

NOTICE INVITING E - TENDER

ENIT No. 39 of 2022-23 JK Agro

No. Agro/DM/PSJ/ 2011-2014

Dated:- 22.09.2022

J K AGRO invites E-Tender in Double Cover system of tendering for the following work:

ENIT No.	39 of 2022-23 JK Agro
Name of Work	PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.
Estimated Cost	Rs. 616.11 Lacs
Completion Period	12 Months.
Earnest Money Deposit	Rs. 12.32 lacs (through RTGS/NEFT/CDR/FDR)
Cost of Tender Document (Non refundable)	Rs 5000/- (inclusive all taxes & duties) through RTGS/ NEFT/ Bank Receipt
Date of Publish of NIT (online)	22.09.2022
Document downloading start date/ Bid submission start date	22.09.2022
Bid submission End date	12.10.2022 16:00 hrs
Date & Time of Opening of Tender	13.10.2022 16:00 hrs

For financial eligibility criteria, experience with respect to similar nature of work, etc, please refer to detailed tender notice available on website www.jkagro.com, but the complete tender document can be downloaded from portal www.jktenders.gov.in. Further, Corrigendum / Addendum to this Tender, if any, will be published on www.jktenders.gov.in. Newspaper press advertisement shall not be issued for the same.

(Please contact Mr. Atul Slathia, PA to MD JK Agro, Mobile no. 9858322215 for any further information).

Sd/-
Divisional Manager
Member Secretary
JK Agro

NOTICE INVITING E - TENDER
(E – TENDERING MODE ONLY)

1. Online Open E-Tenders, in **Double Cover** tendering system , is invited for the below mentioned works from established, experienced and reliable contractors in undertaking PEB Building construction work for large industrial warehouse / cold storage.
2. The complete Tender document can be viewed and downloaded only from the portal www.jktenders.gov.in during the tender sale period. The intending bidders should submit the tender documents sale price & tender processing fee details at the time of making online request.
3. Complete tender papers, duly accompanied with payment proof of tender document cost, tender processing fees and EMD shall be received online as per date and time mentioned below. Tender shall be opened through E-Tendering systems, in presence of bidders or their authorized representatives.

ENIT No.	39 of 2022-23 JK Agro
Name of Work	PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.
Estimated Cost	Rs. 616.11 Lacs
Completion Period	12 Months
Earnest Money Deposit	Rs. 12.32 lacs (through RTGS/NEFT/CDR/FDR)
Cost of Tender Document (Non- refundable)	Rs. 5,000/- (inclusive all taxes & duties) through RTGS/ NEFT/ Bank Receipt
Date of Publish of NIT (online)	22.09.2022
Document downloading start date/ Bid submission start date	22.09.2022
Bid submission End date	12.10.2022 16:00 hrs
Date & Time of Opening of Tender	13.10.2022 16:00 hrs
Financial eligibility Criteria	The average annual total turnover / revenue from operations for the last three financial years (i.e. 2018-19, 2019-20 and 2020-2021) should be of value not less than Rs 185.00 Lacs. The information shall be supported by CA certificate & audited Balance Sheets and Profit & Loss statements of specified last three financial years
Experience with respect to similar nature of work	1. Experience of having successful completed similar works during last 07 years ending last day July 2022 should be either of the following:- a. Three similar completed works costing not less than the amount equal to 40 % of the estimated cost or b. Two similar completed works costing not less than the amount equal to 50 % of the estimated cost. or c. One similar completed work costing not less than the amount equal to 80 % of the estimated cost.

	<p>2. Tenderer to submit required details & documents in support.</p> <p>3. Tenderer should own a running unit for manufacture of pre-fab building complete with necessary facilities.</p>
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Similar Nature works means: Works of construction of cold store building or other Pre Engineering Buildings.

4. This Notice Inviting E-Tender is also available at website: www.jktenders.gov.in
5. Any downloading from the website is at the sole risk & responsibility of the user after paying the tender sale price and processing fee.
6. EMD should be paid in favour of J & K Agro Industries Development Corporation Ltd through RTGS / NEFT **Pledged in favour of Managing Director J&K Agro Industries Development Corporation Limited. The cost of tender document should be paid through RTGS/NEFT/Bank Receipt in f/o J&K Agro Industries Development Corp. Ltd bearing Acc No CD-0077010200000133, IFSC Code- JAKA0TTALOO.** The receipt of both the documents i.e Cost of tender document and EMD should be scanned and uploaded in the e-tendering website www.jktenders.gov.in along with E-Tender document.
7. To participate in the E-Tender, it is mandatory for the bidder to have user ID & password on the portal www.jktenders.gov.in
9. Corrigendum/Addendum to this Tender, if any, will be published on website www.jktenders.gov.in. only. Newspaper press advertisement shall not be issued for the same.
10. Bidder shall quote their rates inclusive of GST as applicable.
11. GST, Building & other construction workers cess or any other tax, levies, duties on materials and on complete works in respect of this contract shall be payable by the contractor and J K AGRO will not entertain any claim whatsoever in this respect. This should be included in the rates quoted by contractor.
12. Insurances (i.e, Contractor All risk policy & Workmen Compensation Policy) for works, persons and property shall be taken by the contractor at his own cost for the entire duration of the project. Therefore, tenderer shall quote their rates inclusive of premium amounts of the Insurance Policies.
13. If the overall rate, quoted by two or more qualified successful bidders, is the lowest and same, then the successful bidder will be selected on the basis of lottery in presence of concerned bidders. The Tender Evaluation Committee will conduct the lottery.
14. Price Variation clause (PVC) is not applicable in this work contract.
15. For any difficulty in downloading & submission of tender document at website www.jktenders.gov.in. please contact their helpdesk nos.
16. J K AGRO reserves the right to reject any or all the tenders without assigning any reason thereof.
17. It is works contract. There is no EMD exemption on account of MSME.

(Please contact Mr. Atul Slathia, PA to MD JK Agro, Mobile no. 9858322215 for any further information).

Sd/-
Divisional Manager
Member Secretary
JK Agro

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TECHNO COMMERCIAL BID

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Check list to be filled by Bidder before Submission of Bid

S.No.	Documents to be submitted by the tenderer along with their bid	Check & confirm of having attached these documents along with Bid (Yes/No)
1.	Cost of the Tender document paid (submit copy in case of RTGS/NEFT/ Bank Receipt)	
2.	Earnest Money Deposit (EMD)	
3.	Pre Qualification (PQ) Performa	
4.	Complete audited Balance Sheets with Profit & Loss accounts for the specified last three years and Chartered Accountant's certificate of average financial turnover of last three years	
5.	Registration Certificate(s) with statutory agencies for PEB fabrication unit as per tender eligibility requirements, viz. Factory License, GST Regn, PF & ESI Regn. etc.	
6.	Experience Certificate for executing works of similar nature as per tender eligibility requirements, issued by client(s)	
7.	Affidavit for sole Proprietorship / Partnership deed of partnership firm/ Memorandum & Articles of Association, for private, limited company	
8.	Certificate of Registration with Registrars of Company (ROC) in case of Ltd. / Pvt. Ltd. company/PSU, if required.	
9.	Power of Attorney in original, if required	
10.	Letter of submission of tender on the letter head of bidder.	
11.	Submission of complete tender document, duly signed	
12.	Bar Chart duly signed	
13.	List of permanent technical persons	
14.	List of Plant & Machinery available at PEB fabrication unit & for undertaking civil works	
15.	PF Registration Certificate	
16.	Permanent Account Number (PAN) Card	
17.	GST registration Certificate (as applicable)	
18.	Contractor Registration details	
19.	Bank Details (Account No., Bank Name, MICR No, RTGS No. copy of cancelled cheque) of bidder	
20.	Affidavit Annexure B to be submitted along with Tender	
21.	Corporation Bank Detail	

PRE-QUALIFYING (PQ)-PROFORMA

MANDATORY PRE-QUALIFYING (PQ)-PROFORMA/COMPARATIVE STATEMENT
(To be filled by bidder and submitted along with tender document)

NAME OF WORK: PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.		
Tender No: 39 of 2022-23 JK Agro		
NAME OF THE FIRM		
S. No.	Description	Details
1	Name, Address, Organization ID, Tel. /Fax No. & e-mail address of Bidder	
2	Attested copy of Firm Details (Proprietorship/Partnership/private limited / limited)	
3	Attested Copy of Power of Attorney details to sign Tender Document.	
4	Earnest Money Deposit (EMD) of Rs. 12.32 lacs through e-payment. (Fill RTGS/NEFT/ CDR/FDR details)	
5	Cost of Tender Documents of Rs. 5000/- through e-payment. (Fill RTGS/NEFT/ Bank Draft details)	
6	PF Registration.	
7	GST Registration	
8	PAN No. of the firm	
9	Letter of Submission of tender	
10	Contractor Registration details	
11	Audited Annual Financial Statements (Balance Sheet, P & L Account etc.) for last three years :-	
a)	FY 2018-19	
b)	FY 2019-20	
c)	FY 2020-21	
12	The average annual turnover / revenue from operations for the last three financial years (i.e. 2018-19, 2019-20 and 2020-2021) should be of value not less than Rs 185.00 Lacs. The information shall be supported by a CA certificate covering specified last three financial years for the bidder.	

