## Government eProcurement System

## **eProcurement System Government of India**

#### **Tender Details**

Date: 03-Sep-2025 10:01 AM



Basic Details					
Organisation Chain	Hindustan Urvarak and Rasaya	Hindustan Urvarak and Rasayan Limited  Baruni-Bihar - HURL			
Tender Reference Number	HURL/BR/CC/25-26/1483				
Tender ID	2025_HURL_875779_1	Withdrawal Allowed	Yes		
Tender Type	Open Tender	Form of contract	Tender cum Auction		
Tender Category	Works	No. of Covers	2		
General Technical Evaluation Allowed	No	ItemWise Technical Evaluation Allowed	No		
Payment Mode	Offline	Is Multi Currency Allowed For BOQ	No		
Is Multi Currency Allowed For Fee	No	Allow Two Stage Bidding	No		

	<u>Payment Instruments</u>						
Offline	S.No	Instrument Type					
	1	R-T-G-S					
	2	NEFT					
	3	Bank Guarantee					

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical	.pdf	Scanned copy of proof of payment of Earnest Money Deposit.
		.pdf	Signed and Stamped of copy of Certificates like Registration Cert.,PAN,GST and EPF certificate.
		.pdf	Scanned copy of Power of Attorney as per NIT Clause 11 and other docs as per checklist clause 31.
		.pdf	Signed and Stamped copy of Proof for PQC criteria as per detailed filled in Annexure-12 of Sec-VI.
		.pdf	Signed and Stamped copy of Annexures- 1 to 7 and Annexure-12 to 16 of Section VI of tender document.
		.pdf	Signed and Stamped copy of GCC, SCC and SOW (i.e.Section-III

			to Section-V) of tender documents.
2	Finance	.xls	BoQ

Tender Fee Details, [Total Fee in ₹ * - 0.00]				
Tender Fee in ₹	0.00			
Fee Payable To	Nil	Fee Payable At	Nil	
Tender Fee Exemption Allowed	No			

	EMD Fee Details					
-	EMD Amount in ₹	4,12,452	EMD Exemption Allowed	No		
1	EMD Fee Type	fixed	EMD Percentage	NA		
	EMD Payable To	HURL	EMD Payable At	NEW DELHI		

Click to view modification history

Work /Item(s)	ork / item(s)				
Title	RENOVATION	ON OF OLD HFCL 12 NOS QUA	RTERS AT TOWNSH	IP AT HURL BARAUNI.	
Work Description	RENOVATION	ON OF OLD HFCL 12 NOS QUA	RTERS AT TOWNSH	IP AT HURL BARAUNI.	
<b>Pre Qualification Details</b>	Please refe	r Tender documents.			
Independent External Monitor/Remarks	NA	NA			
Show Tender Value in Public Domain	No				
Tender Value in ₹	0.00	<b>Product Category</b>	Miscellaneous Works	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	180	Period Of Work(Days)	153
Location	HURL Barauni	Pincode	851115	Pre Bid Meeting Place	NA
Pre Bid Meeting Address	NA	Pre Bid Meeting Date	NA	Bid Opening Place	HURL Admin Building
Should Allow NDA Tender	No	Allow Preferential Bidder	No		

<u>Critical Dates</u>			
Publish Date	03-Sep-2025 11:00 AM	Bid Opening Date	20-Sep-2025 11:00 AM
Document Download / Sale Start Date	03-Sep-2025 11:00 AM	Document Download / Sale End Date	19-Sep-2025 11:00 AM
Clarification Start Date	NA	Clarification End Date	NA
Bid Submission Start Date	03-Sep-2025 11:00 AM	<b>Bid Submission End Date</b>	19-Sep-2025 11:00 AM

NIT Document	S.No	Document Name		Description		Document Size (in KB)
	1	Tendernotice_1.pdf		NIT Document		348.00
Work Item Documents	S.No	Document Type	Document	Name	Description	Document Size (in KB)
	1	Tender Documents	Tenderdocur	ments.pdf	Tender Documents	3703.86
						235.50

Auto Extension Corrigendum Properties for Tender				
Iteration	No. of bids required for bid opening a tender	Tender gets extended to No. of days		
1.	3	4		
2.	3	3		

D: 10 1: 1		
<b>Bid Openers List</b>		

S.No	Bid Opener Login Id	Bid Opener Name	Certificate Name
1.	ashishkumarmishra@hurl.net.in	ASHISH KUMAR MISHRA	ASHISH KUMAR MISHRA
2.	niketkumarsingh@hurl.net.in	NIKET KUMAR SINGH	NIKET KUMAR SINGH
3.	amitkrburman@hurl.net.in	Amit Kumar Burman	AMIT KUMAR BURMAN
4.	ravikrsaw@hurl.net.in	RAVI SAW	RAVI KUMAR SAW

Tender Properties			
Auto Tendering Process allowed	No	Show Technical bid status	Yes
Show Finance bid status	Yes	Stage to disclose Bid Details in Public Domain	Financial Evaluation
BoQ Comparative Chart model	Normal	BoQ Compartive chart decimal places	2
BoQ Comparative Chart Rank Type	L	Form Based BoQ	No
Adopt Tender Cum Auction New Process	No		
Bidders Elimination Process Required	Yes	Allow Preferential Bidder Elimination Process Required	No
Minimum Bidder for Elimination	4	Number of Bidder to Eliminate	1

### TIA Undertaking

S.No	Undertaking to Order	Tender complying with Order	Reason for non compliance of Order
1	PPP-MII Order 2017	Agree	
2	MSEs Order 2012	Agree	

Tender Inviting Authority		
Name	Chief Manage	
Address	HURL Admin Building Urvarak Nagar Begusarai, Barauni, Bihar-851115	

<u>Tender Creator Details</u>			
Created By	Amit Kumar Burman		
Designation	Officer		
Created Date	03-Sep-2025 09:48 AM		

## **HINDUSTAN URVARAK & RASAYAN LIMITED**

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

#### **BARAUNI UNIT**

Barauni Urvarak Nagar, Begusarai

P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115

[Registered Office SCOPE Minar, Core 4, 9TH Floor, Laxmi Nagar District Center, Delhi-110092]



## SECTION - I

## NOTICE INVITING TENDER (NIT)

**TENDER:** RENOVATION OF OLD HFCL 12 NO'S QUARTERS AT TOWNSHIP AT HURL

BARAUNI.

**NIT NO.** HURL/BR/CC/25-26/1483

## HURL

#### HINDUSTAN URVARAK & RASAYAN LIMITED, BARAUNI UNIT

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

1.0 HURL (Hindustan Urvarak & Rasayan Limited), Barauni invites on-line bids from eligible Bidders fulfilling the Qualifying Requirements / Pre-Qualification Criteria (PQC) under Two Bid system for aforesaid package.

#### 2.0 Brief Details

Published Date	Refer CPP Portal
Bid Document Download / Sale Start Date	Refer CPP Portal
Bid submission Start Date	Refer CPP Portal
Last Date and Time for Bid submission	Refer CPP Portal
Technical Bid Opening Date & Time	Refer CPP Portal
Earnest Money Deposit (EMD) in INR	INR 4,12,452.00
Pre-Bid Conference Date & Time (if any)	Refer CPP Portal
Last Query Date	Refer CPP Portal
Reverse Auction	Shall be intimated later

3.0 EMD/Bid Security shall be submitted online/ electronically by RTGS / NEFT in the account of HURL as mentioned below details by the stipulated bid submission closing date and time. The payment details of Bid security shall be submitted along with the bidding documents. Any bid without an acceptable Bid Security (if applicable) shall be treated as non-responsive by the employer and shall not be opened.

Name of the Bank	:	State Bank of India, Overseas Branch, DELHI
Account Name	:	Hindustan Urvarak & Rasayan Limited
Account No.	:	41288344914
IFSC Code	:	SBIN0004803

In case of EMD payment through RTGS/NEFT, Bidder must mention "E1483" in the transaction description while making the payment (Refer Clause 14 of Section II-ITB).

- 4.0 This tender is a "work Contract" and there is no exemption clause for EMD (Earnest Money Deposit) in the tender for work contracts.
- 5.0 All UDYAM registered vendors -MSE Category are exempted from submission of tender fee & EMD.

  UDYAM REGISTRATION CERTIFICATE must be submitted online along with the bidding documents to avail the exemption from furnishing the EMD.
  - MSE bidders seeking benefits of MSE as specified in the Tender Documents, must submit Attested/Self attested copy of UDYAM certificates (as mentioned in clause 4.0 of ITB) failing which no benefit of MSE shall be extended.
- 6.0 A complete set of Bidding Documents may be downloaded by any interested from the e-tendering Site (<a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>). Bidder who has downloaded the tender from the Central Public Procurement Portal (CPPP) website <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>, shall not

## HORL

#### HINDUSTAN URVARAK & RASAYAN LIMITED, BARAUNI UNIT

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

tamper/modify the tender document/form including downloaded price bid template in any manner. In case the same is found to be tampered/modified in any manner, bid will be completely rejected and EMD would be forfeited and Bidder is liable to be banned from doing business with HURL for a period of two years.

Intending Bidders are advised to visit CPPP website https://eprocure.gov.in/eprocure/app regularly till closing date of submission of tender for any corrigendum / addendum/ amendment.

Not more than one tender shall be submitted by one bidder/ bidder(s) having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e., when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable to rejection.

#### 7.0 Qualifying Requirements / Pre-Qualification Criteria (PQC)

#### 7.1 Commercial Pre- Qualification Criteria

Following is the commercial Pre-Qualification Criteria (PQC) for the subject tender:

**Condition 1:** Bidder should be either Partnership firm/Sole Proprietor / Limited company.

#### Documents required (To be Submitted along with technical bid):

- i) For Proprietorship firm Name of the proprietor to be mentioned. Affidavit of proprietorship in original duly notarized (Latest).
- ii) For partnership firms –Affidavit in originals duly notarized, confirming the current status of the firm along with names of the partners or copy of partnership deed duly notarized (latest) to be submitted
- iii) For limited companies, notarized copy of Certificate of Incorporation, Memorandum & Articles of Association and copy of allotment of Director Identification Number (DIN) number.

**Condition 2:** The Average Annual financial turnover during the last 3 years financial years should be at least Rs. 61,86,783.00

#### Note-

- (i) In case where audited results for the last financial year as on the date of techno-commercial bid opening are not available, the financial results certified by a practicing Chartered Accountant shall be considered acceptable. In case, Bidder is not able to submit the certificate from practicing Chartered Accountant certifying its financial parameters, the audited results for the three consecutive financial years preceding the last financial year shall be considered for evaluating the financial parameters, a Certificate would be required from the CEO/CFO as per the format enclosed in the bidding documents stating that financial results of the company are under audit as on the date of techno-commercial bid opening and the certificate from a practicing chartered accountant certifying the financial parameters is not available.
  - (ii) Other income shall not be considered for arriving at annual turnover.
  - (iii) Bidder can either submit Annual turnover for
    - a. FY2020-21, 21-22 & 22-23 with CA certified UDIN.
    - b. FY2021-22, 22-23 & 23-24 with CA certified UDIN.
  - (iv) Only ATO with UDIN shall be considered for Evaluation.

Documents required (To be Submitted along with technical bid)

## HURL

#### HINDUSTAN URVARAK & RASAYAN LIMITED, BARAUNI UNIT

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"Proof of ATO shall be submitted in the form of Audited Balance Sheet along with statement of Profit & Loss Account certified by Chartered Accountant (CA)". Unique Document Identification Number (UDIN) No. of CA must be clearly indicated in the above statement.

NIT Publication date shall be considered for reckoning Annual Turnover (ATO).

#### 7.2 Technical Pre- Qualification Criteria

Following are the Technical Pre-Qualification Criteria (PQC) for the subject tender:

#### **Condition 1:** (6.2.1)

Bidder should have successfully completed **Similar Nature of Work** during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following (value excl. GST & Duties) shall be as follows:

One similar nature of successfully completed work costing not less than the amount equal to Rs. 1,64,98,087.00/- 'OR'

Two similar nature of successfully completed work each costing not less than the amount equal to Rs. 1,03,11,305.00/- 'OR'

Three similar nature of successfully completed work each costing not less than the amount equal to Rs. 82,49,044.00/-

- 1. Amount mentioned is exclusive of taxes and duties.
- 2. The Word "Similar Nature of Work" means "The bidder should have experience in construction/Renovation of residential building including civil & electrical works.
- 3. The Total Executed value of the completed order shall be considered for the PQC evaluation.

#### Note:

- Similar nature of Work order should contain Unit of measurement in Man-days or Man months
  for the respective manpower supplied. Any other items of the work order other than man-days
  or man months shall not be considered for evaluation. If the completion certificate value
  mismatches with the Work order value, then supplier shall submit the documentary evidence for
  the actual manpower supplied for the same contract under the manpower supplied on Man-days
  or Man month basis.
- 2. Cost of completed Service order(s), single/two/three mentioned above, is exclusive of GST& Duties and accordingly executed value of the job excluding GST& Duties shall be considered for evaluation of PQC. The duration in which the job is successfully completed shall be considered for evaluation of PQC which is mentioned in 6.2.1 and shall be evaluated on submission of completion certificate with the Purchase order / agreement copy as supportive documents. The purchase order / agreement should contain complete BoQ / SoR with detailed scope of work.

#### Documents required (To be Submitted along with technical bid):

- 1. Copy of Work Order (WO)/PO/rate contract/ agreement with following details:
  - a. Work order/PO/rate contract/ agreement with number, date and value.
  - b. Name of the client and Period of contract.
  - c. Technical specifications, Complete scope of work and contract terms with SoR / BoQ.
- 2. Completion Certificate issued by client highlighting below:
  - a. Reference Work order/PO/Rate contract with number, date and value
  - b. Name of the client, Period of Contract
  - c. Executed value with quantity under the Work order/PO/Rate contract/ agreement for the particular financial year mentioned.
  - d. Performance of the contract.

## HURL

#### HINDUSTAN URVARAK & RASAYAN LIMITED, BARAUNI UNIT

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e. If the executed amount is missing in the completion certificate issued by the client, the bidder shall submit the certificate issued by CA with UDIN for executed amount for the respective order. The details of the respective order should be mentioned in the same.

#### 8.0 Documents for PQC:

- 8.1 BIDDER MUST SUBMIT ANNEXURE-12 of SECTION VI with complete details and all the terms mentioned in the form of note in annexure 12 shall be strictly followed. If the data is not provided in the same HURL reserves the right to reject the bid.
- 8.2 The bidder shall be obligated to furnish an amended copy of the work order in the event that the executed value specified in the completion certificate surpasses the original order value. Failure to comply with this requirement shall grant HURL the right to disqualify the order, and no claims shall be entertained with respect to such occurrences.
- 8.3 The bid Bids will be opened as per date/time as mentioned on the Date specified above or on the date specified on the e-tendering portal. The date of Price-Bid opening will be intimated later on the e-tendering portal.
- 8.4 The bidder is required to provide all requisite shortfall documents to HURL through the portal, as outlined in the PQC criteria. Bidders are explicitly instructed that HURL will not engage in seeking clarification from the order-issuing organization regarding the verification of submitted documents. HURL holds no responsibility for obtaining confirmation from the order-issuing organization. Failure to submit the necessary shortfall documents will lead to the rejection of the bid, and no claims will be entertained on this ground.
- 9.0 HURL shall not be responsible for any postal /courier delay for submission of EMD and/or other original documents, if applicable.
- 10.0 HURL reserves the right to reject any or all bids or cancel/withdraw the NIT for the subject package without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action.
- 11.0 Bids shall be digitally signed and uploaded by someone legally authorized and competent on behalf of his firm / company i.e., Bidder and relevant documents w.r.t. the same to be uploaded along with the bid by the bidders. The Power of Attorney of such person needs to be furnished along with bid. The Power of Attorney to be submitted on Rs. 100/- Non-judicial Stamp paper or on Legal Notary (Duly Notarized).
- 12.0 Bidders are required to submit detailed work orders (similar in nature as defined) along with the work completion certificate endorsed by the client, containing details such as value, quantity, GST, work order reference, actual date of completion, etc. These documents are necessary to fulfill the PQ criteria mentioned and must be submitted with the technical bid. As part of our standard bid evaluation process, HURL reserves the right to request bidders to provide supporting documents for the purpose of verifying the authenticity of bid documents, as well as the information related to quantity, value, or any other relevant details provided in the submitted bid documents. These may include TDS, GSTR forms, Form 26AS, manufacturing license, plant design capacity, production details and other relevant documents. It is important to note that failure to submit the required documents within the stipulated time frame may result in the rejection of the bid.
- 13.0 Wherever executed value is not mentioned in the completion certificate, the copy of certified bills with service tax/GST details as applicable / Separate certificate from respective client (PO issuing company

- /Engineer In Charge) regarding executed value with GST details, date of completion etc., shall also be accepted towards fulfillment of PQC, if same is submitted along with completion certificate.
- 14.0 Completion certificate submitted by the bidders shall have clarity with respect to whether GST is included/excluded in the supplied value, towards fulfillment of PQC and same shall be ensured by the bidders by submitting proper and relevant documents as required (e.g. separate certificate from respective client regarding GST) along with delivery completion certificate.
- 15.0 If no clear documents as mentioned above regarding GST / Duties component included/extra/not applicable with respect to the supplied value mentioned in delivery completion certificate is submitted by the bidder & In case GST/duties amount / component is also not specified in the submitted delivery completion certificate, then the amount equivalent to rate of applicable GST/duties as considered by HURL for the subject tender shall be deducted from the value of material supplied mentioned in the completion certificate to arrive at the value of the supplied material without GST/ duties.
- 16.0 Similar ARC and Composite orders submitted for PQC.
  - 16.1 Similar ARC (Annual Rate Contract) Jobs that has been successfully completed by the bidder for the originally awarded period shall be considered as completed works even though such ARC is under execution on account of extension. However original term completion should be within the period as indicated in above PQC. Bidder to submit the relevant document along with bid certifying satisfactory completion of the job, executed value of the job and completion date for original period of contract, along with letter of extension of contract, certified by WO issuing company /Engineer in Charge.
  - 16.2 If a biannual contract is successfully completed, the order will be considered as two similar types of work. Similarly, if a tri-annual contract is successfully completed, the order will be considered as three similar types of work. Multi-annual contracts will be calculated in the same way, with only the value of one, two, or three years being considered for orders of 1, 2, or 3 similar types of work, subject to the fulfillment of PQC criteria and submission of a work completion certificate. To evaluate this, bidders must submit completion certificates with yearly completion values and required details as stated in PQC criteria 6.2.1. If yearly completion values cannot be provided, bidders must submit a completion certificate with a CA certified copy indicating completion values per year and respective tenure, clearly mentioning UDIN. This is subject to the successful completion of the order within the original awarded period and the requirements outlined in clause 6.2 of Section-1. Bidders must also submit an order amendment copy in case of any extensions, deviations, or other amendments to the order. Failure to submit these documents will result in HURL's right to calculate completion values on a pro-rata basis or using an appropriate calculation method, which will be unquestionable by the bidder.
  - 16.3 In composite orders where different types and categories of Materials or services are included the evaluation shall be performed considering only the items and its respective values which cover under "Similar nature of work" and accordingly the bidder shall submit the supporting documents. In case of non-submission of the said documents, HURL reserves the right to evaluate as per the data provided by the bidder and the evaluation result shall be unquestionable by the bidder. Also, if the bidder does not submit the said documents may lead to rejection of the bid.



- 17.0 The GST part of the bill shall be paid only after confirmation of payment from the successful awarded bidder or after confirmation of the corresponding return filed by the contractor from the GST portal. The GST part of the bill shall be withheld till such confirmation.
- 18.0 In case of sub contract orders, credential as sub-contractor for above PQC shall be considered only when such work orders for sub contract have been issued with approval or written permission of end user/owner/consultant of the owner of the contract from the scope of work of which contractor under the contract has sub contracted a part of or entire work under such work order. In this regard, the bidder has to submit a certificate from the end user/owner/consultant of the owner stating that the main contractor has intimated them about the engagement of sub-contracting OR have been allowed/ permitted as a sub-contractor. Based on such Sub contracted portion of the job actually executed by the bidder as subcontractor, PQC evaluation shall be done i.e. In case only part job is subcontracted, similar job & executed value etc. for the part job only shall be considered for PQC and not the full job.
- 19.0 Work completion date shall be considered for deciding the period of work experience.
- 20.0 Evaluation Basis:
  - 20.1 Bidder should submit the Shortfall documents as requested in the portal. If Bidder do not respond to the shortfall, HURL reserves the right to evaluate without shortfall documents considering the available bid documents and in such case no bidder/intending bidder shall have any claim arising out of such action.
  - 20.2 In case tie between two or more bidders at L-1 position, the sole criterion for determining the L1 bidder shall be on the basis of Average Annual Turn Over of the party calculated from ATO of either FY 20-21,21-22 & 22-23 or FY 21-22,22-23,23-24. Bidder having the highest average annual turnover shall be considered as L1 party. If bidder submits ATO for FY 20-21, 21-22,22-23 and 23-24, then the average ATO of FY 20-21,21-22 & 22-23 and Average ATO of FY 21-22,22-23,23-24 shall be calculated, and Maximum Average ATO shall be taken in to consideration for evaluation. (Ex. Average ATO of FY 20-23 is 1Cr. and Average ATO of FY 21-24 is 1.1Cr. then Average ATO 1.1Cr. of FY 21-24 shall be taken into consideration). NO shortfall shall be raised regarding the ATO if the bidder submits either of any option i.e. FY 20-23 or FY 21-24. MSE and MII preference shall be applicable during the evaluation.
- 21.0 Evaluation Criteria: On percentage rate basis.
- 22.0 **Contract Duration / Delivery completion:** The contract duration is for 05 Months from the date of site handover.
- 23.0 **Mobilization:** Within 07 days from the date of the handover of site.
- 24.0 Effective date of Contract: From the date of Handover of site.
- 25.0 **Deviation**: 10% of contract value.
- 26.0 Quantity Variation: Applicable, any variation within the contract value is permissible except manpower.
- 27.0 **Defect Liability Period:** 12 Months from the date of completion period.
- 28.0 **Performance Bank Guarantee:** Bidder must deposit PBG 10% of the contract value in advance.
- 29.0 **Reverse Auction:** Applicable as per HURL's requirement.



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#### 30.0 Address for Communication.

From Technical Department: (For Civil Department)		
Mr. Gopal Krishna Behera	Mr. Golam Sarowar	
AVP (Maintenance)	Deputy Manager (Civil)	
gkbehera@hurl.net.in	golamsarowar@hurl.net.in	
From Technical Department: (For Electrical De	partment)	
Mr. Anil Chandrakar	Mr. Abhishek Kumar	
Chief Manager (Electrical)	Deputy Manager (Electrical)	
anilchandrakar@hurl.net.in	abhishekkumar@hurl.net.in	
From Contracts & Materials (C&M) Purchase D	epartment:	
Mr. Ravi Kumar Saw	Mr. Amit Kumar Burman	
Chief Manager (C&M)	Officer (C&M)	
ravikrsaw@hurl.net.in	amitkrburman@hurl.net.in	
Ph. No: 6279310380	Ph.: 06243291724, 6279310383	
From Stores Department:		
Mr. Rakesh Kumar Tiwari	Mr. Chandan Kr. Singh	
Manager (Stores– C&M)	JSA-II – C&M-Stores	
rakesh.tiwari@hurl.net.in	chandankumarsingh@hurl.net.in	
Hindustan Urvarak & Rasayan Limited, Barauni Urvarak Nagar, Begusarai, Bihar – 851115		

#### 31.0 Checklist of documents to be submitted:

Sr. No	Documents
1	Techno Commercial Proposal Bid Form. (Enclosed as Annexure-1 of Section VI)
2	Power of Attorney as per requirement mentioned in NIT.
3	Signed, Stamped and Scanned copy of proof for payment of Earnest Money Deposit (EMD) / MSE
	Certificate with applicable annexure form for exemption.
4	Signed, Stamped and Scanned copy of Certificates like Registration certificate, GST No, PAN No, PF, etc.
5	Signed, Stamped and Scanned copy of Format for Electronics Payment (Enclosed as Annexure-2 to
J	Forms and Procedures i.e., Section VI)
6	Signed, Stamped and Scanned copy of Tender Acceptance Letter (Enclosed as Annexure-3 to Forms and
0	Procedures i.e., Section VI)
7	Documents as required in accordance with Qualifying Requirements / Pre-Qualification Criteria (PQC)
,	i.e., <u>Clause 6</u> of NIT
8	Signed, Stamped and Scanned copy of No deviation Certificate (Enclosed as Annexure-4 to Forms and
0	Procedures i.e., Section VI)
9	Signed, Stamped and Scanned copy of Certificate from CEO/MD/ Legally Authorized Signatory, in the
9	format as enclosed as Annexure-5 to Forms and Procedures i.e., Section VI.
	Acceptance to Fraud Prevention Policy of HURL, for which the bidder has to submit Signed, Stamped
10	and Scanned copy of Form of Acceptance of Fraud Prevention Policy of HURL. (Enclosed as Annexure-
	6 to Forms and Procedures i.e., Section VI).



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11	Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India" i.e. (Enclosed as Annexure-7 to Forms and Procedures i.e., Section VI).
12	Work orders subject to tender for qualification as per Annex – 12 with clearly mentioning Purchase order details relevant to tender based on which PQC can be achieved. Not to be mentioned as "As Attached"/ "mentioned in Bid"/ etc.
13	Declaration of GST (annexure -15) Signed, Stamped and Scanned copy of Declaration of GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).
14	Signed, Stamped and Scanned copy of Bid Security Declaration Form (Enclosed as Annexure-13 to Forms and Procedures i.e., Section VI).
15	Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.
16	Any Other Document asked for in the Bidding Document

<u>Note</u>: Failure to Upload Authentic and Correct Documents as mentioned at Sr. No, 1 to 16 above would lead to Rejection of Techno- Commercial Bid. Price Bids shall be opened only of those bidders who are qualified and whose techno-commercial bids are acceptable.

### **HINDUSTAN URVARAK & RASAYAN LIMITED**

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

#### **BARAUNI UNIT**

Barauni Urvarak Nagar, Begusarai

P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115

[Registered Office SCOPE Minar, Core 4, 9TH Floor, Laxmi Nagar District Center, Delhi-110092]



SECTION - II

INSTRUCTIONS TO BIDDERS
(ITB)



Sr. no	Index
1	Introduction
2	General Information
3	Content of Bidding Documents
4	Benefits To MSEs
5	Cost of Bidding
6	Clarification on Bidding Documents
7	Corrigendum/ Amendment to Bidding Documents
8	Language of Bid
9	Bid Proposal
10	Documents Comprising the Bid
11	Bid Prices
12	Price Basis
13	Bid Currencies
14	Earnest Money Deposit (EMD) / Bid Security
15	Performance Security / Performance Bank Guarantee (PBG)
16	Confirmation of BGs through Structured Financial Messaging System (SFMS)/SWIFT
17	Ineligibility for Future Tenders
18	Period of Validity of Bids (Techno-Commercial Bid and Price Bid)
19	Nil Deviation
20	Format and Signing of Bid
21	Submission of Bids
21.1	Physical bid
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22	Deadline for Submission of Bids
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24	Opening of Bids
25	Clarification on Bids



26	Preliminary Examination of Techno-Commercial Bids
27	Evaluation of Techno-Commercial Bids
28	Preliminary Examination of Price Bid
29	Discrepancies in Bid
30	Evaluation Criteria
31	Evaluation of Bids
32	Contacting the Employer
33	Employer's Right to Accept Any Bid and To Reject Any or All Bids
34	Award Criteria
35	Construction of Contract
36	Notification of Award
37	Corrupt or Fraudulent Practices
38	Fraud Prevention Policy
39	Banning Policy
40	Indian Agents Transfer of Bid Documents
41	Transfer of Bid documents
42	Restrictions on procurement from a Bidder of a country which shares a land border with India
43	Preference to Make In India (MII) and granting of purchase preference to local suppliers.
44	Termination of Contract
45	Blacklisting
Annexure-	Checklist of documents to be submitted:
Annexure- 2	Guidelines for online Bid Submission and Reverse Auction.

1.0	Introduction	Hindustan Urvarak & Rasayan Limited (HURL) is a joint venture	
		company of Coal India Limited (CIL), NTPC Limited (NTPC) and Indian	
		Oil Corporation Limited (IOCL) as the lead promoters with Fertilizer	



		•	of India Limited (FCIL) and Hindustan Fertilizer Limited (HFCL) as other two partners.	
		an agency fo	HURL, Barauni referred to herein as 'the Employer', intends to engage an agency for supply of Goods & related Services or Services as per specifications, Scope of Work as detailed in the Bidding documents.	
2.0	General Information	Commercial	The prospective Bidders are invited to submit a "Technical & Commercial Bid" and "Price Bid" for the package. Methodology for submission of Bid has been detailed hereunder in this document.	
		Applicability NIT.	of Reverse Auction may be seen on the CPP website /	
3.0	Content of Bidding Documents		The items and/or services required, bidding procedures, order/contract terms and technical requirements are prescribed in the bidding documents/Bidding Documents.	
		The bidding	documents include the following sections:	
		Section-I	Notice Inviting Tender (NIT)/Tender Enquiry/Invitation for Bid (IFB)	
		Section-II	Instruction to bidder (ITB)	
		Section-III	General Conditions of Contract (GCC)	
		Section-IV	Special Conditions of Contract (SCC)	
		Section-V	Technical specifications, SOR & Scope of work and other terms & condition.	
		Section-VI	Forms and Procedures	
		conditions, documents. bidding docu to the biddir	is expected to examine all instructions, forms, terms, specifications and other information in the bidding Failure to furnish all information required as per the ments or submission of a bid not substantially responsive ag documents in every respect will be at the Bidder's risk alt in rejection of its bid.	
4.0	Benefits to		Micro and Small Enterprises (MSEs) shall be exempted from paying Earnest Money Deposit.	
		participating shall also be down their someone oth Small Enterp tendered val	Further, in case of tenders where splitting of quantity is possible, participating MSEs quoting price within price band of L1 + 15 percent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 25 percent of total tendered value. In case of more than one such MSE, the supply will be shared proportionately (to tendered quantity).	



		The benefit as above to MSEs shall be available only for Goods/Services produced & provided by MSEs.
		MSEs seeking exemption and benefits should enclose/upload in etender portal an attested/self-certified copy of following registration certificate and <b>BID Security declaration form</b> (Annexure – 13) as a part of his bid, failing which they run the risk of their bid being passed over as ineligible for the benefits applicable to MSEs.
		Ministry of MSME vide Gazette notification no. CG-DL-E-26062020-220191 dated 26.06.2020 had notified certain criteria for classifying the enterprises as Micro, Small and Medium Enterprises and specified, form and procedure for filing the memorandum (Udyam Registration) w.e.f. 01.07.2020 (for complete details of policy refer website of Ministry of MSME i.e. <a href="https://msme.gov.in/">https://msme.gov.in/</a> ) Accordingly, Micro and Small Enterprises (MSEs) shall be required to submit <b>Udyam Registration Certificate</b> for availing benefit under Public Procurement Policy for MSEs-2012.  ii) An enterprise registered prior to 30.06.2020 and who is not reregistered with Udyam Registration, shall continue to be valid for a period up to 31.12.2022. Such enterprise shall submit EM Part-II or Udyog Aadhaar Memorandum (UAM) for availing benefits of PPP-2012. (Ref Notification No. CG-DL-E-19012022-232763)
5.0	Cost of Bidding	The Bidder shall bear all costs associated with the preparation and submission of its bid and the Employer will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.
6.0	Clarification on Bidding Documents	A prospective Bidder requiring any clarification of the Bidding Document shall put the query under Clarification tab of the on-line bid at least three days prior to the clarification end date. EMPLOYER will respond to any request for clarification or modification of the bidding documents that it receives within the time line specified.
		EMPLOYER will post the Clarifications under Clarification tab at etender i.e., CPP website. Bidders can view these clarifications.
		Bidders are advised to regularly check under Clarification tab regarding posting of clarification, if any.
		Bidders must check the Clarifications issued before submission of Bid. Should the Employer deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so and upload the amendments in the tender on the e-tender portal.
7.0	Corrigendum/ Amendment to Bidding Documents	At any time prior to the deadline for submission of bids, EMPLOYER may, for any reason, whether at its own initiative, or in response to a clarification requested by a prospective Bidder, amend the bidding documents.



		The corrigendum's/amendment's will be posted in the tender on the e-tender portal for viewing by the Bidder. The amendments will be binding on Bidders and it will be assumed that the information contained therein will have been taken into account by the Bidder in its bid. Bidders are advised to regularly check the tender regarding posting of Amendments, if any.  To give prospective Bidders reasonable time to take the corrigendum/amendment into account in preparing their bid, EMPLOYER may, at its discretion, extend the deadline for the submission of bids.
8.0	Language of Bid	The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in English language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English. In such case for purposes of interpretation of the Bid such translation shall govern.
9.0	Bid Proposal	Bid shall be complete in all respects and shall be submitted with requisite information and Attachments. It shall be free from any ambiguity.  For preparation of Bids, Bidders are expected to go through the complete bidding documents carefully. Material deficiencies in providing the information requested may result in rejection of the Bid.
10.0	Documents Comprising the Bid	The Bid shall comprise of following components:  Technical Bid:  The following documents are to be furnished by the Bidder as part of the Technical Bid:  a) Techno Commercial Proposal Bid Form  b) Power of Attorney as per requirement mentioned in NIT.  c) proof for payment of Earnest Money Deposit (EMD)/ MSE Certificate for exemption with Annexure -13.  d) Certificates like Registration certificate, GST No, PAN No. etc. e) Format for Electronic Payment  f) Tender Acceptance Letter & Letter of authorization to submit bid.  g) Documents as required in accordance with Eligibility Criteria. Bidder must fill all the details in Annexure-12.  h) No deviation Certificate. i) Certificate from CEO or Managing Director or Legally Authorised Signatory, in the format as enclosed with the Bidding Document certifying that the data and documents furnished by them in respect of Techno-Commercial Evaluation are true and correct including the contents thereof. However, if at any point of time the declarations given in bid are found to be incorrect, HURL shall have the full



		right to terminate the contract and take any action as per provisions of contract including forfeiture of EMD/Security Deposit.  j) Acceptance of Fraud Prevention Policy of HURL,  k) Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India".  l) Any other document asked for in the Bidding Documents.  m) Signed and stamp Copy of GCC, SCC, Technical Specification/scope of work and dully filled all annexures.  Price Bid: The Price bid is to be submitted in the BOQ provided in the Tender at <a href="https://eprocure.gov.in/eprocure/app.">https://eprocure.gov.in/eprocure/app.</a> Bidders are advised to fill the BOQ and upload the same on the portal. Bidder should not tamper/modify download price bid template. In case if the same is found to be tampered / modified in any manner, bid will be rejected and EMD would be forfeited and
		Bidder is liable to be banned from doing business with HURL for a period of 2 years.
11.0	Bid Prices	Bidders shall quote such that the bid price covers all the Supplier's obligations mentioned in or to be reasonably inferred from the bidding documents including all requirements in accordance with the requirements of the Technical Specifications & Scope of Work. Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding documents.  Bidders shall give a breakdown of the prices in the manner and detail called for in the Bill of Quantity (BOQ).
12.0	Price Basis	Bidders are required to quote price on the price basis as per Scope of Work / stipulated in the SCC.
13.0	Bid Currencies	All prices to be quoted by the bidders will be in Indian Rupees only, unless otherwise mentioned in the Special Conditions of Contract, on <b>FIRM</b> price basis and to remain valid during the currency of the Contract.
14.0	EARNEST MONE	Y DEPOSIT (EMD) / BID SECURITY / GUARANTEE:
	i. The Bidder shall furnish, as part of his bid, Earnest Money Deposit in the amount as stipulated in NIT/IFB/Tender Enquiry, in the form of online payment mode by RTGS / NEFT in the account of HURL details as given in subsequent paragraphs. The receipt of the payment shall be attached as a part of bidding documents. If the EMD is paid other than online mode then the EMD shall be submitted in a separate Envelope super-scribed on the top as under:  "ORIGINAL EARNEST MONEY DEPOSIT FOR NIT NO	
	ii. The Earnest N following forr	Money Deposit (EMD) shall, at Bidders option, be submitted in the ms:



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a) electronically by RTGS / NEFT in the account of HURL details as given in subsequent paragraphs

or

b) in the form of Demand Draft in favour of *Hindustan Urvarak & Rasayan Limited,* Payable at New Delhi.

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c) in the form of an irrevocable bank guarantee.

The format of Bid Guarantee (BG) towards EMD shall be in accordance with the form of EMD included in the bidding documents (Annexure 8 of Section VI (Forms and Procedures)). The BG towards EMD shall remain valid for a period of forty-five (45) days beyond the original Bid validity period or beyond any extension in the period of Bid validity subsequently requested from any Scheduled / Commercial Bank recognized by Reserve Bank of India. The Bank Guarantee Verification Checklist duly filled in as per format given in the Bidding Documents is also to be submitted. Bidder shall ensure that all the points of check list are replied in "Yes".

- iii. Wherever Bids under Joint Venture route are permitted as per Qualifying Requirement in the Bidding Documents, the Earnest Money Deposit of the Joint Venture must be on behalf of all the partners of the Joint Venture.
- iv. Any bid not accompanied by an acceptable Earnest Money Deposit in accordance with the aforesaid provisions shall be rejected by the Employer as being non-responsive and shall be rejected without being opened.
- v. The Earnest Money Deposit shall be forfeited in any of the following circumstances without any notice or proof of damage to the Employer:
  - a) If the Bidder withdraws or varies its bid during the period of Bid validity.
  - b) If the Bidder does not accept the Arithmetical correction of its Bid Price
  - c) If the Bidder refuses to withdraw, without any cost to the Employer, any deviation, variation, additional condition or any other mention anywhere in the bid, contrary to the provisions of bidding documents;
  - d) In the case of a successful Bidder, if the Bidder fails, within the time limit,
    - (i) to sign the Contract Agreement
    - (ii) to furnish the required Security Deposit
  - e) If the bidder / his representatives commit any fraud while competing for this contract pursuant to Fraud Prevention Policy of HURL.
  - f) if the Bidder withdraws/ amends, impairs and derogates from the tender.
- vi. No interest will be payable by the Employer on the said amount covered under Earnest Money Deposit.
- vii. EMD shall be refunded to all the unsuccessful Bidder within thirty days of acceptance of work order by the successful Bidders and no interest shall be payable thereon. EMD of the bidders whose price are not considered to be opened, shall be released/refunded at the earliest but not later than thirty days beyond the award of the subject work.

EMD shall be refunded to successful bidder within (30) thirty days of acceptance of LOA and on submission of PBG by the successful Bidders and no interest shall be payable thereon.



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viii. RTGS / NEFT details of HURL as under:

BANK Details for EMD Payment through NEFT/RTGS:

Bank Name-State Bank of India, Overseas Branch, NEW DELHI (17313)

IFS CODE: SBIN0004803, Account No: 00000037880422277.

Bidders are required to upload Signed, Stamped and Scanned copy of the Certificate as part of Technical Bid, failing to which their bids are liable for rejection.

Price Bids shall be opened only of those bidder(s) whose EMD shall be found as per the requirement of the bidding documents.

Employer shall not be liable for loss/non-receipt/late receipt of above documents in postal transit.

#### **Exemption from submission of EMD:**

Micro and Small Enterprises (MSEs) bidders are exempted from submission of EMD as per provisions at clause 4.0 above and shall submit Annexure – 13.

#### **IMPORTANT:**

IN CASE OF EMD PAYMENT THROUGH RTGS / NEFT, BIDDER MUST MENTION "EXXX" (As per Section I, clause 3.0) IN TRANSCATION DESCRIPTION WHILE DOING THE PAYMENT. "XXX" to be replaced with the last three digits of the tender reference

(Example: Tender No.: HURL/BR/CC/22-23/432 then the payment description to be mentioned as "E432")

## 15.0 Security / Bank

Performance Performance Guarantee (PBG)

Within thirty (30) days of the receipt of Purchase Order/Service Order from the Employer, the contractor shall furnish the Contract Performance Security / Guarantee, for the due performance of the Contract for the value as tabulated below with an initial validity up to ninety (90) days beyond the completion date for work plus defect period (if any), for due performance of the Contract(s)/Order(s) in any form acceptable to the Employer.

PBG amount equivalent to 10% of the work order value shall be applicable.

Performance Security / Performance Bank Guarantee (PBG) may be submitted in any of the following forms:

a) electronically by RTGS / NEFT in the account of HURL details of which are given in bidding document

b) in the form of an irrevocable bank guarantee in accordance with the form of included in the bidding documents (Annexure 9 of Section VI (Forms and Procedures)) from any Nationalized bank / Scheduled Bank recognised by Reserve Bank of India.

Failure of the supplier to submit the above-mentioned Performance Security / Performance Bank Guarantee (PBG) shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

No interest shall be payable by the Employer to the Contractor against the Security Deposit furnished.



		Performance Security shall be returned after Certification of completion of work and Defect Liability period (if any) by EIC. However, the contractor will have to apply in writing, for refund of the same.  IMPORTANT: IN CASE OF PBG PAYMENT THROUGH RTGS / NEFT, BIDDER MUST MENTION "PXXX" IN TRANSCATION DESCRIPTION WHILE DOING THE PAYMENT. "XXX" to be replaced with the last three digits of the tender reference number.  (Example: Tender No.: HURL/BR/CC/22-23/432 then the payment description to be mentioned as "P432")
16.0	Confirmation of BGs through Structured Financial Messaging System (SFMS)/SWIF	While issuing the physical BGs, the Bidder's Bank shall also send electronic message through secure SFMS (in case of BGs issued from within India) or SWIFT (in case of BGs issued from outside India) to Employer's Beneficiary Bank whose details are provided in the Special Purchase Conditions.  Bidders are advised to ensure that the message is sent by their Bankers and the Bidders must submit the reference details as part of
	Т	the bid with the EMD.
		Name of Beneficiary of Bank Guarantee:
		Name of the Bank: <b>State Bank of India</b>
		Account Name-Hindustan Urvarak & Rasayan Limited Account no-37880422277
		IFSC code- SBIN0004803.
		In case of submission of EMD in the form of Bank Guarantee, bidders are requested to provide the Details like Bank Name, Branch address, IFSC code and Branch E-mail Id of BG issuing Branch on EMD submission covering letter
17.0	Ineligibility For Future Tenders	Notwithstanding the provisions regarding forfeiture of Earnest Money Deposit specified above, if a bidder after having been issued the Purchase Order/Contract, either does not accept the Purchase Order/Contract or does not submit an acceptable Performance Security and which results in tender being annulled then such bidder shall be treated ineligible for participation in the present and future tenders issued from HURL - Barauni for a period of 6 months from the date of withdrawal of the purchase order / contract or last communication date of notice issued by HURL, whichever is earlier.  If a bidder after opening of tenders where EMD is 'NIL/Not applicable' or exempted for bidders as per policy guidelines, withdraws its offer within the validity period of the offer, then such bidder shall be treated as ineligible for participation in the present and future tenders issued from HURL - Barauni for a period of 6 months from the date of withdrawal of the bid.



