, straightening, cutting, bending, cranking, welding, provision of necessary chairs and spacers as per drawings and specifications and including cost of binding wire, materials, labour tool & tackles etc., all complete in all respects as per drawings, technical specifications and direction of Engineer-in-charge.	MT	70.00
14	Providing, centering and shuttering including strutting propping, fixing, fitting etc. and removing formwork for concrete works for plain surfaces for all places as per drawing for heights upto 15m and depths upto 5m from the plinth level or part thereof etc., complete as directed by Er. Incharge	SQM	5,300.00
15	Providing and spreading anti-termite treatment for treating the top surface of soil, inside and outside the building, under plinth protection and under floor using chemical emulsion of Chlorpyrifos/Lindane E.C. 20% with 1% concentration @ 5 litres of emulsion per sqm of the surface area or approved equivalent, as per manufacturer's specification with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	1,100.00

Item No.	Item Description	Unit	Estimated Quantity
16	Providing and laying 50 mm thick damp-proof course (DPC) over plinth with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and mixing approved water proof admixture with cement as per manufacturer's specification including necessary formwork/ shuttering with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	45.00
17	Supplying, fabrication and fixing at all levels and positions steel embedments/ inserts like plates, angle, channels, anchor bolts, MS pipe sleeves including threading etc. including jigs, templates fixtures complete as per drawings, specifications with all materials, labours, tools and tackles etc., complete as directed by Er. Incharge.	MT	1.50
18	Providing and laying First class bricks/Fly Ash brick in cement mortar 1:6 (1 cement : 6 sand) in all types of foundation and superstructure at all depths/heights including projections, pillars, parapets and as per drawing, all complete including cut work, curing, scaffolding, including filling of joints with cement mortar 1:6 and racking of joints, with supply, labour, tools and tackles, scaffolding etc., complete as per the direction of Er. Incharge.	CUM	270.00
19	Providing and laying Half brick masonry with non modular fly ash bricks of First class in cement mortar (1:4) (1 cement : 4 sand) in superstructure at all heights and as per drawing, all complete including cut work, curing, scaffolding, including filling of joints with cement mortar 1:6 and racking of joints, with supply, labour, tools and tackles, scaffolding etc., complete as per the direction of Er. Incharge.	SQM	675.00
20	Providing and laying 15 mm thick cement plaster 1:6 (1 cement : 6 fine sand) over brick or concrete surfaces for all heights and places and as per drawing, finished with a floating coat of neat cement slurry with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	3,350.00
21	Providing and laying 6 mm thick cement plaster 1:4 (1 cement : 4 fine sand) over brick or concrete surfaces for all heights and places and as per drawing, finished with a floating coat of neat cement slurry with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	1,000.00
22	Exterior Finishing- Providing two or more coats applied @ 3.84 kg/10 sqm and finishing walls with water proofing cement paint of required shade or approved equivalent on new surfaces as per manufacturer's specification to give an even shade with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	1,155.00
23	Interior Finishing- Providing two or more coats and finishing walls with plastic emulsion paint of required shade or approved equivalent on new surfaces as per manufacturer's specification to give an even shade with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	2,610.00
24	Providing and laying water proofing treatment over roofs as per the following specifications: i) 25 mm thick PCC 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) ii) First coat of bitumen primer @ 0.40 litre per sqm iii) 2nd course bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702 iv) 3rd layer roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/ sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20 micron HMHDPE film v) 4th course bonding material @ 1.20 kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702 vi) Top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat.	SQM	1,010.00
25	Providing and laying 1st quality ceramic glazed floor tiles of conforming to IS : 15622 of size and colour as approved by Er. Incharge or as per manufacturer's specification, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), Jointing with white cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	615.00