13	<ol style="list-style-type: none"> 1. Experience of having successful completed similar works during last 07 years ending last day of July 2022 should be either of the following:- <ol style="list-style-type: none"> a. Three similar completed works costing not less than the amount equal to 40 % of the estimated cost or b. Two similar completed works costing not less than the amount equal to 50 % of the estimated cost. Or c. One similar completed work costing not less than the amount equal to 80 % of the estimated cost. 2. Tenderer should own a running unit for manufacture of pre-fab building components complete with necessary facilities 	
a.	<p>Details of unit for manufacture of pre-fab components of PEB:</p> <ol style="list-style-type: none"> 1. Address 2. Proof of Ownership 3. Registration Certificates for the unit 4. List of Key Equipment & facilities available in unit for PEB work 	
b.	<p>Details of Reference Work of similar nature:</p> <ol style="list-style-type: none"> 1. Name of Work 2. Client Name 3. Plinth Area of PEB building constructed 4. Start Date 5. Completion Date 6. Satisfactory Completion Certificate 	
14	Bar Chart for project implementation schedule	
15	List of Permanent Technical Persons	
16	List of Plant & Machinery available with contractor for civil work etc,	
17	Bank Detail i.e. Cancelled Cheque, Name of Bank, Account Number, MICR No. RTGS No., Bank Telephone	
18	Affidavit (Annexure - B) to be submitted by the bidder as per format along with tender.	
19	Details of any other information	
Note: 1:- Bidders have to fill the complete details in Pre-Qualifying Performa.		
Note: 2. The documents pertaining to above details should be scanned and uploaded in the e-tendering website at the time of online tender submission.		
Note: 3 RTGS/ NEFT E-payment Challans with UTR no. <u>duly authenticated by Bank/ copy of Bank Draft</u> may also be scanned & uploaded along with tender submission.		
Note: 4 Affidavit (Annexure - B) must be submitted by the bidder.		

SECTION – I
(TENDER LETTER & AFFIDAVITS)

SECTION - I

TENDER LETTER

To

Name of Work: PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.

Dear Sir,

- 1.0 Enclosed please find herewith a complete set of tender document for work mentioned above.

PART I- TECHNO COMMERCIAL BID

Section-I	-	Tender Letter
Section-II	-	Instructions to Tenderers
Section-III	-	Conditions of Contract
Section-IV	-	Technical Specifications
Section-V	-	Appendix showing important schedules
Section-VI	-	Bank Details Performa
Section-VII	-	List of Mandatory Tests
Section-VIII	-	Testing Performa
Section- IX	-	Tender Drawings
Section-X	-	Bill of quantity

Your offer, in E-Tender mode, is invited in **Double Cover** system of tendering, as per time, date and other instructions indicated below. You are requested to peruse instructions contained in the above documents and submit your tender on the due date and time as mentioned in the tender notice duly signed on each page along with requisite credentials, through e-tendering mode on the website www.jktenders.gov.in. No other mode is acceptable. In case of E-Tender being submitted in Double cover tendering system, the Volume-I is technical bid and Volume-II is financial bid. The EMD and pre- qualification documents in requisite form shall be submitted along with techno commercial bid, in case of Double cover system of tendering.

- 2.0 The tender should accompany the following documents scanned and uploaded using the digital signature for signing the documents:

- i) Attested copies of Affidavit for sole proprietorship / partnership deed / memorandum and Articles of Association along with details pertaining to place of registration, principal place of business of the firm, etc,
- ii) Attested copy of power of attorney on non judicial stamp paper of appropriate value of the signatory of bid on behalf of the tenderer.
- iii) Earnest money of Rs. 12,32,000/- in proper form as mentioned in the instructions to tenderers. The EMD to be paid through e-payment/CDR/FDR and receipt of the same, duly authenticated, should be scanned and uploaded in the e-tendering website: www.jktenders.gov.in.
- iv) Cost of Tender Documents of Rs 5,000/- (Rupees Five Thousand only). The tender document cost to be paid through e-payment and receipt of the same, duly authenticated, should be scanned and uploaded in the e-tendering website: www.jktenders.gov.in.
- v) Attested copy of PF Registration Certificate (as applicable), GST Registration & PAN Card.
- vi) Financial Eligibility Criteria
Attested copy of CA Certificate for average annual turnover/ revenue from operations for the last three financial years (i.e. 2018-19, 2019-20 and 2020-2021) as proof of average annual turnover should be of value not less than Rs 185.00 Lacs.
- vii) Technical Eligibility Criteria
 - a. Attested copies of valid Registration Certificate(s) alongwith following details as proof of owning a running unit for manufacture of pre-fab building components complete with necessary facilities:
 - 1. Address
 - 2. Proof of Ownership
 - 3. Registration Certificates for the unit
 - 4. List of Key Equipment & facilities available in unit for PEB work
 - b. Attested copies of work order/ PO, completion certificate as proof of having;
 - 1. Experience of having successful completed similar works during last 07 years ending last day of July 2022 should be either of the following:-
 - a. Three similar completed works costing not less than the amount equal to 40 % of the estimated cost
 - or
 - b. Two similar completed works costing not less than the amount equal to 50 % of the estimated cost.
 - Or
 - c. One similar completed work costing not less than the amount equal to 80 % of the estimated cost.

A BAR CHART indicating various milestones and their date of completion vis-à-vis deployment of resources. Here it may be noted that the completion period for the work

is **12 (Twelve) months** from the **15th day** after date of issue of Letter of Acceptance (LOA) including mobilization period.

- x) List of plant, equipment and machinery owned by the tenderer.
- ix) List of permanent technical personnel employed by the tenderer.
- x) Conditions of contract along with addendum / corrigendum and Errata duly read and signed on all pages.
- xi) Special conditions of contract duly read and signed on all pages.
- xii) Instructions to tenderers read and signed on all pages.
- xiii) Technical specification read and signed on all pages
- xiv) Drawings issued along with tender document, read and signed on all pages.
- xv) Letter of submission of tender.
- xvi) Affidavit Annexure - B.
- xvii) Affidavit Annexure – D.

Note: (a) Tenderer not fulfilling above requirements, shall be summarily rejected

(b) The above documents should be scanned and uploaded in the e-tendering website at the time of online tender submission.

(c) All credential documents shall be attested by Gazetted officer or Notary or self signed.

3.0 The Financial Bid shall contain the following:-

Bill of quantities with rates & amounts duly filled in figures. Total amount of bid offer should also be indicated in figures duly signed.

4.0 General

- 4.1 All correspondence in connection with Tenders shall be addressed to “Managing Director, JK Agro Industries Development Corporation Limited”
- 4.2 The ENIT No 39 **of 2022-23 JK Agro** given above and subject must appear on all correspondence and documents.
- 4.3 The tender shall be on sale (on line) from **22.09.2022 to 12.10.2022 at website www.jktenders.gov.in**
- 4.4 Complete tender documents must be submitted on or before 12.10.2022 through E-Tendering mode only at website www.jktenders.gov.in.
- 4.5 Tender will be opened at office of the Managing Director ,JK AIDCL, Gole Pully, Talab Tillo Jammu in presence of tenderers or their authorised representatives who are desirous of being present at the opening through E-Tender system.

- 4.6 In case tender opening date is declared a public holiday then tenders will be opened at the same time on the next working day.
- 4.7 The sequence of Tender opening shall be as:-
(i) Earnest Money Deposit (EMD).
(ii) Technical Bid.
(iii) Financial Bid.
5. JK Agro has selected an agency as Project Management Consultants (PMC) with respect to the project. All action taken by the Engineers/ Consultants of PMC shall be taken by J K AGRO for and on behalf of J&K Agro Industries Corporation Ltd.
6. Period of completion of the entire work is 12 Months from the 15th day after date of issue of Letter of Acceptance (LOA).
7. Tenderers are requested to peruse the “Instructions to Tenderers” and all other tender documents and submit their tender through E-tendering system only.
8. No Condition/deviation which is either additional or as modification of the tender condition shall be included in the bids. Conditional tenders shall be summarily rejected
9. J&K Agro Industries Corporation Ltd., reserves the right to accept or reject any or all the tenders in part or full irrespective of their being lowest, without assigning any reason.
10. Time is the essence of the contract and the work is to be completed as per the time of completion including stage completion as stipulated in the Special Conditions of Contract.
11. Tenderers are requested to peruse the minimum qualifying criteria to be fulfilled by tenderers for their eligibility to participate in the tender. The details of minimum qualifying criteria are indicated in “Annexure – A”.
12. IT IS BROUGHT TO THE NOTICE OF TENDERERS THAT THEIR TENDER WILL NOT BE CONSIDERED, IF THEY FAIL TO FULFILL THE MINIMUM ELIGIBILITY AS INDICATED IN ANNEXURE “A”

Yours faithfully,

Sd/-
Divisional Manager
Member Secretary
JK Agro

Name of Work:- PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.