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		If a bidder after having been issued the Notification of Award/Purchase Order of a package where EMD is 'NIL/Not applicable' or exempted for bidder as per policy guidelines, either does not accept the Notification of Award/Purchase Order or does not submit an acceptable Performance Security pursuant to ITB Clause titled 'Performance Security', and which result in tender being annulled then such bidder shall be treated ineligible for participation in the present & future tenders issued from HURL - Barauni for a period of 6 months from the date of withdrawal of the purchase order / contract or last communication date of notice issued by HURL, whichever is earlier.
18.0	Period of Validity of Bids (Techno- Commercial Bid and Price Bid)	Bids shall remain valid for a period of 180 days from the closing date prescribed by EMPLOYER for the receipt of bids, unless otherwise specified in Special Conditions of Contract (SCC). A bid valid for a shorter period shall be rejected by EMPLOYER as being non-responsive.
		In exceptional circumstances, EMPLOYER may solicit the Bidder's consent to an extension of the bid validity period. The request and responses thereto shall be made in writing by post or email or by telefax followed by post confirmation. If a Bidder accepts to extend the period of bid validity, the validity of Earnest Money Deposit shall also be suitably extended. A Bidder may refuse the request without forfeiting its Earnest Money Deposit. A Bidder granting the request will not be required nor permitted to modify its bid.
19.0	Nil Deviation	No deviation, whatsoever, is permitted by EMPLOYER to any provision of Bidding Documents. The Bidders are advised that while making their Bids and quoting prices, all conditions are appropriately taken into consideration. Bidders shall certify their compliance to the complete Bidding Documents as per Certificate at Annexure 4 of Section VI (Forms and Procedures).
		In case the Products and/or Services offered do not meet the Technical requirements, the bid shall be rejected as Technically non-responsive.
		Bidders may note that in case the Bidder refuses to withdraw additional conditions/deviations/variations/exception, implicit or explicit, found anywhere in the techno-commercial bid, the bid shall be rejected as Technically non-responsive.
		Bidders may also note that any deviation/variation in any form in the Price Bid shall result in forfeiture of EMD.
20.0	Format and Signing of Bid	The bid including all documents uploaded in the on-line bid shall be digitally certified by a duly authorised representative of the Bidder to bind him to the contract using Class II or Class-III digital signature (in the name of designated individual with Organisation name). The Digital Signature shall be as per Indian IT Act from the licensed Certifying Authorities (CA) operating under the Root Certifying



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		Authority of India (RCAI) namely Controller of Certifying Authorities (CCA) of India.
		An authorisation letter/power of attorney indicating that the person signing the bid has the authority to sign the bid is to be submitted in Physical form and copy uploaded as part of the Techno-commercial Bid.
21.0	Submission of Bids	Bid shall be submitted through e-tender mode in the manner specified elsewhere in bidding document. No Manual/ Hard Copy of the Bid shall be acceptable except those asked for in Physical form.
21.1	PHYSICAL BID	
	EMD	The Bidder shall furnish, as part of his bid, a Earnest Money Deposit in the amount as stipulated in NIT/IFB/Tender Enquiry, in a separate envelope (in case paid in modes other than on line payment) superscribed on the top as under:
		"ORIGINAL EARNEST MONEY DEPOSIT FOR NIT
		NO (NAME OF PACKAGE) DUE ON (DATE OF BID OPENING)
		FROM(NAME OF THE BIDDER)."
21.2	ON-LINE	Bid along with all the documents should be submitted in the electronic form only through e-Tendering system.
		Any revision or amendment in bid shall be possible only up to the due date and time of submission of tender.
21.2.1	Techno-Commer	rcial Bid
(A)	COVER TYPE – FEE	MSEs seeking exemption and benefits should enclose/upload in e- tender portal a attested/self-certified copy of registration certificate as a part of his bid, failing which they run the risk of their bid being passed over as ineligible for the benefits applicable to MSEs.
(B)	COVER TYPE – TECHNICAL	The bidders shall upload documents in compliance to the Bidding Documents.
		The following documents are to be furnished by the Bidder as part of the Technical Bid:
		a) Techno Commercial Proposal Bid Form (Enclosed as Annexure-1 to Forms and Procedures i.e., Section VI)
		b) Power of Attorney as per requirement mentioned in NIT.
		c) Signed, Stamped and Scanned copy of proof for payment of Earnest Money Deposit (EMD)/ MSE Certificate.

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- d) Signed, Stamped and Scanned copy of Certificates like Registration certificate, GST No, PAN No. etc.
- e) Signed, Stamped and Scanned copy of Format for Electronics Payment (Enclosed as Annexure-2 to Forms and Procedures i.e., Section VI)
- f) Signed, Stamped and Scanned copy of Tender Acceptance Letter & Letter of authorization to submit bid (Enclosed as Annexure-3 to Forms and Procedures i.e., Section VI)
- g) Documents as required in accordance with Eligibility Criteria i.e., <u>Clause 6</u> of NIT
- h) Signed, Stamped and Scanned copy of No deviation Certificate Enclosed as Annexure-4 to Forms and Procedures i.e., Section VI)
- i) Signed, Stamped and Scanned copy of Certificate from CEO or Managing Director or Legally Authorised Signatory, in the format as enclosed as Annexure-5 to Forms and Procedures i.e., Section VI to Bidding Document shall be furnished certifying that the data and documents furnished by them in respect of Techno-Commercial Evaluation are true and correct including the contents thereof. However, if at any point of time the declarations given in bid are found to be incorrect, HURL shall have the full right to terminate the contract and take any action as per provisions of contract including forfeiture of EMD/Security Deposit.
- j) Acceptance to Fraud Prevention Policy of HURL, for which the bidder has to submit Signed, Stamped and Scanned copy of Form of Acceptance of Fraud Prevention Policy of HURL. (Enclosed as Annexure-6 to Forms and Procedures i.e., Section VI)
- k) Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India". (Enclosed as Annexure-7 to Forms and Procedures i.e., Section VI)
- I) Declaration of GST
- m) Any other document asked for in the Bidding Documents.

#### Note: -

Bidders are requested to upload the clearly visible documents only otherwise if not clearly visible then offer shall be liable for rejection without any further communication. The Techno-Commercial Bid should not contain any price content entry. In case, the Techno-



		Commercial Bid is found to contain any price content, such bid shall be liable for rejection.
		Checklist of documents to be submitted is enclosed as Annexure-1 to ITB.
21.2.2	Price Bid (COVER TYPE –	The Price bid is to be submitted in the BOQ provided in the Tender at <a href="https://eprocure.gov.in/eprocure/app.">https://eprocure.gov.in/eprocure/app.</a>
	FINANCE)	Bidders are advised to fill the BOQ and upload the same on the portal. Bidder should not tamper/modify download price bid template. In case if the same is found to be tampered / modified in any manner, bid will be rejected and EMD would be forfeited and Bidder is liable to be banned from doing business with HURL for a period of 2 years.
		Bidders shall necessarily submit the prices on-line in the Bill of Quantity (BOQ) only.
		For preparation of the "Price Bid", Bidders are expected to take into account the requirements and conditions of the bidding documents. The Price Bid shall be made in the 'BOQ' (excel file) only of Bidding Documents.
		The rate quoted by the bidder shall be inclusive of all provisions for incidental expenses necessary for proper execution and completion of the work in accordance with the terms & condition of the bidding document.
		All prices to be quoted by the bidders will be in Indian Rupees only, unless otherwise mentioned in the Special Conditions of Contract, on FIRM price basis and to remain valid during the currency of the Contract.
	Documents	s to be uploaded in the format stipulated in the tender (online).
	Note:	In case of Single Stage Two envelope bidding, Price Bid of those bidders whose bids are found to be qualified and technically & commercially responsive shall be opened at a later date under intimation to such bidders.
22.0	Deadline for Submission of	Bids must be submitted online no later than the time and date stated in the Tender Enquiry/NIT/ on line Tender details.
	Bids	The Off-line bid specified in the tender must be submitted to the Employer at the address given in the Special Conditions of Contract before the last date & Time for submission of Bid as specified in the NIT / Tender. Employer shall not be liable for loss/non-receipt/late receipt of above documents in postal transit.
		The on-line Bid must be submitted on the system well before the expiry of time and the schedule specified in the tender notifications, and may note that there is a time lag between the actual placing the



		bid on the local computer of the bidder and the refreshing of the data on the server.
		The processing time for data exchange depends on the internet speed of the bidder, therefore bidder should avoid the last-minute hosting of their bid. The bids visible to the Employer will be final for the purpose of acceptance.
		EMPLOYER may, at its discretion, extend this deadline for submission of bids, in which case all rights and obligations of Employer and Bidders will thereafter be subject to the deadline as extended.
23.0	Modification and Withdrawal of Bids	The Bidder may modify or withdraw its bid after submission prior to the deadline prescribed for bid submission. In case of withdrawal a letter giving the reason for withdrawal is to be uploaded. Once a bid is withdrawn, the bid cannot be re-submitted.
		No bid may be withdrawn / modified in the interval between the bid submission deadline and the expiration of the bid validity period. Withdrawal/Modification of a bid during this interval may result in the Bidder's forfeiture of its Earnest Money Deposit, pursuant to ITB Clause 14 above.
24.0	Opening of Bids	
	Techno- Commercial Bid Opening	The Employer will first open the Techno-Commercial Bid on the date and at the place specified in the tender enquiry/NIT. In the event of the specified date for the opening of bids being declared a holiday for EMPLOYER, the bids will be opened at the appointed time on the next working day. All important information and other such details as EMPLOYER, at its discretion, may consider appropriate, will be announced at the opening.
		Technical Bid shall be opened for evaluation.
		In case of Single Stage Two Envelope bidding, the Price Bid will remain unopened and the date and time for opening of price bids shall be intimated separately on the CPP website by EMPLOYER after completion of evaluation of Techno-Commercial Bids.
	Price Bid Opening	In case of Single Stage Single Envelope bidding, the Price Bid will be opened on the date and time for opening of bids specified after opening of Techno-commercial bids as specified above.
		In case of Single Stage Two Envelope bidding, after the evaluation process of Techno-Commercial bid is completed, the date and time for opening of price bids shall be intimated separately by Employer. Bidders, whose Techno-Commercial Bid is not substantially responsive, their Technical Bid shall be rejected and their Price bid will also be rejected & shall not be opened and their Earnest Money Deposit shall be returned.
		Price bids of those Bidders, who have been considered qualified and whose Techno-commercial Bid is found to be responsive, will be



		opened online in presence of the Bidder's authorised representatives who choose to attend.
		The participating bidders will be able to view the bid prices of all the bidders after online opening of Price Bids by Employer on the etender portal.
25.0	Clarification on Bids	During bid evaluation, EMPLOYER may, at its discretion, ask the Bidder for a clarification of its bid including documentary evidence pertaining to the Purchase Orders/Contracts executed declared in the bid for the purpose of meeting Qualifying Requirement specified in NIT/IFB. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid including substitution of Purchase Orders/Contracts executed in the bid by new/additional Purchase Orders/Contracts executed for conforming to Qualifying Requirement shall be sought, offered or permitted.
		For this purpose, only 1 chance, shall be given. If the techno-commercial acceptability of bidder is established upon verification of documents including clarifications submitted, the case shall be considered for further processing. If the bidder happens to be defaulter upon verification of the documents or has not uploaded the required document within the mentioned time frame his bid would be analyzed based on the uploaded documents and if found not in order as per requirement, would be outrightly rejected.
26.0	Examination Of Techno-Commercial	EMPLOYER will examine the bids to determine whether they are complete, whether required securities have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
	Bids	Prior to the detailed evaluation, the Employer will determine whether the bid is of acceptable quality, is generally complete and is substantially responsive to the bidding document. For purpose of this determination, a substantially responsive bid is one that conforms to all the terms, condition and specifications of the bidding documents without material deviations, objections, conditionality or reservations.
		A material deviation, objection, conditionality or reservation is
		<ul><li>(i) that effects in any substantial way the scope quality or performance of the contract.</li></ul>
		(ii) that limits in any substantial way inconsistent with the bidding document the Employers right or the successful bidders obligation under the contract or
		(iii) whose rectification would unfairly affect the competitive position of other bidders who are presenting substantially responsive bids.
		Material deficiencies in the bid may render the bid non-responsive and may lead to the rejection of the bid.



		EMPLOYER's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. If a bid is not substantially responsive, it will be rejected by EMPLOYER, and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
27.0	Evaluation Of Techno- Commercial Bids	EMPLOYER will carry out a detailed evaluation of the Techno-Commercial bids (of the qualified bidders shortlisted as above) previously determined to be substantially responsive in order to determine whether the technical and commercial aspects are in accordance with the requirements set forth in the bidding documents. In order to reach such a determination, EMPLOYER will examine and compare the technical and commercial aspects of the bids on the basis of the information supplied by the bidders. Bidder may note that no deviation, whatsoever, is permitted by EMPLOYER to any provisions of Bidding Documents.  In case the Bidder refuses to withdraw additional and distantial according to the state of the
		conditions/deviations/variations/exception, implicit or explicit, found anywhere in the bid in respect of techno-commercial requirements of the bidding documents, without any financial implication whatsoever to the Employer, the bid shall be rejected as technically non-responsive. Product(s) and/or service(s) not meeting the specified technical requirements & scope work, shall be rejected.
28.0	Preliminary Examination Of Price Bid	The Employer will examine the Price bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
		In case any additional conditions/deviations/variations/exception, implicit or explicit, is found anywhere in the Price bid, the Earnest Money Deposit shall be forfeited.
29.0	Discrepancies In Bid	In case of discrepancies in the bid, the following will be adopted to correct the discrepancies for Arithmetical for the purpose of evaluation.
		<ul><li>a) In case of discrepancy between unit price in figures and words, the unit price words will be considered as correct.</li><li>b) In case of discrepancy between unit price and total price, the unit price will be considered as correct.</li></ul>
		d) In case of discrepancy between unit price and total price, which is obtained by multiplying the unit price and quantity, or between sub-totals and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected accordingly.
30.0	Evaluation Criteria	The evaluation criteria specified in Special Conditions of Contract (SCC) shall over-ride all other similar related clauses appearing elsewhere in the bidding documents.



		The evaluation shall be based on the evaluated cost of fulfilling the contract in compliance with all commercial, contractual and technical obligations under this Bidding Document.
31.0	Evaluation Of Bids	a) The Employer shall evaluate each Bid that has been determined, up to this stage of the evaluation, to be substantially responsive.
		<ul> <li>b) To evaluate a Bid, HURL shall only use all the criteria and methodologies defined in this document.</li> </ul>
		c) To evaluate a Bid, HURL shall consider the following:
		<ul> <li>The bid price as quoted as per Bill of Quantity (BOQ)</li> <li>Price adjustment for correction of discrepancy.</li> <li>Price adjustment due to Price Preference, pursuant to ITB clause 4.0, if applicable</li> <li>Price adjustment due to Price Preference due to any other condition specified in Special Purchase Condition;</li> <li>Price adjustment due to application of the evaluation criteria.</li> </ul>
32.0	Contacting The Employer	Subject to ITB clause 25.0 above, no Bidder shall contact the Employer on any matter relating to its bid, from the time of the opening of Bids to the time the contract is awarded.
		Any effort by a Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidder's bid.
33.0	Employer's Right To Accept Any Bid And To Reject Any Or All Bids	The Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder(s) of the grounds for the Employer's action.
34.0	Award Criteria	Subject to ITB Clause 33, the Employer will award the contract to the successful Bidder whose bid has been determined to be substantially responsive to the Bidding Documents and qualified to perform the contract satisfactorily, as per methodology specified in Special Conditions of Contract (SCC).
		The Bidder will be required to comply with all requirements of the Bidding Documents without any extra cost to the Employer, failing which his Earnest Money Deposit will be forfeited.
35.0		If required, HURL may place separate Orders for supplies and Services.
	Contract	The award of separate Purchase Orders shall not in any way dilute the responsibility of the Supplier for the successful completion of the Facilities as per Contract documents and a breach in one Purchase Order shall be construed as a breach of the other Purchase Order(s) which will confer a right on the Employer to terminate the other Contract(s) also at the risk and cost of the Supplier.
		The total value of all the orders shall be the Total Package value.



36.0	Notification Award	of	Prior to the expiration of the period of bid validity, the Employer will notify the successful Bidder in writing by email or letter or by telefax to be confirmed in writing by letter sent by Speed Post/Registered/courier, that its bid has been accepted. The notification of award (Purchase/Service Order) will constitute the formation of the contract and shall be effective from the date of award or the date as specified in Special Conditions of Contract (SCC).
37.0	Corrupt Fraudulent Practices	or	Employer requires that Bidders, Contractors and Suppliers observe the highest standard of ethics during the procurement and execution of the contracts. In pursuance of this policy, Employer:
			(a) defines, for the purposes of this provision, the terms set forth below as follows:
			<ul> <li>(i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and</li> </ul>
			(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the Employer of the benefits of free and open competition;
			(b) will reject a bid for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
			(c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing a contract of the Employer.
38.0	Fraud Prevention Policy		The Bidders/ Service Providers/ Vendors/ Consultants etc. shall strictly adhere to the Fraud Prevention Policy of HURL displayed on its website http://www.hurl.net.in and shall not indulge or allow anybody else working in their organization to indulge in fraudulent activities and immediately apprise HURL of the fraud/suspected fraud as soon as it comes to their notice. A certificate to this effect shall be furnished by the bidder along with his bid, in relevant attachment as per format enclosed (Annexure 6 of Section VI (Forms and Procedures)) with the Bidding Document.
			If in terms of above policy, it is established that the bidder/his representatives have committed any fraud while competing for this contract then the Earnest Money Deposit shall be forfeited.



39.0	Banning Policy	Business dealings may be withheld or banned with the Contractor on account of any Default by the Contractor under Clause 44.
40.0	Indian Agents	In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product.
		If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit bid on behalf of another Principal/OEM in the same tender for the item/product.
41.0	Transfer of Bid Documents	<ul><li>a. Transfer of Bidding documents is not permissible.</li><li>b. Documents purchased / downloaded by the intending bidders cannot be transferred.</li></ul>
42.0	Restrictions on procurement from a Bidder of a country which shares a land border with India	<ul> <li>i. Any Bidder (including its Collaborator/Associate/DJU Partner/JV partner/Consortium Member/Assignee, wherever applicable) from a country which shares a land border with India will be eligible to bid in this tender only if bidder is registered with the Competent Authority.</li> <li>Such registration should be valid for the entire period of bid validity or any extension thereof. However, in case the validity period of registration is less than bid validity period, the Bidder shall be required to submit the extension of the validity period of registration before the opening of price bids, failing which the bid shall be rejected.</li> <li>Further the successful bidder shall not be allowed to subcontract works to any "Sub-contractor" from a country which shares a land border with India unless such Sub-contractor is registered with the competent Authority as mentioned in SCC. However, the said requirement of registration will not apply to bidders/sub-contractors from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Bidders may apprise themselves of the updated lists of such countries available in the website of the Ministry of External Affairs.</li> <li>ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person or firm or company, every artificial juridical person not falling in any of the descriptions of Sub-contractors stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.</li> </ul>

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- iv. "Bidders from a country which shares a land border with India"/ "Sub-contractor from a country which shares a land border with India" mentioned in para above means;
  - a) An entity incorporated, established or registered in such a country; or
  - b) A subsidiary of an entity incorporated, established or registered in such a country; or
  - An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d) An entity whose beneficial owner is situated in such a country; or
  - e) An Indian (or other) agent of such an entity; or
  - f) A natural person who is a citizen of such a country; or
  - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
- v. The beneficial owner for the purpose of clause "iv" above will be as under;
  - a) In case of company of Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

#### Explanation-

- i. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;
- ii. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholdings or management rights or shareholders agreements or voting agreements;
- b) In case of a partnership firms, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more judicial person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- c) In case of an unincorporated associations or body of individuals, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- d) Where no natural person is identified under (a) or (b) or (c) above, the beneficial owner is the relevant natural person who holds the position of senior managing officials;
- e) In case of a trust, the identifications of beneficial owner(s) shall include identification of the author of trust, the trustee, the beneficiaries with fifteen percent or more



** <u>**</u>	1	
43.0	Make In India (MII) and granting of purchase	Preference shall be given to bidders as per the policy "Public Procurement (Preference to Make in India), Order 2017- Revision order No. 45021/2/2017-BE-II and amendments".  Bidder must submit Annexure 14 of section VI for participating in Preference to MII.  For order preference, MSE guidelines mentioned above in 4.0 read in conjunction with "Preference to Make in India and granting of
		purchase preference to local suppliers" mentioned in  The bidders may apprise themselves of the relevant provisions of bidding documents in this regard before submission of their bids.
44.0	Termination of contract	If the Contractor:  (a) at any time makes default in proceeding with the Works with due diligence and continues to do so after a notice of seven (7) days in writing from the Engineer-inCharge; or  (b) commits default in complying with any of the terms and conditions of Contract and does not remedy it or take effective steps to remedy it within seven (7) days after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or  (c) fails to complete the Works or items of Work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge; or  (d) shall offer, or give or agree to give to any person in Employer's service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for the Employer; or  (e) shall enter into a contract with the Employer in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Employer/ Engineer-in-Charge; or



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		<ul> <li>(f) shall obtain a Contract with the Employer as a result of ring bidding or other nonbonafide methods of competitive bidding;</li> <li>(g) In case of poor performance, the contract shall be terminated with a notice period of 15 days without any liability to HURL Barauni. IN the event of unsatisfactory performance, Hurl Barauni reserves right to cancel part or whole of the work order / contract /PO and make alternative arrangement at any time during of contract on risk &amp; cost of contractor and / or forfeit security deposit.</li> <li>(h) The Employer may, without prejudice to any other right to remedy which shall have accrued or shall accrue thereafter to the Employer by written notice, cancel the Contract as a whole or only such items of work in default, from the Contract.</li> </ul>
45	Blacklisting	If the contractor is terminated under clause 44 or made ineligible for tendering under clause 17 then HURL reserves the right to black list the bidder for 12 months from the date of notice.
46	Contract Agreement	On successful award of order or issue of Purchase order the bidder shall submit a non- judicial stamp paper of Rs. 1000/- with 03 bond dummy papers along with all other supporting documents as stipulated in the tender document within 30 days of receipt of Letter of Award (LOA) or Purchase order, failing which the tender is liable to be rejected.
	Important Note	The Special Conditions of Contract (SCC) will supersede any other related conditions anywhere else in the Bidding Documents and will prevail for evaluation / finalization of the tender.

### **Annexure-1 to ITB**

## **Checklist of documents to be submitted:**

Sr. No	Documents
1	Techno Commercial Proposal Bid Form. (Enclosed as Annexure-1 to Forms and Procedures i.e., Section VI)
2	Power of Attorney as per requirement mentioned in NIT.
3	Signed, Stamped and Scanned copy of proof for payment of Earnest Money Deposit (EMD) / MSE Certificate with applicable annexure form for exemption.
4	Signed, Stamped and Scanned copy of Certificates like Registration certificate, GST No, PAN No, PF, etc.
5	Signed, Stamped and Scanned copy of Format for Electronics Payment (Enclosed as Annexure-2 to Forms and Procedures i.e., Section VI)



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6	Signed, Stamped and Scanned copy of Tender Acceptance Letter (Enclosed as Annexure-3 to Forms and Procedures i.e., Section VI)
7	Documents as required in accordance with Qualifying Requirements / Pre-Qualification Criteria (PQC) i.e., Clause 6 of NIT
8	Signed, Stamped and Scanned copy of No deviation Certificate (Enclosed as Annexure-4 to Forms and Procedures i.e., Section VI)
9	Signed, Stamped and Scanned copy of Certificate from CEO/MD/ Legally Authorized Signatory, in the format as enclosed as Annexure-5 to Forms and Procedures i.e., Section VI) to Bidding Document shall be furnished certifying that the data and documents furnished by them in respect of Techno-Commercial Evaluation are true and correct including the contents thereof. However, if at any point of time the declarations given in bid are found to be incorrect, HURL shall have the full right to terminate the contract and take any action as per provisions of contract including forfeiture of EMD/Security Deposit.
10	Acceptance to Fraud Prevention Policy of HURL, for which the bidder has to submit Signed, Stamped and Scanned copy of Form of Acceptance of Fraud Prevention Policy of HURL. (Enclosed as Annexure-6 to Forms and Procedures i.e., Section VI).
11	Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India" i.e. (Enclosed as Annexure-7 to Forms and Procedures i.e., Section VI).
12	Work orders subject to tender for qualification as per Annex $-$ 12 with clearly mentioning Purchase order details relevant to tender based on which PQC can be achieved. Not to be mentioned as "As Attached"/ "mentioned in Bid"/ etc.
13	Declaration of GST (annexure -15) Signed, Stamped and Scanned copy of Declaration of GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).
14	Signed, Stamped and Scanned copy of Bid Security Declaration Form (Enclosed as Annexure-13 to Forms and Procedures i.e., Section VI).
15	Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.
16	Any Other Document asked for in the Bidding Document

<u>Note</u>: Failure to Upload Authentic and Correct Documents as mentioned at Sr. No, I to 16 above would lead to Rejection of Techno- Commercial Bid. Price Bids shall be opened only of those bidders who are qualified and whose techno-commercial bids are acceptable.



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Annexure 2 to ITB

## A Instructions for Online Bid Submission

The bidders are required to submit 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.

#### 1.0 REGISTRATION

- 1.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- **1.2** As part of the enrollment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- **1.3** 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.
- **1.4** Upon enrollment, the bidders will be required to register their valid Digital Signature Certificate (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.
- **1.5** 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.
- **1.6** 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.

#### 2.0 SEARCHING FOR BIDDING DOCUMENTS

- 2.1 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.
- 2.2 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



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- corrigendum issued to the Bidding Document.
- **2.3** 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.

#### 3.0 PREPARATION OF BIDS

- **3.1** Bidder should take into account any corrigendum published on the Bidding Document before submitting their bids.
- 3.2 Please go through the Bidding 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.
- 3.3 Bidder, in advance, should get ready the documents to be submitted as indicated in the Bidding Document / schedule. Generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

#### 4.0 **SUBMISSION OF BIDS**:

- **4.1** 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. HURL shall NOT be responsible for any delay.
- **4.2** The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Bidding Document.
- **4.3** Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- **4.4** Bidder should prepare the EMD as per the instructions specified in the Bidding Document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the Bidding Documents.
- 4.5 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 Bidding 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 blue colored (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.
- **4.6** The server time (which is displayed on the bidders' dashboard)

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- 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.
- **4.7** 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.
- 4.8 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. Overall, the uploaded Bidding Documents become readable only after the tender opening by the authorized bid openers.
- 4.9 The uploaded Bidding Documents become readable only after the tender opening by the authorized bid openers.

  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.
- **4.10**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.
- **4.11**The Bidder is allowed to re-submit the Bid and related Bid documents before the last date of Bid submission and time. The Bid can be re-submitted as many times as required by the Bidder, within the indicated timelines. The last version of the Bid submitted by the Bidder before the Bid submission date and time will be considered for Bid evaluation.
- **4.12**The Bidder is permitted to withdraw his Bid before the last date of Bid submission and time through the CPP Portal. The bidder should provide the supporting reasons for bid withdrawal and attach the supporting letter to the Purchaser.
- 4.13 During bid evaluation, EMPLOYER may, at its discretion, ask the Bidder for a clarification of its bid including documentary evidence pertaining to the Purchase Orders/Contracts executed declared in the bid for the purpose of meeting Qualifying Requirement specified in NIT/IFB. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid including substitution of Purchase Orders/Contracts executed in the bid by new/additional Purchase Orders/Contracts executed for conforming to Qualifying Requirement shall be sought, offered or permitted.



		For this purpose, only 1 chance, shall be given. If the techno-commercial acceptability of bidder is established upon verification of documents including clarifications submitted, the case shall be considered for further processing. If the bidder happens to be defaulter upon verification of the documents or has not uploaded the required document within the mentioned time frame his bid would be analyzed based on the uploaded documents and if found not in order as per requirement, would be outrightly rejected.
B.	Reverse	Procedure in submission of bids by the bidders during
	Auction	Reverse/Forward auction online.
		Bidders shall login using their login ID & Password and then using DSC.
		Click on My Auctions button given in left side of page, to view Action details for which Techno-Commercially qualified.
		For participating in Live Auction,
		a) Click on Live Auction Button.
		b) Click on View button to participate in interested Auction.
		<ul> <li>c) There is List of qualified Lots in which Bidder can participate against selected Auction.</li> </ul>
		d) Click on Hammer Icon to participate in the respective lot.
		e) On clicking Hammer Icon, system will show Start price, Decremental (or incremental) price and Current price against lot. Current Price is appearing as Blank in case no bidder has offered price.
		f) Enter your Price in 'My Auction Price' in multiples of decremental (incremental) value up to above (below) Max Seal % value, and then sign it digitally by clicking on Sign Icon and Click on submit button.
		g) System will show your Latest Value / Price Quoted and system will also show Least Amount/ Rate which any Bidder would have quoted.
		<b>1.</b> Tender Cum Auction is a combination of Tender Followed by Reverse Auction. It is also called as eRA.
		Subsequently, Reverse Auction will be conducted amongst techno–commercially qualified / approved bidders after Opening of Financial/Price Bids' online.
		The Reverse Auction will be normally initiated after Opening of Price Bids. There will be no participation fees for Auction. Only such bidders - who have been found techno- commercially
		qualified as per requirements of the tender will be permitted to
		participate in the Reverse Auction.  After opening of the price (financial) hide System displays 1.1
		After opening of the price (financial) bids, System displays L1 price based on either over all basis or item wise/lot basis
		automatically. Using this system provided price, which would be
		auction start price procuring entity will create Reverse Auction
		and publish the same.
		The Techno-commercially qualified bidders will receive Auction
		information through SMS & email. The participating bidders get

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an opportunity to revise their prices (reduce in case of Reverse Auction). It allows bidders multiple opportunities to offer a price.

- 2. The lowest value quoted by the bidder will become the auction start price for auction and the participant bidders have to quote below the auction price.
- 3. The Bidder would be allowed to bid lower than the opening price of auction in multiples of the decrement value mentioned in para-5. However, bidder can only bid lower than the Lowest Bid.
- **4.** The auction will be done on bid value (to be provided by bidder) which will be derived based upon cost as mentioned in para below. It is inclusive of any taxes, etc.
- **5.** The minimum decrement value will be Rs. 10,000.00 as mentioned in **clause VII** below. The reduction shall have to be made as per decrement value or in multiple thereof.
- **6.** Bidders shall be able to view the following on their screen along with the necessary fields during Online Reverse Auction:
  - a) Current Bid Price in the Auction.
  - b) Start Price.
  - c) Decrement value.

At no point of time will any bidder see the names of other bidders, or the prices of bidders other than the lowest bid.

7. In case of Reverse Auction, in order to displace a standing lowest bid and to become "L1", a bidder can offer a minimum bid decrement or in multiples of decremental value up to above Max Seal %.

#### For example:

Current price:- Rs. 4,90,000 Decrement value: - Rs. 10000 System Defined Maximum Seal %:- 50, in this case a bidder can quote minimum decrement amount as Rs 4,90,000-10,000= Rs. 4,80,000 and maximum decrement amount is 490000-245000-10000=235000=240000\*.

- **8.** A bidder can continue to revise his bid till the auction ends. However, the Bidder cannot quote/Bid equal to the Leading / Lowest Bid. He must always quote lower than the Leading/Lowest Bid site.
- **9.** The evaluation criteria is based on Price alone in auction. The Bidder who quotes the lowest evaluated Price is determined as the lowest bidder.
- **10.** System protects bid and bidder information till auction gets over and displays current L1 price to the bidder.
- 11. Initial period of reverse auction will be two hours in the slot of 10 minutes. There will be auto extensions of time every time by ten minutes in case of any reduction recorded in the last ten

## HURL

#### HINDUSTAN URVARAK & RASAYAN LIMITED, BARAUNI UNIT

- minutes. The reverse auction will come to a close only when there is no further reduction recorded in the last ten minutes slot in any site i.e., after 1 hour 50 minutes.
- **12.** The log details of the entire reverse auction process will be generated by the system once the process of reverse auction is completed.
- **13.** If a bidder does not submit his bid in the Reverse Auction, the price quoted by him in the price bid shall be considered as the final price of that bidder.
- **14.** Since, reverse auction is a sequel to e-tender, the process of finalizing the tender upon completion of reverse auction will be same as the tender process without reverse auction.
- **15.** The bid history shall reflect only the bid value inclusive of taxes. The value will not be same for two bidders even if any bidder makes such an attempt in the bidding.
- 16. Only the chronologically last price bid submitted by the bidder till the end of the auction shall be considered as the valid price bid of that bidder. Any bid submitted prior to submission of his last bid will not be considered as the valid price bid.
- 17. Server time shall be the basis of Start time & Closing time for bidding and shall be binding for all. This would be visible to all concerned.
- All electronic bids submitted during the reverse auction process shall be legally binding on the bidder. The chronologically last bid submitted by the bidder till the end of the auction will be considered as the valid price bid offered by that bidder against that site and acceptance of the same by HURL will form a binding contract between HURL and the bidder for entering into a contract.
- If the lowest price received during reverse auction is unreasonable or it is unacceptable on ground of being too high compared with estimated price, the HURL management reserves right to seek justification of the price from lowest bidder. If the price is not considered reasonable, HURL may not accept such bid and may go for another tender process.
- 20. In case of disruption of service at the service provider's end while the RAP is online, due to any technical snag or otherwise attributable to the system failure at the server end, the RAP process will start all over again. In such a situation, the last recorded lowest price of prematurely ended RAP, will be the 'Start Bid' price for the restarted RAP. The prices quoted in the prematurely ended RAP will be binding on all the bidders for consideration, if the restarted RAP does not trigger within the stipulated time.
- 21. However, if Reverse Auction does not lead to any bid, HURL shall reserve the right to award the job based on the lowest prices quoted in online commercial bid.
- The successful bidder needs to submit the revised BOQ in line with price quoted by him in reverse auction. The ratio of



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	percentage decrease in cost of each item of BOQ component
	shall be same as the overall percentage reduction in the bid
	value originally quoted by successful bidder and final L1 value
	quoted by successful bidder.
	<b>23.</b> The detailed Break-up of offered cost, provided by the
	successful bidder shall be considered and order, if placed, shall
	be with the same break-up of prices. The successful bidder(s)
	after reverse auction will be responsible to ensure that the rate
	as per the breakup of prices provided by him after the reverse
	auction and total value offered by him in the reverse auction
	are in same proportion. The successful bidder will not be
	allowed to increase the rate of any component while submitting
	the breakup. While giving the break up, the successful bidder
	will have to consider same rate of taxes as quoted while
	submitting the commercial bid. In case the successful bidder(s)
	fail(s) to submit the final BoQ within 3 days or the break up
	given by bidder does not match with total offered price, the
	HURL will be at liberty to place order by proportionately
	reducing the component rates on basis of the breakup of the e-
	auction bid submitted by the successful bidder along with the
	initial offer and the same will be binding on the successful
	bidder.
	Bidders must apprise themselves of the applicable guidelines for
	submission of and uploading of bids etc. on CPP website.
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The GST part of the bill shall be paid only after confirmation of payment from the successful awarded bidder or after confirmation of the corresponding return filed by the contractor from the GST portal. The GST part of the bill shall be withheld till such confirmation.

## **HINDUSTAN URVARAK & RASAYAN LIMITED**

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

#### **BARAUNI UNIT**

Barauni Urvarak Nagar, Begusarai

P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115

[Registered Office SCOPE Minar, Core 4, 9TH Floor, Laxmi Nagar District Center, Delhi-110092]



**SECTION - III** 

GENERAL CONDITIONS OF CONTRACTS
(GCC)



(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

The Special Conditions of Contracts (SCC) will supersede any related condition anywhere in the Bidding Documents and will prevail for evaluation / finalization of the tender.

## Definitions & Terminology

1

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

**"Employer" / "Owner"** means the Hindustan Urvarak & Rasayan Limited (HURL), having its registered office Core-4, 9th Floor, Scope Minar, Laxmi Nagar District Centre, Delhi-110092 and its Project office at Barauni , Urvarak Nagar, Begusarai, Bihar — 851115 shall include their legal representatives, successors and permitted assigns.

"Contract" means the Contract Agreement entered into between the Owner and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term "the Contract" shall in all such documents be construed accordingly.

**"Contract Documents"** mean the following documents that constitute the Contract between the Employer and the Contractor:

- (i) The Contract Agreement along with its appendices
- (ii) Letter of Award/Service Purchase Order along with its appendices including agreed variations annexed.
- (iii) Amendment to Tender/Bidding Documents
- (iv) Special Conditions of Contract
- (v) Technical Specifications
- (vi) General Conditions of Contract
- (vii) The Bid and Bill of Quantities submitted by the Contractor
- (viii) Instructions to Bidders

"GCC" means the General Conditions of Contract hereof.

"SCC" means the Special Conditions of Contract.

"Day" means calendar day of the Gregorian Calendar.

"Week" means a continuous period of seven (7) calendar days.

"Month" means calendar month of the Gregorian Calendar.

**"Completion"** means the fulfilment of the Services by the Contractor in accordance with the terms and conditions set forth in the Contract.

"Contractor" shall mean the successful Sole Bidder or Consortium whose bid has been accepted by the OWNER and who has been selected by the OWNER for the award of Works and shall include his heirs, legal representatives, successors and permitted assigns.

**"Contract Price"** means the price to be paid for the performance of the Services, exclusive of GST.

Effective Date means the date on which this Contract comes into force





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pursuant to GCC Clause 15.

**Foreign Currency** means any currency other than the currency of the Owner's country.

"Local Currency" means the currency of the Government of India.

"Government" means the Government of the Owner's country i.e. INDIA.

**Party** means the Owner or the Contractor, as the case may be, and **"Parties"** means both of them. Third party means any party other than Owner and Contractor.

**Personnel** means professionals and support staff provided by the Contractor or by any Sub-Contractor and assigned to perform the Services or any part thereof;

"Funds" means any funds allocated to the Owner under Company budget, or loan, grants and credits placed at the disposal of the Owner.

**Services** means the work to be performed by the Contractor pursuant to this Contract

**Sub-Contractor** means any person or entity to whom/which part of the Services is sub-consulted.

"Engineer" or "Engineer-in-Charge" or "E.I.C." shall mean the officer appointed in writing by the Owner to act as "Coordinator" from time to time on behalf of Owner in all matters pertaining to this Contract. "Engineer-in-Charge" shall be authorized by the Client for supervision, inspection, scrutiny and approval of some or all of the services rendered by the Contractor under the Contract.

"Bill Of Quantity" shall mean the priced and completed Bill of Quantity (BOQ) forming the part of the bid or such Bill of Quantity (BOQ) forming the part of the Contract, as the case may be, with amendments, if any, thereto.

Throughout these Bidding Documents, the term "Bid" and "Tender" and their derivatives (Bidder/ Tenderer, Bidding / Tendering, Bidding Document/Tender Document, etc.); Bill of Quantity / Schedule of Quantity / Schedule of Quantities/ Bill of Quantities; Owner / Employer / HURL; Bid Security / Earnest Money Deposit; Security Deposit / Performance Security/ Performance Guarantee; Engineer-in-Charge / Engineer, appearing anywhere in the Bidding Documents shall have the same meaning and are synonymous to each other.

## Order of the precedence of the Documents

Subject to order of precedence listed below, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

The order of precedence of documents shall be as under:



1	(HURL)	
		a) Contract Agreement and the Appendices
		b) Purchase Order/Service Order along with its annexures.
		c) Amendment to Bidding Documents
		d) Special Conditions of Contract
		e) Technical Specifications including Scope of Work
		f) General Purchase Conditions
		g) The Bid and BOQ submitted by the Supplier
		h) Instructions to bidders
		An amendment issued after issue of Contract shall take precedent over the formal Contract and all other contract documents.
		In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Documents are listed above.
		Any error in description, quantity or rate in Bill of Quantity (BOQ) or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the Works comprised therein according to drawings and specifications or from any of his obligations under the Contract.
3	Singular and Plural	The singular shall include the plural and the plural the singular, except where the context otherwise requires.
4	Headings	The headings and marginal notes in the General Conditions of Contract are included for ease of reference, and shall neither constitute a part of the Contract nor affect its interpretation.
		Heading and marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.
5	Communications and Notices	Communications between Parties (notice, request or consent required or permitted to be given or made by one party to the other) pursuant to the Contract shall be in writing to the Authorized Representatives named in the Contract.
		A notice shall be effective when delivered or on the notice's effective date, whichever is later.
		A Party may change its address for notice hereunder by giving the other Party notice of such change to the address.
6	Governing Laws	The Contract shall be governed by and interpreted in accordance with laws in force in India.
		The Courts of Delhi shall have exclusive jurisdiction in all matters arising under the Contract, unless otherwise stated in the SCC.
7	Governing Language	The Contract shall be written in English. All correspondences and documents relating to the Contract shall be written in English.



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		Supporting documents and printed literature that are part of the Contract may be in another language, as long as such literature is accompanied by a translation of its pertinent passages in English language in which case, for purposes of interpretation, the translation shall govern.
		The English Translation of the documents shall be carried out by professional translators and the translator shall certify that he is proficient in both languages in order to translate the document and that the translation is complete and accurate. Further, translation shall be authenticated by the Indian Consulate located in the Country where the documents have been issued or the Embassy of that Country in India.
		The Contractor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.
8	Assignment	Neither the Owner nor the Contractor shall assign, in whole or in part, their obligations under this Contract; except with prior written approval of the Owner.
		Engineer-in-Charge
9	Authorized Representatives	If the Engineer-in-Charge is not named in the Contract, then within fourteen (14) days of the Effective Date, the Owner shall appoint and notify the Contractor in writing of the name of the Engineer-in-Charge. The Owner may from time to time appoint some other person as the Engineer-in-Charge in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. The Owner shall take reasonable care to see that no such appointment is made at such a time or in such a manner as to impede the progress of work. The Engineer-in-Charge shall represent and act for the Owner at all times during the currency of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Engineer-in-Charge, except as herein otherwise provided. All notices, instructions, information and other communications given by the Contractor to the Owner under the Contract shall be given to the Engineer-in-Charge, except as herein otherwise provided.
10	Contractor's	Contractor's Representative
	Authorised Representative	If the Contractor's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the Owner in writing to approve the person so appointed. If the Owner makes no objection to the appointment within fourteen (14) days, the Contractor's Representative shall be deemed to have been approved. If the Owner objects to the appointment within fourteen (14) days giving the reason therefore, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GCC Clause shall apply thereto.
		The Contractor's Representative shall represent and act for the Contractor at all times during the currency of the Contract and shall



10	(HURL)	
		give to the Engineer-in-Charge all the Contractor's notices, instructions, information and all other communications under the Contract.
		All notices, instructions, information and all other communications given by the Owner or the Engineer-in-Charge to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided.
		The Contractor shall not revoke the appointment of the Contractor's Representative without the Owner's prior written consent, which shall not be unreasonably withheld. If the Owner consents thereto, the Contractor shall appoint some other person as the Contractor's Representative, pursuant to the procedure set out in above GCC Clause.
		The Contractor's Representative may, subject to the approval of the Owner (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor's Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Owner and the Engineer-in-Charge.
		Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with the above GCC Clause shall be deemed to be an act or exercise by the Contractor's Representative.
11	Relation between the Parties	Nothing contained herein shall be construed as establishing a relation of master and servant or of principal and agent as between the Owner and the Contractor. The Contractor, subject to this Contract, has complete charge of Personnel and Sub-Contractors, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.
12	Location	The Services shall be performed at such locations as are specified in the Contract and, where the location of a Special task is not so specified, at such locations as the Owner may approve.
13	Taxes & Duties	Contractor, shall bear all tax liabilities, duties, Govt. levies etc. on account of payments made under this Contract. It shall be the responsibility of the Contractor to submit to the concerned Indian authorities the returns and all other concerned documents required for this purpose and to comply in all respects with the requirements of the laws in this regard, in time.
		It shall be incumbent upon the Contractor to obtain a registration certificate as a dealer under GST Law, and other law(s) relating to levy of tax, duty, cess etc. and necessary evidence to this effect shall be furnished by the Contractor to the Owner.
		The Contract Price (of both domestic and foreign Contractor) shall also be exclusive of GST applicable on services as per the rates prevailing as on seven (7) days prior to the date of Techno-Commercial bid opening.





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		In case the Contractor is from outside India, who does not have any fixed establishment or permanent address in India, the GST shall be paid to the concerned Tax Authorities in India by the Owner and the same shall be recovered/ deducted from the Contractor.
		In case of any variation in the rate of GST during the period of Contract, an equitable amount shall be paid/ recovered from the Contractor to fully take into account any such change.
		If a new tax, duty or levy is imposed or any rates of tax are increased or decreased under statute or law in India after the date seven (7) days prior to date of Techno-Commercial bid opening and the Contractor becomes liable there under to pay and actually pays the said new tax, duty or levy for bonafide use on the work contracted, the same shall be reimbursed/recovered to the Contractor.
		As regards Income Tax, Surcharge on Income Tax and other Corporate Taxes, including Cess wherever applicable, the Contractor shall be responsible for such payments to the concerned authorities.
		The Owner shall be entitled to make necessary tax deductions at source as per the prevalent laws. The Contractor shall be required to submit the PAN details before the submission of the first bill/invoice under the Contract.
		The GST part of the bill shall be paid only after confirmation of payment from the successful awarded bidder or after confirmation of the corresponding return filed by the contractor from the GST portal. The GST part of the bill shall be withheld till such confirmation.
		In case the Contractor is from outside India, it shall be required to either furnish (i) the certificate from Indian Tax Authority or (ii) Ruling from "the Authority for Advance Ruling (AAR)" determining the applicable rate of Income Tax in India before release of first payment.
		The Contractor shall himself be informed of all the applicable laws, notifications, rules, circulars and other communications of the State or Central or other authorities with regard to levy of any tax, duty, cess, levy or fee etc, which in any manner may impinge upon him in performance of any obligations/responsibilities under or arising out of the Contract.
		Further in case of foreign Contractor, certain benefits of Income Tax may be available to him in his country under Double Taxation Avoidance Agreement (DTAA). While quoting for the assignment, the foreign Contractors are required to consider such benefits in their proposal.
14	Effectiveness of Contract	The Contract shall come into force and effect on the date, called the "Effective Date", of the Owner's notice to the Contractor instructing the Contractor to commence carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, as specified in the SCC have been met or as mentioned elsewhere in the tender document.
15	Effective Date	The date the Contract comes into effect shall be as specified in the SCC.