26	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 of size and colour as approved by Er. Incharge or as per manufacturer's specification, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with white cement slurry @ 3.3 kg/sqm, including pointing in white cement mixed with pigment of matching shade etc., with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	275.00
27	Providing and laying flamed finish Granite stone flooring / slab in required size, design and patterns as approved by Er. Incharge, in all places as per drawing with 18 mm thick stone slab over 20 mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc., with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	10.00



Item No.	Item Description	Unit	Estimated Quantity
28	Providing and laying indian patent stone (IPS) flooring 25 mm thick with M-15 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) over the floor in proper grade and slope, including compaction, grooving of approved size, to give appearance of tiles as per the approved pattern, finishing smooth with cement slurry and curing, with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	235.00
29	Providing, fitting and fixing 1 mm thick MS sheet flushed door shutter (single or double leaf) with frame of 40x40x6 mm angle iron and 3mm MS gusset plates at the junctions and corners, using flats 30 x 6 mm for diagonal braces and central cross piece, including applying a priming coat of approved steel primer and two coats painting etc., as per drawing with all necessary fittings, materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	60.00
30	Providing and fixing factory made PVC flush door shutters (single leaf) with frame of 40x40x6 mm angle iron, including ISI marked Stainless Steel butt hinges with necessary screws etc., as per drawing with all necessary fittings, materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	20.00
31	Supply, fitting and fixing openable glazed steel windows & ventilations with grills of square bars (or openable part of partly fixed and partly openable windows / ventilations) upto 2 sqm area of each opening made out of standard rolled steel section ("MAN" or equivalent as per IS 1038) joints mitred & electrically flash welded with iron lugs, brass or brass oxidised beg stays, handles, spring catches, gun metal pivots, steel coupling, mullions & transoms, hinges, float glass panels ( wired glass 4 mm thick min.), including applying a priming coat of approved steel primer and two coats painting etc., as per drawing all necessary fittings, materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	70.00
32	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked throughout their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with flat spring (encased in suitable boxes) with brackets, side guides and arrangements for inside and outside locking with push and pull operation and M.S. top cover, including applying a priming coat of approved steel primer and two coats painting etc., as per drawing with all necessary fittings, materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	10.00
33	Making plinth protection in all places as per drawing, using 100 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 230 mm thick stone soling / brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling, dressing & finishing the top with neat cement punning, with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	SQM	860.00
34	Making garland drain in all places as per drawing, using first class brick in 1:6 (1 cement : 6 sand) over 75 mm thick of cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 20 mm nominal size) & finishing the top smooth with 18 mm thick cement mortar 1:4 (1 cement : 6 fine sand) with neat cement punning, including necessary excavation, levelling, dressing & finishing, with all materials, labour, tools and tackles etc., complete as directed by Er. Incharge.	RM	760.00
35	Providing and fixing 2000 litres capacity SINTEX or equivalent approved PVC water tank ISI : 12701 marked with PVC fittings for inlet, outlet, over flow, scour float valve, air lock release pipe, connections of required size and diameter including connections and fixing the tank on roof at all heights with all bye-works, materials, fittings, fixtures, labour, tool and tackles etc., complete as per manufacturer's specification and direction of the Engineer.	LOT	3.00
36	Supply and fixing sanitary installations like water closets, urinals, cistern wash basin, looking mirror, towel rail, glass shelf etc. of required make, size, design and colour as approved by Er. Incharge and / or as per manufacturer's specification including piping arrangement in all places as per drawing with all materials, fittings, fixtures, labour, tool and tackles etc., complete as per manufacturer's specification and direction of the Engineer.	LOT	5.00