MINIMUM CRITERIA FOR ELIGIBILITY OF THE TENDERERS

01. EMD of Rs. 12,32,000/- in favour of “J&K Agro Industries Corporation Ltd.” The EMD to be paid through e-payment/CDR/FDR and receipt of the same should be scanned and uploaded alongwith tender document in the e-tendering website: jktenders.gov.in
02. Cost of Tender Documents of Rs 5,000/- (Rupees Five Thousand only). The tender document cost to be paid through e-payment and receipt of the same, duly authenticated, should be scanned and uploaded in the e-tendering website: jktenders.gov.in
03. The average annual turnover / revenue from operations for the last three financial years (i.e. 2018-19, 2019-20 and 2020-2021) should be of value not less than Rs 185.00 Lacs. The information shall be supported by a CA certificate covering specified last three financial years for the bidder.
04. a) Tenderer should own a running unit for manufacture of pre-fab building components complete with necessary facilities.
Bidder to submit required details of owned unit for manufacture of pre-fab components of PEB
 1. Experience of having successful completed similar works during last 07 years ending last day of July 2022 should be either of the following:-
 - a. Three similar completed works costing not less than the amount equal to 40 % of the estimated cost
or
 - b. Two similar completed works costing not less than the amount equal to 50 % of the estimated cost.
Or
 - c. One similar completed work costing not less than the amount equal to 80 % of the estimated cost.
05. **Affidavit (Annexure-B)** duly filled up and signed on stamp paper.

NOTE: i) Tenderer not fulfilling the above requirements, shall be **summarily rejected**.

AFFIDAVIT**(FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY TENDERER ALONGWITH THE TENDER DOCUMENTS)**

(To be executed in presence of Public Notary on non- judicial stamp paper of the value of Rs. 100/-. The stamp paper has to be in the name of the tenderer.)

I _____ (Name and designation) _____ appointed as the attorney/ authorized signatory of the tenderer (including its constituents), M/s. _____ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of Construction of PEB Building including civil works (Package 1) - PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi. as per the Tender No. _____ of J K AGRO, do hereby solemnly affirm and State on behalf of the tenderer including its constituents as under:

1. I/ We the tenderer (s), am/ are signing this document after carefully reading the contents.
2. I/ We the tenderer (s) also accept all the conditions of the tender document and have signed all the pages in confirmation thereof.
3. I/ We hereby declare that I/We have downloaded the tender documents from tender portal www.jktenders.gov.in and printed the same. I/We have verified the content of the printed document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage(i.e. evaluation of tenders & execution of work) The decision of J K AGRO with regard to such discrepancies shall be final and binding upon me/us.
4. I/We declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted alongwith the offer and same shall be binding upon me/us.
I/We declare that the information and documents submitted along with the tender by me/us are correct and I/We are fully responsible for the correctness of the information and documents, submitted by us.
6. I/We understand that if the certificates regarding eligibility criteria, submitted by us are found to be forged/ false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides suspending of business for minimum one year. Further, I/We _____ [insert name of the tenderer] _____ and all my/our constituents understand that my/our offer shall be summarily rejected.
7. I/ We also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time, after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of EMD/ SD and Performance Guarantee besides any other action provided in the contract.
8. I/We certify that I/We are not black listed or debarred by Ministry / Department / PSU (Public Sector Undertaking) of the Govt. of India/State Govt. from participation in tenders/contract on the date of opening of bids either in individual capacity or as a member of JV Firm.

DEPONENT**SEAL AND SIGNATURE OF THE TENDERER****VERIFICATION**

I/We above named tenderer do hereby solemnly affirm and verify that the contents of my/ our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT**SEAL AND SIGNATURE
OF THE TENDERER****Place:-****Dated:-****Details as appropriate are to be filled in suitably by tenderer.****Attestation before Magistrate/ Notary Public.**

**FORM OF DECLARATION TO BE GIVEN BY THE TENDERER
BEFORE TENDER NEGOTIATION**

I/We..... do declare that in the event of failure of the contemplated negotiations relating to Tender No. opened on my original tender shall remain open for acceptance on its original terms and conditions.

I/We also declare that I/We am aware that during this negotiation, I cannot increase the originally quoted rates against any of the individual items and that in the event of my doing so, the same would not be considered at all i.e. reduction in rates during negotiation alone would be considered and for some items if I/We increase the rates, the same would not be considered and in lieu my originally quoted rates alone would be considered and my offer would be evaluated accordingly.

**Signature of Tenderer's
with stamp**

SECTION – II

(INSTRUCTIONS TO TENDERERS)

INSTRUCTIONS TO TENDERERS**Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi. - Civil Portion.**

- 1.0 Tender documents consisting of Instruction to Tenderers, special condition of Condition of Contract, Technical specifications, schedule of quantities of work, etc, can be downloaded from the website www.jktenders.gov.in from on payment of 5,000/- (Rupees Five Thousand only) through e-payment.
- 2.0 Tenderer digital signature on the E- Tender form will be considered as their confirmation that they have read and accepted all the conditions laid down in the tender documents, unless specific deviation is quoted in the techno- commercial offer form.
- 2.1 E- Tender form is not transferrable and the same is to be submitted with digital signature/ signed & scanned copy by the pre- authorized personnel of the bidder. Tender is to be submitted through e-tender-mode only at website www.jktenders.gov.in alongwith scanned copies of credential papers.
- 2.2 For what so ever reasons, if any part of J K AGRO tender document is not uploaded/submitted by the bidder, other than financial and technical offers and requisite Pre-Qualifying credentials, in that case the missing part of the tender document shall be treated as read and acceptable to bidder. **Missing part of J K AGRO tender document shall not be called for re-submission, however, the same shall form part of contract agreement and shall be binding on tenderer.**
- 3.0 **Earnest Money:** Tender must be accompanied with Earnest Money amounting to Rs. 12.32 lacs .The EMD is to be paid through e-payment/CDR/FDR and receipt of the same should be scanned and uploaded in the e-tendering website: www.jktenders.gov.in

The tender without the prescribed earnest money, shall be summarily rejected.

Note: - (i) E-Payment of tender document cost, Earnest Money Deposit (EMD) though RTGS/ NEFT/ Bank Receipt in f/o J&K Agro Industries Development Corp. Ltd bearing Acc No CD-0077010200000133, IFSC Code- JAKA0TTALOO.

(ii) The tender processing fee should be deposited by bidder at the time of tender purchase through e- payment.

- 3.1 Any request for recovery from outstanding bills for earnest money against present tender will not under any circumstances be entertained. Tenders submitted with earnest money in forms of cheque, Government Securities or in any form other than those specified above shall not be considered.
- 3.2 No interest shall be allowed on the Earnest Money.
- 3.3 Earnest money of the unqualified bidders shall be released after finalization of Technical bid in case of two packet system of tendering. EMD of technically qualified but unsuccessful bidder will be refunded after the award of Tender. EMD of unsuccessful bidders shall be released after finalization of tender in case of Double cover System of tendering The bidder is advised to provide name of bank, account number, branch code and RTGS code for account maintained by them/him for any financial transaction if found necessary.
- 3.4 For the successful tenderer, earnest money will be retained as part of the security deposit in terms of **of the Conditions of Contract**. The earnest money of other tenderers shall, save as herein before provided, be returned to them, but J K Agro shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay any interest thereon.