16	Commencement of Services	The Contractor shall commence carrying out the Services not later than the number of days after the Effective Date as specified in the SCC.
17	Modifications or Changes or Amendment	No Modifications or changes or amendment or other variation of the Contract (Purchase Order / Service Purchase) shall be effective unless it is in writing, is dated, expressly refers to the Purchase Order / Service Order, and is signed by a duly authorized representative of Employer and accepted by the Contractor.
18	Contract Price	The Contract price, other than GST, shall remain FIRM throughout the contract period and will be NOT be subject to adjustment for price escalation during the performance of the Contract until unless specified otherwise in the SCC.
19	Severability	If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.
20	Standard of Performance	The Contractor shall perform the Services and carry out its obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Contractor shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Owner, and shall at all times support and safeguard the Owner's legitimate interests in any dealings with Sub Contractors or Third Parties.
21	Conflict of Interests	The Contractor shall hold the Owner's interest's paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.
22	Confidentiality	The Owner and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Owner to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this clause of GCC.
23	Limitation of Liability	HURL shall in no way be responsible for any liabilities arising out of the Contractor's Contractual obligations with the Contractor's personnel, experts, engineers, sub-Contractors, licensors, collaborators, vendors, or subsidiaries. Similarly, the Contractor shall in no way be responsible for any liabilities arising out of HURL's personnel, sub-Contractors, licensors,



10	HURL	
		collaborators, vendors or subsidiaries.
		The Contractor and HURL both agree that each shall assume full risk of damages or injury to its own properties, employees and representatives caused by any act or omission to act by their respective employees or representatives, during the performance of this Contract.
		Except in cases of criminal negligence or willful misconduct,
		(a) Neither Party shall be liable to the other Party, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, which may be suffered by the other Party in connection with the Contract, provided that this exclusion shall not apply to any obligation of the Contractor to pay liquidated damages to the Employer and
		(b) The aggregate liability of the either party to the other party, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.
		Notwithstanding anything contained hereinabove, the aggregate liability of the Employer to the Contractor shall not exceed the Total Contract Price, less payments already released to the Contractor, if any.
24	Liability of the Contractor	The Contractor, shall be, liable to and required to indemnify, the Owner as stated under for due performance of the Contract.  The Contractor shall indemnify the Owner from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, judgment, suits, proceedings, demands, costs, expenses and disbursements of whatsoever nature that may be imposed on, incurred by or asserted against the Owner during or in connection with the Services by reason of:  (a) infringement or alleged infringement by the Contractor of any patent or other protected right; or  (b) plagiarism or alleged plagiarism by the Contractor.  The Contractor shall ensure that all goods and services (including without limitation all computer hardware, software and systems) procured by the Contractor out of funds provided or reimbursed by the Owner or used by the Contractor in the carrying out of the Services do not violate or infringe any industrial property or intellectual property right or claim of any third party.
25	Insurance to be	The Contractor
	taken out by the Contractor	(a) shall take out and maintain, and shall cause any Sub-Contractors to take out and maintain, at their (or the Sub-Contractors', as the case
	Contractor	may be) own cost, but on terms and conditions approved by the Owner, during the performance of the Contract, the insurance against the risks, and for the coverage as specified in the SCC; and (b) at the Owner's request, shall provide evidence to the Owner showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.



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26	Contractor's	The Contractor shall obtain the Owner's prior approval in writing before
	Actions Requiring	taking any of the following actions:
	Owner's Prior	(a) any subcontract relating to the Services to an extent and, with such
	Approval	specialists and entities as may be approved as
		(b) any other action that may be specified in the SCC.
		Notwithstanding any approval as above, the Contractor shall remain fully
		liable for the performance of Services by the Sub-Contractor and its
		Personnel and retain full responsibility for the Services.
27	Assistance and	The Owner shall use its best efforts to ensure the following:
	Exemptions	(a) To ensure the accuracy of all information and/or data to be supplied
	•	by the Owner to the Contractor necessary for performance of the
		Contract, except when otherwise expressly stated in the Contract.
		(b) issue to officials, agents and representatives of the Owner all such
		instructions as may be necessary or appropriate for the prompt and
		effective implementation of the Services;
		(c) provide to the Contractor, Sub-Contractors and Personnel any such
		other assistance as may be specified in the SCC.
28	Payment Terms	General
		In consideration of the Services performed by the Contractor under this
		Contract, the Owner shall make to the Contractor such payments and in
		such manner as stated below:
		Payments will be made in the currency or currencies in which the
		Contract Price has been stated in the Contractor's bid i.e., INR.
		No payment made by the Owner herein shall be deemed to constitute
		acceptance of the Services nor relieve the Contractor of any obligations.
		Modes of Billing and Payment
		All the invoices of payment shall be supported by necessary Documents
		and submitted in quadruplicate for the certification of Engineer-in-
		Charge for which he will require a maximum time of fifteen (15) days
		before the same are submitted for processing the payment of amount
		admitted.
		The Owner shall pay to the Contractor all the admissible payments
		within thirty (30) days of certification of the Engineer-in-Charge of the
		amount payable for the services.
		Contractor shall furnish the details of Bank Account in the prescribed
		format along with Bid in order to facilitate the Owner to release
		Payments electronically through Electronic Fund Transfer system
		wherever technically feasible. The Contractor shall hold the Owner
		harmless & Owner shall not be liable for any direct, indirect or
		consequential loss or damage sustained by the Contractor on account of
		any error in the information or change in Bank details provided to the
		Owner in the prescribed form without intimation to Owner duly
		acknowledged.
		Vendor Registration:
		In case of awarding a contract to an unregistered vendor, the vendor
		registration in HURL vendor data base shall be done based on the GST,
		MSME, Annexure -2 for bank details etc. submitted along with the bid
		documents. Once the contractor is registered no changes shall be made
		in the vendor details till a change request on contractor's letter head is
		received from the contractor in sign and stamp copy (as per Power of
		Attorney). The change request should contain the details of the data to
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		be changed, present data, new data and reason for the change along with the supporting documents. For example, in case of change in bank details a change request form on contractor's letter head should contain old bank Account No, New bank account number and reason for change of account number addressing to HURL finance department, along with the cancelled cheque as a supporting document. The Bill payments shall be processed as per the bank details prescribed during the registration or further change request forms if applicable.  In case of awarding a contract to HURL registered vendor, the payment shall be processed as per the details shared during initial registration or first awarding or latest bank detail change requests. The same shall apply for other details like MSME or other statutory requirements. The contractor while bidding for the tender should ensure the bid details should match as per the initial vendor registration data or the latest change request.  HURL shall not be held responsible for any payment issues if the bank details shared while registration (or the change request if applicable) mismatches with the invoice bank details.
29	Early Warning	If at any time during performance of the Contract, the Contractor or its
		Sub-Contractors should encounter events, circumstances conditions that may adversely affect the quality of the work, increase the cost of Services or delay the execution of the Services, the Contractor shall promptly notify the Owner in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Contractor's notice, the Owner shall evaluate the situation, and the Contractor shall cooperate with the Owner in making and considering proposals for how the effect of such an
		event or circumstance can be avoided or reduced.
30	Extension of the Intended Completion Date	In the event the Contractor is unable to complete the assignment by the Intended Completion Date it may request the Owner to extend the Intended Completion Date giving reasons. The Owner may extend the Intended Completion Date if the reasons given by the Contractor, including prior review where necessary, are found acceptable. The Owner shall, however, decide by how much to extend the Intended Completion Date.
31	Good Faith	The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.
32	Liquidated Damage (LD) for Delay	If the Contractor fails to complete the Work on or before the scheduled or extended date of completion, he shall, without prejudice to any other right or remedy of the Employer, arising out of the Contract on account of such delay, be liable for payment of liquidated damages @ ½ percent per week or part of the week, not as penalty, on the Contract Value of the Work for every week that the progress remains below the required progress or that the Work remains incomplete subject to a maximum of 5% of the Contract Value.  In case of amendment in the contract value, the limiting value of the Liquidated damages shall be 5% of the amended Contract Value.  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 Owner.
33	Change in laws	If, after the date seven (7) days prior to the last date of Bid submission,
	·	·



	and regulations	any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the costs and expenses of the
		Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. However, these adjustments would be restricted to items in
		respect of both direct transactions between the Employer and Supplier.
34	Performance Security	Within thirty (30) days of the receipt of Purchase Order/Service Order from the Employer, the contractor shall furnish the Contract Performance Guarantee (CPG), if applicable, for the due performance of the Contract for ten percent (10%) of the Contract Price with an initial validity up to ninety (90) days beyond the completion date for work plus defect liability period (if any), for due performance of the Contract(s)/Order(s) in any form acceptable to the Employer as mentioned below.
		<ul> <li>CPG may be submitted in any of the following forms:</li> <li>a) crossed Demand Draft / Bankers cheque drawn in favour of HURL Payable at New Delhi.</li> <li>b) An irrevocable Bank Guarantee as per the HURL standard format from any Nationalized bank / Scheduled Bank as acceptable to HURL as per list enclosed.</li> <li>Failure of the supplier to submit the above-mentioned Contract Performance Guarantee shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.</li> <li>No interest shall be payable by the Employer to the Contractor against</li> </ul>
		the Security Deposit furnished.  Performance Security shall be returned after Certification of completion of work by EIC. However, the contractor will have to apply in writing, for refund of the same.  IMPORTANT:
		In case of PBG payment through RTGS/NEFT, bidder must mention " PXXX-Bidder name" in transaction description while making the payment. "XXX" to be replaced with the last three digits of the tender reference number.  (Example: Bidder Name: Pqrst Pvt. Ltd., Tender No.: HURL/BR/CC/22-23/432 then the payment description to be mentioned as "P432-PqrstPvtLtd")
35	Force Majeure	Neither CONTRACTOR nor OWNER shall be considered in default in the performance of their obligations under CONTRACT, as long as such performance is prevented or delayed for reasons such as, including but not limited to, whether similar of dissimilar, acts of God, earthquake, tidal wave, tsunami, hurricane, storm, typhoon or cyclone (except monsoon), floods, lightening, land slide, fire or explosions, plague or epidemic, strikes of a whole National category of workers and concerted act of workmen or other industrial disturbances (lasting more than 7
		consecutive calendar DAYs), lockouts (lasting more than 7 consecutive calendar DAYs), sabotage, blockade, war, riots, invasion, act of foreign enemies, hostilities (whether war be declared or not), civil war,



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rebellion, revolution, terrorist acts, insurrection or military or usurped power of confiscation or trade embargoes or destruction or requisition by order of any Government or any Public Authority or for reasons or cause beyond the reasonable control of the affected party provided notice of any such cause is given forthwith and in any event not later than one week (7) DAYs of the happening of the event by the party claiming the benefit of this Clause to the other specifying the matter constituting FORCE MAJEURE explaining to what extent contractual obligations will thereby be prevented or delayed and the further period for which it is estimated that such prevention or delay will continue. CONTRACTOR shall provide justificatory documents countersigned by the local Chamber of Commerce. Notwithstanding the forgoing, FORCE MAJEURE shall not include (a) weather conditions reasonably to be expected for the climate in the geographic area of the SITE including but not limited to the monsoon season, (b) the occurrence of any manpower or material shortages unless such a shortage is itself caused by an event of force majeure, or (c) any delay, default or failure (direct or indirect) in obtaining materials, or in any SUB-CONTRACTOR/VENDOR or worker performing any WORK or any other delay, default or failure (financial otherwise) attributable SUBor CONTRACTOR/Vendor/worker, unless such delay, default or failure results from any act, event or condition which would, with respect to such SUBCONTRACTOR/ VENDOR/ worker, constitute an event of force majeure.

If the CONTRACTOR suffers delay in the due execution of the contractual obligations due to delays caused by force majeure as defined above, the agreed time of completion of job covered by this CONTRACT or the obligation of the CONTRACTOR shall be extended by a period of time on account of force majeure conditions, provided that on the occurrence of any such contingency, the CONTRACTOR shall within 30 days reports to the OWNER in writing, the cause of delay and likely duration of cause of delay with requisite documentary evidence.

Should one or both the parties be prevented from fulfilling the contractual obligations by a state of FORCE MAJEURE lasting continuously for a period of 6 weeks, the two parties shall consult each other regarding the future implementation of the CONTRACT. The mere shortage of labour, materials or utilities shall not constitute FORCE MAJEURE unless caused by circumstances which are themselves FORCE MAJEURE.

CONTRACTOR and OWNER shall endeavour to prevent, overcome or remove the causes of FORCE MAJEURE.

No ground for exemption can be invoked if CONTRACTOR has failed to give timely notice by registered letter and subsequently supported it by documentary evidence.

Delay or non-performance by a party hereto caused by the occurrence of any event of FORCE MAJEURE shall not:

(a) Constitute a default or breach of the CONTRACT,

Or

(b) Give rise to any claim for damages or additional cost or expense occasioned thereby, if such delay or non-performance is caused by the occurrence of any event of FORCE MAJEURE. FORCE



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		MAJEURE conditions are not payable under any circumstances. Force Majeure is no one's fault, therefore each party should bear its own cost and a provision to terminate the CONTRACT in case of Force Majeure extending beyond six (06) month is provided. Should OWNER wish the CONTRACTOR to continue further, both parties may sit together and mutually agree on the future course failing which Parties will have the right to terminate. Such termination shall not be considered as Termination for Owner's Convenience. However, outstanding invoices, payment for supplies made and payment to the work already performed will be paid by OWNER on such termination and shall be detailed at the time of CONTRACT finalisation. CONTRACTOR shall have the right to take action to mitigate the impact of the prolonged Force Majeure event in mutual consent with Owner. FORCE MAJEURE shall not apply to any obligation of the OWNER to make payments to the CONTRACTOR under the contract.
36	No Breach of Contract	The failure of a Party to fulfil any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.
37	Measures to be Taken on Force Majeure	A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force Majeure.  A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.  Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.  During the period of their inability to perform the Services as a result of an event of Force Majeure, the Contractor, upon instructions by the Owner, shall either:  (a) demobilize, in which case the Contractor shall be reimbursed for additional costs they reasonably and necessarily incurred, and, if required by the Owner, in reactivating the Services; or  (b) continue with the Services to the extent possible, in which case the Contractor shall continue to be paid under the terms of this Contract and be reimbursed for additional costs reasonably and necessarily incurred.
38	Suspension	The Contractor shall, on receipt of the order in writing of the Engineer-in-Charge, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary for any of the following reasons:  (i) On account of any default on part of the Contractor;  or  (ii) for proper execution of the Works or part thereof for reasons



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		other than the default on the part of the Contractor; or
		(iii) for safety of the Works or part thereof, for reasons other than those attributable to the Contractor.
		The Contractor shall, during such suspension, properly protect and
		secure the Works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.
		The time for completion of the WORKS will be extended for a period
		equal to the duration of the suspension. The Contractor shall not be
		eligible for any other compensation whatsoever for such suspension, except as otherwise provided herein under.
		If such suspension of WORK by OWNER delays or is likely to delay
		the progress of WORK or the carrying out of WORK under CONTRACT
		resulting in additional expenses or increased liability to CONTRACTOR, the OWNER shall pay to the CONTRACTOR all
		reasonable expenses, mutually agreed between OWNER and
		CONTRACTOR, arising from suspension of the work by an order in
		writing of the OWNER provided that such suspensions of work is more than a cumulative period of ninety (90) days and provided that
		such suspension is not due to some fault on the part of the
	_	CONTRACTOR or a SUBCONTRACTOR.
39	Termination for Default	The Owner or the Contractor, without prejudice to any other remedy for
	Delauit	breach of Contract, by notice of default sent to the other party, may terminate the Contract in whole or in part if the other party causes a
		fundamental breach of contract. In such an occurrence one party shall
		give not less than thirty (30) days' written notice of termination to the
		other party.
		Fundamental breaches of the Contract shall include but shall not be
		limited to, the following:  (a) If the Contractor fails to remedy a failure in the performance of their
		obligations hereunder, within thirty (30) days of receipt of such
		notice of suspension or within such further period as the Owner may
		have subsequently approved in writing;
		(b) If the Contractor submits to the Owner a statement which has a
		material effect on the rights, obligations or interests of the Owner and which the Contractor knows to be false;
		(c) if the Contractor, in the judgement of the Owner has engaged in
		corrupt or fraudulent practices in competing for or in executing the
		Contract.
		For the purpose of this Sub-Clause:
		"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the
		procurement process or in contract execution.
		"Fraudulent practice" means a misrepresentation of facts in order to
		influence a procurement process or the execution of a contract to
		the detriment of the Owner and includes collusive practice among
		Contractors (prior to or after bid submission) designed to establish
		bid prices at artificial non-competitive levels and to deprive the Owner of the benefits of free and open competition.
40	Termination for	The Owner and the Contractor may at any time terminate the Contract by
	Insolvency	giving notice to the other party if:
		(a) the Owner becomes bankrupt or otherwise insolvent;



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		<ul> <li>(b) the Contractor becomes (or, if the Contractor consist of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary; or</li> <li>(c) in such event, termination will be without compensation to any party, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the other party.</li> </ul>
41	Termination for	The Owner, by notice sent to the Contractor, may in its sole discretion
	Convenience	and for any reason whatsoever, terminates the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Owner's convenience, the extent to which performance of the Contractor under the Contract is terminated, and the date upon which such termination becomes effective. In event of termination of Order/Contract, the Employer shall pay to the Supplier/Contractor the Contract Price, properly attributable to the works/supplies executed by the Supplier/Contractor as on the date of termination. However, any sums due to the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Supplier under this Order/Contract.
42	Termination	The Owner and the Contractor may at any time terminate the Contract by
	because of Force	giving notice to the other party if, as the result of Force Majeure, the
	Majeure	Contractor is unable to perform a material portion of the Services for a
		period of not less than sixty (60) days.
43	Cessation of	Upon termination of the Contract by notice of either Party to the other
	Services	pursuant to GCC Clauses 39 to 42, the Contractor shall, immediately upon
		dispatch or receipt of such notice, take all necessary steps to bring the
		Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum.
44	Payment upon	Upon termination of this Contract pursuant to GCC Clauses to 39 to 42,
	Termination	the Owner shall make the payments to the Contractor for Services
		satisfactorily performed prior to the effective date of termination.
45	Disputes about	If either Party disputes whether an event specified in GCC Clause 39,
	Events of	40 or 41 has occurred, such Party may, within forty-five (45) days after
	Termination	receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to GCC Clause 46, and this Contract shall not be
		terminated on account of such event except in accordance with the
		terms of any resulting arbitral award.
		In the case of disagreement between the Parties as to the existence or
		extent of Force Majeure, the matter shall be settled according to GCC
		Clause 46.
46	Settlement of	•
	Disputes	Managing Director (MD) of HURL shall be the Appointing Authority for Adjudicator. Adjudicator under the Contract shall be retired judge of Supreme Court/High Court of India.  If any dispute of any kind whatsoever shall arise between the Owner and the Contractor in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the services—whether during the progress of the work or
	<u> </u>	execution of the services whether during the progress of the work of



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after their completion and whether before or after the termination, abandonment or breach of the Contract—the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference by mutual consultation, then the dispute shall be referred in writing by either party to the Adjudicator, with a copy to the other party.

The Adjudicator shall give its decision in writing to both parties within twenty-eight (28) days of a dispute being referred to it. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either the Owner or the Contractor within fifty-six (56) days of such reference, the decision shall become final and binding upon the Owner and the Contractor. Any decision that has become final and binding shall be implemented by the parties forthwith.

Should the Adjudicator resign or die, or should the Owner and the Contractor agree that the Adjudicator is not fulfilling its functions in accordance with the provisions of the Contract, another Adjudicator shall be jointly appointed by the Owner and the Contractor. Failing agreement between the two within twenty-eight (28) days, the new Adjudicator shall be appointed at the request of either party by the Appointing Authority. Expenses incurred in the process of adjudication including the fees required to be paid to the adjudicator, if any, shall be shared equally between the Owner and the Contractor.

#### **Arbitration**

If either the Owner or the Contractor is dissatisfied with the Adjudicator's decision, or if the Adjudicator fails to give a decision within twenty-eight (28) days of a dispute being referred to it, then either the Owner or the Contractor may, within fifty-six (56) days of such reference, give notice to the other party, with a copy for information to the Adjudicator, of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with above clause, shall be finally settled by arbitration. Arbitration may be commenced prior to or after completion of the Services.

Any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.

The Owner and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within twenty-eight (28) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority as given below:

- a) President, Institution of Engineers in case of an Indian Contractor.
- b) President, International Chambers of Commerce, Paris in case of a Foreign Contractor.

If one party fails to appoint its arbitrator within forty-two (42) days after the other party has named its arbitrator, the party which has named an



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		arbitrator may request the Appointing Authority to appoint the second arbitrator.  If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned under the Clause related to Governing Law and a substitute shall be appointed in the same manner as the original arbitrator.  Arbitration proceedings shall be conducted  (i) in accordance with the following rules of procedure: -  a) In case of a foreign Contractor, the arbitration proceeding shall be
		conducted in accordance with the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976.
		<ul> <li>b) In case of an Indian Contractor, adjudication/Arbitration proceedings shall be conducted in accordance with Indian Arbitration and Conciliation Act 1996. In case the Indian Contractor is an Indian Public Sector Enterprise/Government Department (but not a State Govt. Undertaking or Joint Sector Undertaking which is not a subsidiary of Central Govt. Undertaking), the dispute arising between the Owner and the Contractor shall be referred for resolution to a Permanent Arbitration Machinery (PAM) of the Department of Public Enterprises, Government of India.</li> <li>c) In case of a foreign collaborator/associate of the Contractor, the arbitration proceedings shall be conducted in accordance with the United Nation Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976.</li> <li>(ii) in New Delhi, India (Place for Arbitration)</li> <li>(iii) in the language in which this Contract has been executed.</li> <li>The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or</li> </ul>
		claims of immunity from such enforcement.
47	Fraud Prevention Policy	The Supplier along with their associate / collaborator / subcontractors / sub-vendors / consultants / service providers shall strictly adhere to the Fraud Prevention policy of the Employer displayed on its tender website http://www.hurl.net.in.  The Supplier along with their associate / collaborator / subcontractors / sub-vendors / consultants / service providers shall observe the highest standard of ethics and shall not indulge or allow anybody else working in their organization to indulge in fraudulent activities during execution of the Contract (Purchase Order/Service Order).  The Supplier shall immediately apprise the Employer about any fraud or
		suspected fraud as soon as it comes to their notice.
48	Risk purchase	In the event Contractor fails to execute the services in scheduled completion period, HURL reserves the right to get the job executed from any other source at the Contractors risk and cost and the difference in cost shall be borne by the Contractor.  Further, HURL shall retain the right of forfeiture of Performance Security
		and or any other action as deemed fit.



49	Price Basis	1.	The services shall be carried out at HURL Barauni as required by EIC.
		2.	The contractor shall ensure that the submitted quotation shall be in
			line with the latest statutory compliance.
		3.	To & Fro, Fooding, Boarding, Lodging and Local conveyance is in the
			scope of contractor.

	The Special Conditions of Contract will supersede any other related
IMPORTANT NOTE	conditions anywhere in the tender documents and will prevail for
	evaluation / finalization of the tender.

## **HINDUSTAN URVARAK & RASAYAN LIMITED**

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

#### **BARAUNI UNIT**

Barauni Urvarak Nagar, Begusarai P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115 [Registered Office SCOPE Minar, Core 4, 9TH Floor, Laxmi Nagar District Center, Delhi-110092]



**SECTION - IV** 

SPECIAL CONDITIONS OF CONTRACTS (SCC)

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Wherever there is a conflict, the provisions herein shall prevail over those in the GCC. The corresponding clause number of the GCC is indicated.

SCC Clause	Reference Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract or additional clauses
1	Qualifying Requirements / Pre- Qualification Criteria (PQC)	As per clause 6.0 of Section 1 i.e., NIT (Notice Inviting Tender).
2	Price Bid/ BOQ	Schedule of price bid / BOQ in the form of BOQ1483.xls is provided along with this tender document at <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> .  Bidders are advised to upload the same in the commercial bid. Bidder shall not tamper/modify download price bid template in any manner. In case if the same is found to be tampered / modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with HURL.
		The quoted rate/amount shall be inclusive of taxes duties, levies including any other incidental charges applicable for the complete scope/supply excluding GST.  The GST shall be paid extra as per the provisions of Clause 6 (i.e., Taxes and Duties) of SCC.  Note: Quantity mentioned in the SOR is non-splitable under the tender.
3	Bid Evaluation	Pre-Qualification Evaluation HURL, by the examination of Techno-Commercial Bid, will determine to its satisfaction whether the participating bidders are qualified to satisfactorily perform the contract in terms of Pre- Qualification Criteria stipulated in clause 1 of SCC.  An affirmative determination of meeting the Pre- Qualification Criteria will be a prerequisite for further evaluation of Techno-Commercial bid. A negative determination will result in rejection of the Bidder's Techno-Commercial Bid in which event HURL will not open the Price Bid of the concerned bidder and his EMD shall be returned.  Technical Bid Evaluation Bids shall be scrutinized on Techno-Commercial parameters based on the documents as mentioned in Annexures to ITB. Bidders are required to submit fully compliant bid. The bidders are required to furnish no deviation certificate in conformity to same. The bidder who has not submitted / furnished such certificate, their price bid shall not be opened. The PRICE BID shall be opened only of those bidders whose bid would have been considered technocommercially accepted. Conditional bid will not be accepted.  Price Bid Evaluation

Price bid(s) of the bidder(s) shall be evaluated on the basis of **Percentage basis** of bidder's quote for all the items as quoted by bidder in SOR excluding GST amount.

The lowest evaluated price of the technically qualified bidder shall be considered for initiating of Reverse Auction (RA) Process and the Lowest Received Price of the bidder after the completion of Reverse auction shall be considered for award.

Reverse Auction (RA) Process shall be conducted on the total quantity of BOQ.

The financial comparison for selection of Lowest (L-1) Bidder after reverse auction shall be done based on the total derived price of all the items mentioned in BOQ/SOR. The aggregate amount will be worked out as total derived price of all items of BOQ, shall be considered for evaluation and award.

The successful bidder needs to submit the revised BoQ in line with price quoted by him in reverse auction. The ratio of percentage decrease in cost of each component shall be same as the overall percentage reduction in the bid value originally quoted by successful bidder and final L1 value quoted by successful bidder after reverse auction.

The detailed Break-up of offered cost, provided by the successful bidder shall be considered and order, if placed, shall be with the same break-up of prices. The successful bidder after reverse auction will be responsible to ensure that the rate as per the breakup of prices provided by him after the reverse auction and total value offered by him in the reverse auction are in same proportion. The successful bidder will not be allowed to increase the rate of any component while submitting the breakup. While giving the break up, the successful bidder will have to consider same rate of taxes as quoted while submitting the commercial bid. In case the successful bidder(s) fail(s) to submit the final BoQ within 3 days or the break up given by bidder does not match with total offered price, the HURL will be at liberty to place order by proportionately reducing the component rates on basis of the breakup of the e-auction bid submitted by the successful bidder along with the initial offer and the same will be binding on the successful bidder.

However, if Reverse Auction does not lead to any bid, HURL shall reserve the right to award the job based on the lowest prices quoted in online commercial bid.

HURL Reserves the right to cancel the reverse auction as per the requirement. The management reserves the right to accept/ reject any or all tenders at the time prior to award of contract without assigning any reasons whatsoever.

## 4 Award Criteria

HURL reserves the right to negotiate price with L1 bidder.

HURL will award the Contract to the successful Bidder whose Technical and Commercial bid has been determined to be substantially responsive and Price Bid to be the lowest evaluated Bid. HURL reserves the right to negotiate with the L1 Bidder after the opening of the price bid. The L1 bidder must respond to the communication within stipulated time. Failure to respond will be considered a deliberate delay in the tendering process or a lack of interest in the tender. As a result, the L1 bid will be deemed invalid, potentially resulting in your exclusion from future tender opportunities.

		If intentional non-responsiveness is determined, HURL reserves the right to blacklist the bidder.
	Contract Price	Price to be quoted shall be firm and subject to no escalation whatsoever during the contractual completion period including extended period, if any, except for any statutory variations i.e. change in the rate of tax & duty and/or inclusion of any new tax & duty. Bid with variable price will not be accepted.
5		1. Material shall be delivered at HURL, Barauni plant site.
		<ol> <li>FOR – HURL Barauni</li> <li>Packing, Forwarding, Freight &amp; insurance is in the scope of supplier.</li> <li>For installation / ARC / AMC services, the services shall be carried out at HURL Barauni plant site as required by EIC. To &amp; Fro, Fooding, Boarding, Lodging and Local conveyance is in the scope of contractor.</li> </ol>
6	Taxes and Duties	The Bidder shall include all the taxes, duties/ levies etc (except GST) in their quoted rates / prices. GST charges shall be paid extra at actual by the owner limited to the GST charges indicated by the bidder in the summary of SOR. Statutory variation in taxes and duties including imposition of any new tax & duty, within the scheduled Completion period, as per Contract/Work order, shall be paid by contractor.  The Contractor has to submit / furnish all necessary documents / information to enable claim the input credit benefit, if any, under GST rules.  The contractor shall indemnify the Company against levy of any taxes/charges etc., imposed by the Govt. or any authority which are in existence at the time of submission of tender and also future statutory levies and the Contractor failed to deposit the same. The Company shall have the right to recover the total amount of tax so assessed including litigation expenses from contractor's bills / security deposit.  GST payment applicable at the time of awarding the contract shall be subject to any change in GST law in future.  The GST part of the bill shall be paid only after confirmation of payment from the successful awarded bidder or after confirmation of the corresponding return filed by the contractor from the GST portal. The GST part of the bill shall be withheld till such confirmation.
		GST Registration Number of HURL Barauni is 10AADCH9368N1Z7 Please mention GST Number & PO number in Invoice / Challan wherever applicable and HURL shall not be liable for any delay in payment if the same is not mentioned.
		1. Payment Terms:
	Payment	1. For Civil Works:
	Terms &	i. The Owner shall pay to the Contractor all the admissible payments @60% on monthly basis for actual operated
7	Documents	quantity as per BOQ within thirty (30) days from the date
	required for	of submission of Invoice along with all required supporting
	Payment	documents duly certified by EIC.
		ii. The balance 40% on Testing & Acceptance of works and Commissioning / Completion of all works including all

statutory compliances and providing of Quarter Occupancy certificate duly signed by EIC and HR dept.

#### 2. For Electrical Works:

- i. Progress Payments shall be released to CONTRACTOR against monthly running account bills duly certified by Engineer-in-charge after affecting the necessary deductions within 30 days from the date of submission of Invoice along with all required supporting documents duly certified by EIC.
- ii. The basis for payment against various items shall be below:

#### Supply Items

60% on receipt and acceptance of equipment at site.

40% after Erection / Installation and Commissioning / Completion of all works including all statutory compliances and providing of Quarter Occupancy certificate duly signed by EIC and HR dept.

#### **Erection Items:**

60% on completion of Erection / Installation works 40% on Testing & Acceptance of works and Commissioning/Completion of all works including all statutory and providing of Quarter Occupancy certificate duly signed by EIC and HR dept.

#### 2. The following Documents required for Payment Processing:

- Copy of Work Order, Executed Contract Agreement, and Bank Guarantee, kick off meting Minutes regarding mobilization of services to be submitted along with the first Running Account (RA-1) bill.
- Monthly Tax Invoice in compliance with the GST Act, clearly mentioning the services availed as per BOQ and period, duly certified by EIC.
- Abstract sheet and measurement sheet duly mentioned with current claim qty and cumulative quantities duly certified by EIC and contractor.
- Copy of IMIR/SRV regarding material supplies and service completion reports regarding erections/installations. Further all the warranty, drawings, O&M manuals and other relevant documents to be submitted.
- Copy of hindrance register in case of delay in execution of work.
- Monthly progress report indicating the financial progress as well as physical progress.
- HR Statutory compliance reports (Wage sheets, PF, ESI, WC, Labour license copy, etc.)
- In case of Final bill- In addition to above, Site clearance certificate, Applicable contract completion certificates duly provided by HURL EIC, no demand certificate, confirmation regarding all punch points/pending works are completed

- 3. The bidder must deposit a Performance Bank Guarantee (PBG) amounting to 10% of the contract value in advance, as per GCC clause 34.
- 4. Tax deduction at source Income tax, as applicable as per income tax act, shall be deducted at source from the Contractor's bills and a certificate towards this deduction shall be issued to the Contractor.
- 5. Price Basis: Shall be firm till the completion of the contract for works.
- 6. For manpower contract any increasing or decreasing in statuary minimum wage as notified by the Government with respect to minimum wage shall be reimbursed to or deducted from the contractors bills from date of said increase or decrease effected by the Govt. in respect of each worker engaged by the contractor during pendency of the contractor. Also, consequential effect of increase/decrease, minimum wages toward PF (Limited to Employer's contribution only), bonus, ESI shall also be reimbursed to the contractor or deducted from the contractor's bill as case may be-subject to the production of the relevant proof. Mode of reimbursement of such differential wage will be as follows: "All difference in wage shall be reimbursed on actual labour deployment basis after completion of 12 months of contract period or final bill whichever is earlier on the written request of the contract with requisite statement and proof of documents for claim". However, the owner shall not reimburse any increase in amount thereof towards income tax and sale/trade at, any other applicable taxes etc. these liabilities are to be borne by the contractor only.
- 7. There shall be no service charges / profit component payable to the contractor on account of differential amount reimbursed to the contractor towards increase in the minimum wages.
- 8. TDS shall be deducted as per the statutory norms.
- 9. HURL's total sales turnover has exceeded Rs. 10 crores during the FY 2023-24. Consequently, we now qualify as a buyer under section 194Q of the Income Tax Act, and it is mandatory for us to deduct tax at a rate of 0.1% on the purchase of any goods with a value exceeding fifty lacs in the financial year or the aggregate of such value. All suppliers or contractors to discontinue the collection of tax (TCS) on all sales invoices. HURL will deduct tax at a rate of 0.1% TDS under section 194Q of the Income Tax Act.
- 10. LD: If the Contractor fails to mobilize the services within the stipulated time or fails to deliver the scheduled material by the scheduled delivery date, the Contractor shall be liable for liquidated damages. This liability shall not prejudice any other rights or remedies of the Employer arising from the Contract due to such delay, be liable for payment of liquidated damages @ ½ percent per week or part of week, not as penalty, on the Contract Value of the Work for every week subject to a maximum of 5% of the Contract Value. In case of amendment in the contract value, the limiting value of the Liquidated damages shall be 5% of the amended Contract Value. 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 Owner.

	Defect	12 Months from the date of completion period.
8	Liability	·
	Period	
	Governing	
9	Laws GCC	As per GCC.
	CLAUSE 6	
	Effective Date	From the data of handover of site
10	GCC CLAUSE	Trom the data of handover of site
10	14 & 15	
	Commenceme	From the data of handover of site
11		From the data of handover of site
11	nt of supply	
	GCC CLAUSE 16	
12	Insurance to be taken out by the Contractor GCC CLAUSE 25	The contractor must provide insurance coverage for all their workers for death or bodily injury or occupational disease that may arise out of or in the course of employment, in accordance with statutory requirements and wherever applicable. The necessary insurance(s) to cover the risk of accidents resulting in the loss of life, material, etc., to the crew or third party, must also be arranged by the contractor at their cost. All contractor equipment is solely at the contractor's risk.  The contractor must insure all their personnel employed for the execution of the work against any personal injury that may result from the execution of the work, and provide satisfactory evidence to the owner/consultant that such insurance is in force, wherever applicable.  The contractor must take out a workers' compensation policy and an ESIC policy for the deputed manpower, and the charges are deemed to be included in the quoted price wherever applicable or as per statutory compliance. Any additional insurance required during the execution of the work is the responsibility of the contractor.  The contractor must arrange transit insurance coverage for all risks associated with the transportation of materials from the source to the destination. Any additional insurance required during the execution of the work, such as for the supply of materials, is also the responsibility of the contractor, and the insurance charges are deemed to be included in the quoted price.  When installation services are needed, the contractor must obtain all necessary insurance for their manpower/field service engineers and comply with all statutory requirements. HURL will not be liable for the contractor's insurance. The contractor must properly cover and protect any part of the work that may be susceptible to damage due to exposure to weather, and take every reasonable precaution against accidents or injury to the work from any cause. All contractor equipment will be at the sole risk of the contractor. Insurance coverage for the manpower entering the
	Contractor's	
13	Actions	As per GCC

	Owner's Prior Approval GCC CLAUSE		
	26		
14	Contract Period	The contract duration is for 05 Months from the date of site handover.	
15	Signing of Contract Agreement	The successful tenderer / bidder shall be required to execute a contract agreement on non-judicial stamp paper of Rs.1000 in the prescribed proforma (enclosed as Annexure-11 to Section VI i.e., Forms and Procedures) with the Company within 30 (thirty) days of the issue of the work order of the same for carrying out the work according to the general and special conditions of contract specified in the Tender Document.  Cost of non-judicial stamp paper shall be borne by successful bidder. The contract shall be presumed to be effective from the effective date contract. The Tender Document, Letter of Acceptance and other correspondence between the Company and the tenderers shall form part of the contract.  Failure of the successful tenderer / bidder to execute the above-mentioned Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.	
16	NOTICE OF DEFAULT	In the event of any default by either party hereto, in respect of any of its obligations and responsibilities under the Contract, the party not in default shall give notice in writing to the other party calling upon it to rectify such default. Should the party in default does not rectify such default within a period of thirty (30) days of the receipt thereof within the said period, the other party shall be entitled to treat it as a breach of Contract and notice to that effect shall be given forth with.	
17	If a tenderer resorts to any frivolous, malicious or baseless complaints/allegations with an intent to hamper or delay the tendering process or resorts to canvassing / rigging/influencing the tendering process, HURL reserves the right to debar such tenderer from participation in the future tenders up to a period of 2 years.		
18	Bidders must before submission of their Bids, acquaint themselves with all applicable regulatory and other legal requirements pertaining to insurance and health, safety and environment requirement in India and rules related to work permit and visa requirements in India or in any way or manner affecting the performance of Scope of Work, the Contractor and the Plant operation and performance including social security, safety, pollution control, permits, licenses, and the other statutory requirements and regulations. The submission of a Bid by the Bidder will be construed as evidence that such an examination was made and the Bidder shall not raise at any time later any claims/disputes against the Owner and the Owner shall not be liable for the same in any manner whatsoever.		
19	For proper execution of work sufficient numbers of tools & tackles are to be provided by the agency at their own cost, nothing shall be paid extra for this. The contractor shall abide by all statutory rules and regulations of Local authority, State and Central Govt. as the case may be with regard to statutory benefits and non-statutory benefits prevailing at HURL-Barauni as applicable, at his own cost and hence the agency has to quote their rate accordingly by		

taking care of all these. HURL reserve the right to terminate the contract at any time during the contract period in case performance is not found satisfactory and work not carried as per instruction of Officer-in-charge. The Bid Specific conditions of contract mentioned In Section V shall supplement the Special 20 Conditions of Contract (SCC) wherever applicable. General Note: Wherever applicable, 1. The bidder must ensure that the transporter carries the necessary documents, including the driving license, RC book, PUC certificate, and insurance copy, during the delivery of materials along with the invoice. 2. The bidder must mention the Purchase order number on the consignment / Product package with the name of the concerned technical department and stores department mentioned in the Section -1 of tender / NIT / RFQ. 3. The bidder must share the dispatch details in advance with HURL C&M - Purchase, C&M- Stores and the indenting department as per the communication details mentioned in section 1 of the tender documents. 4. The bidder must mention the HURL Purchase Order number and material code in the invoice/Delivery challan against each line item. 21 5. The bidder must provide the transporter with the contact details of HURL store personnel / EIC for ease of communication as mentioned in the Section -1 of tender / NIT / RFQ. 6. Wherever applicable, the bidder must submit Security deposit and Contract agreement copy within stipulated time as mentioned in tender documents. The formats of the same are mentioned in the FORMS or in the Last section of the tender document as annexures. Any delays caused by non-compliance with the above instructions may result in delayed payment, and HURL shall not be responsible for such instances. # Note: HURL's total sales turnover has exceeded Rs. 10 crores during the FY 2023-24. Consequently, we now qualify as a buyer under section 194Q of the Income Tax Act, and it is mandatory for us to deduct tax at a rate of 0.1% on the purchase of any goods with a value exceeding fifty lacs in the financial year or the aggregate of such value. Therefore, we kindly request all our suppliers or contractors to discontinue the collection of tax (TCS) on all sales invoices. HURL will deduct tax at a rate of 0.1% TDS under section 194Q of the Income Tax Act. 22.1 STATUTORY VARIATION IN TAXES AND DUTIES 22.1.1 If any new taxes or duties (including any increase in rate of any existing taxes or duties) are levied in India after the date of submission of bids on any payments due to the CONTRACTOR under the CONTRACT other than tax on income, wealth or profits of the CONTRACTOR, the HURL BARAUNI shall reimburse the CONTRACTOR the amount of such taxes or duties lawfully paid and borne by the CONTRACTOR against proof of payment. 22 However, this is applicable within the GUARANTEED COMPLETION DATE only and shall not be reimbursed by HURL BARAUNI during the delayed contractual project completion attributable to CONTRACTOR"S account. 22.1.2 If any existing taxes or duties are withdrawn or the rate is decreased after the date of submission of the bids on any payments due to the CONTRACTOR under the CONTRACT other than tax on income, wealth or profits of the CONTRACTOR, the HURL BARAUNI shall be

entitled to discount in the amount payable to the CONTRACTOR of amount equivalent to the amount of such taxes or duties. This is applicable within the GUARANTEED COMPLETION DATE and also during the delayed contractual Project completion.

22.1.3.3 In case of delayed completion beyond the GUARANTEED COMPLETION DATE even though extension of completion time is allowed by HURL BARAUNI, for reasons solely attributable to Contractor, all extra costs on account of changes of statutory regulations/ acts, or increase in price on any other account including price variation clause, if any, shall not apply to the Contract price and shall be borne by the CONTRACTOR.

However, any decrease in taxes and duties during the delayed period shall be passed on to the HURL BARAUNI.

#### 22.2 QUALITY ASSURANCE / QUALITY CONTROL

- 22.2.1 Bidder shall include in his offer the Quality Assurance Programme containing the overall quality management and procedures which is required to be adhered to during the execution of contract. After the award of the contract detailed quality assurance programme shall be prepared by the Contractor for the execution of contract for various works which will be mutually discussed and agreed to.
- 22.2.2 The Contractor shall establish document and maintain an effective quality assurance system outlined in recognized codes.
- 22.2.3 Quality Assurance System plans/procedures of the Contractor shall be furnished in the form of a QA manual. This document should cover details of the personnel responsible for the Quality Assurance, plans or procedures to be followed for quality control in respect of Design, Engineering, Procurement, Supply, Installation, Testing and completion in all respect till final acceptance by HURL Barauni. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of work at site.
- 22.2.4 The HURL Barauni or their representative shall reserve the right to inspect/witness, review any or all stages of work at shop/site as deemed necessary for quality assurance.
- 22.2.5 The Contractor has to ensure the deployment of quality Assurance and Quality Control Engineer(s) depending upon the quantum of work.

This QA/QC group shall be fully responsible to carry out the work as per standards and all code requirements. In case Engineer-in-charge feels that Contractor's QA/QC Engineer(s) are incompetent or insufficient, Contractor has to deploy other experienced Engineer(s) as per site requirement and to the full satisfaction of Engineer-In-Charge.

22.2.6 In case Contractor fails to follow the instructions of Engineer-in-charge with respect to above clauses, next payment due to him shall not be released unless until he complies with the instructions to the full satisfaction of Engineer-in-charge.

22.2.7 The Contractor shall adhere to the approved quality assurance system

#### 22.3 HEALTH SAFETY AND ENVIRONMENT (HSE) MANAGEMENT

The Contractor, during entire duration of the Contract, shall adhere to HSE requirement as per Specifications.

The contractor shall ensure all his workers shall have Personal Protective Equipment's (PPE"s) at his cost (not to be charged to the worker) and ensure safety of site by providing Barricades for restricting movement of public to work area. The barricade arrangement shall be approved by Engineer in charge keeping in view the overall circulating pattern of the commuters in the station

Any other item of work as may be required, to be carried out as per CPWD specifications, for completing the job in all respects in accordance with the provisions of contract and or to ensure the structural stability and safety of the work during and after construction

The work shall be carried out as and when required by HURL with all safety precautions.

The contractor shall ensure all his workers shall have Personal Protective Equipment's (PPE"s) at his cost (not to be charged to the worker) and ensure safety of site by providing Barricades for restricting movement of public to work area. The barricade arrangement shall be approved by Engineer in charge keeping in view the overall circulating pattern of the commuters in the station

The contractor shall ensure safety of his workers and others at site of work and shall be responsible for any consequence arising out of execution of the work.

The work shall be carried out as and when required by HURL with all safety precautions. Penalty of Rs.500 will be imposed if personnel found without PPE's or engaged in unsafe work

#### 23.0 SUBMISSION OF BILL

Contractor is to submit the bills and record of measurements in three (3) copies on approved Performa of HURL Barauni for works executed by him.

23.1 FOR R/A BILLS:

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Contractor is to submit the bills and record of measurements complete in all respect duly certified by HURL Barauni in three copies on approved Performa of HURL Barauni for works executed by him progressively.

#### 23.2 MEASURMENT OF WORKS

Measurement of work shall be made in the units mentioned in the schedule of rates.

#### 23.3 SUBMISSION OF FINAL BILL

The final bill complete in all respect shall be submitted after certified completion of work.