37	i) Providing and construction of septic tank in brick masonry with common burnt clay bricks of class designation 7.5 and base and top slab in RCC M25 complete in all respect as per scope of work, detailed construction drawings, technical specifications including cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement including CI vent, CI manhole cover, SW fittings, PVC coated rungs, brick, inserts, bolts covers, aggregates / sand fill conduits finishes in excavation and backfilling using strutting, bailing and pumping out water, masonry work, plastering etc. with all bye works and sundry works etc., complete as per directions of the Engineer-in-charge. ii) Providing and construction of soak pit with common burnt clay bricks of class designation 7.5 and S.W. drain pipe 100 mm diameter complete in all respect as per scope of work, detailed construction drawings, technical specifications including cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as manhole cover, SW fittings, brick, aggregates / sand fill conduits finishes in excavation and backfilling using strutting, bailing and pumping out water, masonry work, plastering etc. with all bye works and sundry works etc., complete as per directions of the Engineer-in-charge.	LOT	3.00

Item No.	Item Description	Unit	Estimated Quantity
38	Providing and placing in position 50 mm thick Precast RCC Rectangular Covers in all places and as per drawing, of M-25 grade cement concrete for RCC work, including cost of centering, shuttering, reinforcement of 8 mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on both ways , neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick , 100 mm wide MS sheet duly painted over priming coat , reinforcement to be welded at edges with MS sheet and providing 2 Nos. 12 mm dia bar for hooks etc. including cost of cartage, all leads & lift, handling at site etc. all complete as per direction of Engineer-in-Charge.	SQM	50.00
39	Providing and laying ordinary grouting on the base of steel columns and equipments, anchor holes, etc. as per drawing with(1:1:2) concrete with 6 mm gauge stone ballast after erection of steel columns and equipments including all materials, labour, tool and tackles etc., complete as per manufacturer's specification and direction of the Engineer.	CUM	1.00
40	Supply and fixing on wall face 150 mm unplasticised Rigid PVC rain water pipes conforming to IS : 13592, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion complete, including all bends, shoes, grating cover, fittings with all materials, labour, tool and tackles etc., complete as directed by Er. Incharge.	RM	65.00
41	Providing and laying non-pressure NP2 class (light duty) 300 mm dia R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including trenching, filling and testing of joints, with all materials, labour, tool and tackles etc., complete as directed by Er. Incharge.	RM	20.00
42	Dismantling steel work in built up sections in angles, tees, flats, channels, including gusset plates, bolts, nuts, cutting rivets, welding, etc. including dismembering and stacking the materials within 50 m lead, as directed by Engineer-in-charge.	MT	1.00
43	Supply, Fabrication and painting of heavy/Medium Strl. Steel works such as columns, girders, portals, roof trusses, bracings, purlins, liner, hopper, rail, runners, cladding buffer stops etc. where the weight of each individual completed item/assembly is 1 to 4 MT or above. The work includes labelling (printing address on the item), painting steel work with enamel paint to give an even shade (Two or more coat applied @ 0.90 L/10 sqm over an under coat of primer applied @ 0.80L/10sqm of approved brand or manufacture), erection marks, stacking after fabrication, electrical charges, use, depreciation and hire charges of all types of machines, plants and equipments, supply of approved quality and size of electrodes, consumables, gas etc., bolting and tying of loose materials with supply of bolts, wire etc., cutting, chamfering, filling, providing a primer coat of red lead, use and depreciation of templates and other temporary work etc all complete with labours, materials, tools and tackles etc. The work shall be carried out as per drgs. and specification and/or as directed by Er. Incharge.	MT	4.00
44	Erection of steel columns including cleats & brackets, girders, portals, roof trusses, bracing, purlins, liner, hopper, rail, runners, claddings, buffer stops etc. with all necessary fastenings. The item includes transportation of fabricated materials within a lead of 1 km, stacking, touching primer coat of paint, cleaning & checking of foundation & anchor bolts, alignment, all lead and lift, assembly to proper profile & chamber, site welding, bolting, riveting, drilling holes, gas cutting etc. including supply of all materials, machines & cranes, bolts, rivets, nuts, washers, welding rods, other fastenings, packing plates, labour etc. & also including rectification of defects due to transportation but excluded the cost of fabricated steel. The work shall be carried out as per drgs & specifications, and/ or as directed by Er. Incharge.	MT	4.00