- 4.0 The successful tenderer/s shall be required to execute an agreement with J K AGRO for carrying out the work as per the agreed conditions. The cost of stamp paper for the agreement will be borne by contractor.
- 4.1 The successful tenderer/s shall require to sign the integrity pact with J K AGRO as per enclosed Performa (**Section-III**).
- 4.2 The contract operations and proceeding in connection with the works at all times be conducted during the continuance of contract in accordance with the laws, ordinance, rules and regulation for the time being in force and the contractors shall further observe and comply with the bylaws & regulations of the Government of India, UT Government, local Municipalities and other authorities having jurisdiction over area involved in connection with the works of site & over operations such as those as carried out by the contractor/s and shall give all notices required by such by-laws & regulations. The hospital and medical regulations in force for the time being shall also be complied with by the contractor/ contractors and his workmen.
- 4.3 The contractor shall be responsible for the observance of the rules and regulations under the Mines Act and Mineral Rules and Indian Metallurgical rules and regulations of State Government concerned as amended from time to time.
- 4.4 The contractor shall at all times keep the J K AGRO Administration indemnified against all penalties that may be imposed by the Government of India or UT Government for infringement of any other clauses of the mines act and rules made there under in respect of the quarries from which the quarry material for these works is procured.
- 4.5 The tenderer's offer shall be valid for **90 days for Double Cover tendering system** from the date of **opening** of the tender. The tenderer shall extend the offer as desired by J K AGRO in case the tender is not finalized within validity period.
- 4.6 The Tenderer/s shall not increase his/their rate in case J K AGRO negotiates for reduction of rates Such negotiations shall not amount to cancellation or withdrawal of original offer and rates originally quoted will be binding on the tenderer/s.
- 4.7 The tenderer/s shall submit an analysis of rates, if called upon to do so.
- 4.8 Contractor is required to get himself registered as per Building & Other Construction Workers Cess Act 1996, PF Registration , Goods and Service Tax, etc. as per Govt. of India law.
- 5.0 **Conditions of Contract and Specifications**
- 5.1 Works will be carried out according to the Conditions of contract, & CPWD/DSR 2021 Specifications with upto date correction slips along with special conditions of contract, technical specifications issued with this tender document. For roads and pavements, MORTH specification shall be followed. If, however, any particular item or issue is not covered by these specifications and special specifications, then the work shall be carried out in accordance to relevant BIS (IS) Codes and Code of practice.
 - 5.1.1 The following publications can be obtained from the office of the MD, JK Agro:
 - i) Conditions of Contract and regulation's and instruction's to Tenderers.
 - 5.1.2 The following publications can be obtained from Secretary, Indian Road Congress, Jam Nagar House, New Delhi, book shops
 - i) MORTH Standard Specification (latest revised edition) for Road and bridge work; along with upto date correction slips for roads and pavements.
 - ii) CPWD/DSR 2021 Specification with up to date correction slips can be obtained from CPWD/DSR 2021 office.
- 5.2 Correction slips issued upto the date of N.I.T. will be operative to the publications mentioned below:
 - i) CPWD/DSR 2021 Specification.
 - ii) Conditions of Contract, Regulations and Instructions to Tenderers.

- iii) Specifications for Road and Bridge work latest revision (MORTH) specification.
- 5.3 The bid document shall be taken as complimentary and mutually explanatory of one another but in case of ambiguity or discrepancy, shall take precedence in the order, given below:-
- i) Bill of Quantities (BOQ)
 - ii) Technical specifications
 - iii) Drawings
 - iv) Special Conditions of Contract
 - v) Conditions of Contract
 - vi) Instructions to tenderers.
- 5.4 The tenderer should note that the publication mentioned in Para 5.0 have been prepared for use by CPWD/DSR 2021 MORTH. For the use of these publications by J K AGRO the designation mentioned therein will deem to have been modified for use by J K AGRO as follows.
- 6.0 Time is the essence of the contract. In order to complete the work within the scheduled time, the tenderer is required to submit a PERT/BAR CHART for major mile stones for various activities indicating the time required for the same.
- 7.0 In case of E-tendering rates should be quoted in figures only. Tenderers may note that non compliance of above may lead to rejection of their tender.
- 7.1 Where percentage rate is asked for, tenderer should write percentage in figures only. Tenderers may note that non compliance of above may lead to rejection of their tender.
- 8.0 Tenders completed as per instructions will be submitted through e-tendering mode only in the website www.jktenders.gov.in as per the prescribed date and time mentioned in the tender notice and tender will be opened on the prescribed date and time in the presence of tenderers or their authorized representative who may wish to be present. Only one representative of each tenderer, who has submitted the tender, will be allowed.
- 9.0 The tenderer shall visit the site and acquaint himself fully of the site conditions before quoting the rates. No claim arising out of ignorance of site conditions shall be entertained. The contractor will have to follow the extant procedure enforce for movement of labour, material, vehicles, etc, both for inward and outward. Nothing extra will be paid for it.
- 10.0 The acceptance of a tender will rest with the competent authority who does not bind himself to accept the lowest tender, and reserves to himself, the authority to reject any or all of the tenders received, without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled, or are incomplete in any respect, are liable to be rejected. **J K AGRO also reserve the right of accepting the whole or any part of tender and tenderer shall be bound to perform the same at the rates quoted.** J K AGRO also reserve the right for not to invite tender for any work, or to invite open or limited tender.
- 10.1 Tenders containing any condition leading to unknown/indefinite liabilities shall be summarily rejected.
- 10.2 If at all any rebate / rebates is/are offered the tenderer shall first quote his rates strictly on the terms and conditions stipulated in the tender document and then show separately any rebates(s) offered specifying the reasons / conditions for such rebate(s), failure to follow this procedure will render the tender liable to rejection.
- 10.3 Canvassing in connection with tender are strictly prohibited and the tenders submitted by the tenderer who resort to canvassing will be liable to rejection.
- 11.0 In the financial bid the prices/ rates must be filled after downloading the financial bid document in the prescribed format issued through online e-tendering website. The financial bid should be saved and duly filled up and uploaded to the e-tendering site using **digital signatures** for signing the documents/(signed and uploaded).

- 12.0 On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-incharge / Engineer shall be communicated to the MD JK Agro.
- 13.0 **Goods and Service Tax matters:** Tenderer / bidder shall quote their rates inclusive of Goods and Service Tax, as applicable and Goods and Service Tax will not be paid / reimbursed by J K AGRO.
- 13.1 Goods and Service Tax, Building & other construction workers cess or any other tax, levies, duties on materials and on complete works in respect of this contract shall be payable by the contractor and J K AGRO will not entertain any claim what so ever in this respect. This should be included in the rates quoted by contractor.
- 13.2 (a) The Contractor / Tenderer / Vendor undertakes to take registration with GST authority for discharge of its obligation to pay GST in respect of each taxable supply and will intimate the registration details to J K AGRO. In respect of each supply of Goods and Services contractor/tenderer will specify whether CGST/SGST will be attracted to IGST will be attracted along with rate thereof.
- (b) The contractor/Tenderer/Vendor indemnifies J K AGRO, its directors, officers, employees and associates for any loss it may suffer as a result of the Contractor/Tenderer/Vendor not being registered with GST authorities or if registered, for any loss due to non-payment of tax. On request by J K AGRO, the Contractor/Tenderer/Vendor shall produce evidence that it is so registered and paid all the dues in respect of GST. In case the contractor/tenderer/vendor is unregistered then submit appropriate documents establishing that agency is exempted as per the provisions of GST. Also, in case the agency is registered under Composition Levy Scheme, the same will be duly intimated to J K AGRO with relevant documents.
- (c) Contractor/Tenderer/Vendor shall ensure timely issue of documents such as invoices, declaration forms, reporting, uploading etc. undertaking appropriate statutory compliances as may be applicable, timely payment of GST, and filling of statutory returns within prescribed time lines, to ensure availment and utilization of eligible input tax credits by the J K AGRO.
- (d) In case of any failure on the part of Contractor/Tenderer/Vendor, any interest/penalty/any other amounts, as may be applicable shall be indemnified by Contractor/Tenderer/Vendor to the J K AGRO.
- (e) If as result of Change in Law, Contractor/Tenderer/Vendor obtains a benefit by way of reduction in costs due to lower tax rates and availability of ITC, Contractor/Tenderer/Vendor may so notify the J K AGRO and propose amendment to this Agreement so as to pass the incremental benefit to J K AGRO which puts it in the same financial position as it would have occupied had there been no such Change in Law resulting in such decreased cost to the Contractor/Tenderer/Vendor.
- (f) Any denial of input credit due to any omission or failure on the part of the Contractor/Tenderer/Vendor, the Contractor/Tenderer/Vendor undertakes to indemnify the J K AGRO for any delay or denial of input tax credit along with the consequential liability, if any, as may accrue to the J K AGRO.
- 14.0 Under Income Tax Act, 1961, a deduction for income tax along with surcharge as applicable will be made from sums paid on account and final payments for carrying out the work under this contract.
- 14.1 The tenderer shall be required to pay cess @ 1% of cost of construction work in accordance with each bill payable on account of such construction to the concerned UT Govt. (Labour Deptt.), Cost of material shall be outside the purview of cess, when supplied under a separate schedule items". J K AGRO shall not entertain any claim whatsoever in this respect.