The bill should be accompanied with the following documents:

- i. Job completion certificate.
- ii. O & M Manuals / Drawings / Other relevant docs. in respect of equipments supplied
- iii. No claim certificate on HURL BARAUNI's prescribed Performa.
- iv. Site clearance certificate.
- v. Performance guarantee duly amended to cover certified maintenance period.
- vi. Indemnity certificate towards labours payment and all other statutory payments.

No claim shall be entertained after receipt of final bill. Settlement of final bill shall be made within 1 (one) month period subject to furnishing of all required documents / clarification and extension of time, if any, by HURL BARAUNI's competent authority.

In case any claim with regard to the wages of any labour employed by Contractor for the subject job is pending/reported, HURL BARAUNI shall be fully entitled to withhold payment of final bill pending finalization of such claims.

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Release of Performance Bank Guarantee (PBG): The PBG shall be returned only after successful completion of the contract, including the applicable Defect Liability Period (DLP), and upon submission of all invoices corresponding to the services availed under the contract. In the event of non-submission of invoices for services actually rendered, it shall be treated as non-compliance. Accordingly, the validity of the PBG shall be extended to cover such pending obligations.

#### **MSE Seeking Exemption:**

- 1. MSEs seeking exemption and benefits should enclose an attested/self-certified copy of registration certificate i.e Udyog Aadhaar Memorandum, certificate of incorporation, manufacturing license with production details (production capacity etc.) as a part of his bid, giving details such as stores/services, validity (if applicable) etc. failing which they run the risk of their bid being passed over as ineligible for the benefits applicable to MSEs.
- 2. The benefit as above to MSEs shall be available only for Goods/Services produced & provided by MSEs.
- 3. Further, in case of tenders where splitting of quantity is possible, participating MSEs quoting price within price band of L1 + 15 percent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be

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allowed to supply up to 25 percent of total tendered value. In case of more than one such MSE, the supply will be shared proportionately (to tendered quantity). However, in case of tenders where splitting of quantity is not possible, participating MSEs quoting price within price band of L1 + 15 percent shall be allowed to execute the package by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise. The award shall be made as follows:

- 3.1. Award shall be given to L1 bidder if L1 bidder is an MSE.
- 3.2. In case L1 bidder is not an MSE, then all the MSE vendor(s) who have quoted within the range of L1 + 15%, shall be given the opportunity in order of their ranking (starting with the lowest quoted MSE bidder and so on) to bring down its price to match with L1 bidder. Award shall be placed on the MSE vendor who matches the price quoted by L1 bidder.
- 3.3.— If no MSE vendor who has quoted within range of L1 + 15% accepts the price of L1 bidder then the award shall be made to the L1 bidder.
- 4. Note: Generally, in tenders having Item-wise evaluation, splitting is allowed unless otherwise specified in the Special Conditions of Contract (SCC). Further, in tenders having Package wise evaluation generally splitting is not allowed. Please refer Special Conditions of Contract for specific tender provisions.
- 5. If the quoted products are registered under supplier category in any government site / portal then such material shall not be considered under MSE category. As per answer to FAQ no. 18 circulated vide Office Memorandum F. No. 22(1)/2012-M A dt. 24.10.2016 "Policy is meant for procurement of goods produced and services rendered by MSEs. However, traders are excluded from the purview of benefits and exemption of MSEs.
- 6. —In case, Bidder is not a manufacturer of all such items which are a pre-requisite for extending MSE benefits of purchase preference, but is a manufacturer of atleast one of the item(s) of the package, then benefits of EMD and Tender fee exemption only shall be extended in such cases and its bid shall be evaluated treated as Non-MSE bid.
- 7. In support of above claim regarding manufacturing of each of the specified Item(s), Bidder will furnish necessary details of Stores/ Category of items etc. as mentioned in the 'Udyam Registration Certificate' along with the above Undertaking. In case, such details are not available in the Registration Certificate furnished by the Bidder for any of the above item(s), other relevant details / documentary evidence will be furnished along with the Undertaking in support of the claim that such item(s) are manufactured by the Bidder.

## **HINDUSTAN URVARAK & RASAYAN LIMITED**

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

#### **BARAUNI UNIT**

Barauni Urvarak Nagar, Begusarai
P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115
[Registered Office SCOPE Minar, Core 4, 9TH Floor, Laxmi Nagar District Center, Delhi-110092]



**SECTION - V** 

(SOR, TECHNICAL SPECIFICATIONS

SCOPE OF WORK AND OTHER TERMS & CONDITIONS)

Below is a comprehensive list of the annexures, supporting documents, and BoQ. These documents collectively constitute an integral part of our tender submission, offering detailed insights into our proposed approach and technical specifications

Sl. No	Name of Documents
1	Civil (Scope of work and other terms and condition)
2	Electrical (General & Equipment Specification, Drawing etc.)
3	BoQ (Civil & Electrical Works)

(Note: All the Annexures inside section-V relate exclusively to section-V)

## SCOPE OF WORK

# <u>Project: - Renovation of old HFCL 12 No's quarters at township at Barauni</u> <u>Barauni</u>

#### **SCOPE OF WORKS**

The scope shall consist of but not limited to the followings: -

- 1. Rehabilitation of Internal & External Plumbing and Electrical works. 2. Structural rehabilitation of quarters including finishing and waterproofing work.
- 3. Rehabilitation of damaged structures/foundations/roads/cables/pipe etc in renovation
- 4. Rehabilitation of gate/fencing/boundary wall of individual quarters/building and township.
- 5. Rehabilitation of approach road, drain and sewer.
- 6. Other Miscellaneous works.
- 7. Repairing of plaster and painting to whole building.
- 8. Construction of septic tank with soak pit.
- 9. Replacement of all sanitary and water supply fixture.
- 10. Water proofing treatment at terrace.
- 11. Construction of welded steel wire fencing with steel gate.

The Scope of work shall also include any other item of work require to complete the work in all respects as per the specifications, drawings and instruction of EIC whether specifically mentioned or not in the tender documents. All the dimensions mentioned are indicative and it may vary at the time of final design/execution.

# TECHNICAL SPECIFICATION FOR CIVIL, STRUCTURAL AND OTHER ALLIED WORKS

#### 1.0 GENERAL

- 1.1 Specifications of materials and workmanship shall be as described in the Central Public Works Department Specifications Vol. I & II (latest) include latest amendments, unless other wise specified. These CPWD Specifications shall be deemed to form part of this contract. The CONTRACTOR shall procure and maintain copies of the latest CPWD Specifications at site for reference.
- 1.2 These technical Specifications shall be supplementary to the specifications contained in the CPWD specifications, wherever at variance, these Particular Specifications shall take precedence over the provisions in the CPWD Specifications.

#### 2.0 REFERENCE CODES & STANDARDS

- 2.1 Wherever reference of IS Specifications/ or IS Codes of Practice are made in the Specifications/ Schedule of Rates or Preambles, reference shall be to the latest edition of IS (Bureau of Indian Standards).
- IS 383 Coarse & Fine aggregates from natural sources for concrete.
- IS 427 Distemper, dry, colour as required.
- IS 432 Mild Steel & Medium tensile steel bars.
- IS 456 Code of Practice for Plain and Reinforced Concrete.
- IS 515 Natural and Manufactured aggregates for use in mass concrete
- IS 730 Hook bolts for corrugated sheet roofing
- IS 800 Code of Practice for General Construction in Steel
- IS 1079 Hot rolled carbon steel sheets & strips
- IS 1081 Code of practice for fixing and glazing of metal (steel & aluminium) doors, windows and ventilators.
- IS 1161 Steel tubes for structural purposes.
- IS 1285 Wrought aluminium & aluminium alloy extruded round tube and hollow sections
- IS 1361 Steel windows for Industrial Buildings.
- IS 1363 Hexagon head bolts, screws & nuts of product grade C : Part I Hexagon head bolts (size range M5 to M64)
- IS 1367 Technical supply conditions for threaded steel fasteners IS 1566 Hard Drawn steel wire fabric for concrete reinforcement. IS 1786 High strength deformed steel bars & wires for concrete reinforcement. IS 2062 Steel for general structural purposes.
- IS 2116 Sand for masonry mortars.
- IS 2212 Code of practice for brickwork.
- IS 2386 Methods of test for aggregates.
- IS 2835 Flat transparent sheet glass
- IS 4021 Timber door, window and ventilator frames
- IS 4923 Hollow Steel sections for structural use.
- IS 4925 Concrete batching and mixing plant.
- IS 5410 Cement Paint
- IS 6477 Dimensions for wrought aluminium & aluminium alloys, extruded hollow sections.
- IS 7318 Fusion welding of steel.
- IS 10262 Recommended guidelines for concrete mix design.
- IS 14871 Products in Fibre Reinforced Cement Long Corrugated or Asymmetrical Section Sheets and Fittings for Roofing and Cladding Specification

#### 3.0 EARTHWORK

- 3.1 Excavation
- 3.1.1 Excavation shall be carried out in soil of any nature and consistency, in the presence of water or in the dry, met on the site to the lines, levels and contours shown on the detailed drawings and CONTRACTOR shall remove all excavated materials to soil heaps on site or transport for use in filling on the site or stack them

for reuse as directed by the Engineer-in-Charge.

- 3.1.2 Surface dressing shall be carried out on the entire area occupied by the buildings including plinth protection as directed without any extra cost. The depths of excavation shown on the drawings are the depths after surface dressing.
- 3.1.3 The site around all buildings and structures to a width of 3 metres beyond the edge of plinth protection, ramps, steps, etc. shall be dressed and sloped away from the buildings.
- 3.1.4 Black cotton soil, and other expansive or unsuitable soils excavated shall not be used for filling in foundations, and plinths of buildings or in other structures including manholes, septic tanks etc. and shall be disposed off within the contract area marked on the drawings, as directed, levelled and neatly dressed.
- 3.1.5 In case of trenches exceeding 2 metres depth or where soil is soft or slushy, the sides of trenches shall be protected by timbering and shoring. The CONTRACTOR shall be responsible to take all necessary steps to prevent the sides of trenches from caving in or collapsing. The extent and type of timbering and shoring shall be as directed by the Engineer-in-Charge.
- 3.1.6 Where the excavation is to be carried out below the foundation level of adjacent structure, the precautions to be taken such as under pinning, shoring and strutting etc. shall be determined by Engineer-in-Charge. No excavation shall be done unless such precautionary measures are carried out as per directions of Engineer-in-Charge.
- 3.1.7 Specification for Earth work shall also apply to excavation in rock in general. The excavation in rock shall be done such that extra excavation beyond the required width and depth as shown in drawings is not made. If the excavation done in depth greater than required /ordered. The CONTRACTOR shall fill the extra excavation with concrete of mix 1:5:10 as the foundation concrete at his own cost. 3.1.8 CONTRACTOR shall make all necessary arrangements for dewatering / defiling as required to carry out proper excavation work by bailing or pumping out water, which may accumulate in the excavation pit from any cause/ source whatsoever. In addition to this, if required, contractor shall also install continuous dewatering pump-sets to lower the

ground water table below the working level to make the area fit and safe for working.

- 3.1.9 CONTRACTOR shall provide suitable draining arrangements at his own cost to prevent surface water entering the foundation pits from any source.
- 3.1.10 The CONTRACTOR is forbidden to commence the construction of structures or to carry out concreting before Engineer-in-Charge has inspected, accepted and permitted the excavation bottom.
- 3.1.11 Excavation in disintegrated rock means rock or Boulders including brickbats which may be quarried or split with crow bars. This will also include laterite and hard conglomerate.

- 3.1.12 Excavations in hard rock meant excavation made in hard rock to be done manually, or by blasting using only explosives and / or pneumatic hammers. In case of blasting, control blasting should be adopted depending on site conditions. For using explosives CONTRACTOR shall follow all provisions of Indian Explosives Act / Rules 1983, corrected / revised up to date.
- 3.1.13 In case of hard rock excavation to be carried out using explosives the, CONTRACTOR shall obtain the written approval in advance.
- 3.1.14 The measurements for excavations shall be restricted and limited to minimum excavation line as per drawing for payment purposes.
- 3.1.15 Adequate protective measures shall be taken to see that the excavation does not affect or damage adjoining structures. The CONTRACTOR shall take all measures required for ensuring stability of the excavation and safety of property and people in the vicinity. The CONTRACTOR shall erect and maintain during progress of work, temporary fences around dangerous excavations at no extra cost. Excavation in ordinary soil means excavation in ordinary hard soil including stiff heavy clay, hard shale, or compact moorum, or any materials, which can be removed by the ordinary application of spades, shovels, picks and pick axes. This shall also include removal of isolated boulders each having a volume not more than 0.50m<sup>3</sup>.
- 3.1.17 Excavation in soft rock includes limestone, sandstone, laterite, hard conglomerates, etc. or other rock which can be quarried or split with crowbars or wedges. This shall also include excavation of tarred pavements, masonry work and rock boulders each having a volume of not more than 0.25m<sup>3</sup>.
- 3.1.18 Excavation in hard rock includes any rock bound in ledges or masses in its original form or cement concrete for which in the opinion of the Engineer-in Charge, requires the use of compressed air, equipment, sledge hammer and blasting or nonexplosive materials viz. Acconex manufactured by A.C.C. Ltd. Specifications and instructions for use shall be as per manufacturer.
- 3.1.19 In case of any difficulty concerning the interpretation of type of soil as mentioned above, the Engineer-in-Charge shall decide whether the excavation in a particular material is in ordinary soil, soft rock or hard rock and his decision in this matter shall be final and binding on the CONTRACTOR and without appeal.

  3.2 Filling
- 3.2.1 Back filling of excavations in trenches, foundations and elsewhere shall consist of one of the following materials approved by Engineer-in-Charge. Soil Sand Moorum Hard-core Stone/gravel All back filling material shall be approved by the Engineer-in-Charge.
- 3.2.2 Soil filling Soil material shall be free from rubbish, roots, hard lumps and any other foreign organic material. Filling shall be done in regular horizontal layers each not exceeding 20 cm. depth.
- 3.2.3 Back filling around completed foundations, structures, trenches and in plinth shall be done to the lines and levels shown on the drawings.

- 3.2.4 Back filling around pipes in the trench shall be done after hydro testing is done.
- 3.2.5 Back filling around liquid retaining structures shall be done only after leakage testing is completed and approval of Engineer-in-Charge is obtained.
- 3.2.6 Sand used for filling under foundation concrete, around foundation and in plinth etc. shall be fine/ coarse, strong, clean, free from dust, organic and deleterious matter. The sand filling under foundation shall be rammed with Mech. compactor. Sand material shall be approved by Engineer-in-Charge.
- 3.2.7 Moorum for filling, where ordered, shall be obtained from approved pits and quarries which contain siliceous material and natural mixture of clay. Moorum shall not contain any admixture of ordinary earth. Size of moorum shall vary from dust to 10 mm.
- 3.2.8 Hard-core shall be of broken stone of 90 mm to 10 mm size suitable for providing a dense and compact sub grade. Stones shall be sound, free from flakes, dust and other impurities. Hard core filling shall be spread and levelled in layers, 15 cm thick, watered and well compacted with ramming or with mechanical / hand compacts including hand packing wherever required.
- 3.2.9 If any selected fill material is required to be borrowed, CONTRACTOR shall make arrangements and procure such material from outside borrow pits after obtaining all necessary permissions from statutory authorities. The material of source shall be subject to prior approval of Engineer-in-Charge. CONTRACTOR shall make necessary access roads to borrow areas and maintain the same, if such access roads do not exist, at no extra cost.
- 3.2.10 Plinth filling shall be carried out with approved material as described earlier, in layers not exceeding 150mm, watered and compacted with mechanical compaction machines. Engineer-in-Charge may however permit manual compaction by hand tampers in case he is satisfied that mechanical compaction is not possible. When filling reaches the finished level, the surface shall be flooded with water, unless otherwise directed, for at least 24 hours, allowed to dry and then the surface again compacted as specified above to avoid settlements at later stage. The finished level of the filling shall be trimmed to the level specified. Compacted surface shall have at least 95% of laboratory maximum dry density. A minimum of one test per 250 sq. meters of compacted area shall be done.
- 3.2.11 Whenever the fill material (earth or soil) is purchased, CONTRACTOR shall get the approval of Engineer-in-Charge. The CONTRACTOR shall arrange to determine the following properties of the soil (at outside NABL accredited laboratory without any cost to HURL Barauni) and shall get the approval of Engineer-in-Charge.
- 1. Clay content : 15% to 20%
- 2. Laboratory dry density (MDD): Not less than 1600 kg/m<sup>3</sup>
- 3. Plasticity Index: Not more than 20
- 4. Optimum Moisture Content (OMC): 8% to 12%
- 3.2.12 The fill shall be compacted using a vibrating compactor of not less than 1.5

tonne. The fill shall be thoroughly compacted in layers as directed but not more than 200 mm thick. Adequate water shall be used for compaction and the density after compaction shall be not less than maximum dry density obtained in test of IS: 2720 Part-8. Compacted surface shall have at least 95% of laboratory maximum dry density. A minimum of one test per 250 sq. meters of compacted area shall be done for each layer.

- 3.2.13 The Gravel fill shall be non plastic granular material, well graded, strong, with maximum particle size of 50 mm, with not more than 15% passing a 4.75 mm IS sieve, free of all debris, vegetable matter and chemical impurities.
- 3.2.14 All clods, lumps etc. shall be broken before compaction.
- 3.2.15 In case of grading/banking successive layers of filling shall not be placed, until the layer below has been thoroughly compacted to satisfy the requirements laid down in this specification. Prior to rolling, the moisture content of material shall be brought to within +/-2% of the optimum moisture content as described in IS 2720 Part-7. The moisture content shall preferably be on the wet side for potentially expansive soil. After adjusting the moisture content as described, the layers shall be thoroughly compacted by means approved by Engineer-in-Charge, till the specified maximum laboratory dry density is obtained. General, fill shall be placed in layers not exceeding 200 mm thickness and shall be thoroughly compacted to achieve a compaction of at least 95% of laboratory maximum dry density throughout the depth of filling. Final fill of 600 mm thickness shall consist of preferably natural material in, as dug condition except that stones larger than 100 mm shall be removed. It shall be placed in layers not exceeding 200 mm thickness and compacted to achieve of at least 95% of laboratory maximum dry

density. Each layer shall be tested in field for density and accepted by Engineer-in Charge, subject to achieving the required density before laying the next layer. A minimum of one test per 250 sq meters for each layer shall be conducted. If the layer fails to meet the required density, it shall be reworked or the material shall be replaced and method of construction altered as directed by Engineer-in Charge to obtain the required density.

The filling shall be finished in conformity with the alignment, levels, cross-section and dimensions as shown in the drawing. Extra material shall be removed and disposed off as directed by the Engineer-in- Charge.

#### 4.0 PLAIN AND REINFORCED CONCRETE WORK

This specifications deals with cement concrete, plain or reinforced, for general use, and covers the requirements for concrete materials, their storage, grading, mix design, strength & quality requirements, pouring at all levels, reinforcements, protection, curing, form work, finishing, painting, admixtures, inserts and other miscellaneous works.

- 4.1 Materials
- 4.1.1 Cement: Any of the following cements may be used as required. IS 8112 43 Grade ORDINARY PORTLAND CEMENT / PPC 4.1.2 Water: Water used for mixing and curing concrete and mortar shall conform to the requirements as laid down in IS: 456. Sea water shall not be used for concrete work.

4.1.3 Aggregates: Coarse and fine aggregates for cement concrete plain and reinforced shall conform to the requirements of IS 383 and / or IS 515. Before using, the aggregates shall be tested (at outside NABL accredited laboratory without any cost to HURL Barauni) as per IS: 2386.

Coarse aggregate: Coarse aggregate for all cement concrete work shall be broken or crushed hard stone, black trap stone obtained from approved Quarries or gravel. Sand: Fine aggregate for concrete work shall be coarse sand from approved sources. Grading of coarse sand shall be within grading zones I, II or III laid down in IS: 383, table 4. If required the aggregates (both fine and coarse) shall have to be thoroughly washed and graded as per direction of Engineer-in-Charge.

#### 4.2 Mixing

All cement concrete plain or reinforced shall be machine mixed. Mixing by hand may be employed where quantity of concrete involved is small, with the specific prior permission of the Engineer-in-Charge. 10% extra cement shall be added in case of hand mixing as stipulated in IS-456. For large and medium project sites the concrete shall be sourced from ready- mixed concrete plants or from on site or off site batching and mixing plants (IS 4926)

- 4.3 Water Cement Ratio, Laying & Curing Water Cement Ratio, Laying & Curing shall be done as per IS:456.
- 4.4 Grades of Concrete
- 4.4.1 Grades lower than M 25 shall not be used in reinforced concrete.
- 4.4.2 A sieve analysis test of aggregates shall be carried out (at outside NABL accredited laboratory without any cost to HURL Barauni) as and when the source of supply is changed without extra charge notwithstanding the mandatory test required to be carried out as per CPWD specification.
- 4.4.5 All tests in support of mix design shall be maintained as a part of records of the contract.

Test cubes for mix design shall be prepared by the CONTRACTOR under his own arrangements and at his costs, but under the supervision of the Engineer-in-Charge.

## 4.5 Design Mix Concrete

- 4.5.1 Design mix shall be allowed for major works where it is contemplated to be used by installing weigh batch mixing plant as per IS 4925. At the time of tendering, the CONTRACTOR, after taking into account the type of aggregates, plant and method of laying he intends to use, shall allow in his tender for the design mix i.e., aggregate/cement and water/cement ratios which he considers will achieve the strength requirements specified, and workability for concrete to be properly finished.
- 4.5.2 Before commencement of concreting, CONTRACTOR shall carry out preliminary tests (at outside NABL accredited laboratory without any cost to HURL Barauni) for design mix on trial mixes proposed by him in design of mix to satisfy the Engineer-in-Charge that the characteristic strength is obtained. In this regard, CONTRACTOR may consult govt. approved/reputed institute to get design mix done

as per IS 10262 at his own cost. The concrete mix to be actually used shall be approved by the Engineer-in-Charge.

4.5.3 Notwithstanding the above, the following shall be the maximum combined weight of coarse and fine aggregate per 50 kg of cement.

Grade of Concrete Maximum weight of fine & coarse aggregates together per 50 kg of cement

(for nominal mix only)

- 1. M 10 480 kg
- 2. M 15 350 kg
- 3. M 20 250 kg
- 4.5.4 The workability of concrete produced shall be adequate, so that the concrete can be properly placed and compacted. The slump shall be as per IS 456.
- 4.6 Testing of Concrete
- 4.6.1 Testing of concrete, sampling and acceptance criteria shall be in accordance with IS 456.
- 4.7 Proportioning

Mixes of cement concrete shall be as ordered. Where the concrete is specified by grade, it shall be prepared by mixing cement, sand and coarse aggregate by weight as per mix design. In case the concrete is specified as volumetric mix, then dry volume batching shall be done, making proper allowances for dampness in aggregates and bulking in sand. Equivalent volume batching for concrete specified by grade may however be allowed by the Engineer-in-Charge at his discretion.

#### 4.8 Pre Cast Concrete

The specifications for pre cast concrete will be similar as for the cast in situ concrete. All pre cast work shall be carried out in a yard made for the purpose. This yard shall be dry, properly levelled and having a hard and even surface. If the ground is to be used as a soft former of the units, shall be paved with concrete or masonry and provided with a layer of plaster (1:2 proportion) with smooth neat cement finish or a layer of MS sheeting. The casting shall be over suitable vibrating tables or by using form vibrators as per directions of Engineer-in-Charge. The yard, lifting equipment, curing tank, finished material storage space etc. shall be designed such that the units are not lifted from the mould before 7 (seven) days of curing and can be removed for erection after 28 (Twenty Eight) days of curing. The moulds shall preferably be of steel or of timber lined with G.I. sheet metal. The yard shall preferably be fenced. Lifting hooks, wherever necessary or as directed by Engineer-in-Charge shall be embedded in correct position of the units to facilitate erection, even though they may not be shown on the drgs. and shall be burnt off and finished after erection. Pre cast concrete units, when ready shall be transported to site by suitable means approved by Engineer-in-Charge. Care shall be taken to ensure that no damage occurs during transportation. All adjustments, levelling and plumbing shall be done as per the instructions of the Engineer-in Charge. The CONTRACTOR shall render all help with instruments, materials and staff to the Engineer-in-Charge for checking the

proper erection of the pre cast units. After erection and alignment the joints shall be filled with grout or concrete as directed by Engineer-in-Charge. If shuttering has to be used for supporting the pre cast unit they shall not be removed until the joints has attained sufficient strength and in no case before 14 (fourteen) days. The joint between pre cast roof planks shall be pointed with 1:2 (1 cement: 2 sand) mortar.

#### 5.0 STEEL REINFORCEMENT

5.1 Steel reinforcement shall comprise:

Mild steel bars conforming to IS: 432 Part-I.

Cold twisted bars conforming to IS: 1786

CRS bars

TMT bars

Hard drawn steel wire fabric conforming to IS: 1566

5.2 All joints in reinforcement shall be lapped adequately to develop the full strength of the reinforcement as per provision of IS: 456 or as per instruction of Engineer-in-Charge.

#### 6.0 FORM WORK

6.1 The shuttering or form work shall conform to the shape, lines and dimensions as shown on the drawings and be so constructed as to remain sufficiently rigid during placing and compacting of the concrete and shall be sufficiently tight to prevent loss of liquid from the concrete. The surface that becomes exposed on the removal of forms shall be examined by Engineer-in-Charge or his authorized representative before any defects are made good. Work that has sagged or bulged out, or contains honey combing, shall be rejected. All shuttering shall be plywood or steel shuttering.

6.2 The CONTRACTOR shall be responsible for sufficiency and adequacy of all form work. Centering and form work shall be designed & detailed in accordance with IS 14687 and approved by the Engineer-in-Charge, before placing of reinforcement and concreting.

## 6.3 Stripping Time

Forms shall not be struck until the concrete has reached strength at least twice the stress to which the concrete may be subjected at the time of removal of form work. The strength referred to shall be that of concrete using the same cement and aggregates, with the same proportions and cured under conditions of temperature and moisture similar to those existing on the work. Where possible, the form work shall be left longer as it would assist the curing.

Note 1: In normal circumstances and where ORDINARY PORTLAND CEMENT / PPC is used, forms may generally be removed after the expiry of the following periods:

- 1. Walls, columns and vertical faces of all structural members 24 to 48 hours as may be decided by the Engineer-in- Charge
- 2. Slabs (props left under) 3 days
- 3. Beam soffits (Props left under) 7 days
- 4. Removal of props under slabs

- 1. Spanning up to 4.5 m 7 days
- 2. Spanning over 4.5 m 14 days
- 5. Removal of props under beams & arches: 1. Spanning up to 6 m 14 days 2. Spanning over 6m 21 days

For other types of cements, the stripling time recommended for ORDINARY PORTLAND CEMENT / PPC may be suitably modified.

Note 2: The number of props left under, their sizes and disposition shall be such as to be able to safely carry the full dead load of the slab, beam or arch as the case may be together with any live load likely to occur during curing or further construction.

7.0 CEMENT CONCRETE BLOCK

Cement concrete block shall be machined made in the proportion of such that mix shall not be leaner than one cement to twelve combined aggregates (by volume) but having minimum strength of 7.5 MPa. Combined aggregate shall be graded as near as possible to IS: 383. The fineness modules of combined aggregate shall be between 3.6 and 4. The concrete block shall be properly cured as per IS-456. The surface of conc. Block shall have even face without any honeycomb and free from cracks.

#### 7.1 Mortar

Cement and water shall confirm to the requirements laid down for cement concrete work.

- 7.1.1 Sand for concrete block masonry mortars shall be coarse sand generally conforming to IS: 2116. Maximum quantities of clay, fine dust, shall not be more than 5% by weight. Organic impurities shall not exceed the limits laid down in IS: 2116.
- 7.1.2 Mix of mortar for building concrete block shall be as specified in the item of work.
- 7.1.3 Mixing of the mortar shall be done in a mechanical mixer. When quantity involved is small hand mixing may be permitted by Engineer-in-Charge. Any mortar remaining unused for more than 30 minutes after mixing shall be rejected.

## 7.2 Concrete Block Masonry

The thickness of joints shall be 10 mm +- 3mm. Thickness of joints shall be kept uniform. In case of foundation and manholes etc. joints up to 15 mm may be accepted.

#### 7.3 Half Concrete Block

All courses shall be laid with stretchers. Reinforcement comprising 2 nos. 6 mm dia MS bars shall be provided over the top of the first course and thereafter at every fourth course.

#### 7.4 Fixtures

All iron fixtures, pipes spouts, hold fasts of doors and windows which are required to be built into the wall shall be embedded in cement concrete blocks 1:2:4 mix (1 cement :2 coarse sand :4 graded stone aggregate. 20 mm nominal size) of size indicated in the item.

#### 7.5 Curing

Concrete block masonry shall be protected from rain by suitable covering when mortar is green. Masonry work shall be kept constantly moist on all faces for a minimum period of seven days.

#### 8.0 STRUCTURAL STEEL WORK

This specification covers the technical requirements for the preparation of shop drawings, supply, fabrication, protective coating, painting and erection of all structural steel rolled sections, built up sections, plates and miscellaneous steel required for the completion of the work.

Steel

All structural steel used in construction within the purview of this contract shall, comply with one of the following Bureau of Indian Standard Specifications, whichever, is appropriate or as specified.

IS - 2062 Hot rolled sections and plates

IS – 1079 Cold formed light gauge sections

IS – 1161 Tubular sections

IS – 4923 Hollow sections (rectangular or square)

#### Fabrication

Fabrication of steel structure shall be carried out in conformity with the best modern practices and with due regard to speed with economy in fabrication and erection and shall conform to IS-800. All members shall be so fabricated as to assemble the members accurately on site and erect them in correct positions. Before dispatch to site the components shall be assembled at shop and any defect found rectified. All members shall be free from kink, twist, buckle, bend, open joints etc. and shall be rectified before erecting in position. Failure in this respect will subject the defective members to rejection.

## Fabrication Drawings:

Development of Fabrication drawings shall be in contractor's scope. Connections, splices and other details shall be suitably designed based on good Engineering practice.

Electrodes: Electrodes used for welding shall comply with IS-814 or IS - 815.

## 8.1 MS Black/High Strength Bolts and Nuts

M.S.Black or high strength bolts, nuts and washers etc. shall be as per IS-800, IS 1363 and IS-1367. Manufacturer's test certificate shall be made available to the Engineer-in- Charge. For bolted joints, shanks and threaded bolts are to be used to ensure that threaded length do not encroach within the thickness of connected members of dimension beyond the following limit:-

- 1. 1.5 mm for connected members of thickness below 12 mm and 2. 2.5 mm for connected member of thickness 12 mm and above and that adequate shearing and bearing values required as per design are achieved. Every portion work shall have its erection mark or numbers stencilled on the member for guidance in erection and bear all necessary marks of erections as directed by the HURL Barauni.
- 8.2 No part of the work is to be oiled, painted (except contact surfaces) packed, bundled, crated or dispatched until it has been finally inspected and approved by the HURL Barauni or his authorized representative. The whole steel work before

being dispatched from the Contractor's shop shall be dry and after being thoroughly cleaned from dust, mills scale, rust etc., and shall be given two coats of primer and one coat of final paint as per painting specification attached in this enquiry. Unless otherwise specified, all surfaces inaccessible after welding shall be given two coats of primer and two coats of paints as per painting specification attached in this enquiry.

8.3 The HURL Barauni or his authorized representative shall have free access at all reasonable time to all places where the work is being carried out, and shall be provided by the Contractor at his own expenses all necessary facilities for inspection during fabrication and erection. The HURL Barauni or his authorized representative shall be at liberty to reject the work in whole or in part if the workmanship or materials do not conform to the terms of the specifications mentioned herein. The Contractor shall remove, replace or alter any part of the work as ordered by the HURL Barauni or his authorized representative.

#### 9.0 PAINTING ON STRUCTURAL STEEL

The following specification shall be used for painting of structural steel work. 9.1 Scope

This specification covers the technical requirements for shop and site application of paint and protective coatings and includes; the surface preparation, priming, application, testing and quality assurance for protective coatings of structural steelwork, plate work, handrails and associated metal surfaces, which will be exposed to atmospheric for industrial plants.

#### 9.2 Definitions

C.S - Carbon steel and low chrome (1-1/4 Cr through 9 Cr) alloys

S.S - Stainless steel, such as 304,316, 321, 347,

Non-ferrous - copper, aluminium and their alloys.

High Alloy - Monel, Inconel, Incoloy, Alloy 20, Hastelloy, etc. DF - Dry Film thickness, the thickness of the dried or curved paint or coating film.

## 9.3 Safety Regulations

Protective coatings and their application shall comply with all national, state, and local codes and regulations on surface preparation, coating application, storage, handling, safety, and environmental recommendations. Sand or other materials producing silica dust shall NOT be used for any open-air blasting operations.

## 9.4 Material Safety Data Sheets

The latest issue of the coating manufacturer's product datasheet, application instructions, and material safety data Sheets shall be available prior to starting the work and shall be complied with during all preparation and painting / coating operations.

#### 9.5 Materials

All paints and paint materials shall be obtained from the company's approved manufacturer's list. All materials shall be supplied in the manufacturer's containers, durably and legibly marked as follows.

Specification number

Colour reference number

Method of application Batch number

Date of Manufacture

Shelf life expiry date

Manufacturer's name or recognised trade mark.

#### 9.6 CODE AND STANDARDS:

Without prejudice to the provision of Clause 1.1 above and the detailed specifications of the contract, the following codes & standards shall be followed. Wherever reference to any code is made, it shall correspond to the latest edition of the code.

#### 9.7 Indian Standards:

IS-5: 1994 Colors for ready mixed paints and enamels.

IS-2379: 1990 Color codes for identification of pipe lines.

IS-2629: 1985 Recommended practice for hot-dip galvanizing on iron and steel.

IS-2633: 1986 Methods for testing uniformity of coating of zinc-coated articles.

IS-8629: 1977 Code of practice for protection of iron and steel structures from atmospheric corrosion.

IS: 110 Specification for Ready Mixed Paint, Brushing, Grey Filler, for Enamels, for Over Primers IS: 101 Methods of test for ready mixed paints & enamels.

#### 9.8 Other Standards:

9.8.1 Swedish Standard: SIS-05 5900-1967 / ISO-8501-1-1988

(Surface preparations standards for Painting Steel Surface).

This standard contains photographs of the various standards on four different degrees of rusted steel and as such is preferable for inspection purpose by the Engineer-in-charge.

#### 9.8.2 DIN: 53151 Standards for Adhesion test.

- 9.9 The paint manufacturer's, instructions shall be followed as far as practicable at all times. Particular attention shall be paid to the following:
- a. Instructions for storage to avoid exposure as well as extremes of temperature. b. Surface preparation prior to painting.
- c. Mixing and thinning.
- d. Application of paints and the recommended limit on time intervals between coats.

## 9.10 Surface Preparation

## 9.10.1 Safety

All work in adjacent areas, which may negatively affect the quality of blast cleaning,

and/or impose safety hazards, must be completed or stopped before the blasting operation starts.

## 9.10.2 Pre-Cleaning

Prior to surface preparation all weld spatter shall be removed from the surface, all sharp edges ground down and all surfaces cleaned free of contaminants including chalked paint, dust, grease, oil, chemicals and salt. All shop primed surfaces shall be water washed by means of suitable solvent, by steam cleaning, with an alkaline cleaning agent if necessary or by high-pressure water, to remove contaminants prior to top-coating.

#### 9.10.3 Surface decontamination

Surface decontamination shall be performed prior to paint application when uncoated surface is exposed to a corrosive environment or existing paint work is to be repaired. Existing coatings shall be removed by abrasive blast cleaning, and then high pressure potable water shall be used to clean steel surfaces. Prior to application of coatings, the surface shall be chemically checked for the presence of contaminants. A surface contamination analysis test kit shall be used to measure the levels of chlorides, iron salts and pH in accordance with the kit manufacturer's recommendations. Swabs taken from the steel surface, using cotton wool test swabs soaked in distilled water shall not be less than one swab for every 25m2 of surface area to be painted. Maximum allowable contaminant levels and pH range is as follows:

Sodium chloride, less than 50 microgram / cm2;

Soluble iron salts, less than 7 microgram / cm2; and

pH between 6 - 8

If the results of the contamination test fall outside the acceptable limits, then the wash water process shall be repeated over the entire surface to be painted, until the contaminant test is within the specified levels.

### 9.10.4 Abrasive blasting

All C.S materials shall be abrasive blast cleaned in accordance with relevant IS Codes. To reduce the possibility of contaminating S.S., blasting is not usually specified. However, for coatings which require a blast-cleaned surface for proper adhesion, S.S. may be blast cleaned using clean aluminium oxide or garnet abrasives (Free from any chloride or Iron / Steel contamination). When hand or power tool cleaning is required on S.S., only S.S. wire-brushes (including 410 S.S.) which have not been previously used on C.S. surfaces may be used.

The surface profile of steel surfaces after blasting shall be of preparation grade Sa 2-1/2 of Swedish Standards SIS-05-5900 (Latest Revision) or better according to ISO 8501-1 and shall be measured using the replica tape method or the comparator method. The roughness (profile) of blast-cleaned surfaces shall be Medium (G) according to ISO 8503-2: 1988 (appendix 1) unless otherwise specified. Medium defines a surface profile with a maximum peak-to-valley height of 60-100 microns, and G indicates that the surface profile is obtained by grit blasting. For the evaluation of surface roughness Comparator G shall be used.

Abrasive blast cleaning shall NOT be performed when the ambient or the substrate temperatures are less than 3 Degree Celsius above the dew point temperature. The relative humidity should preferably be below 50% during cold weather and shall never be higher than 60% in any case.

Abrasive blast cleaning shall be performed with a clean, sharp grade of abrasive. Grain size shall be suitable for producing the specified roughness. Abrasives shall be free from oil, grease, moisture and salts, and shall contain no more than 50ppm chloride. The use of silica sand, copper slag and other potentially silica containing

materials shall not be allowed. The blasting compressor shall be capable of maintaining a minimum air pressure of 7 kPa at the nozzle to obtain the acceptable surface cleanliness and profile. The blast cleaning air compressor shall be equipped with adequately sized and properly maintained oil and water separators. The air supply shall be checked to ensure no oil and water contamination at the beginning of each work shift. Blast cleaning abrasive shall be stored in a clean, dry environment at all times. Recycling of used abrasive is prohibited. After blast cleaning, the surfaces shall be cleaned by washing with clean water (Pressure 7kg/cm2 using suitable nozzles. During washing broom corn brushes shall be used to remove foreign matter. Assessment of the blast cleaned surfaces shall be carried out in accordance with reference code.

Blast cleaned surfaces which show evidence of rust bloom or that have been left uncoated overnight shall be re-cleaned to the specified degree of cleanliness prior to coating.

All grit and dust shall be removed after blasting and before coating application. Removal shall be by a combination of blowing clean with compressed air, followed by a thorough vacuum cleaning with an industrial grade, heavy duty vacuum cleaner. All cleaned surfaces shall have protection from atmospheric corrosion as per IS8629:1977 9.11 Painting system to be used is indicated below:

#### **Epoxy Painting:**

9.11.1 All the surfaces must be abrasive blasted and 1 coat of primer, 2 coats of intermediate and 1 coat of finish paint applied in the fabrication shop before the same are shifted to site for erection. All the members must be suitably match marked for facilitating proper assembly.

After erection is over all surfaces shall be washed up as follows: Washing with clean water (pressure 7 kg/cm2) using suitable nozzles. During washing broom corn brushes shall be used to remove foreign matters. Solvent washing if required to remove traces of oil grease etc.

After washing the surface as indicated above, the surfaces shall be suitably touched up to the extent required so that all the damages to the premiered surfaces caused during erection are done up.

- a) The surfaces affected by welding and / or gas cutting during erection shall also be suitably touched up. Before touch up is taken up surfaces shall be prepared by mechanical means such as grinding, power brushing etc. to achieve surface finish to ST-3.
- b) After touch up work is over as indicated above, all the surfaces shall be given one coat of finish paint to the required specification.
- 9.11.2 The following points must be observed for painting work: 1. Primer and paint shall be compatible to each other and should be from the same manufacturer.
- 2. The recommendation of the paint manufacturer regarding mixing, matching and application must be followed meticulously.
- 3. Technical representative of paint manufacturer should be available at site as and when required by Engineer-in-Charge for their expert advice as well as to ensure that the painting work is executed as per the instruction of paint manufactures. c) Paints and primers shall be supplied at site in original container with factory seal otherwise such paints and primers shall not be allowed to be used. Mode of application i.e. by spray, brush or roller shall be strictly as per recommendation of paint manufacturer.

- d) Painting materials must be used before the expiry date indicated on the containers.
- e) Number of coats and DFT per coat must be strictly followed as indicated above. If the desired DFT is not achieved for primer, intermediate and finish paints in two coats (each), CONTRACTOR shall be required to apply extra coat (s) to achieve the desired DFT without any extra cost to Engineer-in-Charge.
- f) Color shade for each coat of primer and finish paint must be different to identify the coats without any ambiguity.
- g) Shade for the final finish coat shall be decided by Engineer-in-Charge at site. h) All painting materials must be accompanied by manufacturers test certificates. However, Engineer-in-Charge has any doubt regarding quality of materials, he shall have the right to direct CONTRACTOR to get the doubtful material tested or and provided (by CONTRACTOR) testing agencies for which no extra payment shall be made to the CONTRACTOR and the charges shall deemed to be covered in the unit rates quoted for fabrication and erection of structural work. i) DFT for paint shall be measured at least 20 points and mean DFT shall not vary by more than 10% than specified in DFT.
- j) Reliable and calibrated Instrument for measurement of DFT shall be arranged and provided by CONTRACTOR at his cost.
- k) Thickness of each coat shall also be checked regularly to ensure uniformity in DFT.
- 9.11.3 Abrasive blasting and painting works, being a specialized job must be carried out through the approved agencies only.
- 9.11.4 PAINTING ON STEEL STRUCTURES

DESCRIPTION GENERIC COATING SYSTEM

- 1. SURFACE PREPARATION Blast clean to SA 2.5
- 2. PRIMER

One coat of ethyl silicate zinc rich with solvent. Thickness 75 micron per coat

3. INTERMEDIATE

Two coat of two pack high build aliphatic amine cured epoxy coating

Thickness 100 micron per coat.

4. FINISH COAT

One coat of two pack amine cured epoxy / Acrylic aliphatic polyurethane.

Thickness 50 micron per coat

5. Total DFT 325 Micron

10.0 STEEL / ALUMINIUM DOORS, WINDOWS AND VENTILATORS 10.1 The Steel doors, windows and ventilators shall be of the size and type as per IS-1361 and IS-1038. Fixing and glazing shall be done as per IS-1081 and as per manufacturer's instructions. The putty of approved make such as special gold size or equivalent conforming to IS-419 shall be used.

10.2 Aluminium doors, windows and ventilators shall be manufactured from wrought aluminium and aluminium alloy extruded round tube and / or hollow rectangular / square sections conforming to IS: 1285 & IS: 6477 or equivalent as approved by Engineer-in-Charge.

#### 11.0 ROOFING & CLADDING

For roofing & cladding Non-asbestos high impact Polypropylene reinforced cement 6mm thick corrugated sheets (as per IS:14871) roofing up to any pitch and fixing with polymer coated J or L hooks, bolts and nuts 8mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washer.

#### 12.0 FLOORING AND PAVING

- 12.1 Sub Base of floor
- 12.1.1 The area to be paved shall be divided into suitable panels. Form work shall be provided. The boarding / battens shall be fixed in position with their toe at proper level, giving slope where required. Alternatively base concrete may be deposited in the whole area at a stretch.
- 12.1.2 Before placing the base concrete the sub-base shall be properly wetted and rammed.

The concrete of the specified mix shall then be deposited between the forms where provided, thoroughly tamped and the surface finished level with the top edge of the forms. The surface of base concrete shall be spreader uniformly. The surface shall be finished rough to provide adequate bond for the topping. Two or three hours after concrete has been laid the surface shall be brushed with wire brush to remove any scum or Latinate and swept clean so that coarse aggregate is exposed.

- 12.2 Cement Concrete Floor Finishes
- 12.2.1 The surface of base concrete shall be thoroughly cleaned by scrubbing with coir or steel wire brush. Before laying the toping, the surface shall be soaked with water at least for 12 hours and surplus water mopped up immediately before the toping is laid.
- 12.2.2 The forms shall be fixed over the base concrete dividing into suitable panels. Where glass dividing strips are provided, thickness of glass dividing strips shall be 4 or as indicated. Before placing the concrete toping, neat cement slurry at the rate of 2 kg/sq.m shall be then thoroughly brushed into the base concrete just ahead of the finish. The topping shall then be laid, thoroughly compacted by using screed board/plate vibrator.

The surface floated with a wooden float to a fair and even surface shall be left for some time till moisture disappears from it. Junctions with skirting / dado or wall surfaces shall be rounded off using cement mortar 1:2 curing shall be carried out for a minimum of 7 days.

#### 13.0 PLASTERING

- 13.1 Sand for plastering shall be 50% fine sand and 50% coarse sand from approved sources.
- 13.2 Preparation of surface shall be done as per CPWD specifications.
- 13.3 Cement mortar shall be of the mix as indicated in the items and shall be mixed as specified in the CPWD specifications.