- 15.0 Tenders for works shall remain open for acceptance for a period of **90 days for Double Cover system of tendering** from the date of **opening** of tenders. Should the tenderer fail to keep the tender open for acceptance as stated above or if the tenderer withdraws his tender before the expiry of the said validity period or makes any modifications in the terms and conditions of the tender, which are not acceptable, then **J K Agro**, without prejudice to any other right or remedy, shall be at liberty to forfeit his earnest money.
- 16.0 The Tenderer shall scan and upload details of owned unit for fabrication of PEB building. The details should include address, ownership proof, registration certificates for the unit, list of key equipment & facilities available in the unit for PEB work.
- 16.1 The Tenderer shall scan and upload the work experience certificate of similar nature works completed by him in the last seven financial years. The certificate should indicate name of work, client name, plinth area of PEB building, date of start and actual date of completion of completed work, satisfactory completion certificate.
- 17.0 The tenderer shall scan and upload the CA Certificate, audited balance sheets with Profit & Loss account statement of specified last three years in respect of average financial turnover, Contractor registration Certificate, Power of Attorney, Affidavit of Proprietorship/Memorandum & Article of Association, PF Registration Certificate, PAN Card, Bar Chart, similar nature works completion certificates & their work orders, Goods and Service Tax, list of personnel, list of tools, plants and machinery and undertaking downloaded tender documents.
- 17.1 No additional documents will be entertained after tender opening, except clarification documents required if any, regarding already submitted documents with tender. Any documents submitted suo-moto by the bidder through e-mail/ post/ hand delivery, etc, shall neither be entertained nor considered for evaluation.
- 17.2 **For deciding eligibility of tender and award of work**, it is mandatory for tenderer / bidder to submit Affidavit (Annexure - B), EMD, Tender document Fees, Tender processing fees, financial turnover, (audited Balance Sheets with Profit & Loss Account of specified last three years as per NIT), availability of owned running PEB fabrication unit and similar nature of work experience certificates of requisite magnitude as per NIT.
- 17.3 All other documents like PAN Card, PF Registration, Goods and Service Tax, Bar Chart, List of plant, machinery, technical persons, etc, are also required to be submitted along with tender.
- 18.0 If the tender is made by **proprietary firm**, it shall be signed by the proprietor with his full name and full name of his firm with its current address.
- 18.(a). If the application is made by a firm in **partnership**, it shall be signed by all partners of the firm above their full names and current addresses or by a partner holding the power of attorney for the firm by signing the applications in which case a **certified copy** of the power of attorney shall accompany the application. **A certified copy of the partnership deed**, current address of the firm and the full names, and current addresses of all the partners of the firm shall also accompany the application.
- 18.(b). If the application is made by a **limited company or a limited corporation**, it shall be signed by a duly authorized person holding the power of attorney for signing the application in which case a **certified copy of the power of attorney** shall accompany the application. Such limited company or corporation will be required to furnish satisfactory evidence of its existence, before the contract is awarded.
- 18 (c) If the tenderer/tenderers deliberately gives/give wrong information or conceals some facts in his/their tender or creates/create circumstances for the acceptance of his/their tender fraudulently, the J K AGRO reserve the right to reject such tender at any stage, along with forfeiture of earnest

money deposit. Tenderers are liable to face the penalty of banning of business dealings with him by J K AGRO.

19.0 **Security Deposit/Performance Security**

- 19.1 The Successful bidder on notification shall have to furnish the Performance Security @ 3 % of the quoted cost in the shape of CDR/FDR valid till successful completion and handing over of work allotted before issuance of LOI (Letter of Intent). In case of L-1 failing to provide performance security @ 3 % for the works within 15 days after being notified, his bid shall be cancelled and work shall be offered to L-2 for execution on L-1's rates at the discretion of The Managing Director Concerned.
 - 19.2 The Performance security @ 3% of the successful bidder shall be released after successful completion and handing over of work allotted.
 - 19.3 The Bid not accompanied by Bid Security Declaration shall be out-rightly rejected.
 - 19.4 If in case contractor failed to start/complete the work, within the stipulated time period, his Security Deposit/Performance Guarantee @3% shall be forfeited after termination of the contract. Besides, defaulting contractor shall be debarred from taking works in the Department at least for one year.
 - 19.5 The EMD of the entire bidders including the L1 will be returned on allotment of the work. L1 bidder shall be required to keep 3% only as performance security.
- 20.0 The successful tenderer shall be required to execute an agreement with J K AGRO in prescribed Performa within a maximum period of 30 days after date of issue of LOA.
- 21.0 **MEANING OF TERMS**
- 21.1 In these Regulations for Tenders and Contracts various terms shall have the meaning as defined in the Conditions of Contract. Words importing the singular number shall also include the plurals and vice-a-versa where the context requires.
- These Regulations for Tenders and Contracts shall be read in conjunction with the Contract which are referred to herein and shall be subject to modification additions or supersession by special conditions of contract and/or Technical specifications if any, to the Tender Forms.
- 21.2 A contractor should furnish particulars regarding :-
- a) His knowledge from actual personal investigation of the actual site condition and resources of the zones in which he offers to work.
 - b) His ability to supervise the work personally or by competent and duly authorized agents.
- 22.0 Should a Tenderer find discrepancies, or omissions in the drawings or any of the Tender forms or should he be in doubt as to their meaning, he should at once notify (within 10 days of start of tender sale) to the authority inviting tenders, who may send a written intimation to all Tenderers. It should be understood that every endeavor has been made to avoid any error which can materially affect the basis of the tender and the successful tenderer shall take upon himself and provide for the risk of any error which may subsequently be discovered and shall make no subsequent claim on account thereof.
- 23.0 The tenderer shall be required to keep the offer open till such date as might be specified in the tender. It shall be understood that the tender documents have been sold/issued to the Tenderer and the Tenderer is permitted to tender in consideration of the stipulation on his part, that after **submitting his tender**, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the J K AGRO. Should the Tenderer fail to observe or comply with the said stipulations, the earnest money amount shall be liable to be forfeited by JK Agro

- 24.0 The J K AGRO will not be bound by any power of attorney granted by the tenderer or by change in the composition of the firm and subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which, will be chargeable to the Contractor.
- 25.0 The tenderer, whose tender is accepted, shall be required to appear at the office of J K AGRO in person, or through a duly authorized representative, to execute the contract documents/agreement within 30 days after date of issue of LOA. Failure to do so shall constitute a breach of agreement effected by the acceptance of the tender, in which case, the earnest money & other dues shall be forfeited by the JK Agro.
- 26.0 If a tenderer expires after the submission of his tender or after the acceptance of his tender the J K AGRO shall deem such tender as cancelled. If a partner of a firm expires after the submission of their tender or after the acceptance of their tender, the J K AGRO shall deem such tender as cancelled, unless the firm retains its character. However, in such cases, the amount of earnest money will be refunded to the legal heir on production of successor certificate.
- 27.0 In the event of any Tenderer whose tender is accepted shall refuse to execute the contract documents, the J K AGRO may determine that such Tenderer has abandoned the contract and there upon his tender and the acceptance thereof shall be null and void and the JK AGRO shall be entitled to forfeit the full earnest money as liquidated damages for such default.
- 28.0 In E-Tendering, Bids in physical form in tender box/by post shall not be accepted.
- 29.0 Submission of tender and credential documents through E-Tender website www.jktenders.gov.in is sole risk & responsibility of the bidder. Any claim on this account will not be entertained. Hence, bidder should ensure that tender along with all requisite credential papers should be submitted / uploaded on the e-tender website on or before tender submission date and time.
- 30.0 If the overall rate, quoted by two or more qualified successful bidders, is the lowest and same, then the successful bidder will be selected on the basis of lottery in presence of concerned bidders. The Tender Evaluation Committee will conduct the lottery.
- 31.0 No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or administrative duties in any Department of the Government of India is allowed to work as a contractor for a period of two years immediately after his retirement from Government service without the prior permission of the Government of India. Such Contract is liable to be cancelled if either the Contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
- 32.0 Should a Tenderer or Contractor have a relative employed in Managerial capacity in J K AGRO or in the case of partnership firm or company incorporated under the Indian Company Law, should a partner or relative of the partner or a shareholder be employed in responsible capacity in the J K AGRO, the authority inviting tender shall be informed of the fact at the time of submission of tenders, failing which the tender may be rejected. If such a fact is suppressed at the time of tendering and comes to light at any time after the acceptance of tender, the contract may be rescinded in accordance with the provisions in Conditions of Contract.

33.0 Performa to be filled and signed by the Tenderer and scanned & uploaded along with the tender is given below. Portions not applicable may be deleted

34.0 The undersigned: -

- i)
 - a) is a retired officer holding prior to retirement a post in J K AGRO/Govt. of India/ UT Govt
 - b) is a partnership firm having as one of its partners person as aforesaid.
 - c) is an incorporated company having, retired officer/Engineer/Manager as stated above.
 - d) has no such retired Engineer or retired manager, associated with it as stated above.
- ii) If falling under any of the above categories (a) to (c), particulars of the officer may be furnished here under: -
 - a) Post held before retirement _____
 - b) Date of retirement _____
 - c) If not retired at least two years prior to date of submission of tender, state whether permission for taking such employment has been obtained from the officer duly authorized in this behalf

- iii) If the Tenderer or in case of a firm or Company, any of the shareholders has a relative or relatives employed in managerial capacity in the J K AGRO, particulars of such relative in the J K AGRO may be furnished here under- _____
 1. NAME
 2. DESIGNATION
 3. RELATIONSHIP

PLACE :

DATED :

SIGNATURE OF TENDERER

35.0 Power of Attorney

- 35.1 Notwithstanding anything contained in the clause above, the tenderer shall execute the Power of Attorney in prescribed format as mentioned in Annexure-VIII (a) and Annexure VIII (b) and shall conform to the following :-
- 35.2 A company, while executing Power of Attorney must make conformity with the board resolution and the charter documents giving the power to issue the said Power of Attorney including further sub delegation of the same by the said POA holder only.
- 35.3 “Unless notified in writing to the Tendering Authority, the Authority shall recognize only that POA holder for the purposes of tender submission and matters related thereto whose notice and necessary POA document was submitted to the Authority at the time of tender submission”.
- 35.4 While for a partnership firm either all the partners of the partnership firm shall execute and confirm the Power of Attorney if executed or there shall exist a Power of Attorney in favour of the Partners executing the Power of Attorney for the delegation of power on behalf of the Tenderer.
- 35.5 The Power of Attorney being executed by the Tenderer herein shall be executed in favour of only its Partner or Director or Salaried employee. And in case the POA is being executed by the Tenderer in favour of its salaried employee, the said employee should have worked for at least more than 1 year continuously with the Tenderer and the Tenderer should furnish the following.
 - Name
 - Designation

- Mobile/Contact no.
 - employment letter /agreement issued by the firm
 - Identity card with number ,issued by the firm
 - Information about the wages paid i.e (Salary slips)
 - Form-16
 - PAN card
 - PF Number
 - Power of Attorney as per Annexure III(a) III(b)
- 35.6 J K AGRO will not be bound by the Power of Attorney furnished by the Tenderer and acceptance of the same shall be at the sole discretion of the J K AGRO.
- 35.7 There can validly exist only a single Power of Attorney at any given time. The Power of Attorney executed and accepted by J K AGRO shall stand revoked on issuance of any new Power of Attorney issued within the rules herein, with regard to this particular Project.
- 35.8 During the subsistence of contract if the Power of Attorney holder is found to be creating mischief or involved in any illegal or unlawful activity, J K AGRO will at its sole discretion reject the Power of Attorney of such person submitted by the Tenderer and the Tenderer would be required to issue a fresh Power of Attorney within the rules herein in favour or authorized person, stated above, within a period of 10 days of being so notified.

LETTER OF SUBMISSION OF TENDER

From :

To :

.....

Name of Work: PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at Lawrence Road, Delhi

Dear Sir,

Having examined the Tender Documents consisting of conditions of contract, special conditions of contract, notice/letter inviting tenders, instructions to tenderers, Drawings, Time Schedule, Schedule of Quantities and all other documents and papers, as detailed in the tender documents, and having understood the provisions of the requirements of J K AGRO, relative to the work tendered for in connection with Projects, and having conducted a thorough study of the job, site(s) involved, the site conditions, soil conditions, the climatic conditions, labour, power, water, material and equipment availability of land for right of way and temporary office and accommodation quarters and all other factors and facilities and things whatsoever necessary or relative to the formulation of the tender and the performance of work.

I/We hereby submit our tender offer for performance of proposed work in accordance with the terms and conditions and within the time mentioned in the Tender Documents at the rate(s) quoted by me/us in the accompanying Schedule(s) of Quantities included within the Tender Documents.

It has been explained to me/us that the time stipulated for job(s) and completion of work(s) in all respect and in different stages mentioned in the Instructions to Tenderers and signed and accepted by me/us is the essence of the contract. I/We agree that in case of my/our failure to strictly observe that time of completion of jobs or any of them and to the final completion work in all respects according to the schedule. I/We shall pay penalty to the J K AGRO as per provision of tender document.

I/We further agree to sign an Agreement/Bond to abide by the Conditions and Special Conditions of Contract with all correction slips upto date and amendments, corrigendum annexed, additional conditions, specifications, notice/letter inviting tender and instructions to the tenderers and to carry out all works and according to the specifications for materials and works of the CPWD/DSR 2021/MORTH/Special conditions. In the case of acceptance of tender, I/We bind myself/ourselves to execute the contract documents within 30 / 60 days from the date of issue of LOA without penalty / with penalty respectively, after notice that the contract has been awarded to me/us and to commence the work within 15 days after date of issue of LOA failing which I/We shall have no objection to the forfeiture of the earnest money amounting to Rs. 12,32,000/- only, lodged with the JK Agro.

I/We also undertake to carry out the work in accordance with the said plan specifications and tender documents as stated in the above Para and to bind and provide such of the materials (other

than those to be supplied by the J K AGRO), and to do all such things which in the opinion of the Engineer may be necessary for, or incidental to the construction, completion and maintenance thereof and to complete the whole of the said works in all respects, and hand them over to you or your representative within the period specified; and to maintain the same for the period and in the manner provided in the conditions of contracts.

I/We have annexed all the documents with Tender No. and all the documents listed under **Section-1** including tender documents duly signed.

I/We hereby undertake that the statements made herein and the information given in the annexure referred to above are true in all respects and that in the event of any such statement or information being found to be incorrect in any above particulars, the same may be construed to be a misrepresentation, entitling J K AGRO to avoid any resultant contract.

I/We confirm having deposited earnest money of Rs. 18,48,000/- (Rupees Eighteen lacs Forty Eight Thousand Only) in the prescribed form.

SIGNATURE (S) OF THE TENDERER WITH STAMP

Name & Designation of authorized person (s)
Signing the tender on behalf of the tenderer (s)
(Power of attorney to be also enclosed)

INDEMNITY BOND

Name of the work (On non-judicial stamp paper of appropriate value)

Know all men by these presents that I/we _____

Name of Contractor with address _____

Do hereby execute Indemnity Bond on _____ day of _____ 2022 in favour of (I) J&K Agro Industries Corporation Ltd., and

(II)appointed as the Engineers for the Project Management for and on behalf of J K AGRO for the work ofvide Tender No.

THIS DEED WITNESSETH AS FOLLOWS:

I/We _____ (Name of contractor) hereby do indemnify and save harmless J K AGRO &having their Regd. Office at and respectively from:

- (1) Any third party claims, civil or criminal complaints/liabilities, site mishaps and other accidents or disputes and/or damages occurring or arising out of any mishaps at the site due to faulty work, negligence, faulty construction and/or by violation of any law, rules and regulations in force, for the time being while executing/executed civil works by me/us.
- (2) Any damage, loss or expenses due to or resulting from any negligence or breach of duty on the part of me/us or any sub contractor, if any, servants or agents.
- (3) Any claims by an employee of Mine/ours or of sub-contractor(s) if any, under the Workman Compensation Act and Employers' Liability act, 1939 or any other law, rules and regulations in force for the time being and any acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of execution of the contract, work and/or arising out of and in the course of employment of any workman/employee.
- (4) Any Act or omission of mine/ours or sub-contractors if any. Our/their servants or agent which may involve any loss, damage, liability, civil or criminal action.

IN WITNESS WHEREOF THE.....

HAS SET HIS/THEIR HANDS ON THIS DAY OF 2022.

SIGNED AND DELIVERED BY THE

AFORESAID.....

IN THE PRESENCE OF WITNESS

1.

2.

Power of Attorney**ON NON JUDICIAL STAMP PAPER OF ADEQUATE VALUE AS PER THE JURISDICTION**

Know all men by these presents I/We, _____, son/daughter/wife of Mr._____, aged _____ years, citizen of _____, presently residing at _____, Managing Director/ Chief Executive Officer/Partner of M/s._____[*name of contractor*], a company/Firm incorporated in India under the **Partnership Act/Companies Act, 1956/ Companies Act, 2013** and having its registered office at _____(hereinafter called “the Principal”) by virtue of the resolution passed at the Meeting of the Board of Directors of the Company held on _____ or deed/resolution of the Firm dated *or* the Power of Attorney dated _____ granted to me pursuant to the resolution passed at the meeting of Board of Directors of company held on _____ or deed/resolution of the Firm dated_____, delegated to me/us certain powers to act on behalf of the company/firm for various purposes. As per the said delegation, I/We have been authorized to appoint and substitute any person or persons to exercise all or any of certain powers delegated to me/us by the Company/Firm and/or to grant Powers of Attorney to the officers and employees of the Company/Firm to perform various acts, deeds and things required to be done by the Company/Firm.