- 13.4 Joints in walls etc. shall be raked to a depth of 12 mm, brushed clean with wire brushes dusted and thoroughly washed before starting the plaster work.
- 13.5 The surface shall be thoroughly washed with water cleaned and kept wet to saturation point before plastering is commenced.
- 13.6 Cement mortar as indicated, shall be firmly applied to the masonry walls in a uniform layer to the thickness specified and will be pressed into the joints. On concrete surfaces rendering shall be dashed to the roughened surface to ensure adequate bond. The surface shall be finished even and smooth. Hectoring wherever required shall be done as per directions of Engineer-in-Charge. Nothing extra shall be paid on this account.
- 13.7 All plaster work shall be cured for at least 7 days.
- 13.8 Integral water proofing compound shall be mixed with cement in the proportion recommended by the manufacturer. Care shall be taken to ensure that the water proofing material gets well and integrally mixed with cement. All other operations are the same as for general plaster work.
- 13.9 For sand face plaster undercoat of cement plaster 1:4 (1 cement : 4 sand) of thickness not less than 12 mm shall be applied similar to one coat plaster work. Before the under coat hardens the surface shall be scared to provide for the top coat. The top coat also of cement mortar 1:4 shall be applied to a thickness not less than 8 mm and brought to an even surface with a wooden float. The surface shall then be tapped gently with a wooden float lined with cork to retain a coarse surface texture, care being taken that the tapping is even and uniform.

#### 14.0 EXTERIOR PAINTING

- 14.1 Exterior painting shall be Acrylic smooth exterior.
- 14.2 Where shown on drawings for external surfaces of sand faced plaster, or any other surface, two coats of cement paint shall be applied of tint and shade as approved by the Engineer-in-Charge.
- 14.3 The surfaces shall be prepared as specified for white washing. Before applying cement paint the surface shall be thoroughly wetted to control surface suction. The surface shall be moist but not dripping wet, when the paint is applied. Not less than 24 hours shall be allowed between the two coats. In hot weather the first coat shall be slightly moistened before applying the second coat.
- 14.4 On external plastered surfaces (one coat primer + minimum 3 coat of paints), sand faced or plain plastered and concrete surfaces, apex weather proof paint shall be vigorously scrubbed on to work the paint into the voids and provide a continuous paint film free from pin holes and other openings

#### 15.0 GLAZING

15.1 Sheet glass glazing of doors, windows etc. shall be of selected quality glass conforming to IS: 2835. Toughened splinter proof industrial safety glass shall confirm to IS: 2553. No cracked chipped or disfigured glass shall be accepted

Glass shall be in one piece for each pan.

15.2 Glazing shall be fixed with timber or steel / aluminium beading as called for. Glass shall be back puttied and fixed with beading for a water tight and rattle free installation. Sizes of timber/ steel / aluminium beading shall be as directed.

#### 16. PROTECTIVE COATING AND LINING SYSTEM

#### 16.1 EPOXY COATING

Characteristics of coated surfaces (after application)

- Compressive strength: min. 90 N/mm2
- Tensile strength: min. 10 N/mm2
- Abrasion resistance : as per Amsler 1.5 mm after 3000 revol.
- Bonding (joining) factor: 1
- Adhesion with concrete: min. 2.5 N/mm2
- Elongation: 15%

### APPLICATION: A) ON FLOOR

#### **DESCRIPTION**

- 1. Surface preparation- in this case concrete columns, beams, sofitt slabs, floors & plastered brick masonry walls (for receiving IMPREGNATION, BOND COATS, COATINGS etc) with hand wire brushes or rotary wire brushes etc and removing all the dust, dirt etc complete.
- 2. Impregnation with monomer (5 cps viscosity) to be applied by brush with a consumption of minimum 0.25 kg/m2

#### **DESCRIPTION**

- 3. Providing and applying structural grade Epoxy Bonding agent, (with bond strength of 3 N/mm2) over concrete prior to screed concrete. Bonding agent to be used as per application procedure of manufacturer.
- 4. Self levelling cemetious screed avg. 25mm thick, using proportion 1:1:0.5 cement: sand: 8 mm down aggregates (by weight) with addition of suitable free flow and performance improving additives namely micro silica, shrinkage compensating admixtures, polymers, high range super plasticizers. W/C ratio not to exceed 0.4. Compressive strength of the screed to be 37.5 N/mm2 after 28 days over bonding agent.
- 5. Providing and applying structural grade Epoxy Bonding agent, (with bond strength of 3 N/mm2) over screed concrete. Bonding agent to be used as per application procedure of manufacturer.
- 6. Self levelling epoxy phenolic IPN (inter penetrating polymer network) screed (min 3mm thick, solvent free resin in proportion of 1 resin hardener mix: 2 sharp silica sand 600 micron down) on dry and clean surface of the self levelling cementitious screed done earlier, using special fork type leveller tool and allowing the scred to sure for 48 hours.

# B) ON WALLS, SLAB, SOFFITS, BEAMS, COLUMN DESCRIPTION

1. Surface preparation- in this case concrete columns, beams, sofitt slabs, floors & plastered brick masonry walls (for receiving IMPREGNATION, BOND COATS, COATINGS etc) with hand wire brushes or rotary wire brushes etc and removing all the dust, dirt etc complete.

- 2. Impregnation with monomer (5 cps viscosity) to be applied by brush with a consumption of minimum 0.25 kg/m2
- 3. Impregnation of prepared concrete surface (internal walls, slab, soffits, beams, column and cut outs) with polymethyl methacrylate monomer (viscosity 5cps), brush applied @ 0.25kg/m². Three coat epoxy phenolic IPN solvent containing protective coating with one non pigmented primer coat and two subsequent colour coats with approved shades giving

#### **DESCRIPTION**

total dry film thickness of 225 +/- 10 microns over impregnated and cleaned surface.

#### POLYURETHANE WATERPROOFING

#### 17.1 MATERIALS

The two component Solvent free Polyurethane coat shall have the following properties –

- 1. Solid content ASTM D 2369- 90%
- 2. Mixing ratio 8:1
- 3. Elongation ASTM D 638 700-900%
- 4. Tensile strength ASTM D 638- 1-2 MPa

The coating shall be applied to a minimum thickness of 600 microns ( $300\mu X2$ ) thickness with separate wearing course (as per ASTM C 898 & 836) over application of 2 component, solvent free Epoxy Primer of 200 microns with tensile of 20-30 MPa and elongation of 4-5% for smooth surface and act as primer coat at all elevations in vertical and horizontal surface It shall be perfectly smooth, dust free and shall retain glossy finish at least up to 3 years It shall be resistant to acid, alkalis and have a very low water absorption rate of 0.5% maximum at ambient temperature after 7 days. The packs shall not be older than 9 months after the date of manufacture and packing.

## 17.2 Workmanship

## 17.2.1 Preparation of surface

The roof surface shall be thoroughly cleaned with a wire brush and all foreign matter etc shall be removed. Well defined cracks on the surface shall be cut to "V" section, cleaned and filled up flush with a paste of 2 component polyurethane based crack filling compound and white cement in a ratio of 1:2.

#### 17.2.2 Primer Coat

Primer coat shall be mixed in the ratio as per manufacturer's specification A single coat of this primer shall be applied by brush over the prepared bed as an adhesion coat. The primer shall be allowed to dry for minimum of 8 hours before the successive finishing coats of Polyurethane are applied.

### 17.2.3 Finishing coats

The finishing coats shall consist of three successive pigmented seating coats each of 2 pack polyurethane, mixed in the ratio as per manufacturer's specifications. Application shall be with brush, to a smooth and even finish. The overall dry film thickness shall be Ambient temperature at the time of application shall not be less than 5°C and not more than 40oC.

Each coat shall be allowed to dry for minimum 8 hours or as per manufacturer's specification before applying next coat. Care shall be taken for quick application after mixing the 2 pack primer in view of short pot life of the mix and shall be fully consumed within the stipulated period as per manufacturer's specification. (Maximum 60 minutes at 30°C.

Polyurethane coating shall be continued up the parapets/ walls for a minimum of 150mm over the finished roof surface. It shall be continued into rain water pipes by at least 100mm.

Treated surface should be allowed to cure for minimum 72 hours.

#### 17.2.4 Cement Screed

The final coat of polyurethane, when tacky shall be sprinkled with 300 micron layer of clean sand. Plain cement concrete (1:2:4) of 25mm minimum thickness with 24 SWG chicken wire mesh shall be then laid to slope in panels not exceeding 6 M2 area per panel The joints between panels shall be raked out neatly to a minimum 6mm x 6mm Vgroove and filled up with an approved quality elastomeric compound sealant. Drain outlet shall be provided for all spouts/rain water pipes by suitable rounding, filling and skoping of PCC as per drawing. At the junction of the roof and parapet or any other vertical surface, a fillet of 75mm radius shall be formed in cement mortar 1 cement 4 coarse sand.

#### 17.3 Guarantee

The contractor shall cooperate in providing a written undertaking related to the waterproofing work carried out. The undertaking pertains to any work necessitated by defects in the waterproofing system. This obligation extends for a period of 10 years from the date of application of the roof waterproofing treatment. Should any rectification work be required during this period, it shall be the responsibility of the applicator. The applicator shall bear the cost associated with addressing any defects or necessary repairs. Importantly, this undertaking is distinct from both the defect liability period and the performance bank guarantee validity period. This shall not be read in equivalence to defect liability period or performance bank guarantee validity period which have been defined separately in clause 24.0 of SCC.

# PREAMBLE TO SCHEDULE OF RATES FOR CIVIL, STRUCTURAL AND OTHER ALLIED WORKS

#### 1.00 GENERAL

1.01 The plans have been evolved tentatively based on information available with HURL Barauni but the dimensions and details etc. are liable to changes. The Tenderers shall not be entitled to claim any higher rate or compensation on this account. The tender drawings are intended mainly to give an indication of the

probable type of construction. The successful Tenderers will, however, be required to execute the work as per detailed approved drawings issued to them from time to time. Steel structures can be changed to R.C.C. or vice versa. HURL Barauni reserves the right to add / delete any of the building works mentioned in the N.I.T., during the currency of the contract.

- 1.02 The Tenderers shall note that the quantities of the different Items, as given in the "Schedule of Rates" are tentative based on tentative tender drawings and are subject to variation and they shall not be entitled to claim any higher rate or compensation on this account. HURL Barauni reserves the right to change / modify the size and type of sections at any time. HURL Barauni does not guarantee work under each item of the Schedule of Quantities. The total quantum of work may vary up to  $\pm$  25% on either side the Contract Price and nothing extra over the Unit Rate as referred in Schedule of Rates will be paid on this account. Quantum of individual item may vary to any extent. However, in case of any increase in executed / work order value beyond awarded value, contractor shall prepare statement of such expected variation based on the drawings issued for construction or as per site condition and shall obtain prior issuance of formal amendment to Contract from the HURL BARAUNI in this regard. In no case, the value of executed value should exceed the awarded value without prior written approval from HURL BARAUNI.
- 1.03 The Tenderers shall be fully responsible for the correct setting out and execution of the work in accordance with approved drawings which will be supplied to them progressively. All tools, tackles, construction equipments etc., required for the successful execution / construction of the complete work, shall be responsibility of the Tenderers.
- 1.04 The quantities given in the "Schedule of Rates" are approximate and are given only for the guidance for quoting rates. Payments on bills shall, however, be made on actual measurements of quantities of work done as per approved drawings. Unless otherwise specified, measurements of quantities shall be taken as per Indian Standards IS: 1200.
- 1.05 The rates to be inserted in the "Schedule of Rates" are to be inclusive of the value of the work described under several items including all costs and expenses which may be required for the construction of the work described together with all taxes, general risks, liabilities and obligations such as temporary buildings / hutments, fencing, watching, lighting, insurance, labour regulations, indemnity, maintenance and the like. The prices shall be inclusive of all labours, materials, tools, plants, equipment, hoists, tackles, scaffoldings, the sundries, etc., as may be necessary for the completion of the work in all respects.
- 1.06 No work shall be undertaken at site until detailed approved drawings have been issued by the HURL Barauni in writing. Subsequent revision in the drawings which become necessary shall be incorporated and revised drawings issued to the Contractor who shall execute the work as per the latest revised drawings. Nothing extra will be paid on this account and no claim whatsoever will be entertained on this account. The HURL Barauni reserves to themselves the right to modify / revise / alter etc. in any drawing supplied to the Contractor.

- 1.07 Any materials / accessories / fittings etc. which may not be specifically mentioned in the description of items but which are normally used or necessary are to be provided by the contractor without any extra cost to HURL Barauni and the work must be completed in all respects.
- 1.08 In case of any discrepancy between the description of items given in the "Schedule of Rates" and Specifications, drawings and other documents, the decision of the HURL Barauni in writing shall be final, binding and conclusive for the purpose of this contract.
- 1.09 The term "Design and drawings" mentioned in the description of Items in the "Schedule of Rates" means the detailed approved design drawings marked "Good for Construction".
- 1.10 The work "As described", "As shown", "As directed" or "As approved", "As mentioned" in the description of Items shall mean as directed in design or detailed drawings and as directed by the Engineer-in-Charge.
- 1.11 The HURL Barauni shall furnish the Contractor with only reference points of the job site and a level bench mark, and the Contractor shall at his own cost and initiative, set out the works to the satisfaction of the Engineer-in-Charge but shall solely be responsible for the accuracy of such setting up not withstanding satisfaction as aforesaid of the Engineer-in-Charge or any other assistance rendered by the Engineer-in-Charge for the purpose.
- 1.12 The Contractor shall provide, fix and be responsible for the maintenance of all stakes, templates, level marks, profiles and the like and shall take all precautions necessary to prevent their removal or disturbance, and shall be responsible for the consequence of such removal or disturbance and for their efficient and timely reinstatement. The Contractor shall also be responsible for the maintenance of all survey marks, boundary marks, distance marks and centre line marks, whether existing or supplied / fixed by the Contractor.
- 1.13 Before commencing the work, the Contractor shall at his own cost and initiative provide all necessary references, level posts, pegs, bamboos, flags, ranging rods, strings and other materials for proper layout of the work in accordance with the scheme for fixing bench marks acceptable to the Engineer-in-Charge. The centre of longitudinal or face line and cross line shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the center to enable a TOTAL STATION to be set over it. No work shall be started until all these points are approved by the Engineer-in-Charge in writing. But such approval shall not relieve the Contractor of any of his responsibilities in respect of the adequacy or accuracy, thereof. The Contractor shall also provide all labour, material and other facilities necessary for the proper checking of layout and inspection of the points during construction.
- 1.14 Pillars bearing geodetic marks located at the site / unit of works under construction should be protected and fenced by the Contractor.

- 1.15 On completion of works, the Contractor must submit to the Engineer-in Charge the geodetic documents according to which the work was carried out.
- 1.16 The Contractor shall be exclusively responsible for the provision and maintenance of horizontal and vertical alignments and levels and for the correctness of every part of the work in accordance there with and shall at his own cost rectify any errors or imperfections therein.
- 1.17 The Contractor shall at all times during the progress and continuance of the works be responsible for and effectively maintain and uphold in good, substantial, sound and perfect condition of all / and every part of works and shall make good from time to time and at all times as often as the Engineer-in-Charge shall require any damage or defect that may during the above period arise in or be any way connected with works.
- 1.18 The portion which is under HOLD shown in the approved drawing or the portion which would be brought under HOLD during execution on account of coordinating different activities of other working agencies shall be taken up by the Contractor to execution only after the said HOLD is withdrawn. The Contractor on this account shall not be entitled to claim for any compensation.
- 1.19 The Contractor shall maintain adequate drainage facilities at the work site at all times during the execution of the work.
- 1.20 No compensation shall be made by the HURL Barauni for any damage done by rain or traffic during the execution of the work.
- 1.21 The Contractor shall afford all reasonable facilities such as scaffolding etc., and cooperation to the various other agencies and Contractors, for services not included in this contract, who may be working on the site simultaneously so that entire work can proceed smoothly and simultaneously to a successful completion. The Tenderer must take all the aforesaid factors into consideration while quoting his rates. Nothing extra shall be paid on any ground out of or relating to the aforesaid factors.
- 1.22 For details of works, materials and workmanship, attention is invited to the "Schedule of Rates", Scope Drawings, Special Conditions of Contract, Materials and Job Specifications, this section, etc. and the Tenderers must quote the rates keeping in full view the requirement of the said documents.
- 1.23 Except otherwise clearly stated, CPWD Specifications with Correction Slips (latest) shall be followed in all Civil, Structural and other allied Works and in absence of CPWD Specifications for any work, relevant Indian Standard codes of practices (latest) shall be followed. Where there are no Specifications available for any work either in CPWD Specifications or in IS Codes of practices, the work shall be carried out as per the direction of Engineer-in-Charge.
- 1.25 The quoted rates shall be applicable for all heights, depths etc. except otherwise clearly stated in the description of items and nothing extra shall be paid to the contractor on this account.

1.26 Description of items and mode of measurement for payment indicated herein shall override those given elsewhere if these are at variance.

#### 2.00 DEFINITION OF PLINTH

- 2.01 The portion of a structure between the surface of the finished ground and the surface of the floor immediately above the ground will be considered as plinth, which is generally 300 mm to 600 mm above finished ground level of the site area.
- 2.02 Plinth Level as shown in the drawing shall be treated as plinth level for the purpose of payment.

#### 3.00 MATERIALS

- 3.01 The supply / procurement of all materials, required for the job, shall be the responsibility of the Contractor unless otherwise stated in the "Schedule of Rates" and elsewhere in the tender documents. The quality of the materials procured by the Contractor shall be subject to the approval of Engineer-in-Charge or his authorized representative before the materials are allowed to be used in the works. All the materials to be procured by the Contractor shall be in conformity with the CPWD Specifications with correction slips (latest) and in absence of which as laid down in the relevant Indian Standard Codes of practices (latest).
- 3.02 Transport of all materials shall be the Contractor's responsibility and it shall be at their own risk and cost.
- 3.03 The Engineer-in-Charge shall determine the suitability of materials to be used on the job and the Contractor shall get all materials approved by the Engineer-in-Charge. Any material procured and brought to site by the Contractor, found not to conform to the specifications and does not meet the approval of the Engineer-in Charge, for use, will be rejected, and the Contractor shall remove and dispose off the same at his own cost and he shall not have any claim for compensation in this regard.

#### 4.00 TESTS

- 4.01 According to the nature and importance of works or as per IS code requirements, HURL Barauni will demand the conduct of tests on concrete and other building materials etc., in which case the Contractor shall get the same done at his own cost in a laboratory to be approved by the HURL Barauni.
- 4.02 Providing and operating necessary measurements and testing devices, materials and consumables are included in the scope of work and the rates quoted shall be deemed to include the cost of such tests which are required to ensure achievement of specified quality of work.

5.00 EXECUTION OF WORK 5.01 EARTH WORK

- a. The prices for all excavations shall include for removing and clearing away all shrubs, bushes, roots etc.
- b. The prices for all excavations shall also include for all leveling and ramming foundation beds, trimming of sides and bottom, grading to proper level as required.
- c. Removal and carrying shall include for all loading, unloading and handling as may be necessary and also all necessary means of transport (Mechanical or animal or manual) as required.
- d. The prices are also to include removal of water caused by rain, seepage, spring due to water table or any other cause, either by pumping or by bailing, that may accumulate in the trenches, foundations, pits, etc. It is likely that the subsoil water may encounter during excavation. The Contractor shall be responsible to remove all water accumulated in trenches, foundations, pits, etc. due to subsoil seepage, rainwater or from any other sources. For the above reasons, if the Contractor is required to install some special type of dewatering system, the same shall be arranged by the Contractor at his own cost and nothing extra shall be payable. The Contractor shall be fully responsible for removal of all water from the working area including necessary shoring and strutting, etc., wherever required, in order to maintain safe working condition and good engineering practice at his own cost and nothing extra shall be paid on this account.
- e. Where excavations are made in excess of the depth required the Contractor shall, at his own expenses, fill up to the desired level with lean concrete of nominal mix. 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size).
- f. In case of hard / dense soil, the last 150 mm depth of such depth specified in the drawing or decided by the HURL Barauni shall be excavated just prior to the laying of

plain cement concrete bed.

g. In case surplus excavated materials are to be disposed off at different leads as per items in the "Schedule of Rates" the distance for such disposal shall be measured over the shortest practicable route as decided by Engineer-in-Charge and not necessarily the route actually taken by the Contractor for disposal. For the purpose of measurement of lead, the area excavated shall be divided into blocks (mutually agreed) and for each block the distance from center of the block to center of disposed material pertaining to this block shall be taken. h. For payment of Earthwork in foundations / pits / trenches, etc., the excavation in earthwork volume shall be calculated by multiplying the base area as per the dimensions of mat (lean) concrete indicated in the drawing for different foundations by the specified depth of excavation considering vertical cut up to the bottom of mat concrete level from ground level. Extra excavation carried out by the Contractor with sloping sides or with larger base area or with extra deepening of trenches / pits / foundations, etc. for working convenience shall not be measured and paid for. The payment for back filling and disposal of surplus excavated material shall also be made on the same basis as that for excavation. Therefore excavation, backfilling and disposal of surplus earth resulting from the excavation over the mat concrete dimensions and for the depth beyond bottom level of mat concrete as indicated in the drawings shall not be paid for. However, for the cases where waterproofing / acid proofing is indicated as per drawings on outer sides, the mode of measurement shall be as per IS: 1200. i. Nothing extra shall be paid for sorting / screening of the excavated materials to obtain

good earth for filling.

- j. Nothing extra shall be paid on account of any lift for disposal of excavated materials.
- k. Proper precautions shall be taken during the excavations to prevent any damage to the existing structures, pipes, sewer lines etc. If such damage occurs, it shall be rectified by the Contractor at his own expense.
- 5.02 PLAIN AND REINFORCED CEMENT CONCRETE WORKS a. The prices for concrete beds and slabs are to include for laying on any type of subgrade, laying to falls or camber and for preparing surface to receive concrete. b. All concrete surfaces shall be finished to a fair face to give smooth and even surfaces and nothing extra shall be paid on this account.
- c. The prices are to include leaving pockets, cutouts and holes and to provide wooden boxes or any other suitable arrangement in R.C.C for providing pockets for bolts as per approved working drawings and nothing extra shall be paid on this account.
- d. All pockets / holes are to be properly covered by suitable means, so that dirt, rain water etc., should not enter the pockets / holes etc. No deduction in R.C.C quantity shall be made for pockets and nothing extra shall be paid for providing pockets as mentioned in para 5.02c above.
- e. For measurement of openings in plain concrete / R.C.C work, refer clause No. 4.13 of IS: 1200 (Part-3).
- f. Threads of bolts etc., which have already been fixed in the pockets, are to be greased and properly covered with gunny bags or polythene sheet to protect it from damage from all sources and nothing extra shall be paid on this account. g. The prices shall include for all rebating, throating, chamfering, weathering, moulding etc. to accord with the details shown in the approved working drawings.
- h. Nothing extra shall be paid for any intricate work for foundation of equipments and machinery (Static / Dynamic) in R.C.C walls and other superstructure work or in concreting in small and thin sections in P.C.C or R.C.C work. i. The prices for concrete are to include for hoisting and / or lowering to any heights and / or depth required and in any type of form work, packing around reinforcement wherever required and finishing the surfaces to fair and even surfaces.
- j. The prices shall include for working up or hacking of concrete surface for providing keys for further concrete work and shall also include all plane, rebated or grooved construction and other joints.
- k. All reinforced cement concrete used shall be of controlled concrete with designed mix and weigh batched conforming to IS: 456 unless otherwise specified. In all concrete and R.C.C work, broken graded coarse aggregate shall be used. The design mixes of concrete of different grades shall be established at the beginning of the work considering the required workability. However, if batching plant facility is not available, only nominal mix concrete is permissible. l. Concrete admixtures for workability, if necessary, may be used in R.C.C., if decided by the Engineer-in-Charge. No extra payment for material or mixing etc. shall be made on this account. m. Machine and equipment foundations shall mean all foundations including pedestals of vessels, towers, pumps, compressors, motors or any other equipment or machinery (both static and dynamic), pipe supports etc., and / or the like.
- n. The prices shall include applying cement slurry on reinforced cement concrete

surfaces, keys of construction joints etc. @ 2.75 Kg/Sq.m of surface area of receiving cement concrete including roughening and proper cleaning etc., complete as directed by Engineer-in-Charge.

- o. The prices shall include or performing water tightness for all water retaining R.C.C structure as stipulated in IS: 3370 (Part-I), wherever specified in the drawing.
- p. Cement to be used for plain & reinforced cement concrete and other works shall be of ORDINARY PORTLAND CEMENT/PPC conforming to IS: 269 unless otherwise stated in the "Schedule of Rates" and elsewhere in this Section of NIT. q. Any concrete having honeycombi s not acceptable and shall be rejected and redone at contractor's cost.

#### 5.03 REINFORCEMENT AND EMBEDMENTS

- a. Wastage in cutting will not be paid for. Steel actually fixed in position only will be paid by the linear measurement including hooks and laps. Lapping of bars will be allowed only where the required bar length exceeds the standard lengths available. All other laps provided, unless otherwise specified in the drawings, shall not be measured and paid for. Weight of binding wire shall not be measured for payment.
- b. Reinforcement are to be tack welded in addition to binding by 18 S.W.G annealed wire wherever necessary to improve efficiency of the joint. Bars of 28 mm diameter and above shall be provided with stitch weld in addition to binding with 18 SWG annealed wire and nothing extra shall be paid for stitch welding. Welding of mild steel plain and deformed reinforcements shall conform to IS: 2751, 'Code of practice for welding of mild steel plain and deformed bars for reinforced concrete construction'.
- c. The Contractor shall prepare the bar bending schedule for all reinforced cement concrete work as per the approved / "good for construction" drawings furnished by the HURL Barauni and nothing extra shall be paid on this account.
- a. The prices for shuttering shall include for providing splayed edges, notching, chamfering, allowances for overlaps and passing at angles, battens, strutting bolting, wedging, easing, striking and removing.
- b. The concrete work should have ply wood / steel shuttering as not to require any plastering, after striking out the shuttering. Any concrete having honeycomb is not acceptable and is liable to be rejected and redone at Contractor's cost.
- c. The prices are also to include for all necessary supports, struts, braces, etc., dressing with shuttering compound and / or other approved method to prevent adhesion between concrete and form work and all raking for circular cutting and waste.
- d. The prices shall also include for all labour and materials necessary for providing form work at all heights and depths and including striking, dismantling the form work assembly etc. after the necessary stripping period of concreting is over and also making all the joints in shuttering fully leak-proof providing low density polythene sheets / bitumen paper.
- e. The prices shall also include for forming detailed design required for the form

work and / or all other sundry labour.

- f. All shuttering shall be either plywood or steel shuttering to produce plain, smooth and even surfaces, which will thus be integrally finished. If any impressions of the shuttering joints are noticed after the striking of the shuttering, the same should be treated by rubbing with Carborundum stones and nothing extra shall be paid on this account.
- g. In case of dowel bars projecting out from R.C.C works such as columns, beams etc. nothing extra shall be paid for any special provision like making holes that may be required to be left in the form work.

#### 5.05 MASONRY WORKS

The prices for brick work shall include the following:

- a. Fair face of brick work with selected brick with class designation 75 or as specified in the description of relevant Items in the "Schedule of Rates" from the lot.
- b. Raking out joints for plastering and pointing done as separate process of finishing joints, flush as the work proceeds.
- c. All rough and / or fair cutting and waste unless specifically stated otherwise. d. Plumbing to angles.
- e. Providing holes left or formed for fixing pipes etc.
- f. Forming reveals to the jambs, where fair cutting on exposed face is not involved. g. All masonry work shall be done using mortar with coarse sand.

#### 5.06 WOOD WORK AND JOINERY

- a. All joiner's work shall include necessary nails and screws, and all other necessary materials.
- b. The description includes all necessary keys, wedges, dowels, hard or bamboo pins, pined tenon joints and cleaning of nail heads.
- c. Nothing extra will be paid for rebated and / or splayed meeting stiles of doors and Windows.

#### 5.07 STRUCTURAL STEEL WORK

- a. The weight of structural steel work for the sake of payment shall be calculated by linear measurements and unit weight taken from the relevant IS codes based on approved fabrication drawings assuming all members to be cut square without making any deduction for bolts, bevel ends or edges, beveling of plates. Gusset plates shall be paid for minimum rectangle enveloping their actual periphery. b. Welds, black-bolts, high tensile bolts, nuts, plain and tapered washers etc. shall not be measured and paid for. Rate for the structural steel work shall be deemed to include the same. Nothing extra shall be paid on this account. c. Nothing extra shall be paid over the unit rates for structural members to be built up by butt or fillet welding as indicated in the approved fabrication drawings or as per the instruction of Engineer-in-Charge, from either:
- i. Plates.
- ii. Two or more rolled steel sections.
- iii. One or more rolled steel sections and plates.
- d. Nothing extra shall be paid over the unit rates for sealing the joints of box sections

made out of channels or joists by continuous butt welding. e. All paints and primers specified in various Items in the "Schedule of Rates" shall be best quality of approved brand and manufacturer such as M/s. Asian Paints, M/s. Berger Paints (India) Ltd., M/s. Johnson & Nicholson and / or other equivalent paint approved by the Engineer-in-Charge. All painting material supplied by the contractor should have at least 4 (four) months balance shelf life on the date of application.

- f. On box / compound sections, the painting shall be done before fabrication on all those surfaces which become inaccessible after fabrication.
- g. Prior approval of the Engineer-in-Charge shall have to be obtained for changing the sections due to non-availability of certain sections and using built-up sections / compound sections and nothing extra shall be paid on this account.
- h. The word "Fabrication" wherever used for the description of work herein shall include:

Straightening, cutting, notching, beveling, drilling or cutting holes, necessary welding, fastening, etc. to prepare the structural member as per fabrication drawings.

- I. The word "Erection" wherever used for description of work shall include: Hoisting, putting in position at all required heights, aligning and fixing with necessary welding, bolting and / or other fasteners as per approved drawings and technical specifications with all safety standards.
- j. Preparation of "AS-BUILT" construction drawings incorporating all approved changes at site shall be in Contractor's scope of work and it shall be considered included in relevant Items of the "Schedule of Rates".
- k. For grid blasting / painting by the specialized agency other than indicated in the NIT, if proposed by the Contractor, the same shall be got approved from the Engineer-in-Charge at site.
- 1. The Contractor shall prepare design of joints and detailed fabrication and erection drawings in sequence of erection on the basis of detailed design drawings supplied by the HURL Barauni from time to time. Nothing shall be paid extra on this account. The above fabrication drawings must show clearly all shop and site joints and connection with erection marks on each loose parts. m. The Contractor shall submit his design calculations for the design of joints. All joints shall be designed for full strength of the members or otherwise as indicated in the design drawings.
- n. The design calculations of joints and fabrication drawings will be checked and approved by the HURL Barauni as per mutually agreed time schedule and the Contractor should strictly adhere to these approved drawings and specifications. Fabrication work shall be taken up only with the approved fabrication drawings.

5.08 STEEL AND ALUMINIUM DOORS, WINDOWS & VENTILATORS a. The prices are to include for necessary hardware fittings and fixtures as specified and fixing to frames with necessary lugs etc., all necessary chases, holes, etc., grouting of holes and making good to match after doors, windows and ventilators, etc. are fixed. The price of steel doors / windows / ventilators is also to include application of required primer and paint of approved shade, make and manufacturer.

b. The prices shall also to include for providing good quality glass panes of required

thickness as indicated in the "Schedule of Rates".

a. The price for hard core shall include for all labour in laying to falls or camber, hand packing, edges of haunches forming splayed edges, watering and rolling with power driven roller and ramming wherever required to solid compaction. b. The prices shall include also for works at all heights and depths.

#### 5.10 FINISHING WORKS

- a. The prices shall include for work at any height / depth and for all necessary scaffolding etc. as required.
- b. The prices shall include for providing and laying of materials for all the Items of plaster and also raking to form key for plaster and for all work in narrow width, formed angles, chamfered external angles and for making good the faces.

#### **5.11 MISCELLANEOUS**

- a. The Contractor may have to splice shorter length of structural steel members to obtain required length at site. If extra pieces of materials are required for splicing (say for lap jointing) then the same will be measured and paid for in the relevant structural steel items and nothing extra on any other account shall be paid to the Contractor for such splicing.
- b. The Contractor should note that steel wedges, packing plates, shim plates, etc. used by them for leveling and alignment of structural members are to be considered erection devices and these should be taken out after proper alignment is over to the satisfaction of Engineer-in-Charge. Such erection devices shall neither be measured nor paid for.
- c. Contractor shall submit the Material Test Certificates along with Bill copies for all

bought out items prior to entry of material in plant premises.

## CIVIL VENDOR LIST FOR TOWNSHIP AT HURL, BARAUNI

Approved make

- **12.0 CEMENT**
- a) ACC
- b) J K CEMENT
- d) JP CEMENT
- e) GUJARAT AMBUJA
- f) ULTRA TECH CEMENT
- i) SHREE CEMENT

13.0 RCC DESIGN MIX – NABL certified lab

STRUCTURAL STEEL / CS PLATE

- a) SAIL
- b) TATA STEEL
- c) RINL
- d) JINDAL

- e) ESSAR
- f) ISPAT INDUSTRIES

MATERIAL TEST HOUSE- NABL Certified Lab

**CERAMIC TILES** 

- b) BELL CERAMICS
- c) SOMANY CERAMICS
- d) H&R JOHNSON

**CERAMICS** 

- e) KAJARIA CERAMICS
- f) ORIENT CERAMICS

WOOD WORK

**FLUSH DOOR** 

- a) SITAPUR PLYWOOD
- b) WOODCRAFT

**PRODUCTS** 

c) KITPLY PRODUCTS

PLY WOOD/BLOCK

**BOARD** 

a) WOODCRAFT

**PRODUCTS** 

- b) KITPLY PRODUCTS
- c) GREEN PLY

PARTICLE BOARD

- (EXTRA GRADE)
- a) BHUTAN BOARD
- b) BEST BOARD
- c) NOVAPAN INDIA LTD. d)

THE BOMBAY BURMAN

TRACING CORPN. LTD.

MDF BOARD/MD

PARTICLE BOARD

(EXTRA GRADE)

VENEEREED/LAMINA

**TED** 

- a) NUCHEM LTD.
- b) MANGALAM TIMBER

PRODUCTS LTD.

c) WESTERN BIO SYSTEMS

LTD.

**DECORATIVE** 

**LAMINATES** 

a) THE BOMBAY BURMAN

TRADING CORPN. LTD.

- b) GREENPLY INDUS. LTD.
- c) BAKELITE HYLAM LTD.
- d) RAMMICA INDUSTRIES

MARINE PLYWOOD

a) INDIAN PLYWOOD MFG.

CO. LTD.

b) SWASTIC PLYWOOD

DOORS & WINDOWS FITTINGS MORTICE LOCKS WITH HANDLES

- a) GODREJ & BOYCE
- b) EVERITE AGENCIES (P)

LTD.

c) GOLDEN INDUSTRIES

MISC. DOOR FITTINGS HINGES, TOWER BOLTS, LATCHES, SOPPER, STAYS, ALDROPS ETC.

a) EVERITE AGENCIES (P)

LTD.

- b) EBCO DINSUTRIES
- c) ECIE (P) LTD.
- d) NU-LITE INDUSTRIES

FASTENERS a) HILTI INDIA PVT. LTD.

b) FISCHER

STEEL/ ALUMINIUM DOORS, WINDOWS & VENTILATOR PRESSED STEEL
DOORS WINDOWS &
SECTION DOORS
WINDOWS/ROLLING

**SHUTTER** 

- a) RAYMUS ENGINEERS
- b) DHIMAN STEEL
- c) RDG ENGINEERING
- d) SUPER STEEL WINDOW

CO.

e) SKS STEEL INDUS.

ALMUNIUM / DOORS/

WINDOWS SECTIONS

- a) JINDAL ALUMINIUM LTD.
- b) HINDALCO INDUSTRIES
- c) INDAL

FIRE-PROOF

DOORS(APPROVED)

- a) NAVAIR INTERNATIONAL
- b) RDG ENGINEERING

PVC DOORS /

**WINDOWS** 

a) SINTEX Or APPVD

EQUIV.

PVC WATER TANKS a) SINTEX Or APPVD

EQUIV.

**PLASTERING** 

WATERPROOFING/

**COMPOUND IN** 

CEMENT PLASTER

a) STRUCTURAL WATER

PROOFING CO. (P) LTD.

b) PIDILITE INDUSTRIES

# PLASTIC EMULSION

INTERIOR/EXTERIOR

- a) ICI INDIA LTD.
- b) BERGER PAINTS LTD.
- c) ASIAN PAINTS LTD.
- d) SHALIMAR PAINTS
- e) KANSAI NEROLAC

PAINTS LTD.

DRY OILBOUND

**DISTEMBER** 

- a) ASIAN PAINTS LTD.
- b) KANSAI NEROLAC

PAINTS LTD.

INDUSTRIAL /

EXPOXY/ SYNTHETIC

**ENAMEL PAINTS** 

- a) ICI/AKZO NOBEL INDIA
- b) BERGER PAINTS LTD.
- c) ASIAN PAINTS LTD.
- d) SHALIMAR PAINTS
- e) INTERNATIONAL MARINE

COATINGS PVT. LTD.

- f) KANSAI NEROLAC
- PAINTS LTD.
- g) BOMBAY PAINT

WATERPROOF

**CEMENT PAINT** 

- a) KILLICK NIXON LTD.
- b) RAJDOOT PAINTS

**WOOD MELAMINE** 

**POLISH** 

- a) ASIAN PAINTS
- b) SHALIMAR PAINTS

WASTERPROOFING

TRANSPARENT

**EXTERIOR WALL** 

**COATING (OVER** 

PAINTED SURFACE)

- a) PIDILITE INDUSTRIES
- b) INDUSTRIAL PROD. MFG
- c) STRUCTURAL WATERPROOFING

CO.(P) LTD.

FIRE PROOF

**COATING** 

a) NAVAIR INTERNATIONAL

OR APPVD. EQUIV.

SANITARY PLUMBING FITTINGS & FIXTURES

**SANITARY FITTINGS** 

WASH BASIN,

URINAL ETC.)

a) HINDUSTAN SANITARY

WARE & INDUS. LTD.

b) PARRYWARE SANITARY

WARE

c) MADHUSUDAN

**CERAMICS** 

d) NYCER CERAMICS

PLUMBING FITTINGS

**FIXTURES** 

- a) GEM
- b) PARKO
- c) KINGSTON

GLASS/MIRROR

SHEET/ FLOAT/

TOUGHENED/

LAMINATION

a) GUJARAT GUARDIAN

LTD.

- b) SAINT GOBAIN
- c) ASAHI FLOAT

**GI PIPES** 

- a) JINDAL
- b) SURYA
- c) PRAKASH

# TIMT BAR / REBAR

- a) SAIL
- b) TATA STEEL
- c) RINL

# **SPECIAL CONDITIONS OF CONTRACT**

- 1.1 The rates shall be deemed to allow for all minor extras and constructional details which are not specifically shown on drawings or given in the specifications but are essential in the opinion of the HURL Barauni to the execution of work to conform to good workmanship and sound engineering practice. The HURL Barauni reserve the right to make any minor changes during the execution without any extra payment.
- 1.2 The HURL Barauni decision to classify any item 'minor changes', 'minor extras' and 'constructional details' shall be final conclusive and binding on the Contractor.
- 1.3 The Rates quoted shall include for payment of royalties for obtaining earth, morrum, sand, aggregates, stones, etc. Nothing extra shall be paid to the Contractor on this account.
- 1.4 Contractor shall be responsible for making all necessary approach roads to the sites of execution for taking his rigs, cranes & equipments. No extra claim in this regard shall be entertained.
- 1.5 Schedule of rates submitted by the Tenderer shall be the true copy of the schedule of rates enclosed with the tender documents in the form of BOQ excel sheet.
- 1.6 Without prejudice to stipulation in General Conditions of Contract, the Bidder should quote firm prices inclusive of all taxes & duties (except GST) and other levies on which no variation will be allowed. Further any statutory variations in respect of other taxes & duties, if any, shall be governed by Clause 39.0 of the SCC.

# 2.0 SPECIFICATIONS

- 2.1 If specification for an item of work is not covered by CPWD/BIS specifications or Technical Specifications, the same shall be decided by the HURL Barauni and shall be binding on the Contractor.
- 2.2 The HURL Barauni shall have the right to cause the Contractor to purchase and use such materials of particular make or from a particular source which may in his opinion be necessary for proper and reasonable compliance with the specifications and execution of work.
- 2.3 (a) As and when required by the HURL Barauni, the Contractor shall provide all facilities at site or at manufacture's works or in approved laboratory for testing of materials and/or workmanship. All the expenditure in respect of this shall be borne by the Contractor. The Contractor shall, when required to do so by the HURL Barauni, confirm that the materials have been tested in accordance with requirements of the specifications.
- (b) Neither the omission by the HURL Barauni to test the materials nor the production of manufacturer(s) certificate, etc. shall affect the right of the HURL Barauni to reject, after delivery, the materials found not in accordance with the specifications.

# 3.0 GATE PASSES

All tools, plant and materials shall be brought by the Contractor to the works site through a covering note to be submitted in 3 copies. One copy of the covering note will be delivered to the security staff and one copy to the HURL Barauni. The third copy shall be retained by the Contractor. The Contractor shall follow all rules and regulations for entry / exit of their men and materials in/from project site as framed by HURL Barauni.

#### 4.0 CONSTRUCTION SCHEDULE

If at any time, the HURL Barauni is of opinion that the Contractor has fallen behind the approved

construction schedule, the HURL Barauni may, without any cost to HURL Barauni, require the Contractor to take such steps as may be necessary to improve his progress, especially require him to employ overtime operations, increase the number of shifts, work on holidays and Sundays or increase the capacity of his construction plant and equipment and require him to submit evidence demonstrating the manner in which the Contractor proposes to comply with the construction schedule. Failure of the Contractor to comply with the above will be considered a failure to execute the work with due diligence.

# 5.0 CONTRACTOR TO BE LIABLE FOR ALL TAXES ETC.

The Prices / Rates quoted by the Contractor shall be inclusive of all labour, materials, tools and tackles necessary for executing the work and all other miscellaneous expenditure for/or incidental tools in connection with the execution of the contract including but not limited to all taxes & duties, levies, BOCW Cess (if any), TPI charges, any other cess personnel & corporate tax etc. except GST. GST shall be paid / reimbursed at actual by HURL Barauni on submission of GST Invoice limited to Maximum 18%.

Further any statutory variations in respect of other taxes & duties, if any, shall be governed by Clause 39.0 of the SCC.

Payment of taxes etc., is the responsibility of the Contractor and shall not be payable by HURL BARAUNI. The Contractor shall indemnify HURL BARAUNI against levy of any taxes, duties, etc., in regard to the contract and in the event of HURL BARAUNI being assessed for any of the said imports, the HURL BARAUNI shall have the right to recover the total amount so assessed from the Contractor's dues and the Contractor shall also be responsible for all costs or expenses that may be incurred by HURL BARAUNI in connection with any proceeding or Litigation in respect of the same.

# **6.0 ISSUE OF WORKING DRAWINGS**

Approved working drawings marked "Good for execution/construction" shall be issued by HURL Barauni to the Contractor progressively during the pendency of the contract. Sufficient quantum of workings drawings will be issued at the beginning. The Contractor on this account shall not be entitled to put forth any claim whatsoever.

**7.0 COST OF TRANSPORT OF MATERIALS ISSUED BY HURL BARAUNI** Cost of transport, loading, unloading etc. from HURL Barauni's stores to work site etc., will be on Contractor's account.

# 8.0 ROLE OF HURL BARAUNI

8.1 The HURL Barauni shall have authority to stop the work, whenever such stoppage may become necessary to ensure the proper execution of the contract. He shall also have authority to inspect and reject all work and materials which do not conform to specifications, to direct the application of Contractor's forces to any portion of the work, as in his judgment is required, and to order the said force increased or diminished and to decide questions which arise in the execution of the work.

8.2 The HURL Barauni reserve the right to suspend the work or part thereof at any time and no claim whatsoever on this account shall be entertained. In case of any clarification the Contractor may appeal to the HURL Barauni whose decision shall be final and binding thereupon.

8.3 The above inspection shall, however, not relieve the Contractor of his responsibilities in regard to defective materials or workmanship and the necessity for rectifying or replacing the same.

8.4 The judgment of HURL Barauni for determining the category of an item not mentioned in the schedule shall be final.

# 9.0 SERVICE OF NOTICES OF CONTRACT

The Contractor shall furnish to the HURL Barauni the name, designation and address of his authorized Agent for the purpose of service of notice(s) regarding all complaints, communications and references and shall be deemed to have been duly given to the Contractor if delivered to the Contractor or his authorized agent or left at or posted to the address so given and shall be deemed to have reached such address in the ordinary course of post or on the day on which they were so delivered or left. In the case of contract by partners, any change in the constitution of the firm shall be forthwith informed by the Contractor to the HURL Barauni.