Whereas J&K Agro Industries Corporation Ltd. (“J K AGRO”), has invited proposals from interested parties for the work of _____ at _____ (Project/works).

Whereas, _____ (name of the contractor), the Principal is interested in bidding for the Project/works in accordance with the terms and conditions of the tender document, bearing No._____, dated _____ and other connected documents in respect of the Project/works, and

Whereas, it is necessary for the Principal to delegate to one of the employee / partner(s) / director with all necessary power and authority to do for and on behalf of the _____ (name of the contractor), all acts, deeds and things as may be necessary, including but not limited to representing the contractor, signing of tender documents, bills, measurement books, drawings and other related documents in connection with the _____ Bid for the Project/works and its execution.

NOW THESE PRESENTS WITNESSETH that I/we do hereby designate, nominate, constitute appoint and irrevocably authorize Mr./ Ms. _____, son/daughter/wife of Mr._____, aged _____ years, citizen of _____, presently residing at _____, _____[specify designation] and whose signatures are given below, as true and lawful Attorney of the Principal(hereinafter referred to as the “Attorney”), to have and exercise in the name and on behalf of the Principal the powers and authorities hereinafter mentioned:

1. To execute all required documents and conduct all business for and on behalf of the Principal during the Bidding process of the Project/works and, in the event Principal is awarded the contract, during the execution of the Project/works; and
2. To do on behalf of the Principal, all or any of such acts, deeds or things as are necessary or required or incidental to the selection of the Principal and signing and submission of its Bid/tender for the Project/works, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders' and other conferences, respond to queries, submit information/documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the Principal and generally to represent the Principal in all its dealings with J K AGRO, and/ or any other Government Agency or court/judicial authority or any person, in all matters in connection with or relating to or arising out of the Contractor's bid for the Project/works and/ or upon award thereof till the agreement for the Project/works is entered into with J K AGRO and thereafter till the completion of the project/works and expiry of the contract agreement.

AND We/I hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by said Attorney in exercise of the powers hereby conferred shall always be deemed to have been done by me/us

This Power of Attorney shall stand revoked on issuance of a new Power of Attorney issued with regard to this Project/works or if earlier revoked by me or the Company/Firm.

Given under the hand of the within named[name of individual] on this day of[month][year].

[Signature of Managing Director/ Director/Partner(s)/Other authorised person]

[Name of Company/Firm]

[date]

[place]

I accept

[Signature of Attorney]

[date]

[place]

Witnesses:

1.

2.

Notes:

- The mode of execution of the Power of Attorney shall be in accordance with the charter documents of the executants(s) and when it is so required, the same shall be under common seal affixed in accordance with the required procedure.
- Also, wherever required, the Tenderer shall submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of

attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Tenderer.

Power of Attorney**ON NON JUDICIAL STAMP PAPER OF ADEQUATE VALUE AS PER THE JURISDICTION**

Know all men by these presents I, son/daughter/wife of Mr....., aged years, citizen of, presently residing at and **Proprietor** of M/s..... and having its office at(hereinafter called “the Principal) do hereby execute this Power of Attorney on the date mentioned herein below.

Whereas J&K Agro Industries Corporation Ltd. (“J K AGRO”), has invited proposals from interested parties for the work of at (Project/works).

Whereas, _____ (name of the contractor), the Principal is interested in bidding for the Project/works in accordance with the terms and conditions of the tender document, bearing No....., dated and other connected documents in respect of the Project/works, and

Whereas, it is necessary for the Principal to delegate to one of the employee with all necessary power and authority to do for and on behalf of the _____ (name of the contractor), all acts, deeds and things as may be necessary, including but not limited to representing the contractor, signing of tender documents, bills, measurement books, drawings and other related documents in connection with the _____ Bid for the Project/works and its execution.

NOW THESE PRESENTS WITNESSETH that I do hereby designate, nominate, constitute appoint and irrevocably authorize Mr./ Ms., son/daughter/wife of Mr....., aged years, citizen of, presently residing at,[specify designation] and whose signatures are given below, as true and lawful Attorney of the Principal(hereinafter referred to as the “Attorney”), to have and exercise in the name and on behalf of the Principal the powers and authorities hereinafter mentioned:

1. To execute all required documents and conduct all business for and on behalf of the Principal during the Bidding process of the Project/works and, in the event Principal is awarded the contract, during the execution of the Project/works; and
2. To do on behalf of the Principal, all or any of such acts, deeds or things as are necessary or required or incidental to the selection of the Principal and signing and submission of its Bid/tender for the Project/works, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders’ and other conferences, respond to queries, submit information/documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the Principal and generally to represent the Principal in all its dealings with J K AGRO, and/ or any other

Government Agency or court/judicial authority or any person, in all matters in connection with or relating to or arising out of the Contractor's bid for the Project/works and/ or upon award thereof till the agreement for the Project/works is entered into with J K AGRO and thereafter till the completion of the project/works and expiry of the contract agreement.

AND I hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by said Attorney in exercise of the powers hereby conferred shall always be deemed to have been done by me/us

This Power of Attorney shall stand revoked on issuance of a new Power of Attorney issued with regard to this Project/works or if earlier revoked by me.

Given under the hand of the within named[name of individual] on this day of[month][year].

[Signature of Proprietor]

[Name of Concern]

[date]

[place]

I accept

[Signature of Attorney]

[date]

[place]

Witnesses:

1.

2.

Notes:

- The mode of execution of the Power of Attorney shall be in accordance with the charter documents of the executants(s) and when it is so required, the same shall be under common seal affixed in accordance with the required procedure.
- Also, wherever required, the Tenderer shall submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Tenderer.

SECTION – III

(SPECIAL CONDITIONS OF CONTRACT)

SPECIAL CONDITIONS OF CONTRACT

Tender for: PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.

PREAMBLE

- a) PMC/Engineers to J&K Agro Industries Corporation Ltd. (J K AGRO) for the above work will be notified later.
- b) The special conditions of contract shall be read in conjunction with Conditions of Contract and amendments/corrections thereto. Where the provisions of special conditions of contract are at variance with above mentioned documents, these special conditions of contract shall prevail.

**Divisional Manager
Member Secretary
JK Agro**

CONDITIONS OF CONTRACT

1.0 **Scope of work**

The scope of work includes: **PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13 & 14, Lawrence Road, Delhi.**

- 1.1 The contractor will be required to execute the work in stretches/areas which are made available to him and may or may not be in continuous stretches. Decision of Engineer shall be final in this regard and binding on the contractor. Contractor shall have no claim, if the stretches/areas are not available for the construction/repair at the same time, whenever extension of time is granted on valid reason.
- 1.2 The contractor will engage an experienced **Graduate Engineer / Diploma Holder** site engineers of concerned discipline on the project, who should have the full knowledge of work and is capable of getting executed the work and removing defects as pointed out by the engineer-in-charge. At least one site engineer shall be deployed for the works of value upto Rs.5 Crore and two site engineers of the works more than Rs.5 Crore. A recovery of **Rs.25,000/- per month** per site engineer will be made, if contractor fails to deploy the site engineers.
- 1.3 The contractor shall procure all construction materials well in advance so that there is sufficient time for testing of the materials and clearance of the same before incorporation in the works. In case untested material is used by the contractor and later on the same is found not meeting to specification requirement, then, the executed work with said material shall be dismantled and re-executed at the cost of contractor.
- 1.4 Before commencement of work, the contractor shall take levels and record them in prescribed record book. The levels taken shall be got verified from Engineer/Engineer's representative.
- 1.5 Tenderer has to obtain statutory approvals from relevant authorities, co-ordinate and file all papers/applications (wherever required). JK AIDCL officials will sign relevant papers and application forms and also deposit the required statutory charges.
- 1.6 Tenderer has to supply, install, test and successfully commission all BOQ items.
- 1.7 Tenderer will ensure supply of all items as per CPWD norms and concerned IS for that specific item.
- 1.8 The tenderer shall guarantee all the equipment offered for satisfactory performance for a period of 12 months from the date of commissioning and handing over the installation to JK Agro against defects arising out of faulty design, material & workmanship. The tenderer should make good all the defects free of costs during the guarantee period and replace or repair the defective equipment/parts free of cost promptly and satisfactorily.
- 1.9 The defects liability period will be 12 months after actual & final completion of work.
- 1.10 Security Deposit will be 10% of the contract value and will be released after completion of the defects liability period.

2.0 **PERIOD OF COMPLETION**

The work is required to be completed within time schedule from the date of issue of acceptance letter is given below: -

Total period of completion: **12 months (Twelve Months) from the 15th day after date of issue of L.O.A.**

- 2.1 The contractor shall stick to the final completion date and will be liable to action for any delay due to contractor as mentioned in Conditions of Contract for stage as well as overall completion of the work.