# **10.0 CONTRACTOR'S GUARANTEE**

The Contractor agrees to give the guarantee of his works in the following manner which shall remain valid till the validity of performance guarantee.

i. All equipments / materials incorporated in the work shall be new and both workmanship and materials shall be of good quality.

- ii. Should, at a subsequent date, any inside honeycomb/hollowness be detected within a concrete member, he shall investigate other nearby sections for similar occurrence and shall rectify all these members by Pressure grouting at his own cost and as per direction of the HURL Barauni. iii. Should, any element of the structure be detected afterwards not exactly tallying with the working drawing, he shall re-do the element at his own cost and as per instruction of the HURL Barauni.
- iv. Should, at a subsequent date, any equipment / materials or fittings or workmanship or any element of the structure be detected as of sub-standard quality he shall either remove the same and shall re-do at his own cost or shall accept an equitable deduction in the contract price should the HURL Barauni deemed it inexpedient to correct the work.
- v. All liquid retaining concrete structures shall be demonstrated about their efficiency or water tightness by filling the said structures with water and retaining it for 72 hours at his own cost. Should the result be found unsatisfactory he shall rectify the structures by pressure grouting at his own cost and as per direction of the HURL Barauni. vi. Should, at a subsequent date, the basement wall/floor been noted seeping/leaking he shall rectify the same by pressure grouting at his own cost and as per direction of the HURL Barauni.
- 11.0 CONTRACTOR FULLY RESPONSIBLE FOR LAYOUT OF WORK The Contractor shall remain fully responsible to provide detailed layout of different structures according to the coordinates and reduced levels incorporated in the working drawings by taking reference from the Bench Marks of both the coordinates and the reduced levels which shall be given at a convenient place in the works site by HURL Barauni. The Contractor shall provide necessary protection to keep the Bench Marks Undisturbed throughout the pendency of the contract. The accuracy of detailed layout of any element of a structure shall remain exclusively with the Contractor. The Contractor shall have to maintain a number of after beams; Theodolite and levels instruments etc. in good working conditions at site for the above purpose throughout the pendency of the contract, and shall make them available to HURL Barauni for their use.

# 12.0 NOTHING EXTRA FOR ADVERSE SUB-SOIL CONDITION

There may be variation in nature of sub-soil both horizontally and vertically. The Contractor shall have to take necessary precaution during excavation against any happening like collapsing of sides etc. Any slip or fall in excavation shall have to be cleared by the Contractor at his own cost. In case of excessive heaving, it shall have to be cut and refilled with lean concrete by the Contractor at his own cost. The Contractor shall have to adopt underwater work in case of occurrence of piping/quick conditions without any cost to HURL Barauni.

# 13.0 R.C.C. ELEMENT SHALL BE INTEGRAL FINISHED

For all RCC elements, both underground and above ground, only new plywood and steel shuttering shall be used to produce the concrete surface reasonably plain and smooth which will be integrally finished surface. Any little unevenness shall be made good by rubbing with carborandum stones only. Unless otherwise mentioned, plastering will not be allowed to manipulate and make the surface plain and smooth.

If the surfaces after stripping off the shuttering are found to be contrary to the above conditions then the Contractor shall have to dismantle the member and re-do the same to attain the aforesaid surfaces at his own cost.

# 14.0 FABRICATION DRAWINGS FOR STRUCTURALS

- a) The CONTRACTOR shall prepare and submit fabrication drawings in **triplicate** for preliminary **approval** of HURL BARAUNI. Fabrication drawings shall be based on design drawings issued by HURL BARAUNI. One copy of these preliminary drawings duly corrected and signed wherever necessary shall be returned to CONTRACTOR for incorporation of the corrections. After incorporating the corrections, the CONTRACTOR shall submit in 8 (eight) copies of the drawings for **final approval**. Each drawing shall be accompanied by:-
- i) Bill of materials giving all details including sizes, numbers and weights.
- ii) Two copies of design calculations for the design of joints. All the joints shall be designed for full strength of members; unless otherwise specified.

Nothing extra shall be payable to Contractor for preparation of fabrication drawings, material lists design calculation etc.his responsibility for the safety and correctness of the fabrication details. iii) In case the CONTRACTOR wants to get the fabrication drawings prepared from other agencies, HURL Barauni's approval for appointing such agencies shall be obtained by CONTRACTOR before appointing the agency. For this,

CONTRACTOR must submit the credentials of the agency along with the request for approval.

iv) The Contractor shall supply three (3) sets of as built drawings also, after completion of work but well before the submission of final bill.

# 15.0 CONTRACTOR SHALL SUBMIT BAR BENDING SCHEDULE

The Contractor shall prepare bar bending schedule from the detailed RCC working drawings supplied by HURL Barauni for execution of work and nothing shall be paid on this account. Four copies of such bar bending schedule shall be made available to the HURL Barauni for his approval and effecting payment there under.

**16.0 CONTRACTOR'S RESPONSIBILITY FOR THE MANNER OF EXECUTION OF WORK** The Contractor shall be responsible for the manner and the method of executing the work. The work shall be subject to the approval of HURL Barauni from time to time for purposes of determination of the question whether the work is executed by the Contractor in accordance with the contract.

17.0 NO WORK SHALL BE UNDERTAKEN WITHOUT APPROVED WORKING DRAWINGS No work shall be undertaken at Site by the Contractor until detailed approved working drawings marked "Good for execution/construction" for the same is issued by HURL Barauni/ HURL Barauni. Any work done without the aforesaid working drawing shall be at the Contractor's own risk and costs.

18.0 CONTRACTOR SHALL KEEP FOUNDATION PITS/TRENCHES DRY The Contractor, during the pendency of contract, shall keep in dry condition of pits, trenches, which are not yet back filled due to technical reasons, if not shall be Bailout/ Pump-out all accumulation at his own cost for the safety of the structure /element. During pumping, the Contractor shall have to ensure that 'Loss of Ground' does not occur. Other approved methods shall be undertaken by the Contractor to avoid 'Loss of Ground' if occurred, at his own cost.

# 19.0 NOTHING EXTRA FOR INTRICATE CONCRETE SHUTTERING OR REINFORCEMENT WORK

Nothing extra shall be paid for any intricate concrete, shuttering or reinforcement work for foundations of equipment and machinery and for other foundation/superstructure works or for any delay inherent in concreting in small and thin sections in concrete or RCC works etc.

#### 20.0 NOTHING EXTRA FOR REBATING ETC.

Nothing extra shall be paid in concrete/RCC works for all rebating, chamfering, grooving, sinking, trotting weathering, molding, etc. to accord with the details shown on the working drawings.

# **21.0 CONSTRUCTION JOINTS**

21.1 In case of execution of massive concrete elements both in foundation and in superstructure and in some other locations as would be permitted except where specified in the working drawings, the work shall be carried out in one single operation without any break in concreting within time limit that would be specified by the HURL Barauni without any additional cost to HURL Barauni.

21.2 All specified construction joints, either horizontal or vertical, in any element of concrete member shall be provided with shear keys of such dimensions as would be determined by the HURL Barauni. Before adopting the next operation for the other half of the element these shear keys along with the entire surface of the joint shall be roughened and deepened to above 20 mm by chipping, washing and cleaning thoroughly. The Contractor shall provide cement slurry in sufficient quantity over the cleaned surface for proper bond as per the direction of HURL Barauni. The Contractor shall not be entitled to any extra/payment; on this account.

# 22.0 SUBMISSION OF BILL

Contractor is to submit the bills and record of measurements in three (3) copies on approved Performa of HURL Barauni for works executed by him.

# 22.1 FOR R/A BILLS:

Contractor is to submit the bills and record of measurements complete in all respect duly certified by HURL Barauni in three copies on approved Performa of HURL Barauni for works executed by him progressively.

# 22.2 MEASURMENT OF WORKS

Measurement of work shall be made in the units mentioned in the schedule of rates.

# 22.3 SUBMISSION OF FINAL BILL

The final bill complete in all respect shall be submitted after certified completion of work. The bill should be accompanied with the following documents:

i. Job completion certificate.

ii. O & M Manuals / Drawings / Other relevant docs. in respect of equipments supplied iii. No claim certificate on HURL BARAUNI's prescribed Performa.

iv. Site clearance certificate.

v. Performance guarantee duly amended to cover certified maintenance period. vi. Indemnity certificate towards labours payment and all other statutory payments. No claim shall be entertained after receipt of final bill. Settlement of final bill shall be made within 1 (one) month period subject to furnishing of all required documents / clarification and extension of time, if any, by HURL BARAUNI's competent authority.

In case any claim with regard to the wages of any labour employed by Contractor for the subject job is pending/ reported, HURL BARAUNI shall be fully entitled to withhold payment of final bill pending finalisation of such claims.

# 23.0 PROVISION FOR MULTIFARIOUS CHECKING OF WORK

Before commencement of the actual concreting operation the position and layout of foundations, pedestals, inserts, pockets, recess, reinforcement and form work shall be checked repeatedly by HURL Barauni. No claim whatsoever shall be entertained on this account. The level of foundations shall be accurately maintained as shown in the drawings or as directed by the HURL Barauni. No padding, plastering or chipping shall be allowed for achieving the results.

# 24.0 DEFECT LIABILITY PERIOD

Defect Liability Period shall be 12 months from the date of certified Final completion of the work.

# 25.0 NO COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK TO BE CARRIED OUT

If at any time after the commencement of the work, HURL Barauni shall, for any reason whatsoever, not require the whole work thereof as specified in the tender to be carried out, the HURL Barauni shall give notice in writing of the fact to the Contractor who shall have no claim of any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of work in full, but which he did not derive in consequence of the amount of the work not having been carried out, neither shall be Contractor have any claim for compensation by reasons of any alternations having been made in original specifications, drawings and instructions which shall involve any curtailment of the work as originally contemplated.

**26.0 ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK** If it shall appear to the HURL Barauni or his representative, that any work has been executed with unsound, imperfect or unskilful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to at contracted for, or otherwise not in accordance with the contract, the Contractor shall, on demand in writing from the HURL Barauni specifying the work/materials/articles complained, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require, or as the case may be, remove other unsuitable materials or articles so specified within a period specified by the HURL Barauni at his own cost.

# 27.0 CLEARING, FILLING AND LEVELING OF SITE

The site shown on the layout plan shall be cleared by the Contractor of all obstructions, loose stones, materials, rubbish of all kinds of bushes, trees, grass as well as brush wood. All holes/hollow, whether originally existing or produced by removal of loose stones or brush wood, shall be carefully filled up with earth, well rammed and leveled off as directed by the HURL Barauni. The Contractor will not be entitled to any payment in his regard.

# 28.0 CONTRACTOR TO COMPLY ALL LAWS

28.1 The contract shall be governed by the law in force in the Republic of India. 28.2 The Contractor shall comply with all laws etc. The Contractor shall be responsible to secure compliance with the Central and States Laws as well as the Rules, Regulations, by-laws and orders of the legal authorities and statutory bodies which are in force or as may be in force from time to time. He shall give to the Municipal Corporation Committees, police and other relevant authorities all such notices, etc. as may be required by law and obtain all requisite license for temporary constructions, enclosures, etc. and pay all fees, taxes and such other dues or charges which may be leviable on account of any of his operations in executing the works under this contract. HURL Barauni shall not pay anything extra to the Contractor on this account. The Contractor shall also make good at his own cost, any damage done by him to any adjoining property, during execution of work.

# 29.0 CONTRACTOR TO USE THE MATERIALS ONLY AFTER THE APPROVAL OF HURL BARAUNI

The Contractor shall use the materials only after the approval of HURL Barauni, before incorporation of the same in the works.

30.0 COMPLIANCE OF ENTIRE PROVISIONS IS OBLIGATORY TO CONTRACTOR It shall always prevail, unless otherwise specifically stated, that the entire provisions of the Tender Document have been accepted for compliance by the Contractor without any reservation.

#### 31.0 GENERAL

- 31.1 The location and general information regarding site on which the proposed work is to be executed is furnished in Attachment-I hereto.
- 31.2 Contractor shall acquaint himself with access to site, availability of local facilities such as railway siding, transport facilities, materials and labour and shall provide suitable allowances in his Bid, Contractor's quoted rate being firm, it should take into account all expenses likely to arise in this regard.
- 31.3 Contractor shall be deemed to have visited site and familiarized himself thoroughly with site conditions before submitting his Bid. Non-familiarity with site conditions will not be considered a reason either for extra claims or for not carrying out work in strict conformity with drawings and specifications.

# **32.0 DELIVERY AND DOCUMENTS**

Delivery of the Goods shall be made by the Contractor in accordance with the terms specified by the HURL Barauni in the schedule of requirements in Technical Specifications. and the special conditions of purchase, if any and the Goods shall remain at the risk of the Contractor until Delivery has been completed.

# 33.0 INCIDENTAL SERVICES

- 33.1 As specified in the special conditions of purchase, the Contractor may be required to provide any or all of the following services:
- i) Supervision of on-Site assembly and/or of the supplied Goods.
- ii) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Contractor of any warranty obligations under this Purchase Order, and
- 33.2 Price charged by the Contractor for the preceding incidental services, if not included in the contract price for the Goods shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Contractor for similar services.
- 33.6 At the request of HURL Barauni or HURL Barauni, Contractor shall at his expense, dismiss from work and replace any such employee as HURL Barauni, may deem incompetent or careless or whose continued employment is deemed inimical to the interest of the HURL Barauni or against public interest.
- 33.7 Other conditions of work at Site shall be mutually discussed and settled. **34.0 WORK AND WORKMANSHIP GUARANTEE**

- 34.1 Contractor shall make arrangements to provide at no extra charge all temporary approaches to and within the site, after obtaining prior approval of HURL Barauni of the layout of such approaches.
- 34.2 To determine the acceptable standard of workmanship, HURL Barauni may order Contractor to execute certain portions of work and services such as wall, flooring, joinery, finishes, roads and the like under the close supervision of HURL Barauni. On approval, these items shall be labeled as quiding samples and work shall be executed to conform to these samples. These samples shall be prepared at the cost of Contractor.
- 34.3 Workmanship shall be of best possible quality and all the work shall be carried out by skilled workmen except for those which normally require unskilled persons. If the laws of local government, municipal or other authorities require employment of licensed or registered workmen of various trades, Contractor shall arrange to have the work done by such registered or licensed persons.
- 34.4 Workmanship shall be in accordance with the specifications, standards and codes which are

part of this tender as well as the established engineering practices for this type of work. For any portion of work executed by Contractor and considered defective by HURL Barauni, the Contractor shall have to take necessary remedial measures, to the complete satisfaction of HURL Barauni, to make the defective good in order at his own cost without any liability to HURL Barauni.

The Contractor shall be responsible for the proper workmanship and shall not be relieved of his obligation in this regard just because no objection was raised by HURL Barauni during the progress of work. The workmanship guarantee period will be 12 months from the date of final completion as a whole, certified by HURL Barauni.

If any defects are found due to bad workmanship during this period, the Contractor shall undertake to rectify the same at his cost, most expeditiously. The workmanship guarantee for rectified portion of work shall commence from the date of rectification for a subsequent period of 12 months. The decision of HURL Barauni regarding bad workmanship shall be final binding and conclusive. The Contractor shall be required to submit the performance guarantee accordingly.

# 35.0 PRIORITY OF DOCUMENTS

The following is the order of priority in descending order. High priority document shall take precedence over low priority document in case of any conflict:-

- 1. Contract Document and its Appendices
- Letter of Intent (LOI)
   Special Conditions of Contract and amended/clarification, if any.
- 4. General Conditions of Contract and amended/clarification, if any.
- 5. Part-II, Technical, of the NIT documents and amended/clarification, if any, 6. Technical specifications and Drawings and amended/clarification, if any. 7. The Bid and Schedule of Prices including Supplementary Price, if any. 8. Integrity Pact signed between the HURL Barauni and the bidder/contractor. 9. Instruction to Bidders

# **36.0 WEATHER CONDITIONS**

HURL Barauni may order Contractor to suspend any work which in the opinion of HURL Barauni may be subject to damage by prevailing weather conditions. No claim whatsoever on this account shall be entertained.

"It is presumed that the Contractor has familiarized himself with the weather conditions prevailing in the area therefore in such weather parameters if it appears to the Engineer -in -charge (EIC) that certain weather condition may damage the work or specified quality of the work can be achieved without stoppage of the work, the EIC in such conditions may require the Contractor to stop the work till such time as he thinks fit and appropriate. It is understood by the contractor that no compensation will be admissible on this count. However in exceptional circumstances at the recommendation of the EIC, HURL Barauni/HURL Barauni may grant reasonable extension of Time.

# 37.0 TIME SCHEDULE AND PROGRESS REPORTING

# 37.1 Time schedule network/bar chart.

- 37.1.1 Together with the Work Order/Contract confirmation, Contractor shall submit to HURL Barauni, his time schedule regarding the documentation, supply of materials as well as information about of his Subcontracts to be placed with their parties, including the dates on which Contractor intends to issue such Subcontracts.
- 37.1.2 The time schedule will be in the form of a network or a bar chart clearly indicating all main or key events regarding documentation, supply of materials, delivery and site fabrication, erection, inspection, testing and completion.
- 37.1.3 The original issue and subsequent revisions of Contractor's time schedule and or Subcontractor's time schedules shall be sent to HURL Barauni in two copies (of which one shall be in Soft copy) and two copies to HURL Barauni.
- 37.1.4 The time schedule network/bar chart shall be updated at least every fortnight. 37.2 Progress

# **Trend Chart/Monthly Report**

- 37.2.1 Contractor shall report weekly to HURL Barauni the progress of the execution of Work Order/Contract and achievement of targets set out in time bar chart.
- 37.2.2 The progress will be expressed in percentages shown in the progress trend chart.
- 37.2.3 The first issue of the progress trend chart will be forwarded together with the time bar chart along with the Work Order confirmation.

37.2.4 The fortnightly reporting will bear the updating of the progress trend chart. 37.2.5 All reporting

will be done on e-mails and hard copies wherever required will follow.

# 38.0 INSTRUCTIONS, DIRECTIONS AND CORRESPONDENCE

- 38.1 The work described in Work Order is to be executed according to the standards, data sheets, tables, Specifications and Drawings attached hereto and/or enclosed with the Work Order itself and according to all conditions both general and specific enclosed with the Work Order, unless any or all of them shall have been modified or cancelled in writing as a whole or in part.
- i) All instructions and orders to Contractor shall, excepting what is herein provided, be given by HURL Barauni.
- ii) All the work shall be carried out under the direction of and to the satisfaction of HURL Barauni.
- iii) All communications including technical/commercial clarifications and/or comments shall bear reference to the Work Order /Contract.
- iv) Invoice for payment against Work Order /Contract shall be addressed to HURL Barauni/ HURL Barauni.
- v) The WORK Order/Contract number shall be shown on all invoices, communications, packing lists, containers and bills of lading etc.

All correspondence from Contractor shall be forwarded to HURL BARAUNI at following addresses Hindustan Urvarak & Rasayan Ltd., HURL Barauni, Begusarai, Bihar

Kind Attention: Mr. Pankaj Bhankar (Deputy Manager) / G.K Behera (Chief Manager) Email: pankajbhankar@hurl.net.in & gkbehera@hurl.net.in

Correspondence on technical and commercial matters shall be dealt with in separate letters for each Work Order /Contract and each copy of the letter shall be complete with all Annexures. Wherever possible, correspondence should be through e-mail to the above personnel so as to save time.

Correspondence for expediting and inspection shall be done directly with inspector with a copy to HURL Barauni at above mentioned address.

# 39.0 STATUTORY VARIATION IN TAXES AND DUTIES

39.1 If any new taxes or duties (including any increase in rate of any existing taxes or duties) are levied in India after the date of submission of bids on any payments due to the CONTRACTOR under the CONTRACT other than tax on income, wealth or profits of the CONTRACTOR, the HURL BARAUNI shall reimburse the CONTRACTOR the amount of such taxes or duties lawfully paid and borne by the CONTRACTOR against proof of payment. However, this is applicable within the GUARANTEED COMPLETION DATE only and shall not be reimbursed by HURL BARAUNI during the delayed contractual project completion attributable to CONTRACTOR"S account.

- 39.2 If any existing taxes or duties are withdrawn or the rate is decreased after the date of submission of the bids on any payments due to the CONTRACTOR under the CONTRACT other than tax on income, wealth or profits of the CONTRACTOR, the HURL BARAUNI shall be entitled to discount in the amount payable to the CONTRACTOR of amount equivalent to the amount of such taxes or duties. This is applicable within the GUARANTEED COMPLETION DATE and also during the delayed contractual Project completion.
- 39.3 In case of delayed completion beyond the GUARANTEED COMPLETION DATE even though extension of completion time is allowed by HURL BARAUNI, for reasons solely attributable to Contractor, all extra costs on account of changes of statutory regulations/ acts, or increase in price on any other account including price variation clause, if any, shall not apply to the Contract price and shall be borne by the CONTRACTOR.

However, any decrease in taxes and duties during the delayed period shall be passed on to the HURL BARAUNI.

# **40.0 QUALITY ASSURANCE / QUALITY CONTROL**

40.1 Bidder shall include in his offer the Quality Assurance Programme containing the overall quality

# ELECTRICAL DOCUMENTS (TECHNICAL SPECIFICATION, DRAWING, BOQ etc.)

Renovation of 12 nos. old HFCL quarters at Township

**SCOPE** 

- 1.1.1 The scope covers Design, Engineering, Supply, Installation, Testing and Commissioning, delivery at site in well packed condition of the electrical equipments and accessories specified herein required for Internal Electrification Works (Supply & Erection) for renovation of 12 nos. old HFCL quarters at HURL, Barauni, Bihar.
- 1.1.2 This specification covers complete internal electrifications of 12 nos. old HFCL quarters including Power control center, distribution boards, Feeder pillar, earthing, Lightning etc. for Lighting, 6A/16A switch socket, Air conditioner points, Geyser point, Fans etc. as specified and mentioned in SOR.
- 1.1.3 The scope of work shall also include digging of earth and refilling for directly buried cables, earth strips, cable protection pipes, earth pits, civil works such as making earth pit inspection chambers with covers, grouting of equipment base plate, channels, supports and foundation bolts, chipping of concrete or in brick work for earth strips, pipes or other minor chipping for foundation preparation, if required, cutting holes in walls light fitting brackets, sealing of cable entries and making good the same after installation of the equipment and levelling, and other minor similar jobs as per directions of Owner / Engineer-in
  Charge.
- 1.1.4 The scope shall include design, engineering, manufacture, testing at works and delivery to site in well packed condition, storage, handling, erection, testing and commissioning of complete electrical system for Submerged Pump to be installed at HURL, Barauni.
- 1.1.5 The scope shall include but not limited to the following:
  - Drive motors for the pumps.
  - DOL starter for the motors.
  - Cable from DOL starter to the motor terminal box.
  - All other items not specified but required for safe and proper operation.
- 1.1.6 All civil work (like cutting, chipping, grouting, making opening in floor / wall etc. for equipment foundation and cabling work) pertaining to electrical equipment are in the scope of work of the contractor.
- 1.1.7 The contractor shall obtain the necessary clearance from local supply authority for complete electrical installation. Wherever service connections are to be obtained from the local supply company, the contractor shall process the application and obtain the power supply. All necessary drawings, calculations, test certificates and record of site tests etc. as required by the Inspector shall be furnished. Any modification / rectification as required by Electrical Inspector
  - shall be carried out free of cost by the contractor. All fees payable to the supply company and Electrical Inspector for such service connections shall be paid by the

- 1.1.8 This specification shall be read in conjunction with all referred standards, associated drawings, specification sheets, PDS, Inventory of internal electrification of 12 nos. old HFCL quarters & SOR for Internal Electrical Works (Supply & Erection) for Renovation of 12 nos. old HFCL quarters
- 1.1.9 Quantities indicated in the Schedule of Rates (SOR) and Inventory are approximate and these may increase or decrease or some items may even be deleted at the time of actual execution. However, the value of total increase or decrease shall be limited to ± 25% of the contract value irrespective of the changes in quantity of individual items.
- 1.1.10 The contractor shall have valid "A" class license from the Director of Electrical Safety to the Govt. of Bihar. The contractor must have PF & ESI codes covering all persons hired by him for carrying out the job. He shall engage suitably skilled / licensed workmen of various categories for execution of work supervised by supervisors / engineer of appropriate qualification and experience to ensure suitable quality of work.
- 1.1.11 In case of any discrepancies between Technical Specification and SOR in respect of description of equipment / work, the details indicated in the SOR shall prevail.
- 1.1.12 This being a renovation job, Bidder must visit the site to understand the nature of job and collect the necessary details from site. Bidder shall also develop the layout based on the details provided and submit for approval during detail engg.
- 1.1.13 The contractor shall observe safety rules and take all necessary safety precautions to carry out the internal electrification works.
- 1.1.14 Scope of internal electrification shall also cover but not limited to complete internal electrifications up to and including main switches, MCBs and distribution boards as specified and as mentioned in SOR.

# 1.2 REFERENCE STANDARDS

- 1.2.1 All electrical equipment and installation shall comply with the requirements laid down in the latest issue of relevant Indian Standard Specifications and statutory acts / rules / regulations. In the absence of IS for any particular equipment or in case of imported equipment, relevant IEC Standards shall be applicable. All Specifications, publications mean the latest edition.
- 1.2.2 The equipment and installation shall also comply with the provisions of latest issue of Indian Electricity Rules. Contractor shall obtain approvals of Statutory Authorities for equipment and complete installation and shall make, wherever necessary, suitable modification in the equipment, installation to comply with the above.
  - 1.2.3 Wherever any requirement, laid down in this standard, differs from that in Indian Standard Specification, the requirement specified herein shall prevail.

The equipment shall be designed for the following site conditions: -

- Maximum ambient temperature 46 °C
- Minimum ambient temperature 5°C
- Design reference temperature 50 °C
- Relative humidity 100%
- Altitude above sea level <1000 mtr

#### 1.4 INSTRUCTION TO THE BIDDER

- 1.4.1 This specification covers complete electrifications of 12 nos. old HFCL quarters with PCC, MPDBs/FPB, PDBs, LT cables & wires, LSDB's, 16A switch socket, AC Distribution Boards, Meter distribution boards. Room switch boards, surface/recess conduits, MCB boxes, LED lighting fixtures, wall & ceiling Fan, 6A & 16A switch socket etc as specified in technical specification, SOR, and attachments enclosed with it.
  - 1.4.2 Distribution from PCC to DOL Panel, motor etc. shall be in bidder's scope.
- 1.4.3 Motors for outdoor service shall be provided with special seals for the enclosure, joints, bearing housing, terminal boxes etc. so that no extra protective covering for ingress of water shall be required.
- 1.4.4 Complete work shall be carried out conforming to the provisions of Indian Electricity Act and relevant Indian standard Specifications (ISS). Wherever these regulations are supplemented by the State Electricity Dept., Electricity Undertakings / Boards, the installation shall also comply with these requirements. Wherever the specifications given in this NIT differs from those of the statutory regulations, these specifications shall be followed.
- 1.4.5 Before the procurement of any electrical equipment/items, the Contractor shall provide relevant technical catalogues, product specifications, and certifications for approval by the Engineer-in-Charge.
- 1.4.6 Bidder shall submit various Layout drawings as per Annexure-I 'Drawings and Documents Schedule' for owner's approval before proceeding with the installation works. Approval of drawings / documents does not relieve the contractor of his responsibilities to meet the intents of specifications. Cutting
  - chases / groove, wherever required, and making good is deemed to be included in the contractor's quoted rates.
- 1.4.7 Location of Power control center, Main Power Distribution Boards/Feeder Pillar Boards, Meter Distribution Boards, Power Distribution Boards for AC, Lighting Distribution Boards, Lighting Sub Distribution Boards, Single Phase Switch Socket Sub Distribution Board, switch boards, light fittings, cable routes, conduit routes, earth pits etc. shall be marked at site and approval of Engineer in- charge obtained before proceeding with the installation work.
- 1.4.8 On completion of works, wiring diagram for complete installation and various Layout drawings as per Drawings and Documents Schedule shall be prepared by the contractor and 4 copies of the same shall be supplied to the owner (M/s HURL) for

their record.

- 1.4.9 All circuits shall be indicated and numbered in wiring diagram and all points shall be given the same number as the circuit to switch they are electrically connected. Distributions boards shall also be marked to indicate the circuit number controlled by them.
- 1.4.10 "Loop in" system of wiring shall invariably be followed throughout the installation. Where it is absolutely necessary, junction boxes of approved make may be used as permitted by Engineer-in-charge. Soldered or taped joints are not permitted for jointing under any circumstances.
- 1.4.11 Rated Power, Voltage and frequency of supply of current consuming devices and materials used in installation shall be suitable for the power and frequency of the supply to which these are to be connected.
- 1.4.12 Power wiring shall be kept separate and distinct from light wiring, from the level of circuits, i.e., beyond the branch distribution boards. Conduits for light/power wiring shall be separate.
- 1.4.13 In wiring, no joints in wiring will be permitted anywhere, except in switch box or point outlets, where jointing of wires will be allowed with use of suitable connector. Soldered or taped joints are not permitted for jointing under any circumstances
- 1.4.14 In recessed conduit system, routes of conduit will be planned, so that various inspection boxes provided don't present a shabby look. Such boxes can be provided 5 mm above plaster level, and they can be covered with Plaster of Paris with marking of junction boxes.
  - 1.4.15 Installation of conduits for wiring generally will not be taken in floor slabs.
- 1.4.16 Socket outlets along with switch shall be modular type for either 6A 3 pin or 16/6 Amp 6 pin configuration. The third pin shall be connected to earth through protective (loop earthing) conductor. 2 pin or 5 pin socket outlets will not be provided.
- 1.4.17 Sockets for the power outlets of rating above 1KW like for window/split AC etc, shall be of industrial type with associated plug top and controlling MCB.
- 1.4.18 All external hardwares shall be made of stainless steel SS-304/316. 1.4.19

Canopy shall be provided for all outdoor equipments.

#### 1.5 POWER SUPPLY DISTRIBUTION

Incoming power supply for renovation of 12 nos. old HFCL quarters shall be tapped from the PCC panel located in township by contractor. This shall also include supply, laying, termination at both ends of power and control cable from incoming power source and its further distribution up to various consumers shall be in the contractor's scope.

For electrification of 12 nos. old HFCL quarters incoming power supply tapped from MCC room shall be routed through Main Power distribution Boards provided by contractor..

#### 1.6 SYSTEM OF INTERNAL WIRING

Wiring shall be FRLS PVC insulated (Sheathed / Unsheathed) stranded copper conductor cable/ wire in approved PVC conduit wiring as per approved drawings. Wiring is to be terminated in sunken cast iron or pressed steel terminal boxes for mounting modular type fittings like switches, sockets and regulators, etc. complete with modular base, cover plate etc. Cable for lighting and power circuit shall run separately.

#### 1.7 POINT WIRING

- 1.7.1 Installation is to be carried out on point wiring basis, the supply of following shall be deemed to be included in wiring installation works:
- Conduit/channel as the case may be, accessories for the same and wiring cables between the switch box and the point outlet, loop protective earthing of each fan/light fixture.
- 650/1100V FRLS PVC insulated copper conductor single core lighting wires of size 1.5/2.5/4 sq. mm as specified for conduit wiring, and PVC insulated 1.5 copper conductor earth wire.

All fixing accessories such as clips, screws, Phil plug, rawl plug etc. as required.

- GI or PVC switch boxes for control switches, regulators, sockets etc, recessed or surface type, and phenolic laminated sheet covers over the same.
- Outlet boxes, junction boxes, pull boxes etc. provided with switchboards for loose wires/conduit terminations.

Control switch or MCB, as specified.

PVC concealed conduit as specified with all relevant accessories and junction / inspection boxes.

Ceiling rose or connector (in case of ceiling / exhaust fan points). Connections to ceiling rose, connector, socket outlet, lamp holder, switch etc. Bushed conduit or porcelain tubing where wiring cables pass through wall etc. Back plate (in case of suspended light fixtures)

Wiring of each lighting / receptacle unit / ceiling fan / bell point / exhaust fan, etc. shall be considered as one point.

#### 1.8 CONCEALED CONDUIT WIRING

- 1.8.1 Supply, routing and laying of PVC conduit of minimum size 20 mm in walls / ceiling, from lighting panels up to fittings, receptacles / inspection / junction boxes etc. shall be in the contractor's scope.
- 1.8.2 The Contractor shall closely coordinate his work with that of the Civil Contractor. The contractor shall prepare detailed shop drawing and submit for the approval to the owner/ consultant well before commencing the work. The shop drawings shall show setting out details for all components such as conduits and cable routes indicating the number and size of wires in each section of conduit.
- 1.8.3 The layout of conduits shall be such that any condensation or sweating inside the conduit is drained out. Suitable precaution shall be taken to prevent entry of insects inside the conduit. No cable or wire shall be installed until the inside of conduit has been cleaned.
- 1.8.4 Suitable junction / inspection boxes according to requirements shall be provided to permit periodical inspection and to facilitate replacement of wires, when required. The boxes shall be mounted flush with the wall or ceiling. Junction boxes with minimum 75 mm depth shall be used in roof slabs and depth of boxes in other places shall be as per IS: 2667.
- 1.8.5 Pull boxes shall not be located in a conspicuous manner. Number and location of pull boxes shall be clearly indicated on shop drawings and shall be got approved by the owner / Engineer-in-charge before commencing the work.
- 1.8.6 The chases in the wall shall be neatly made and with ample dimensions to permit the conduit to be fixed in the manner desired.
- 1.8.7 All the cuttings and chasings in the brick work / RCC work / Block work shall be carried out using electrically operated Hilti or Fishcher make casing tool. Further all the drillings and cuttings in the RCC work shall be carried out using core cutting machine. The rate shall include all these and no separate rates towards the same shall be paid to the contractor.
  - 1.8.8 Fixing of standard bends of elbows shall be avoided as far as practicable and all curves maintained by bending the conduit pipe itself with a long radius which will permit easy drawing in of conductors. All threaded joints of conduit pipes shall be treated with some approved preservative compound to secure protection against rust. Open conduit ends shall be properly protected to prevent the ingress of dirt and rubbish.
- 1.8.9 Provisions shall be made at expansion joints, where they occur in the building structure.

  PVC pipe with coupling to be installed to prevent damage to structure / conduits and finishes. Continuity through all such joints shall be maintained.
- 1.8.10 Power wiring shall be kept separate and distinct from light wiring, from the level of circuits, i.e., beyond the branch distribution boards. Conduits for light/power wiring shall be separate.
- 1.8.11 Loads of complete building are distributed in such a way that balancing of 3-ph circuit shall be done.
- 1.8.12 In wiring, no joints in wiring will be permitted anywhere, except in switch box or point

outlets, where jointing of wires will be allowed with use of suitable connector. Soldered or taped joints are not permitted for jointing under any circumstances.

- 1.8.13 The wiring throughout the installation shall be such that there is no break in the neutral wire except in the form of linked switchgear.
- 1.8.14 In recessed conduit system, routes of conduit will be planned, so that various inspection boxes provided don't present a shabby look. Such boxes can be provided 5 mm above plaster level, and they can be covered with plaster of paris with marking of junction boxes.
  - 1.8.15 Installation of conduits for wiring generally will not be taken in floor slabs.
- 1.8.16 Socket outlets along with switch shall be modular type for either 6A 3 pin or 16/6 Amp 6 pin configuration. The third pin shall be connected to earth through protective (loop earthing) conductor. 2 pin or 5 pin socket outlets will not be provided.
  - 1.8.17 Sockets for the power outlets of rating above 1KW like for window/split AC etc, shall be of industrial type with associated plug top and controlling MCB.
- 1.8.18 All conduits shall be kept clear of other services, except where intentionally earthed or bonded. Conduits shall be fixed to prevent contact with same at the following minimum spacing.

150 mm away from hot water services.

50 mm away from all other services.

1.8.19 Where desktop to be installed, group of 3 Nos. 6A Plug point to be provided at convenient location.

#### 1.9 CONDUIT CAPACITY

Maximum Number of PVC Insulated Cables in One Conduit (IS: 694)

The following table shows the maximum number of PVC insulated cables conforming to IS: 694 that can be drawn in a single conduit. The values are based on conduit size and cable cross-sectional area. The 'S' columns apply to straight runs not exceeding 4.25 meters with deflections less than 15°, while the 'B' columns apply to runs that deflect more than 15°.

Nominal	20	20	25	25	32	32	38	38
Cross-	m	m	m	m	m	m	m	m
Section	m	m	m	m	m	m	m	m
al Area	(S)	(B)	(S)	(B)	(S)	(B)	(S)	(B)
(sq.								
mm)								
1.5	5	4	10	8	18	12		
2.5	5	3	8	6	12	10		
4	3	2	6	3	10	8		
6	2	-	5	4	8	7		
10	2	-	4	3	6	5	8	6

Note:

The table indicates the maximum capacity of conduits for simultaneous cable drawing. Columns headed 'S' apply to straight runs  $\leq$  4.25 m with deflections  $\leq$  15°. Columns headed 'B' apply to runs with deflections > 15°.

#### 1.10 MATERIALS

- 1.10.1 The cable shall be of PVC insulated and of approved make / grade ISI marked. All materials for fittings / accessories, cable etc. to be incorporated in this work shall strictly comply with latest appropriate Indian Standards. If Indian standards have not been issued relevant current British Standards may be used. Aluminium link clips of width 6 mm to 8 mm shall be acceptable without any price adjustment.
- 1.10.2 The rates for point wiring (power / light) are with the provision of stranded copper conductor of solid drawn copper conductor.

#### 1.11 CONNECTORS

1.11.1 Connectors of appropriate rating shall be provided inside the box for fan and utility fittings. The wiring shall be done in such a way that wires from connectors to the fan are not visible. In situations where ceiling rose is proposed for fan and tube light fittings, the connector need not be provided.

# 1.12 LIGHTING WIRES

- 1.12.1 The wires for wiring in lighting system shall be 650 / 1100 V, PVC insulated, un armoured with stranded copper conductors, unless otherwise specified. The wires shall conform to IS: 694.
- 1.12.2 The minimum area of conductors shall be 1.5 sq. mm for light point/fan point/exhaust fan point/call bell point and 4 sq. mm for light/power plug.
- 1.12.3 The PVC insulation shall be coloured red, yellow, blue for R, Y, B phase and black for neutral.

# 1.13 MOUNTING STRUCTURES

Switch sockets, cable trays, Distribution Boards etc shall be mounted / supported on suitable structure fabricated out of standard sections of mild steel, i.e. channels, angels, flats etc conforming to IS: 2062.

# 1.14 EARTHING & LIGHTNING PROTECTION

- 1.14.1 Complete earthing installation shall be done as per IS:3043 and lightning protection shall be as per IS/IEC 62305 along with its latest amendments.
- 1.14.2 Earthing & lightning protection shall also conform with the requirements of

National building code.

- 1.14.3 Separate Earthing rings/grid for Earthing & Lightning protection shall be provided around the Substation & Quaters. Minimum size of main grid shall be 50mmX6mm.
- 1.14.4 Earthing grid/ring shall comprise of buried GI earth strips and GI pipes/electrodes. All these earth electrodes shall be inter-connected.
- 1.14.5 Individual electrical equipment shall be earthed by GI strip. Earth buses shall be provided for earthing groups of electrical/non-electrical equipment to earthing grid/rings.
- 1.14.6 All equipment rated above 250V shall have two external earth connections and those rated up to 250V shall have one external earth connection.
- 1.14.7 All GI conductors shall meet the galvanizing requirement as per IS.
- 1.14.8 Surplus soil shall be carried away to distance exceeding 50 m and the site left clean and tidy.
- 1.14.9 Pipes carrying gas / water etc. shall not be used as means of earthing on installation.
- 1.14.10 Portion of earth wire between earth electrode and Meter Distribution Board shall be enclosed in 15 mm bore galvanized pipe light grade. The rate against respective item of earthing of shall be deemed to include the cost of the aforesaid pipe.

# 1.15 OPERATING REQUIREMENTS

1.15.1 All equipment and accessories shall be suitable for trouble free and continuous service at their rated capacity in the specified ambient and system conditions.

#### 1.16 REFERENCE STANDARDS

1.16.1 All electrical equipment and installation shall comply with the requirements laid down in the relevant Indian Standard Specifications and statutory acts/ rules / regulations. In the absence of ISS, relevant British Standards shall be applicable. All Specifications, publications mean the latest edition.

# 1.17 TESTS & INSPECTION

- 1.17.1 Electrical installation work shall be subjected to inspection by owner / his authorised representative, statutory bodies like Electrical Inspector. The contractor shall carry out without extra cost to owner rectifications / modifications desired by the above authorities to make the installation conforming to I.E. Rules etc.
- 1.17.2 The owner may reject any portion of the work considered defective or of poor workmanship and the contractor shall make good these defects without extra cost to owner.

- 1.17.3 Guarantee / Warrantee Certificate for all electrical equipments / appliances / components shall be handed over to the owner / Engineer-in-charge.
- 1.17.4 All equipment shall be routine tested as per relevant standards in presence of owner representative at manufacturer's works before despatch. In addition, the equipment shall be inspected at site for final acceptance.
- 1.17.5 The following tests as specified in IS-732, code of practice for electric wiring and fittings in building shall be complied with before the complete installation is taken over. The contractor shall carry out the tests in the presence of Engineer in-charge. Electrical wiring test sheet shall be signed both by the contractor's representative and the Engineer-in-charge. All testing equipment shall be arranged by contractor without any extra cost.
  - Insulation resistance shall be measured by 500 volts megger. The insulation resistance in mega ohm of the installation shall not be less than 50 divided by the number of points on the circuit and the resistance of the whole installation shall not exceed one ohm and resistance including earth mass as 5 ohm.

# **Testing Polarity of Switches**

A test shall be made to verify that all non linked single pole switches have been fitted in the same conductor throughout and that such conductor has been connected to another or phase conductor or to the non-earthed conductor of the supply-

# 1.18 ERECTION, TESTING & COMMISSIONING

- 1.18.1 The contractor shall undertake erection of all equipment in accordance with good engineering practices in conformity with statutory regulations and Code of Practice and to the entire satisfaction of the owner.
- 1.18.2 Contractor shall prepare SLD of the entire distribution system and Lighting Distribution Board, various layout drawings (e.g. point layout, conduit layout etc.) and submit to the owner/consultant for approval. Contractor shall also supply 'as built drawings' for complete installation.
- 1.18.3 The contractor shall arrange all the necessary erection tools, tackles, testing and measuring instruments and shall supply erection materials and consumables.
- 1.18.4 The contractor shall clear the site after commissioning of the equipments / system and obtain the Site Clearance Certificate from owner's Engineer-in charge.

# 1.19 MAKE OF COMPONENTS

1.19.1 Make of equipment / components shall be as per Annexure -II. Make of equipment / components not indicated shall be subject to owner's approval.

# 1.20 PAINTING

1.20.1 The equipment surface to be painted shall be pre-treated to remove all dust, scale and foreign adhering matter by suitable treatment.

- 1.20.2 All metal surfaces shall be painted with two coats of suitable anti-rust paint followed by two coats of anticorrosive epoxy paints.
- 1.20.3 All paints shall be carefully selected to withstand tropical heat and extremes of weather.

The paint shall not scale off, crinkle or be removed by abrasion due to normal handling.

1.20.4 Unless otherwise specified, the finishing shade shall be light gray having No.631 as per IS-5.

# 1.21 DRAWINGS AND DOCUMENTS

- 1.21.1 The bidder shall supply the drawings and documents as per Annexure-I 'Drawings & Documents Schedule'.
- 1.21.2 All drawings and documents shall have the following descriptions written boldly:

Name of Client.

Enquiry / Order Number with

Project/Plant name.

Equipment Code No. and Description.

1.21.3 The Contractor shall be responsible for preparation and submission of two sets of drawings viz. "AS BUILT" (2) Material Reconciliation and Deviation Statement

# 1.22 CO-ORDINATION WITH OTHERS

1.22.1 The contractor shall co-ordinate with owner's other contractors / agencies as required.

# 1.23 HANDING OVER TO OWNER

1.23.1 The contractor shall hand over the complete installation as a whole. Minor works not specified or mentioned in the scope or SOR but required to complete the job as a whole will have to be done by the contractor without

extra cost. Any equipment / installation shall not be deemed as handed over to Owner until the same is complete in all respect and is accepted in writing by the Owner / Engineer-in-charge.

## 1.24 SPARE PARTS

- 1.24.1 Spares mentioned in respective Engineering Standard shall not be supplied.
- 1.24.2 Commissioning spares as required shall be supplied without any extra cost to the owner.

# 1.25 SCHEDULE

- 1.25.1 Bidder shall furnish bar chart for complete scope of their works.
- 1.25.2 Vendor to submit a detailed Scheduled Plan including day wise details regarding Supply, Erection, commissioning, statutory jobs compliances etc. jobs related till final completion in all respects. (Vendor to submit one Hard(A3) signed and Soft copy of same) at the time of MOM.

Vendor to Provide Details of Hierarchy / Site Manpower (Project Coordinating Team) i.e. 1 Nos. RCM for Project Co-ordination & Planning, 1 Nos. – Engineer In charge Each (Civil & Electrical Jobs), 1 Nos. Safety In charge with Proper Contact Details at the Time of MOM, apart from another Project Execution Team.

All works to be carried out prior proper submission of JSA, HIRA and Works Permits. Engineer Incharge & Safety officer shall always be present at site at the time of Job Execution.

Vendor To submit calibration and Test Certificates of all Safety Equipment's, tools and tackles and Testing Equipment's to owner at least 7 Days Before using at Site.

Warranty of Supply Items will be 18 Months from the date of receipt at Site or 12 Months from the date of commissioning.

Defect Liability Period shall be 12 months from the date of certified Final completion of the work.

Vendor to Submit all the Warranty and Guarantee Certificates in Hard as well as in soft.

Vendor to provide a list of Equipment with its Warranty Certificate Details.

# 1.26 Payment Terms & Security Deposit:

# 1.1.1. Payment Terms:

1.1.1.1. Progress Payments shall be released to CONTRACTOR against monthly running account bills duly certified by Engineer-in-charge after affecting the necessary deductions. The basis for payment against various items shall be below:

# 1.1.1.1.1. A) SUPPLY ITEMS

- i. 80% on receipt and acceptance of equipment at site
  - ii. 15% after Erection / Installation
- iii. 05% on Commissioning / Completion of all works including all statutory compliances in all respects and acceptance thereof by EIC.

# 1.1.1.1.2. B) ERECTION ITEMS

- i. 80% on completion of Erection / Installation works
  - ii. 15% on Testing & Acceptance of works
- iii. 05% on Commissioning / Completion of all works including all statutory compliances in all respects and acceptance thereof by EIC.
- 1.1.1.2. The Bidder is required to furnish the requisite CPBG as mentioned in GCC/SCC. 1.1.1.3. In case of breach of contract, the guarantee amount shall be encashed by the Owner without any conditions whatsoever.
- 1.1.2. Tax deduction at source Income tax, as applicable as per income tax act, shall be deducted at source from the Contractor's bills and a certificate towards this deduction shall be issued to the Contractor.

- 1.1.3. Price Basis: Shall be firm till the completion of the contract.
- 1.27 Manufacturing Quality Plan: Vendor shall execute the manufacturing quality plan as per approved MQP subjected to approval from OWNER.
- 1.28 Pre-Dispatch inspection plan:

Inspection and tests

- a) Routine tests shall be carried out at works in the presence of Third-party inspector as per relevant IS / IEC Standards. Site Inspection Reports and Test copies for the same to be submitted for OWNER Review.
- b) Vendor shall furnish type and routine test certificates for all bought out components for the panel, as per relevant standards.
- c) Test certificates for type test carried out on similar equipment of identical design, if available, shall be submitted.
- d) Pre-Dispatch inspection shall be carried out as per approved manufacturing quality plan. Pre-Dispatch inspection shall be in bidder / vendor scope. No extra payment shall be made by owner for the pre-dispatch inspection / tests etc.
- e) Vendor shall intimate Factory Acceptance Test (FAT) of equipment's 15 days in advance through written communication to Client. Owner post receipt of intimation, may conduct the virtual/ onsite FAT.
  - 1.29 Site Quality plan: Vendor shall furnish the field / site quality plan for review and approval.
  - 1.30 Inspection & Testing:

The equipment shall be inspected by an independent 3<sup>rd</sup> party inspection agency, as approved in accordance with project requirements.

The inspection and Testing shall be in accordance with the all relevant codes, standards, specifications.

# **EQUIPMENT SPECIFICATION**

#### 2.1 GENERAL

- 2.1.1 Equipment to be supplied by the contractor shall conform to relevant Indian Standards, Engineering Standards, Specification Sheets & Drawings enclosed.
- 2.1.2 Equipment shall also comply with the requirement of Statutory Acts, Rules & Regulations.
- 2.1.3 Make of the equipment / components shall be as specified elsewhere in this specification. Make of the equipment / components not indicated shall be subject to owner/ consultant's approval.
- 2.1.4 Drawings & Documents for various equipments as indicated in respective Engineering Standards shall be furnished. For other equipments, GA drawings & descriptive catalogues shall be furnished.

#### 2.2 EQUIPMENTS

- 2.2.1 415V POWER CONTROL CENTRE (PCC)
- 2.2.1.1 Rated short circuit breaking capacity for 415V PCC shall be minimum 50 KA for 1 sec.
- 2.2.1.2 The incoming circuit breaker feeders shall be in single tier formation.
- 2.2.1.3 The main bus bars of PCC shall have heat shrinkable insulated sleeves suitable for rated voltage and shall be made of high conductivity aluminum alloy. At joints of these busbars removable shrouds shall be provided.
- 2.2.1.4 Bus bars shall be of uniform cross section and supported on non-hydroscopic FRP insulators with adequate clearances and creepage distance to prevent flash over due to effect of dust/moisture.
- 2.2.1.5 Sufficient bus supports shall be given to give adequate mechanical strength during short circuits.
- 2.2.1.6 A continuous ground bus shall be provided at the bottom in the PCC for grounding.
- 2.2.1.7 All feeders of PCC shall be provided with draw out type air circuit breakers.
- 2.2.1.8 Busbar clearances shall conform to relevant Indian Standard/IEC for equipment voltages up to and including 500 V AC.
- 2.2.1.9 The draw out modules shall be standardized and it shall be possible to interchange any module with a module of same size. The components to control the equipment like switch, starter, fuse, auxiliary relay etc. shall be wired as a unit on the individual module. Safety shutter shall be provided to prevent direct access to live parts when the chassis is removed.
- 2.2.1.10 The entire draw out construction should be designed for safe operation during placement or removal of chassis. An earthing arrangement shall be provided which will make contact

- first before the power contacts are made and break last.
- 2.2.1.11 The door shall be interlocked so that it cannot be opened unless the isolating switch on that module is OFF. However, it shall be provided with a door defect mechanism for intentional opening when on line for testing and inspection purpose.
- 2.2.1.12 Control switches for breaker control shall be provided in each breaker cubicle. Circuit breaker shall be interlocked to prevent withdrawal of a closed breaker or insertion of a closed breaker. Each breaker shall be provided with anti-pumping device.
- 2.2.1.13 Provisions shall be made to manually close/trip circuit breakers on loss of control voltage.
- 2.2.1.14 The switchboards shall be suitable for extension at both the ends.
- 2.2.1.15 There shall be three positions for Breaker/Contactor trolley: Service, Test and Isolate. In service position, the power connections shall be made; but in test and isolate mode, the power connection of bus bars shall be automatically removed.
- 2.2.1.16 Suitable shutter arrangement shall be provided to protect the person from accidental contact with live bus in trolley chamber.
- 2.2.1.17 FRP supports shall be used for bus bars with adequate clearances and creepage distance to prevent flash over due to effect of dust moisture.
- 2.2.1.18 Protective relays for incoming and outgoing feeders shall be microprocessor based numerical type. Drawout type relays shall be used. Protective relays shall be mounted on the front of the switchgear panel.
- 2.2.1.19 All meters shall be digital multifunctional meters. Additionally, analog type ammeter & voltmeter shall be provided separately for various feeders.
- 2.2.1.20 A continuous ground bus shall be provided at the bottom of the switchgear and in cable connection side for grounding the switchgear, breaker trolley as well as to ground the cable glands.
- 2.2.1.21 Every enclosure door that provides access to live parts operating at 240 V AC and above shall be mechanically interlocked with a circuit interrupting device on the supply side such that when the door is open, the equipment is de-energised.
- 2.2.1.22 PCC shall have separate sections of bus bars for indoor and outdoor lighting. Outdoor bus sections shall be connected by means of contactor operated through photo-cells and astro timer.
- 2.2.1.23 Manual by-pass circuit for outdoor lighting shall be wired up to a switch located in electrical control room/shift office, so that outdoor lighting can be switched ON or OFF manually to override the automatic switching.
  - 2.2.1.24 All outdoor lighting fixtures including shall receive power from outdoor lighting bus.
- 2.2.1.25 For detailed specification refer Engineering Standard of Medium Voltage Switch Boards (ES:8060).
- 2.2.2 MAIN POWER DISTRIBUTION BOARD (MPDB)
- 2.2.2.1 Boards shall be provided with incoming and outgoing feeders as indicated in specification sheets attached with this specification.

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	10	2.28.1	Dismantling & Demolising Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. All kinds of soil		Surface dressing	3,315.41	M2	15.28	50,659.46
120	20	15.7.4	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-incharge.		Demolishing brick work	365.54	М3	922.27	337,126.58
120	30	15.56	Dismantling old plaster or skirting, raking out joints and cleaning the surface for plaster including disposal of rubbish as directed by Engineer-in charge.		Dismantling old plaster	536.34	M2	24.46	13,118.88
120	40	15.2.2	Demolishing plain cement concrete under floor including disposal of material outside Building premises as directed by Engineer-in-charge  1:4:8 or richer mix.		Demolishing PCC	52.83	М3	673.11	35,560.40
120	50	15.36	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.		Dismantling barbed wire	195.00	KG	16.48	3,213.60
120	60	15.42.2	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking th material within 50 metres lead:  100 mm dia pipe		Dismantling C.I.	474.50	М	34.92	16,569.54
120	70	15.34.2	Dismantling and stacking within 50 meters lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of:  R.C.C.		Dismantling fencing posts	56.00	EA	111.21	6,227.76
120	80	15.23.1	Dismantling of existing tiles/marble floor and wall laid in cement mortar including stacking of serviceable materials as directed. For thickness of tiles 10 mm to 25 mm		Dismantling of existing tiles/marble	1,790.75	M2	32.85	58,826.14
120	90	15.44.1	Dismantling of existing G.I. water supply pipes with all fittings / fixtures / clamps and stacking of serviceable materials as per instruction of Engineer- in charge.  15 mm to 40 mm nominal bore		Dismantling of G.I. 15 mm to 40 mm	401.05	М	67.39	27,026.76
120	100	15.44.2	Dismantling of existing G.I. water supply pipes with all fittings / fixtures / clamps and stacking of serviceable materials as per instruction of Engineer- in charge.  Above 40 mm nominal bore		Above 40 mm nominal bore	490.10	М	72.90	35,728.29
120	110	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.		Demolishing R.C.C.	39.00	M3	1,589.98	62,009.22
120	120	15.12	Dismantling doors, windows and clerretory windows (steel or wood) shutter including chowkhats, architravs, holdfasts etc. complete and stacking within 50 m lead:  Of area 3 SQM. and below		Dismantling doors, windows 3 SQM.below	390.00	EA	164.37	64,104.30
120	130	15.12	Dismantling doors, windows and clerretory windows (steel or wood) shutter including chowkhats, architravs, holdfasts etc. complete and stacking within 50 m lead:  Of area be ond 3 SQM.		Of area be ond 3 SQM.	81.00	EA	225.10	18,233.10
120	140	15.52	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.		Dismantling of flushing cistern	52.00	EA	404.32	21,024.64
120	150	15.6	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in- charge, beyond 50 m initial lead, for all I ads including all lifts involved.		Disposal of building rubbish	365.54	М3	65.70	24,015.98
120	160	14.82	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in Charge.		Dismantling W.C. Pan	13.00	EA	60.11	781.43

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	170	2.10.1.2	Earth work  Excavating trenches of required width for pipes, cables, etc including excavation for sockets and dressing of sides, ramming of bottoms depth up to 1.5 m including getting out the excavated soil and then returning the soil as required in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:  Pipes, cables etc exceeding 80 mm dia but not exceeding 300 mm dia		Excavating trenches	619.45	М	226.63	140,385.95
120	180	2.30	Banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer ith ½ tonne roller, or wooden or steel rammers, and rolling ever 3rd and top- ost layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 5 m and lift upto 1.5 m		Banking excavated earth	260.00	M3	295.07	76,718.20
120	190	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete		filling in plinth with sand	292.50	МЗ	1,173.55	343,263.38
120	200	4.17	Making plinth protection 50mm thick of cement concrete 1: :6 (1 cement : 3 coarse san : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth		Making plinth protection	357.50	M2	370.14	132,325.05
120	210	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared		Clearing jungle	3,315.41	M2	7.87	26,092.28
120	220	2.34.1	Supplying chemical emulsion in sealed containers including delivery as specified:Chlorpyriphos/ Lindane emulsifiable concentrate of 20%		Supplying chemical emulsion	260.00	L	109.09	28,363.40
120	230	2.35	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) Along the exter all wall below concrete or masonry apronusing c emical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc. With chlorpyriphos/ Lindane E.C. 20% with 1% concentration		Diluting and injecting chemical emulsion	260.00	М	17.54	4,560.40
120	240	2.60	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means ov r areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in -charge.  All kinds of soil		Earth work in excavation by mechanical m	463.75	M3	111.56	51,735.95
120	250	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in- charge, beyond 50 m initial lead, for all leads including all lifts involved.		Disposal of building rubbish	463.75	M3	119.11	55,237.26
120	260	6.1.2	Brick work Providing brickwork of class designation 75 in cement mortar 1:6 (1cement: 6 coarse sand) as per instruction of Engineer-in-charge.		Providing brickwork	325.00	М3	3,615.48	1,175,031.00
120	270	6.13.2	Half brick masonry with bricks of class designation 75 in plinth and super structure in cement mortar 1:4 (1 cement : 4 coarse sand)		Half brick masonry	731.25	M2	552.81	404,242.31
120	280	4.1.8	Plain Cement Concrete & RCC  1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)		PCC 1:4:8	21.82	М3	3,435.09	74,953.66
120	290	4.1.6	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 40 mm nominal size derived from natural sources)		PCC 1:3:6	195.00	МЗ	3,621.99	706,288.05
120	300	4.1.3	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)		PCC 1:2:4	97.50	М3	3,999.33	389,934.68
120	310	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size de rived from natural sources)		RCC 1:1.5:3 plinth	32.50	М3	4,541.82	147,609.15
120	320	5.2.2	1:1.5:3 (1 cement : 1.5 co rse sand(zon -III) : 3 graded stone aggregate 20 mm nominal size)		RCC 1:1.5:3 V floor	45.50	МЗ	5,530.56	251,640.48

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	330	5.22.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.		Steel reinforcement	1,462.50	KG	48.68	71,194.50
120	340	5.9.1	Centering and shuttering including strutting, propping et . and removal of form for :  Foundation , footings, bases of columns, etc. for mass concrete		shuttering Foundation	910.00	M2	167.22	152,170.20
120	350	5.9.3	Centering and shuttering including strutting, propping et . and removal of form for :  Suspended floors, roofs, landings, balconies and access platform		shuttering Suspended floors	65.00	M2	416.24	27,055.60
120	360	13.1.1	Finishing 12 mm cement plaster: 1:4 (1 cement : 4 coarse sand)		1:4 (1 cement : 4 coarse sand)	883.38	M2	160.11	141,437.97
120	370	13.1.2	Finishing  12 mm cement plaster:  1:6 (1 cement : 6 coarse sand)		1:6 (1 cement : 6 coarse sand)	2,577.25	M2	153.13	394,654.29
120	380	13.16.1	Finishing  12 mm cement plaster:  6mm thick cement plaster to ceiling of mix 1:3 (1 cement: 3 fine sand).		6mm thick cement plaster to ceiling of m	1,852.50	M2	137.41	254,552.03
120	390	13.44.1	Finishing walls with water proofing cement paint of required shade:  New work (Two or more coats applied @ 3.84 kg/10 sqm)		cement paint New work	174.35	M2	53.00	9,240.55
120	400	13.41	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade:  New work (two or more coats) over and including water thinnable riming coat with cement priemer		OBD New work	7,882.52	M2	88.27	695,790.04
120	410	13.90.1	Distempering with 1st quality acrylic distember (Ready mix) having VOC content less than 50 grams/ litre of approved brand and manufacture to give an even shade: Old work (one or more coats) sqm		acrylic distember Old work	260.00	M2	30.84	8,018.40
120	420	13.98	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:  One or more coats on old work		plastic emulsion paint old work	812.50	M2	49.33	40,080.63
120	430	13.99	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:  One or more coats on old work		enamel paint old work	325.00	M2	47.00	15,275.00
120	440	13.111.2	Finishing walls with Acrylic Smooth exterior paint of required shade:  Old work (One or more coat applied @ 0.90 ltr/10 sqm).		Finishing walls with Acrylic Old work	3,419.00	M2	40.59	138,777.21
120	450	13.61.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even Shade:  Two or more coats on new work		enamel paint new work	1,612.00	M2	71.38	115,064.56
120	460	13.91	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.		Removing dry OBD	11,100.30	M2	11.32	125,655.40
120	470	14.1.2	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 SQMeters and under, including cutting the patch in proper shade, raking out joints and prepring and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.  With cement mortar 1:4 (1cement: 4 coarse sand)		Repairs to plaster	3,412.50	M2	259.55	885,714.38
120	480	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to repare the surface even and smooth complete.		plaster of paris putty of 2 mm	11,124.75	M2	116.37	1,294,587.16

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	490	11.41.2	FLOORING Providing and laying vitrified floor tiles in different sizes (thickness to specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm		vitrified floor tiles	1,105.00	M2	769.25	850,021.25
120	500	11.38	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sq.m including pointing the joints with white cement and matching pigments etc., complete.		Ceramic glazed floor tiles	174.35	M2	601.14	104,808.76
120	510	11.46.2	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm		Vitrified tiles	191.75	M2	796.32	152,694.36
120	520	8.31	Providing and fixing 1st quality ceramic glazed wall tiles conforming to 1S: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, 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 grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade		ceramic glazed wall tiles	568.75	M2	577.46	328,430.38
120	530	17.2.1	Complete.  Water supply and Sanitary Installations Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V. C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors what ever required: W.C. pan with ISI marked white solid plastic seat and lid		W.C. pan	13.00	EA	3,008.56	39,111.28
120	540	17.7.4	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require  White Vitreous China Wash basin size 550x400 mm with a single 15 mm C.P. brass pillar tap		Wash basin	26.00	EA	1,483.20	38,563.20
120	550	17.10.1.2	Providing and fixing Stainless Steel A ISi 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the wall wherever required:  Kitchen sink with drain board 510x1040 mm bowl depth 225 mm		Kitchen sink	13.00	EA	3,625.88	47,136.44
120	560	8.20.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre moulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4(1cement: 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.  Granite of any colour and shade:Area of slab upto 0.50 s m		Granite upto 0.50 s m	39.00	M2	2,540.92	99,095.88

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	570	8.20.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre moulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4(1cement: 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.  Granite of any colour and shade:Area of slab over 0.50 s m		Granite over 0.50 s m	3.25	M2	2,403.00	7,809.75
120	580	17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.		mirror	26.00	EA	766.27	19,923.02
120	590	17.34.1	Providing and fixing toilet paper holder : C.P. brass		toilet paper holde	13.00	EA	369.68	4,805.84
120	600	17.71	Providing and fixing PTMT liquid soap c ontainer 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing n t less than 105 gms.		Liquid soap c ontainer	26.00	EA	79.44	2,065.44
120	610	17.73.2	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.  600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.		PTMT towel rail	26.00	EA	325.99	8,475.74
120	620	18.7.1	Providing and fixing Chlorinated Polyvinl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1. 0 m spacing. This includes joi nting of pipes fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.  15 mm nominal outer dia pipes		15 mm nominal outer dia pipes	65.00	М	138.96	9,032.40
120	630	18.7.2	Providing and fixing Chlorinated Polyvinl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1. 0 m spacing. This includes joi nting of pipes fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.  20 mm nominal outer dia pipes		20 mm nominal outer dia pipes	568.75	М	176.53	100,401.44
120	640	18.7.3	Providing and fixing Chlorinated Polyvinl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1. 0 m spacing. This includes joi nting of pipes fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.  25 mm nominal outer dia pipes		25 mm nominal outer dia pipes	682.50	М	221.85	151,412.63
120	650	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931		Providing and fixing C.P. brass angle va	146.00	EA	271.69	39,666.74
120	660	18.50.1	Providing and fixing C.P. brass long nose bib cock of app oved quality conforming to IS standards and weighing not less than 810 gms.  15 mm nominal bore (Long body bib cock)		15 mm Long body bib cock	52.00	EA	388.28	20,190.56
120	670	18.49.1	Providing and fixing C.P.brass bib cock of approved quality conforming to IS:8931:  15 mm nominal bore (short body bib cock)		15 mm short body bib cock	65.00	EA	235.77	15,325.05
120	680	18.52.1	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.  15 mm nominal bore		brass stop cock	26.00	EA	322.95	8,396.70
120	690	18.22.2	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet:  150 mm diameter		brass shower rose	13.00	EA	103.22	1,341.86
120	700	12.41.1	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.  75 mm dia		PVC rain water 75 mm dia	48.75	М	115.66	5,638.43

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	710	12.41.2	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.  100 mm diameter		100 mm diameter	58.50	М	173.63	10,157.36
120	720	12.42.4.1	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 382, leaving 10 mm gap for thermal expansion  Single tee without door 75x75x75 mm		Single tee without door 75x75x75 mm	16.25	EA	67.44	1,095.90
120	730	12.42.4.2	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 382, leaving 10 mm gap for thermal expansion  Single tee without door 110x110x110 mm		Single tee without door 110x110x110 m	52.00	EA	103.58	5,386.16
120	740	12.42.3.2	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 382, leaving 10 mm gap for thermal expansion  Single tee with door 110x110x110 mm		Single tee with door 110x110x110 mm	78.00	EA	111.56	8,701.68
120	750	12.42.3.1	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 382, leaving 10 mm gap for thermal expansion  Single tee with door75x75x75 mm		Single tee with door75x75x75 mm	26.00	EA	76.86	1,998.36
120	760	12.42.5.1	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 382, leaving 10 mm gap for thermal expansion  Bend 87.5° 75 mm bend		Bend 87.5° 75 mm bend	26.00	EA	42.35	1,101.10
120	770	12.42.5.2	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 382, leaving 10 mm gap for thermal expansion Bend 87.5° 100 mm bend		Bend 87.5° 100 mm bend	78.00	EA	61.36	4,786.08
120	780	14.28.1	Providing and fixing brass curtain rods of wall thickness 1.25 mm with two brass brack ts fixed with brass screws and wooden plugs etc. wherever necessary complete.  Providing and fixing brass curtain rods of wall thickness 1.25 mm with two brass brack ts fixed with brass screws and wooden plugs etc. wherever necessary complete.		brass curtain rods	130.00	М	160.29	20,837.70
120	790	17.28.1.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.  Flexible pipe 32 mm dia or 40 mm dia		P.V.C. waste pipe	39.00	EA	55.20	2,152.80
120	800	18.48	Providing and placing on terrace (at all floor levels) poly thylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.  Circular Tank of capacity 1000Lit		Circular Tank of capacity 1000Lit	6,500.00	L	5.27	34,255.00
120	810	18.62.2	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.  20 mm nominal bore, 120 mm long, weighing not less than 198 gms		20 mm nominal bore, 120 mm long, weighin	19.50	EA	121.36	2,366.52
120	820	18.58	Providing and fixing CP grating of approved quality and colour.Jalli of approved make for traps.		Jalli	52.00	EA	18.03	937.56
120	830	18.20.2	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main: 20 mm nominal bore		brass ferrule	39.00	EA	188.91	7,367.49
120	840	9.21.2	DOORS, WINDOWS AND VENTILATORS  Providing and fixing ISI marked flush door shutters conforming to IS: 2202, core of block construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.  30 mm thick non-decorative type including ISI marked stainless steel butt hinges with necessary screws.		30 mm thick non-decorative type	438.75	M2	1,021.91	448,363.01

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	850	9.9.2.2	Providing and fixing glazed shutter for doors, windows and clerestory windows using 4 mm thick float glass panes including ISI marked butt hinges bright finished of required size with necessary screws.  30 mm thick Kiln seasoned and chemically treated hollock wood		30 mm thick Kiln seasoned	243.75	M2	1,572.87	383,387.06
120	860	9.1.3	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).  Kiln seasoned and chemically treated hollock wood		Kiin seasoned and chemically treated hol	17.88	М3	40,290.99	720,402.90
120	870	9.51.1	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm all complete.  With 2nd class teak wood beading 62X19 mm		With 2nd class teak wood beading 62X19 m	334.75	M2	632.55	211,746.11
120	880	9.20.3	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non- decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:  25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS: 3818 marked with necessary screws		25 mm thick (for cupboard)	162.50	M2	993.70	161,476.25
120	890	9.7.8	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick:  Fly proof stainless steel grade 304 wire gauge with 0.5 mm dia. wire and 1.4mm wide aperture with matching wood beading		Fly proof stainless	32.50	M2	826.24	26,852.80
120	900	10.25.2	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position & applying priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gatesand similar works		Steel work railing	3,250.00	KG	77.27	251,127.50
120	910	22.50	WATER PROOFING TREATMENT  Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc. by applying cement slurry mixed with Armourcrete of M/s The Structural water proofing Company Pvt. Ltd. or Tapecrete of M/s CICO Engineering Service consisting of applying: a)First layer of slurry of cement @ 0.488 Kg/SQM mixed with Armourcrete or Tapecrete @ 0.253 Kg/SQM. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 Kg/SQM mixed with Armourcrete or Tapecrete @ 0.126 Kg/SQM. This layer will be allowed to air cure for 4 hours follwed with water curing for 48 hours. (The rate includes reparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonary with polymer mixed slurry.		water proofing treatment sunken portion	71.50	M2	280.52	20,057.18
120	920	14.89	Providing and fixing APP (Atactic Polypropylene Polymer) modified prefabricated five layer 2 mm thick water proofing membrane , black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrance manufacture of density at 25°C, 0.87 - 0.89 kg/ litre and viscocity 70 - 160 cps. Over the primer coat the layer of membrane shall be laid using Butane torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as un er: Joint strength in longitudinal and transverse direction at 23°C as 350/300 N/5 cm. Tear strength in longitudinal and transverse direction as 60/80N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacture of membrane including 2mm (for corrugated roof sheets)		Providing and fixing APP	910.00	M2	242.07	220,283.70

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	930	12.22	Miscellaneous  Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.		Making khurras 45x45 cm	26.00	EA	144.77	3,764.02
120	940	13.18	Neat cement punning.		Neat cement punning.	617.50	M2	36.82	22,736.35
120	950	19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.  With common burnt clay F.P.S. (non modular) bricks of class designation 7.5		With common burnt clay F.P.S. (non modul	6.50	EA	15,220.03	98,930.20
120	960	18.77	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.		Cutting holes up to 15x15 cm in R.C.C. f	65.00	EA	204.77	13,310.05
120	970	9.89	Providing and fixing chromium plated brass night latch of approved quality including necessary screws etc. complete.		Providing and fixing chromium plated bra	13.00	EA	465.68	6,053.84
120	980	18.74	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour. 15 mm nominal bore with 45 cm length		Providing and fixing unplasticised P.V.C	65.00	EA	58.59	3,808.35
120	990	9.101.1	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Single rubber stopper		Providing and fixing aluminium hanging f	169.00	EA	19.28	3,258.32
120	1000	9.68.3	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete.200 mm weighing not less than 120 gms		Providing and fixing oxidised M.S. casem	754.00	EA	24.54	18,503.16
120	1010	9.114.2	Providing and fixing magnetic catcher of approved quality in cupboard / ward rob shutters, including fixing with necessary screws etc. complete.  9.114.2 Double strip (horizontal type)		9.114.2 Double strip (horizontal type)	104.00	EA	18.54	1,928.16
120	1020	17.60.2.2	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:  Sand Cast Iron S&S as per IS: 1729		Sand Cast Iron S&S as per IS: 1729	16.25	EA	703.95	11,439.19
120	1030	12.43.2	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1: 4 (1 cement : 4 coarse sand) and making good the wall etc. complete.  110 mm		110 mm	373.75	EA	168.06	62,812.43
120	1040	9.100.1	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:  125 mm		125 mm	832.00	EA	32.61	27,131.52
120	1050	9.100.2	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:  100 mm		100 mm	416.00	EA	28.92	12,030.72
120	1060	9.97.3	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:  200x10 mm		200x10 mm	42.25	EA	49.30	2,082.93
120	1070	9.97.4	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:  150x10 mm		150x10 mm	42.25	EA	41.02	1,733.10

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	1080	9.97.5	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:  100x10 mm		100x10 mm	624.00	EA	31.84	19,868.16
120	1090	9.96.2	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete:  250x16 mm		250x16 mm	169.00	EA	127.55	21,555.95
120	1100	9.90.3	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc. complete.  Size 65 mm		Size 65 mm	104.00	EA	174.36	18,133.44
120	1110	9.98	Providing and fixing aluminium pull bolt lock, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws bolts, nut and washers etc. complete.		aluminium pull bolt lock	26.00	EA	48.82	1,269.32
120	1120	Non-DSR	Providing & fixing 1.5 M high fencing with M.S.angles posts of standard design placed every 2.5 M apart, embedded in cement concrete block 45x45x60 cm of mix 1:5:10 (1 cement:5 fine sand:10 graded stone aggregate 40 mm nominal size) corner end and every 10 th post to be strutted, provided with G.I.wire chain links of size 50 mm x 50mm (mesh) and not less than 10 gauge thickness fixed with G.I. staples including necessary earth work in excavation and backfillin complete in all respect.		1.5 M high fencing	162.50	М	720.03	117,004.88
120	1130	9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.		mortice latch	42.25	EA	393.03	16,605.52
120	1140	14.5.1	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty: Float glass panes of nominal thickness 4 mm (weightnot less than 10kg/sqm)		Float glass panes	32.50	M2	511.49	16,623.43
120	1150	17.33	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.		glass shelf with edges round off,	26.00	EA	511.60	13,301.60
120	1160	10.25.1	Steel work welded in built up sections/ framed work, including cutting, hosting, fixing in position and applying a priming coat of approved steel primer usin structural steel etc. as required. In stringers, tr ads, landings etc. of stair cases, including use of chequered plate wherever required, all complete		Steel work Staircase	16.20	KG	55.52	899.42
120	1170	Non-DSR	Drilling and development of borewell  Boring, Supply, Installation, testing & Commissioning of Borewell with submersible pump all accessories. 2 HP, Dia-6", with depth of 200ft (Boring a bore of depth 200 feet approx., dia. of bore: 6 "Minimum Smm thick PVC pipe ISI marked with sufficient filter length. Pea-gravel along the PVC pipe to be provided. Submersible pump Single phase A.C. supply complete with GI wire of suitable size, copper wire all accessories in all respects. 2 HP (Kirloskar, KSB, CRI, Crompton) with starter panel of suitable capacity  Supply assembling, lowering, and fixing in vertical position in bore well, GI Pipe steel Screwed and socketed /plain ended casing pipes of required dia, including required fittings & accessories, all complete, for all depth, as per direction of Engineer In charge. Supply and fixing of Flange with provision of crossing of cable, NRV, gate valve with flanged ends, resting clamps for holding of lowered pipes, bore cover plate with suitable size hole for lowered pipe, holding wire for holding of pump, Supply and fixing of tee, Elbow,		Boring Borewell	1.00	EA	46,447.83	46,447.83

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
120	1180	Non-DSR	Supply of submersible pump with capacity of 2 HP with all accessories. (Kirloskar, KSB, CRI, Crompton) with starter panel of suitable capacity includes 1 HP Submersible with motor, Starter panel & 100 meter, 4sq.mm CU flexiable cable. Submersiable Specification:- Nos of Stages forsubmersible pump-15, Pump shaft-Stainless steel grade X 04 Cr 12 / X 12 Cr 12 / X 20 Cr 13 of IS 6603,Cast iron grade FG 200 of IS 210,Single Phase,240 ±10%Volts,50Hz,Type of motor,ISI Marked to IS:9283Numbers of poles of motor-2,Motor rating-1.5 kiloWatt,Maximum current at ratedvoltage and frequency-9 A, Discharge capacity (LPS)-0.33, Discharge Head-70 meter,,BEE Energy Star Rating-3 Star,Motor Speed -1950RPM Starter Spec:- Starter Rating-1 HP,Single Phase/230v/50Hz,T A,Overload Relay Range-8.9-13.5 A, Ammeter & Voltmeter -Digital,Run Capacitor CapacityMFD 34 mfd,Start Capacitor Capcity(MFD)-200-250 mfd, Cu cable specification:Cable Type: THREE CORE FLATCABLES WITH PVCINSULATION ANDSHEATHED withmultistrand fl exibleCopper Conductor, Size of Cable (Sqmm):4, Number of cores-3,Material of conductor (Capper/EC grade). Shape of conductor Standard Length-100 meter.		Supply of submersible pump	1.00	EA	22,326.38	22,325.38
120	1190	Non-DSR	3Cx4 sq.mm Cu cable for incoming supply to starter polyethylene and XLPEinsulated PVC outersheathed cable withaluminum conductorsuitable for ratedvoltage at 1100 voltsgrade and conformingto IS: 7098 Part-1		3Cx4 sq.mm Cu cable	200.00	М	92.90	18,579.00
120	1200	Non-DSR	MCB Box Single Pole MCBs as outgoing and Double pole MCB as incoming	•	MCB Box	1.00	EA	619.30	618.28
120	1220	Non-DSR	Any DSR items		Any DSR items	400,000.00	LS	1.00	400,000.00
					Civil Part (Part-A)				14,753,817.05

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
			Electrical Part (Part-B)						
130	10	Non DSR	INTERNAL WIRING: Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required & as per attached technical specification.  Group A	2000001931	1.5 sqmm point wiring - Group A	512.00	Р	539.21	276,075.52
130	20	Non DSR	Supply & providing point wiring for twin control light point with 1.5 sq. mm FRLS PVC insulated copper conductor single core wire in recessed medium class PVC conduit including cutting the wall and making good the same in case of recessed conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core wire etc. as required inclusive of the cost for providing circuit wiring from Dis tribution board to switch boards with 2x 2.5 sq. mm alongwith 1 no. 2.5 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.,	2000001932	1.5 sqmm Twin control point wiring	128.00	P	791.17	101,269.76
130	30	Non DSR	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required as per attached technical specification.  2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	2000001933	Wiring for circuit for 2 X 1.5sqmm	3,960.00	RMT	126.52	501,019.20
130	40	Non DSR	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required as per attached technical specification.  2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	2000001934	Wiring for circuit wiring - 2 X 2.5sqmm	4,800.00	RMT	149.33	716,784.00
130	50	Non DSR	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required as per attached technical specification.  2 X 4 sq. mm + 1 X 4 sq. mm earth wire	2000001935	Wiring for circuit wiring - 2 X 4 sqmm	4,200.00	RMT	181.36	761,712.00
130	60	Non DSR	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/recessed steel/ PVC conduit as required.	2000001936	Supplying and drawing co-axial TV cable	960.00	М	25.52	24,499.20
130	70	Non DSR	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.as per attached technical specification.  20 mm	2000001937	Supplying & fixing PVC conduit - 20 mm	360.00	М	69.50	25,020.00
130	80	Non DSR	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.as per attached technical specification.  25 mm	2000001938	Supplying & fixing PVC conduit - 25 mm	240.00	М	78.74	18,897.60
130	90	Non DSR	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.as per attached technical specification.  32 mm	2000001939	Supplying & fixing PVC conduit - 32 mm	120.00	М	99.90	11,988.00
130	100	Non DSR	Supplying and fixing following modular type switch/ socket on the existing switch box/ cover including connections etc. as required.  TV antenna socket outlet	2000001940	Supplying & fixing TV antena socket	52.00	EA	80.37	4,179.24
130	110	Non DSR	Supplying and fixing following modular type switch/ socket on the existing switch box/ cover including connections etc. as required.  Bell Push	2000001941	Supplying & fixing Bell Push	12.00	EA	76.02	912.24
130	120	Non DSR	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required as per attached technical specification.	2000001943	Supply & fixing modular blanking Plate	64.00	EA	21.70	1,388.80

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
130	130	Non DSR	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required. as per attached technical specification.  1 or 2 Module (75 mmX75 mm)	2000001944	Supply & fixing 1 or 2 Module (75X75 mm)	248.00	EA	161.82	40,131.36
130	140	Non DSR	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required & as per attached technical specification.  1 or 2 Module	2000001945	Supply & fixing modular Base &CoverPlate	248.00	EA	72.22	17,910.56
130	150	Non DSR	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.as per attached technical specification.	2000001946	SI of 5/6A Switch+socket with GI box	352.00	EA	259.02	91,175.04
130	160	Non DSR	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 A & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required as per attached technical specification.	2000001947	SI of 15/16A Switch+socket with GI box	120.00	EA	318.20	38,184.00
130	170	Non DSR	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 Nos. 3 pin 5/6 A modular socket outlet and 2 Nos. 5/6 A modular switch, connections etc. as required as per attached technical specification. (For light plugs to be used in non residential buildings).	2000001948	SI of 2no 5/6A Switch+socket with GI box	120.00	EA	367.05	44,046.00
130	180	Non DSR	Supply & fix ing 6A 2-way switch (modular type) complete with GI box, modular base, cover plate	2000001949	SI of 6A 2-way switch with GI box	124.00	EA	80.51	9,983.24
130	190	Non DSR	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 25A modular socket outlet and 25A modular switch/MCB connections etc. as required.as per attached technical specification.	2000001950	SI of 25A MCB+Socket with GI box	64.00	EA	394.77	25,265.28
130	200	Non DSR	DISTRIBUTION BOARDS  Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required as per attached technical specification (But without MCB/RCCB/ Isolator)  Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required as per attached technical specification (But without MCB/RCCB/ Isolator) - 8 way (4 + 24), Double door	2000001951	SI of MCB DB - 8way	4.00	EA	3,240.14	12,960.56
130	210	DSR2.5.3	SI of MCB DB - 12 way (4 + 36), Double door	2000002195	SI of MCB DB - 12 way (4 + 36), Double door	8.00	EA	12,883.00	103,064.00
130	220	Non DSR	Supplying and fixing 5 amps to 32 amps rating, 240 volts, 10KA, 'C' Curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required as per attached technical specification.  Double pole	2000001952	SI of Double pole MCB(5-32 A) in MCB DB	220.00	EA	356.22	78,368.40
130	230	Non DSR	Supplying and fixing 5 amps to 32 amps rating, 240 volts, 10KA, 'C' Curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required as per attached technical specification.  Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	2000001953	SI of Blanking Plate in MCB DB	12.00	EA	7.06	84.72

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
130	240	Non DSR	Supplying and fixing following rating, four pole, 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required as per attached technical specification.  63 amps	2000001954	SI of 63Amp 4-pole RCCB 30mA in MCB DB	12.00	EA	1,559.53	18,714.36
130	250	Non DSR	Supplying and embedding following dia G.I. pipe (medium class) in pole collar/ foundation (during casting) for cable entry including bending the pipe to the required shape complete as required.  100 mm dia	2000001955	SI of 100mm dia GI pipe	100.00	М	980.68	98,068.00
130	260	Non DSR	Supplying and embedding following dia G.I. pipe (medium class) in pole collar/ foundation (during casting) for cable entry including bending the pipe to the required shape complete as required.  150 mm dia	2000001956	SI of 150mm dia GI pipe	300.00	М	1,487.85	446,355.00
130	270	Non DSR	Providing, fixing and laying of following dia hume Pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement :2 fine sand) including trenching (75 cm deep) and refilling etc as required.  300 mm dia	2000001957	SI of 300mm Dia Hume pipe	80.00	М	619.03	49,522.40
130	290	Non DSR	SUPPLY AND FIXING OF BULK HEAD / WELL GLASS FITTINGS - Wall/Bracketmounted bulk head lighting fix tures complete with bracket, 9W LED bulb eco friendly, having S 900 lumen output, CCT-6500K, luminous efficacy S 100 lm/watt, CRI>80, life S 40000 burning hours, PF>0.95 and THD<10%, no UV radiation etc. suitable for outdoor installation Bulk Heads type FXC 101/PL-S 9W	2000001958	SI of 9W Bulkhead Light	52.00	NO	616.02	32,033.04
130	770	Non DSR	Installation , Testing, commissioning of pre-wired fluoroscent fitting / compact fluoroscent fitting / LED tubelight/ Tube light fitting of all types, complete with all accessories and tube etc directly on ceiling / wall, including connection with 1.5 sqmm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	2000001959	ITC of LED fittings	360.00	NO	111.86	40,269.60
130	320	Non DSR	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CM/M/W) minimum 6.00, Air delivery minimum 210 Cum/Min, 350 RPM (tolerance as per IS: 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required	2000001960	SITC of Ceiling fan	72.00	NO	1,482.42	106,734.24
130	340	Non DSR	Installation of exhaust fan in the existing opening, Including making good the damage, connection testing, commissioning etc as required - Upto 450 mm Sweep	2000001961	ITC of Exhaust Fan upto 450 mm	2.00	NO	244.35	488.70
130	350	Non DSR	Supplying and fixing call bell / buzzer suitable for single phase, 230 volts, complete as required.	2000001962	SI of 230V Call bell / buzzer	12.00	NO	278.69	3,344.28

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
130	360	Non DSR	EXTERNAL LIGHTING FEEDER PILLAR  Design, Supply, Ins tallation, Tes ting and Commissioning at site of weatherproof Lighting Sub Distribution Board made of CRCA sheet steel IP-55 execution having minimum thickness 2.0 mm suitable for wall/structure mounting and same shall be suitable for DIN rail mounting MCBs/MCCBs/ RCCBs etc. with provision of both (top & bottom) entry with 3 nos. LED phase indicating lamps in incomers. Required nos. of suitable Elmex/phoenix/ connectwell terminals, crimping ty pe Cu lugs and double compression rolled aluminium cable glands for Incomer and outgoing cable feeders including power and control cable glanding and terminations, handling, trans portation from owner's s tore/s torage yard to erection site; unpacking, inspection; dressing of foundation as required; on frame works/supports grouted or welded to columns/structures; mounting in position and connecting of loose components and accessories; drilling of gland plates with required holes or enlarging existing holes for cable entries; fix ing of cable glands and terminal supplied loose; plugging of all unused cable entries in the board/panels to make the same dust and vermin proof, making good of wall/column broken or chipped by cement plastering; minor repair and touch painting work; operational and functional checking; supply of fix ing bolts, nuts and washers and other necessary hardwares and civil masonry materials; all work, labour and materials complete as per drawings & documents, specifications, codes and standards and directions of Engineer-in-Charge. Further please note that termination shall also include drilling, tapping of cable insulation, crimping of lugs to the conductor & connection of the lugs to equipment terminal.  415V Hose proof and weatherproof industrial type sheetsteel enclosed, 9 way Lighting Distribution Board (LSDB) with timer for outdoor lighting with IP-55 degree ofprotection having 1 no, 63A 4P MCCB, 3 nos 63A DP ELCB in phase and 9 nos.16A DP MCBs outgoing as per technical specifications, standards	2000001964	SITC of 9 way LSDB	1.00	NO	30,965.22	30,965.22
130	370	Non DSR	CABLE LAYING LT (PVC / XLPE / Armoured / Unarmoured / Power / Control / Signalling) Cables LT cables: upto 35sqmm	2000001965	Laying of LT Cables: upto 35sqmm	1,500.00	М	15.20	22,800.00
130	380	Non DSR	CABLE LAYING LT (PVC / XLPE / Armoured / Unarmoured / Power / Control / Signalling) Cables LT cables: above 35sqmm upto 95 sqmm	2000001966	Laying of LT Cables: above 35 - 95 sqmm	1,800.00	М	24.44	43,992.00
130	390	Non DSR	CABLE LAYING LT (PVC / XLPE / Armoured / Unarmoured / Power / Control / Signalling) Cables LT cables: above 95sqmm upto 185sqmm	2000001967	Laying of LT Cables: above 95 - 185 sqmm	500.00	М	34.21	17,105.00
130	400	Non DSR	CABLE TERMINATION  End termination and subsequent testing of XLPE insulated single core/multi core armoured cables of 11KV/1.1KV grade, Al/Cu cable., including supply of termination kits, glands & lugs, all labour and consumable materials to make installation complete in all respect. The rate shall include drilling, taping of cable insulation, crimping of lugs to the conductor, connection of the lugs to equipment terminal, supply and fixing of supports & clamps for HT cables, G.l. nuts, screws, bolts, washers and other necessary hardware, PVC tape of required grade for taping, making cable entries dust and vermin proof, earthing etc. as per instruction of manufacturer, approved drawings, specifications and directions of engineer-in-charge.  1.1KV Grade, XLPE Insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables Stranded Cu/Al Conductor cables.  3.5X150 sq. mm (Al)	2000001970	ET of 3.5X150 sq. mm	8.00	EA	378.48	3,027.84

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
130	410	Non DSR	CABLE TERMINATION End termination and subsequent testing of XLPE insulated single core/multi core armoured cables of 11KV/1.1KV grade, Al/Cu cable., including supply of termination kits, glands & lugs, all labour and consumable materials to make installation complete in all respect. The rate shall include drilling, taping of cable insulation, crimping of lugs to the conductor, connection of the lugs to equipment terminal, supply and fixing of supports & clamps for HT cables, G.I. nuts, screws, bolts, washers and other necessary hardware, PVC tape of required grade for taping, making cable entries dust and vermin proof, earthing etc. as per instruction of manufacturer, approved drawings, specifications and directions of engineer-in-charge.  1.1KV Grade, XLPE Insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables Stranded Cu/Al Conductor cables.  3.5X50 sq. mm (Al)	2000001972	ET of 3.5X50 sq. mm	50.00	EA	224.26	11,213.00
130	420	Non DSR	CABLE TERMINATION End termination and subsequent testing of XLPE insulated single core/multi core armoured cables of 11KV/1.1KV grade, Al/Cu cable., including supply of termination kits, glands & lugs, all labour and consumable materials to make installation complete in all respect. The rate shall include drilling, taping of cable insulation, crimping of lugs to the conductor, connection of the lugs to equipment terminal, supply and fixing of supports & clamps for HT cables, G.I. nuts, screws, bolts, washers and other necessary hardware, PVC tape of required grade for taping, making cable entries dust and vermin proof, earthing etc. as per instruction of manufacturer, approved drawings, specifications and directions of engineer-in-charge.  1.1KV Grade, XLPE Insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables Stranded Cu/Al Conductor cables.  4CX16 Sq.mm. (Al)	2000001973	ET of 4X16 sq. mm	30.00	EA	167.79	5,033.70
130	440	Non DSR	CABLE TERMINATION End termination and subsequent testing of XLPE insulated single core/multi core armoured cables of 11KV/1.1KV grade, Al/Cu cable., including supply of termination kits, glands & lugs, all labour and consumable materials to make installation complete in all respect. The rate shall include drilling, taping of cable insulation, crimping of lugs to the conductor, connection of the lugs to equipment terminal, supply and fixing of supports & clamps for HT cables, G.I. nuts, screws, bolts, washers and other necessary hardware, PVC tape of required grade for taping, making cable entries dust and vermin proof, earthing etc. as per instruction of manufacturer, approved drawings, specifications and directions of engineer-in-charge.  1.1KV Grade, XLPE Insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables Stranded Cu/Al Conductor cables.  3CX2.5 Sq.mm. (Cu)	2000001974	ET of 3X2.5 sq. mm	30.00	EA	154.83	4,644.90
130	450	Non DSR	Supplying and making of straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC sheathed/XLPE aluminium conductor cable of 1.1 KV grade as per requirement.  3.5X150 sg. mm (Al)	2000001976	Supply & Straight Joint of 3.5X150 sqmm	2.00	EA	2,464.19	4,928.38
130	460	Non DSR	Supply, Installation, Testing & Commissioning ,Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.	2000001977	SITC of 4.5m 40mm Dia GI Earth Electrod	14.00	EA	3,722.34	52,112.76
130	470	Non DSR	Supply & fixing of 25mm x 5mm GI strip on surface / recess / under ground for earth connection as required.	2000001978	SI of 25 x 5 mm GI Strip	100.00	М	132.49	13,249.00
130	480	Non DSR	Supply and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	2000001979	SI of 6 SWG GI wire	200.00	М	38.01	7,602.00
130	490	Non DSR	Providing Earthing with GI strip of the following sizes including supply and laying of GI strip and connecting consumables, all complete with labour and materials as per direction of Engineer-in-Charge.  50 X 6 MM GI STRIP	2000001980	SI of 50 X 6 MM GI Strip	500.00	М	125.05	62,525.00

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
130	500	Non DSR	Providing Earthing with GI strip of the following sizes including supply and laying of GI strip and connecting consumables, all complete with labour and materials as per direction of Engineer-in-Charge.  75 X 10 MM GI STRIP	2000001981	SI of 75 X 10 MM GI Strip	100.00	М	269.00	26,900.00
130	530	Non DSR	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	2000001983	Supply and Structural steel work	300.00	KG	50.53	15,159.00
130	540	Non DSR	Supply, Fabrication and Installation of 8mm thick chequered plate in flooring, steps, covers over cable trenches in switch board room, painting with one coats of bitumen paint in the 50% thinner with two coats of black bitumen paints including supply of all consumables and paints.	2000001984	Supply,Fab&Install of 8MM Chequred Plate	300.00	KG	40.25	12,075.00
130	550	Non DSR	Supplying and spreading of approved quality fine dry river sand in cable trenches including the cost of all material, transport, load and lift charges, labour, tools and tackles, consumables etc., as per drawings, specification and directions of Site Engineer / Engineer-in-Charge.	2000001985	Supply & spreading of Sand	100.00	M3	464.48	46,448.00
130	560	Non DSR	Supply and laying of approved quality 75 mm thick second class brick flat soling with sand filling in the interstices, in cable trenches for protection including the cost of all brick and sand, labour, load and lift charges, tools and tackles etc., as per drawings, specification and directions of Site Engineer / Engineer-in Charge.	2000001986	Supply & Laying of Brick	20,000.00	NO	3.72	74,400.00
130	570	Non DSR	Supply and making cable route marker with cement concrete (1:2:4) (1: cement, 2 coarse, 4: graded stone aggregate 20 mm nominal size) of size $60  \mathrm{cm} \times 60  \mathrm{cm}$ at the bottom and $50  \mathrm{cm} \times 50  \mathrm{cm}$ at the top with a thickness of $10  \mathrm{cm}$ including incription duly engraved as required.	2000001987	SI of cement cable route marker	20.00	NO	317.66	6,353.20
130	580	Non DSR	Excavating Trenches by Mechanical / Manual means of required width for pipes, cables etc including excavation for sockets and dressing of sides, ramming of bottoms for depth upto 1.5m, including getting out the excavtaed soil and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering etc and disposing of surplus excavated soil as directed, within a lead of 50m all kinds of soil - Pipes, cables etc	2000001988	Earth Excavation for all kinds of soil	350.00	M3	138.77	48,569.50
130	590	Non DSR	Filling available exvacated earth (excluding rock) in trenches, Plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, Lead upto 50m and for all lift upto 1.5m	2000001989	Backfilling of Excavated Earth	250.00	М3	137.90	34,475.00
130	600	Non DSR	Supply and installation of shock hazard chart as per IE Rules 1956 (Clause-44) complete with frame and glass including necessary clamps, bolts, rawl plugs, etc. breachking and making good the wall if required. All complete with labour and materials as per	2000001990	SI of shock hazard chart	1.00	EA	389.57	389.57
130	610	Non DSR	Supply & fixing MV danger notice plate of 200 mm x 150mm, made of mild steel sheet of at least 2mm thick & vitreous enamelled white on both sides and with inscription in signal red colour on front side as required.	2000001991	SI of MV danger notice plate	1.00	EA	141.65	141.65
130	620	Non DSR	Supply of First aid box containing material as prescribed by St. John Ambulance brigade OR Indian Red Cross complete as required.	2000001992	SI of First Aid Box with required materi	1.00	EA	895.89	895.89
130	630	Non DSR	Supply and laying of 2 meter by 1 meter rubber mat of 3mm thickness suitable for 11kV as per IS 15652:2006 and as per direction of Engineer-in-Charge.	2000001993	SI of 11kV insualated rubber mat	1.00	EA	1,235.42	1,235.42
130	650	Non DSR	Supply & fixing of 1nos. Dos & don't chart and other accessories.	2000001994	Supply & fixing of Dos & don't chart	1.00	NO	247.72	247.72
130	730	Non DSR	Supply & fixing of fire extingusher co2 type 4.5 Ltr capacity slunder and other accessories.	2000001995	SI of fire extingusher co2 type 4.5 Ltr	2.00	NO	1,734.05	3,468.10
130	680	Non DSR	METER DISTRIBUTION BOARD/ Distribution Board Supply & installation of Wall mounted Meter Distribution Board complete with 63A Fuse, Meter and 63A Isolator suitable for installation of 3 phase, 4 Wire, 415V, two no. earthing stud provided house service type (18.5KW) Meter for Type IV quarters	2000001996	SI of Meter Distribution Board	12.00	NO	6,193.04	74,316.48

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
130	690	Non DSR	Supply, unloading, Handling, Storage, transporation within site, Erection, Installation, testing and commissioning etc. of following floor / wall mounted Distribution Boards/Sub distribution board having minimum IP-55 protection, Aluminium Bus Bar with Color Coded Heat Shrinkable Sleeves, storage, handling, site trasporation from store to site of installation, including supply and fabrication of epoxy painted MS frame, operational and functional checking, drilling of gland plates with requisite holes, supply & fix ing ofsuitable double compression nickel plated brass/rolled Al cable glands & suitable lugs, termination ofall power and control cables, shrouding, plugging ofall unused cable entries and other holes found in the boards to make the same dust and vermin proof with all labour and consumable materials to make installation complete of following Distribution Boards as specified in Technical Specification attached SLD, data sheets, drawings, specifications and directions of engineer-in-charge 415V, 3Ph & N, IP55 Hose proof and weatherproof industrial type wall/structure/floor mounted sheetsteel enclosed, Main Power Distribution Board (MPDB)/Feeder Pillar box (FPB), IP-55 degree of protection, cubical type, Auminium bus bar with colour coded heatshrinkable sleeve having 1 no. 250 4P MCCB I/C with R,Y, B indication lamps with 12 nos 63A TPN MCCB Outgoing Feeders as indicated in feeder details with ammeter & Voltmeter as per Technical specifications (For type 4 quarters)	2000001997	SITC of 12 way, 250A I/C MCCB MPDB	2.00	NO	371,582.65	743,165.30
130	750	Non DSR	Supply, installation, testing and commissioning of BEE 5 Star 3lts Geyser including with 16A 3 pin plug Top	2000001998	SITC of BEE 5 Star 3ltrs Geyser	12.00	NO	2,477.22	29,726.64
130	760	Non DSR	Supply, installation, testing and commissioning of BEE 5 star 25lts Geyser including with 16A 3 pin plug Top	2000001999	SITC of BEE 5 Star 25ltrs Geyser	12.00	NO	5,883.39	70,600.68
200	200	Non DSR	Supply of High quality LED tube batten complete with 1X20W tube (T8) eco friendly, having S 2000 lumen output, CCT- 6500K, IP-20, luminous efficacy S 100 lm/watt, CRI>80, life S 40000 burning hours, PF>0.95 and THD<10%, no UV radiation etc. suitable for ceiling/wall mounted	M740000003	1X20W LED TUBE BATTEN(T5)	260.00	NO	143.09	37,203.40
210	210	Non DSR	Supply of Wall mounted high quality LED tube batten complete with single 10W tube (T8) eco friendly, having S 900 lumen output, CCT-6500K, IP-20, luminous efficacy S 100 lm/watt, CRI>80, life S 40000 burning hours, PF>0.95 and THD<10%, no UV radiation etc.	M7400000026	1x10W LED tube light (T8)	76.00	NO	136.08	10,342.08
220	220	Non DSR	Supply of 240VAC 1 phase 100W outdoor light with LED lamp in weatherproof & hose proof light Min IP55, fixture complete with driver, cable glands and other accessories, suitable for 3 X 2.5mm2 (Cu) cable and stopping plug for outdoor area.	M7401000013	100W FLOOD LIGHT SAFE AREA	12.00	NO	1,978.63	23,743.56
230	230	Non DSR	Supply of 250 mm sweep single phase exhaust fan with guards / louvres, along with necessary brackets	M1607070004	DOMESTIC EXHAUST FAN 250MM	64.00	NO	617.73	39,534.72
140	240	Non DSR	1.1KV grade LT cable (Power/Control) Supply of 1.1 kV grade (UE), Al/Cu conductor, XLPE insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables conforming to IS 7098 (Part-I) amended upto date & as per technical specification of following sizes: 3.5CX150Sq.mm. (Al)	M7200020011	3.5CX150Sq.mm. (AI)	500.00	М	391.85	195,925.00
240	240	Non DSR	1.1KV grade LT cable (Power/Control)     Supply of 1.1 kV grade (UE) , Al/Cu conductor, XLPE insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables conforming to IS 7098 (Part-I) amended upto date & as per technical specification of following sizes:  3.5CX50 Sq.mm. (Al)	M7200020043	3.5 C X 50 Sq.mm. (Al) armoured	1,800.00	М	155.33	279,594.00
170	170	Non DSR	1.1KV grade LT cable (Power/Control) Supply of 1.1 kV grade (UE), Al/Cu conductor, XLPE insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables conforming to IS 7098 (Part-I) amended upto date & as per technical specification of following sizes: 4CX16 Sq.mm. (Al)	M7200020002	4C x 16 mm2 (Al) Armoured Cable	1,000.00	М	76.32	76,320.00

Item	Line Number	DSR No.	Long Text	Activity number	Short Text	Qty	Unit	Rate	Net Value
180	180	Non DSR	1.1KV grade LT cable (Power/Control) Supply of 1.1 kV grade (UE), Al/Cu conductor, XLPE insulated, PVC inner sheathed, armoured, FRLS PVC outer sheathed cables conforming to IS 7098 (Part-I) amended upto date & as per technical specification of following sizes:  3CX2.5 Sq.mm. (Cu)	M7200090001	3C x 2.5 mm2 (Cu) armoured cable	500.00	М	73.97	36,985.00
190	190	Non DSR	Supply of floor mounting stand for keeping 4No of fire bucket 1500mm length, 900mm height made out of 40x40x6mm angle iron welded with 4 hooks and duly painted with one coat of red lead and two coats of enamel paint as per direction of Engineer-in-Charge.	M2105050001	SUPPLY FIXING SAND BUCKET	1.00	NO	930.19	930.19
					Electrical Part (Part-B)				5,868,792.24

## HINDUSTAN URVARAK & RASAYAN LIMITED

(A JOINT VENTURE OF CIL, NTPC, IOCL, FCIL & HFCL)

#### **BARAUNI UNIT**

Barauni Urvarak Nagar, Begusarai

P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115

[Registered Office SCOPE Minar, Core 4, 9TH Floor, Laxmi Nagar District Center, Delhi-110092]



SECTION - VI

FORMS AND PROCEDURES (NIT)

## **INDEX**

Annexure	Description
1	Techno-Commercial Proposal Bid Form
2	Format for Electronics Payment
3	Tender Acceptance Letter & Letter of authorization to submit bid
4	No deviation Certificate
5	Certificate from CEO/MD/ Legally Authorized Signatory
6	Acceptance to Fraud Prevention Policy of HURL
7	Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India
8	Format of Bank Guarantee for Bid Security
9	Format of Performance Bank Guarantee
10	Bank Guarantee Verification Checklist
11	Format for Contract Agreement
12	Work orders subject to tender for qualification
13	Bid Security Declaration Form
14	Self-Certification under Preference to "MAKE IN INDIA" Policy.
15	DECLARATION OF GST (A&B).
16	Proforma of NO DEMAND CERTIFICATE

#### **TECHNO-COMMERCIAL PROPOSAL BID FORM**

(To be Submitted on the Letter Head of Bidder)

#### **Bidder's Techno-Commercial Proposal Ref. No.:**

Bidder's Name & Address :	Date:
Person to be contacted:  Designation: Tel. No(s).:  Mobile No.:  Fax No(s).:  E-mail address:	
To Manager (C&M), HURL Admin Building Office, Hindustan Urvarak & Rasayan Limited, Barauni, (A JV of CIL, NTPC, IOCL, FCIL & HFCL) P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115.	
Dear Sirs,	
1.0 Having examined the Bidding Documents including its subsequent amendments and clarifications, which is hereby acknowledged, we the undersigned, offer named Package in full conformity with the said Bidding Do Commercial Proposal.	if any, issued by Owner, the receipt of to complete the work under the above

# Bidding Documents furnished by you and have thoroughly examined the specifications laid down by you in the Bidding Documents and are fully aware of the nature of consultancy services required.

#### Attachments to the Bid form (Techno-Commercial Bid):

In line with the requirement of the Bidding Documents we enclose herewith the following Attachments to the Bid Form (Techno-commercial) Bid:

	Table 1 : Attachments to the Bid form								
Sr. No	Sr. No Documents								
1	1 Power of Attorney as per requirement mentioned in NIT.								
2	Signed, Stamped and Scanned copy of proof for payment of Earnest Money Deposit (EMD) / MSE Certificate with applicable annexure form for exemption.								
1 3	Signed, Stamped and Scanned copy of Certificates like Registration certificate, GST No, PAN No, PF, etc.								

We have understood the instructions and the terms & conditions mentioned in the

to Forms and Procedures i.e., Section VI)  Signed, Stamped and Scanned copy of Certificate from CEO/MD/ Legally Authorized Signatory, in the format as enclosed as Annexure-5 to Forms and Procedures i.e., Section VI.  Acceptance to Fraud Prevention Policy of HURL, for which the bidder has to submit Signed, Stamped and Scanned copy of Form of Acceptance of Fraud Prevention Policy of HURL. (Enclosed as Annexure-6 to Forms and Procedures i.e., Section VI).  Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India" i.e. (Enclosed as Annexure-7 to Forms and Procedures i.e., Section VI).  Work orders subject to tender for qualification as per Annex — 12 with clearly mentioning Purchase order details relevant to tender based on which PQC can be achieved. Not to be mentioned as "As Attached"/ "mentioned in Bid"/ etc.  Declaration of GST (annexure -15) Signed, Stamped and Scanned copy of Declaration of GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of Bid Security Declaration Form (Enclosed as Annexure-13 to Forms and Procedures i.e., Section VI).		
Annexure-3 to Forms and Procedures i.e., Section VI)  Documents as required in accordance with Qualifying Requirements / Pre-Qualification Criteria (PQC) i.e., Clause 6 of NIT  Signed, Stamped and Scanned copy of No deviation Certificate (Enclosed as Annexure-4 to Forms and Procedures i.e., Section VI)  Signed, Stamped and Scanned copy of Certificate from CEO/MD/ Legally Authorized Signatory, in the format as enclosed as Annexure-5 to Forms and Procedures i.e., Section VI.  Acceptance to Fraud Prevention Policy of HURL, for which the bidder has to submit Signed, Stamped and Scanned copy of Form of Acceptance of Fraud Prevention Policy of HURL. (Enclosed as Annexure-6 to Forms and Procedures i.e., Section VI).  Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India" i.e. (Enclosed as Annexure-7 to Forms and Procedures i.e., Section VI).  Work orders subject to tender for qualification as per Annex – 12 with clearly mentioning Purchase order details relevant to tender based on which PQC can be achieved. Not to be mentioned as "As Attached"/ "mentioned in Bid"/ etc.  Declaration of GST (annexure -15) Signed, Stamped and Scanned copy of Declaration of GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of Bid Security Declaration Form (Enclosed as Annexure-13 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.	4	, , ,
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mentioning Purchase order details relevant to tender based on which PQC can be achieved. Not to be mentioned as "As Attached"/ "mentioned in Bid"/ etc.  Declaration of GST (annexure -15) Signed, Stamped and Scanned copy of Declaration of GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of Bid Security Declaration Form (Enclosed as Annexure-13 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.	10	Certificate related to Restrictions on procurement from a Bidder of a country which shares a land border with India" i.e. (Enclosed as Annexure-7 to Forms and Procedures i.e., Section VI).
GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of Bid Security Declaration Form (Enclosed as Annexure-13 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.	11	Work orders subject to tender for qualification as per Annex – 12 with clearly mentioning Purchase order details relevant to tender based on which PQC can be achieved. Not to be mentioned as "As Attached"/ "mentioned in Bid"/ etc.
Annexure-13 to Forms and Procedures i.e., Section VI).  Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.	12	Declaration of GST (annexure -15) Signed, Stamped and Scanned copy of Declaration of GST (Enclosed as Annexure-15 to Forms and Procedures i.e., Section VI).
tender document.	13	
15 Any Other Document asked for in the Bidding Document	14	Signed, Stamped and Scanned copy of GCC, SCC & Scope of Work (i.e. Section-V) of tender document.
	15	Any Other Document asked for in the Bidding Document

#### 3.0 COMPLIANCE TO THE PROVISIONS OF THE BIDDING DOCUMENTS

3.1 We have read all the provisions of the Bidding Documents and confirm that notwithstanding anything stated elsewhere in our bid to the contrary, the provisions of the Bidding Documents, are acceptable to us and we further confirm that we have not taken any deviation to the provisions of the Bidding Documents anywhere in our bid.

We have furnished our compliance to the provisions of the Bidding Documents and its subsequent Amendment(s)/Clarification(s)/Addenda/Errata by furnishing "NO DEVIATION CERTIFICATE".

We hereby confirm that any deviation, variation or additional condition etc. or any mention, contrary to the provisions of Bidding Documents and its subsequent Amendment(s)/Clarification(s)/Addenda/Errata (if any) found anywhere in our bid proposal, implicit or explicit shall stand unconditionally withdrawn, without any cost implication whatsoever to the Owner, failing which our bid security shall be forfeited.

- 3.2 We further declare that additional conditions, variations, deviations, if any, found in the bid, shall not be given effect to.
- 3.3 We further declare that we have read and understood all sections (I to VI) of the tender document, endorse all the sections and submitting the bids.
- 4.0 We undertake, if our bid is accepted, to commence the work immediately upon your Notification of Award to us.

- 5.0 We agree to abide by this bid for a **period 180 days** from the date of opening of Techno-Commercial bids as stipulated in the Bidding Documents and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.
- 6.0 Until a formal Contract Agreement is prepared and executed between us, the bids, together with your written acceptance thereof in the form of your Notification of Award shall constitute a binding contract between us.
- 7.0 We understand that you are not bound to accept our bid or any other bid you may receive.
- 8.0 We, hereby, declare that only the persons or firms interested in this proposal as principals are named here and that no other persons or firms other than those mentioned herein have any interest in this proposal or in the Contract to be entered into, if the award is made on us, that this proposal is made without any connection with any other person, firm or party likewise submitting a proposal, is in all respects for and in good faith, without collusion or fraud.
- 9.0 We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.
- 10.0 We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.
- 11.0 We hereby declare that we have completed Annexure-12 Tender Qualification form and provided clear details of the purchase order number and ATO information for verification and evaluation of the prequalification criteria. We acknowledge that failure to provide the mentioned details may lead to the rejection of our bid, and we understand that no claims will be entertained in such a case.

Dated thisday of		
Thanking you,	Yours faithfully,	
Date :	rouis faithfully,	
Place :	(authorised signatory Name).	
	(Designation)	
	Company Seal	

#### **Format For Electronics Payment**

Bidders are required to submit the following details on the company's letter head for online transfer of amount to their account:

1.	Contractor Name / Company Name	
	Address:	
	Phone No.	
	E-mail ID	
2. a	Name of the Bank	
b.	Address of the Branch	
c.	Telephone No.	
d.	9 Digit Code number of the Bank and Branch appearing on the MICR Cheque issued by the Bank	
e.	11 Digit NEFT/IFSC Code of the Bank Branch	
f.	Account Type (SB/CC/CA)	
g.	Bank Account No. (as appearing on the Cheque)	
h.	Permanent Account Number (PAN) Under Income Tax Act.	
I	GST Registration Number	
j.	Name of Authorized Signatory	
k.	Contact Person Name	

# Attach Cancelled cheque as supporting to Annexure -2

We hereby declare that the particulars given above are correct and complete

Authorized signatory of the bidder
Name

Designation

Date

## TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

Date:

То,
Sub: Acceptance of Terms & Conditions of Tender.
Tender Reference No:
Name of Tender / Work: -
Dear Sir,
<ol> <li>I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: as per your advertisement, given in the above-mentioned website(s).</li> </ol>
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. to (including all documents like annexure(s), schedule(s), etc.,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt.

6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture

Department/Public sector undertaking.

of the full said earnest money deposit absolutely.

Yours Faithfully, (Signature of the Bidder, with Official Seal)

## **DECLARATION FOR "NO DEVIATION"**

## (To be submitted on the Letter Head of the Bidder duly signed by Authorised Signatory)

1. With reference to our Bid Proposal No dated	ditions ar rification( ial Bids ar rcial Bid	nd (s) nd
2. We further confirm that any deviation variation or additional conditions etc. or a contrary to the Bidding Documents and its Amendments(s) / Clarification(s) / Addend any) as mentioned at 1.0 above found anywhere in our Techno – Commercial Bid and / Bid, implicit or explicit, shall stand unconditionally withdrawn, without any cost whatsoever to the Owner, failing which the Bid Security shall be forfeited.	a / Errata or Finan	a (if cial
Yours faithfully, (Signature)		
Date: Designation	Name	&
Place: the Company	Name	of
(Seal of Company)		

#### PROFORMA OF CERTIFICATE

# (TO BE SUBMITTED BY CEO/MD/ LEGALLY AUTHORISED SIGINATORY OF THE BIDDING COMPANY ON COMPANY'S LETTER HEAD IN ORIGINAL)

Ref.	: Date:
To Manager (C&M), HURL Admin Building Office, Hindustan Urvarak & Rasayan Limited, Barauni, (A JV of CIL, NTPC, IOCL, FCIL & HFCL) P.O: Barauni, Distt: Begusarai (Bihar), Pin: 85111 Sub:	.5.
Bidding Doc. No.	
Dear Sir,	
	pany / MD of the company/ Authorized Signatory), rnished by M/s in respect correct including the contents thereof.
	declarations given in bid are found to be incorrect, contract and take any action as per provisions of eposit.
	Yours faithfully, (Signature)  Date Name & Designation  Place Name of the Company (Seal of Company)

## (FORM OF ACCEPTANCE OF FRAUD PREVENTION POLICY OF HURL)

#### (To be submitted on the Letter Head of the Bidder duly signed by Authorised Signatory)

Ref. :		Date:
To Manager (C&M), HURL Admin Building Office, Hindustan Urvarak & Rasaya (A JV of CIL, NTPC, IOCL, FCIL P.O: Barauni, Distt: Begusara	n Limited, Barauni, . & HFCL) ii (Bihar), Pin: 851115.	
Sub: FORM OF ACCEPTANCE	E OF FRAUD PREVENTION POLICY OF HURL	
Bidding Doc. No.		
We have read the contents of the Fraud Prevention Policy of HURL displayed on its website <a href="http://www.hurl.net.in">http://www.hurl.net.in</a> and undertake that we shall strictly abide by the provisions of the said Fraud Prevention Policy of HURL.		
Date :	(Signature of Authorized Signatory)	
Place :	(Printed Name)	
	(Designation)	
	(Company Seal)	

# Model Certificate For Tenders For Works involving possibility of sub-contracting (TO BE SUBMITTED BY AUTHORISED SIGNATORY OF THE BIDDING COMPANY ON BIDDERS LETTER HEAD IN ORIGINAL)

Bid Ref No. :	
Bidder's Name and Address:	
To	
To, Manager (C&M),	
HURL Admin Building Office,	
Hindustan Urvarak & Rasayan Limited, Baraun	i,
(A JV of CIL, NTPC, IOCL, FCIL & HFCL)	
P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851	115.
Dear Sir,	
the guidelines dated 23.07.2020 & 24.07.20 Ministry of Finance; We hereby certify that we Assignee is not from such a country and are ewill not sub-contract any work to a contract	ontracting to contractors from such countries as per 020 issued by Department of Expenditure (DOE), /our collaborator/ JV partner/ Consortium member/ eligible to be considered. We further certify that we stor from such countries unless such contractor is hereby certify that we fulfill all the requirements in
	Yours faithfully,
	(Signature)
Date Place	Name & Designation  Name of the Company (Seal of Company)

Note: - Bidders not furnishing this aforesaid declaration shall be considered to be from such Countries.

#### **Bid Security Form**

#### **Bank Guarantee**

(To be stamped in accordance with Stamp Act, if any, of the Country of the issuing Bank)

Bank Guarantee No...

2. This bank guarantee shall be valid up to [expiry date]

if you	u serve upon us a written claim or demand on or before [claim expiry date of guarantee]".
	tness where of the Bank, through its authorised officer, has set its hand and stamp isday ofatat
	(Signature) (Name) (Designation with Bank Stamp)
Autho	orized Vide Power of Attorney No
Date.	···
(#	(*) The amount shall be as specified in the Bid Data Sheets. (*) This shall be the date of opening of Techno-commercial bids. (*) Complete mailing address of the Head Office of the Bank to be given. (D) This date shall be forty-five (45) days after the last date of bid validity.
	ne Bank Guarantee shall be from a Bank as per relevant provisions of ITC clause e Bidding Documents.
	e Stamp Paper of appropriate value shall be purchased in the name of Bidder/Bank issuing the antee.
4.	While getting the Bank Guarantee issued, Bidders are required to ensure ompliance to the points mentioned in relevant Form of Bank Guarantee Verification Check List

enclosed in Section-VII of bidding document. Further, Bidders are required to fill up this Form and

5. HURL Bank details required for the purpose of issuance of Bank Guarantee are

enclose the same with the Bank Guarantee.

Current account no 37880422277,

IFSC Code- SBIN0004803.

Bank: SBI

3. We are liable to pay the guaranteed amount or any part under this bank guarantee only and only

#### **Performance Security Form**

(To be stamped in accordance with Stamp Act if any, of the Country of the Issuing Bank)

Bank Gu	arantee No
Date	
To,	
Manager (C&M), HURL Admin Building Office, Hindustan Urvarak & Rasayan (A JV of CIL, NTPC, IOCL, FCIL & P.O: Barauni, Distt: Begusarai (	k HFCL)
Dear Sirs,	
expression shall unless repug administrators and assigns) had /Head Office at	Owner's Name] (hereinafter referred to as the 'Owner' which mant to the context or meaning thereof, include its successors, ving awarded to M/s[Bidder's Name] with its Registered (hereinafter referred to as the 'Bidder', which expression shall atext or meaning thereof, include its successors administrators, intract by issue of Owner's Notification of Award No
at(hereinafter to the context or meaning the do hereby guarantee and under the Bidder to the extensive upto	Address of the Bank]having its Head Office or referred to as the 'Bank', which expression shall, unless repugnant breof, include its successors, administrators, executors and assigns) extake to pay the Owner, on demand any and all monies payable by tof

The Owner 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 time for performance of the Contract by the Bidder. The Owner 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 Bidder, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Owner

and the Bidder or any other course or remedy or security available to the Owner. The Bank shall not be released of its obligations under these presents by any exercise by the Owner of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of ommission or commission on the part of the Owner or any other indulgence shown by the Owner 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 Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Bidder and notwithstanding any security or other guarantee that the Owner may have in relation to the Bidder's liabilities.

Notwithstanding any	thing contained h	iereinabove ou	r liability under	this guarante	e is restr	icted
to	(*)	and it	shall remain	in force	upto	and
including						
(not exceeding one year), as may be desired by M/s[Bidder's Name] on whose behalf this guarantee has been given.						
Dated this	day of	20	at			
WITNESS:						
	•••••	(5	ignature)	•••••		
(Signature)						
			45.5			
(Name)			(Name)			
/Off: a: a! A alaba a a.\		ith Dank Ctans		•••••		
(Official Address)	(Designation w	ith Bank Stam	0)			
Attorney as	ner Power					
Attorney as per Power of Attorney No						
•						
Datea	• • • • • • • • • • • • • • • • • • • •					

**Notes:** 1. (\*) This sum shall be ten percent (10%) of the Contract Price.

- (@) This date will be ninety (90) days beyond the completion date for consultancy work as specified in the Contract.
- 2. The stamp papers of appropriate value shall be purchased in the name of guarantee issuing Bank.
- 3. While getting the Bank Guarantee issued, the Bidder is required to ensure compliance to the points mentioned in relevant Form of Bank Guarantee Verification Check List. Further, the Bidder is required to fill up this Form and enclose the same with the Bank Guarantee.
- 4.The Bank Guarantee shall be from any Scheduled / Commercial Bank recognised by Reserve Bank of India.

#### **BANK GUARANTEE VERFICATION CHECKLIST**

- 1. Bank Guarantee No.
- 2. Issuing Bank
- 3. Amount of BG
- 4. Nature of BG & No. Pages
- 5. Validity of BG
- 6. Package Description
- 7. Party & Contracts Ref.
- 8. Bank Reference

#### **CHECK LIST**

S.No. Details of Checks Yes/No

- a) Is the BG on non-judicial stamp paper of appropriate value, as per Stamp Act?
- b) Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the Bidder on whose behalf the BG has been issued).
- c) In case the BGs from Banks abroad,
   has the BG been executed on Letter
   Head of the Bank, whether adhesive Stamp
   of appropriate value has been affixed thereon.
- d) Has the executing Officer of BG indicated his name, designation and Power of Attorney No. / Signing Power No. etc. on the BG?
- e) Is each page of BG duly signed/initiated by executant and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witness under seal of Bank as required in the prescribed proforma?
- f) Does the Bank Guarantees compare

verbatim with the Proforma prescribed in the Bid Documents?

- g) In case of any changes in contents of text, whether changes are of minor/clerical nature (which in no way limits the right of HURL in any manner)?
- h) In case of deviations in text of BG, which materially affect the right of Owner, whether the changes have been agreed based on the opinion by Legal Department or BG is considered acceptable on the basis of opinion of Law Department already available on the similar issue.
- i) Are the factual details such as Bid Document No./Specification No. / NOA / LOA / Contract No., Contract Price, Percentage of Advance, Amount of BG and Validity of BG correctly mentioned in the BG?
- j) Whether overwriting / cutting if any on the BG have been properly authenticated under signature & seal of executant?
- k) Whether the BG has been issued by a Bank in line with the provisions of Bidding / Contract Documents?
- I) In case BG has been issued by a Bank other than Scheduled / Commercial Bank recognised by Reserve Bank of India, is the BG confirmed by a Bank in India acceptable as per Bidding / Contract Documents?

**Note:** The Bidder is required to fill up this form and enclose along with the Bank guarantee.

#### **FORMAT OF CONTRACT AGREEMENT**

(To be executed on non-judicial stamp paper of appropriate value)

THIS CONTRACT AGREEMENT is made the day of, 20
BETWEEN
(1) [Name of Owner], a corporation incorporated under the laws of [country of Owner] and having its principal place of business at [address of Owner] (hereinafter called "the Owner"), and (2) [name of Contractor], a corporation incorporated under the laws of [country of Contractor] and having its principal place of business at [address of Contractor] (hereinafter called "the Contractor")
WHEREAS the Owner desires to engage the Contractor to[scope of work] and the Contractor have agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.
NOW IT IS HEREBY AGREED as follows:
ARTICLE 1. CONTRACT DOCUMENTS

1.1 The following documents shall constitute the Contract between the Owner and the

and each shall be read and construed as an integral part of the Contract:

- a) This Contract Agreement and the Appendices hereto
- b) Letter of Award .. Ref. No
- c) Amendment to the NIT document.
- d) Instruction to Bidders

Contractor,

- e) Special Conditions of Contract
- f) General Conditions of Contract
- g) Technical Specifications and Drawings
- (f)The Bid and Price Schedules submitted by the Bidder

#### 1.2 Order of Precedence

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1(Contract Documents) above.

#### 1.3 **Definitions**

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions of Contract.

#### ARTICLE 2. CONTRACT PRICE AND PAYMENT TERMS

#### 2.1 Contract Price

The Owner hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be the aggregate of: [amount of foreign currency in words], [amount in figures], and [amount of local currency in words], [amount in figures], or such other sums as may be determined in accordance with the terms and conditions of the Contract.

#### 2.2 Payment Terms

Payment shall be made by the Owner to the Contractor as per the provisions of Bidding Documents.

#### ARTICLE 3. EFFECTIVE DATE FOR DETERMINING TIME FOR COMPLETION

The Completion period of the Project shall be determined from the date of Letter of Award.

#### **ARTICLE 4. NON-ASSIGNABILITY**

The Contract and benefits and obligations thereof shall be strictly personal to the CONTRACTOR and shall not on any account be assignable or transferable by the CONTRACTOR.

#### ARTICLE 5. GOVERNMENT OF INDIA NOT LIABLE

It is expressly understood and agreed by and between the Contractor and the Owner that the Owner is entering into this Agreement solely on its own behalf and not on behalf of any other person or entity. In particular it is expressly understood and agreed that the Government of India is not a party to this Agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that the Owner is an Independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and the general principles of Contract Law. The Contractor expressly agrees, acknowledges and understands that the Owner is not an Agent, Representative or Delegate of the Govt. of India. It is Further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the Contract. Accordingly, the Contractor expressly waives, releases and foregoes any and all actions or claims, inlcuding cross claims, imp leader claims or counter claims against the Government of India arising out of this Contract and covenants not to sue the Government of India as to any manner, claim, cause of action or thing whatsoever arising of or under this Contract.

#### **ARTICLE 6. Appendices**

The Appendices listed in the attached list of Appendices shall be deemed to form an integral part of this Contract Agreement. Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly.

#### ARTICLE 7. NO LIABILITY ON DIRECTOR AND EMPLOYEE

No Director, employee, consultant or agent of the OWNER or other person representing the OWNER or acting on behalf of the OWNER in or pursuant to the Contract or in the discharge of any obligation to the OWNER under the Contract or otherwise in relation to the Contract shall have any personal liability to the CONTRACTOR or any Sub-Contractor, agent, representative, director or employee of the CONTRACTOR or to any other person acting for or on behalf of the CONTRACTOR and the CONTRACTOR on its own behalf and on behalf of its Sub Contractors, directors, employees, agents and representatives hereby waives and disclaims any and all right of

action which it or they may have whether under tort or Contract or otherwise against the OWNER or any director, employee, agent, consultant or

representative of the OWNER for act of omission or commission done or omitted to be done.

#### **ARTICLE 8. WAIVER**

No failure or delay by the OWNER in enforcing any right or remedy of the OWNER in terms of the CONTRACT or any obligation or liability of the CONTRACTOR in terms thereof, shall be deemed to be a waiver of such right, remedy, obligation or liability, as the case may be, by the OWNER and notwithstanding such failure or delay, the OWNER shall be entitled at any time to enforce such right, remedy, obligation or liability, as the case may be.

#### **ARTICLE 9. LANGUAGE OF CONTRACT AND COMMUNICATION**

The language of the Contract shall be English and all communications, drawings, design, data, information, codes specifications and other document whatsoever supporting the bid or otherwise exchanged under the Contract shall be in English. In the event that any technical documentation is in any language other than English, the document should be translated and presented to the OWNER/Project Manager in English and English document/translated document shall be regarded as the only authentic document.

IN WITNESS WHEREOF the Owner and the Bidder have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

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ignature]
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gned by for and on behalf of the Bidder
ignature]
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ONTRACT AGREEMENT
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ETWEEN
the Owner"]
nd the Bidder"]

## **TENDER QUALIFICATION FORM**

## (MUST BE FILLED)

THE TENDER SHALL NOT BE EVALUATED IF THE FORM IS NOT FILLED. UDIN AND PURCHASE ORDER DETAILS SHOULD BE CLEARLY MENTIONED. ONLY ORDERS MENTIONED IN THE FORM SHALL BE EVALUATED AND OTHER ORDERS MAY NOT BE EVALUATED EVEN IF THEY ARE ATTACHED. HURL RESERVES THE RIGHT TO REJECT THE BID IF THIS FORM IS NOT FILLED.

To,

HURL Barauni, Begusarai, Bihar – 851115

Tend	der No. :					
Bidd	ler's Name :					
	rder to meet the PQC a porting documents:	nd qualifica	ation (	criteria of t	he subject tender, w	e submit the below
In or	der to meet the PQC of	above tende	er No,	we submit	below supporting docu	ıments:
Details of Annual Turnover (ATO)		FY	UDIN No.		Turn over (INR)	
Annı	ual Turnover during	2020-21				
Annı	ual Turnover during	2021-22				
Annı	ual Turnover during	2022-23				
Annı	ual Turnover during	2023-24				
		Averag	ge ATO	for the Pre	ceding 3 Financial Year	s
SI.	Description of items	PO No	Э.	PO Date	PO value in INR	Actual Supplied value in INR
1						
2						
3						
4						
5						
6						

	8			
Ç	9			
	10			

#### **VERY IMPORTANT:**

#### Note to Annexure -12:

- 1. Bidders shall <u>clearly mention</u> the details in above table in line with the supporting <u>documents</u> and any vague reply like "attached" / "as per supporting" etc. written in above **form such bids shall be liable to reject.** NO CLAIMS SHALL BE ENTERTAINED IF THE DATA IS NOT FILLED PROPERLY AS MENTIONED IN ANNEXURE -12.
- 2. Bidders must submit all requisite documents mentioned above in support of their meeting the PQC requirement.
- 3. **Bidders can submit a maximum of 10 Purchase orders with their completion certificates** and the details of the same should be clearly mentioned in the annexure -12. The bidder shall be obligated to furnish an amended copy of the work order in the event that the executed value specified in the completion certificate surpasses the original order value. Failure to comply with this requirement shall grant HURL the right to disqualify the order, and no claims shall be entertained with respect to such occurrences.
- 4. No work order copies other than mentioned above will be accepted for PQC, technical and financial evaluation at the stage of tender evaluation and shortfall query/clarification. HURL Reserves the right to reject the bid if the document
- 5. The shortfall shall only be raised for the attached orders. If the bidders fail to attach the purchase orders even after filling out the data in Annexure-12, HURL reserves the right to reject them, and no shortfall may be raised for such instances. Additionally, no claims from the bidders shall be entertained in such cases.
- 6. Bidders will be given only one opportunity with a fixed deadline to submit any shortfall documents/clarification mentioned in Annexure-12 related to work order/purchase order (if required).

Yours Faithfully,

(Signature of the Bidder with Official Seal)

#### **Bid Security Declaration Form**

#### (On Bidders Letter Head)

To,

Manager (C&M), HURL Admin Building Office, Hindustan Urvarak & Rasayan Limited, Barauni, (A JV of CIL, NTPC, IOCL, FCIL & HFCL) P.O: Barauni, Distt: Begusarai (Bihar), Pin: 851115.

**Sub:** Bid Security Declaration Form

Tender Reference No: -Name of Tender/Work: -

Dear Sir,

I/We. The undersigned, declare that:

- 1. I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.
- 2. I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We:
- a. have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b. Having been notified of the acceptance of our Bid by the purchaser during the period of Bid Validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.
- 3. I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) if I am/ we are not the successful bidder, the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid or any extension thereof.

#### Signed:

(Insert signature of person whose name and capacity are shown)

in the capacity of

(Insert legal capacity of person signing the Bid Securing Declaration)

Name:

(Insert complete name of person signing he Bid Securing Declaration)

Dated on ......day of ......(Insert date of signing)

Corporate Seal (where appropriate)

Note: To Be signed by person who is legally authorised as assigned in Power of Attorney. In case of a Joint venture, the Bid securing declaration must be I the name of all partners to the joint venture that submits the bid.

#### Self-Certification under Preference to "MAKE IN INDIA" Policy

#### CERTIFICATE

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, as amended from time to time and as applicable on the date of submission of tender, we hereby certify that we M/s
Details of location at which local value addition will be made is as follows:
We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rule for which for which a bidder or its successors can be debarred for up two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law. Seal and Signature of Authorized Signatory.
Seal and Signature of Authorized Signatory

#### DECLARATION OF GST NON-ENROLMENT

Dear Sir/Madam,

<b>Sub:</b> Declaration of non-requirement of registration under the Central/State/UT/Integrated Goods and Services Tax Act, 2017
I/We
I/We hereby also confirm that if anytime during any financial year I/we decide or require or become liable to register under the GST, I/we undertake to provide all the requisite documents and information.
I/We request you to consider this communication as a declaration for not requiring to be registered under the Goods and Service Tax Act, 2017.
I/We hereby also confirm that (Name of the service recipient) shall not be liable for any loss accrued to me/us, due to any registration default with the GST.
Signature of Authorised Signatory:
Name of the Authorised Signatory:
Name of Business:
Date:
Stamp/Seal of the business entity:

# DECLARATION REGARDING GST (To be given on Company Letter Head)

Date:
То,
Sub: Declaration Regarding GST
Tender Reference No:
Name of Tender / Work: -
Dear Sir,
We hereby submit following declaration with respect to the applicability of GST.
GST (Goods and Service Tax) on transportation activity being under reverse charge mechanism (RCM) shall be deposited by HURL.
GST shall be Charged by the bidder @% will be reimbursed by HURL.
(Please tick in the applicable Box for GST)
Yours Faithfully,
(Signature of the Bidder, with Official Seal)
Note: -
If the bidder quotes Zero "0" in the Applicable GST rate in the declaration OR doesn't submit the declaration then the GST amount would be deemed to be included in the per unit rate quoted by

the bidder in the BOQ.

## PROFORMA OF "NO DEMAND CERTIFICATE" BY CONTRACTOR

## (TO BE ISSUED BY THE CONTRACTOR)

NAME OF PACKAGE:	NAME OF CONTRACTOR:
LETTER OF AWARD/ NOA/ CONTRACT NO.:	DATED:
that we have received the full and final payment of our aforesaid LOA/ NOA/ Contract No	(Contractor) do hereby acknowledge and confirm lue and payable to us from HURL (Owner) in respection dated including satisfaction and we further confirm that we have no id Contract.
a P. (1988) [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986] [1986]	y correspondence, document, measurement books ge any claim or protest in future under this contract
We are issuing this "NO DEMAND CERTIFICATE" free consent without any undue influence, misrepr	in favour of HURL with full knowledge and with our esentation, coercion, duress, etc.
	Signature
Date	Name
Place	Designation
	(Company Common Seal)

(This certificate shall be accompanied by the Power of attorney of the signatory)