- 2.2 In case of termination of contract, available EMD, BG & Security with the department against the said contract will be forfeited.
- 2.3 In case contractor fails to furnish consent / acceptance of extension of time (EOT) for completion of work with LD or any other conditions in response to EOT granted and communicated as per Annexure-VII, but continues to execute the work, in such circumstances, EOT, as communicated, will be deemed to have been accepted by the contractor in totality.

3.0 SAFETY PRECAUTIONS

- 3.1 For work close to road, telephone line, power line (both underground and overhead) and structures, all precautions will be taken for ensuring that during the execution of the work, no damage is caused to the installation structures and also no obstruction is caused to the movement of trains.
- 3.2 The contractor will also ensure that no damage is done to the electrical cables, drainage system, water supply and any other services and/or structures.
- 3.3 Safety rules and safe working methods as **per Appendix “A”**.

4.1 Delay or Deferrals

- 4.2 Simultaneously with the progress of this work, works on installation/erection of the various parts and plants of the other works will continue. The progress of works will have to be synchronized with such other works.
- 4.3 Where the Contractor has to work along with other agencies in and around the area allotted for his works, he shall execute all his works in complete **coordination and cooperation** with all such agencies so that at no time either his work or the works of other agencies is stopped or delayed. In case of any dispute in this regard the decision of J K AGRO or their representative will be final and binding on the Contractor. No claim for idle labour, plant and machinery under any circumstances will be entertained by the J K AGRO.
- 4.4 Contractor has to execute all works in complete coordination and cooperation with all activities confined to the area within the scope of this work, so as not to affect the operation of other activities under any circumstances. In case of any dispute in this regard, the decision of J K AGRO or their representative will be final and binding on the contractor. Contractor shall also note the work shall progress as per the phased development, if any.

5.0 Service Roads

Contractor will provide service road/roads for movement of materials as per direction of Engineer-in-charge. Contractor will also maintain these service roads in safe and fit conditions at his own cost. He will, however, have no authority to prevent use of such roads by J K AGRO and other bonafide contractors working at site. J K AGRO will, however, have the authority to disallow any movement on the road which in their opinion is not in the interest of work. If the contractor fails to provide service road to the satisfaction of the Engineers, it will be provided by the Engineer at contractor's cost.

6.0 Measurements for Works/Record Measurements

- 6.1 The contractor shall ensure that measurements for all work which may be partially or wholly hidden in the course of construction are duly recorded in the Measurement book before that portion of work becomes inaccessible for measurement.
- 6.2 For works running/on account payments can be made on the basis of detailed measurements recorded in the measurement books for the actual work executed. The bills will be submitted by the contractor on the approved format (attached), and the date of submission of the bills will be considered as the date, the contractor signs the accepted bill which is to be forwarded by the Engineer-in-Charge concerned for arranging payment. Whenever, there is likelihood of delay in recording detailed measurements for making running payment, without detailed measurements for works done at 75% of the total assessed value.
- 6.3 **For electrical work, payment**, in the form of running account bills, will be made as follows:-

- a) 90% of the quoted rate or due amount (lowest of all) as per contract against satisfactory installation and commissioning of equipment at site.
- 6.4 **Payment to be made by J K AGRO**
The contractor will submit running account bills of value, not less than 25% value of the contract amount towards the work done approved and passed by Engineer-in-charge whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor.
- 6.5 For payment of Running Account Bills, the mandatory documents, like copy of paid challans of PF / ESI, Royalty, paid bills of water, electricity, copy of CAR & WC Policy, copy of labour license, etc, shall be required at the time of 1st RA bill & final bill. For intermediate RA bills, above documents if of not available due to reasons stated by contractor with undertaking to comply, may be relaxed by Engineer- in-charge. However contractor must comply the statutory and other provisions Contractor shall indemnify the J K AGRO against all losses / damages due to non-compliance of above provisions at intermediate stage of any.
- 6.6 **The contractor have to produce the Geo-tagged photographs of before, after and during the execution of the work for the processing of the bill.**
- 7.0 **Procurement Storage, and Payment of Cement, Steel and bitumen, etc,**
- 7.1 Ordinary Portland cement, steel, bitumen & structural steel required for the work will be procured by the contractor from approved suppliers. The Ordinary Portland cement should conform to grade 43 (as per IS:8112) and /or 53 grade (as per IS:12269), reinforcement steel should conform to IS-1786 & IS-432, structural steel conforming to IS-808 and bitumen should conform to I.S. code 702 and 703.
- 7.2 The storage of cement should be done as per IS-4082-1977 (recommendation on stacking and storage of construction materials at site). Sheds for storage of cement will also be provided by contractor. All such sheds/store, after completion of work shall be removed by contractor at his own cost and site shall be cleared.
- 7.3 Each bag of cement must weigh 50 kg, subject to variation as per BIS code.
- 7.4 Proper daily record of cement, steel and bitumen consumption shall be maintained at site by Engineer-in-charge. The register shall be duly signed by both the Engineer-incharge and the Contractor. In case concrete is being obtained from RMC plant, then, the record of cement of the same shall be kept based on the computerized receipt of mix proportion of each lot.
- 7.5 "Return of Empty Cement Bags:-
Cement issued to the contractor or procured by the contractor will be in gunny bags/paper bags/polythene bags. The empty gunny bags / polythene bags shall be the property of the contractor.
- 7.6 Payment for steel reinforcement shall be made on the basis of standard weight of the bars used as per approved drawings. in case weight of bars is more than or less than the standard weight but within the tolerance limit as specified in BIS, the payment will be restricted to lesser weight in case of steel having less weight than the specified and standard weight, in case steel having more weight than the specified.
- 7.7 For CPWD/DSR 2021 Schedule of rate as given in Bill of Quantity the payment for steel will be based on quantities of the materials consumed for the works actually executed, as calculated from drawings and specifications, in terms of the respective Schedule of Rates. **For other than schedule items, rates quoted by tenderer shall be complete item rate, i.e. include cost of all materials including cement, steel, bitumen, etc,**
- 7.8 No claim whatsoever shall be entertained by J K AGRO on account of delay in non availability of these materials in the market.
- 7.9 Cement, Steel and Bitumen shall be kept under double lock system in godown fixed with door. The key of one lock shall remain with the representative of the Engineers at site of work and that of the other with the contractor or his authorized agent.
- 7.10 Clodding of cement and rusting of steel should be avoided to the maximum extent possible. For such clodding of cement and/or rusting of steel which may render the same unusable, the contractor shall be responsible to make good such quantities the loss at his own cost.

8.0 TESTING OF MATERIALS

- 8.1** Contractor will be required to establish a field laboratory. The setting of field laboratory for the works of value more than Rs.1 crore is a mandatory requirement. Contractor shall be responsible for setting up laboratory facilities, equipments and arranging technical manpower at their cost, as directed by the PMC/Engineer-in-charge for conducting site/field test. All the equipments shall be BIS approved makes and will be got checked/ calibrated regularly. All equipments of the laboratory shall be kept in good working conditions. If contractor fails to provide field laboratory within one month of commencement of work, shall attract a penalty of Rs. 25,000 per month recoverable from the running bills. In all routine tests, which can be normally done in the field laboratory/in situ, testing charges will be borne by the contractor. In case of failure on the part of contractor to conduct field laboratory test satisfactorily, the tests shall be carried out in the reputed/approved outside laboratory and the Payment of testing charges of such tests will be borne by the contractor.
- 8.2** The contractor has to produce a Manufacture test certificate (MTC) from manufacturer to the Engineer-Incharge for the cement, steel, bitumen etc, for every consignment procured, failing which no consignment of cement, steel and bitumen will be accepted by the Engineer-Incharge.
- 8.3** The testing and acceptance of criteria for cement and steel and any other materials supplied by the contractor should be as per BIS codes/Technical Specification or as decided by the Engineer-Incharge as per the stipulated testing frequency.
- 8.4** Sample of material for testing will be supplied free of cost by the contractor, including its transportation to the approved test houses/laboratory, as directed by the Engineer-In- Charge or inspecting officials.
- 8.5** For outside testing, test of materials and stipulated samples shall be carried out by one of the following laboratories/ tests houses (1) IIT (2) NIT (3) National Test Houses (4) National Council of Cement & Building Material (5) Govt. Engg. College/National Accreditation Board Approved Lab (NABL), as per decision of the Project Incharge. The testing charges shall be borne by the contractor.
- 8.6** All Routine tests on various materials shall be carried out as per the mandatory tests lists. Testing of material shall be carried out as per mandatory test list of tender document at the cost of the contractor. Wherever if same is not specified then it will be carried out as per CPWD/DSR 2021/ MORTH/ BIS as per decision of engineering incharge which will be final and binding.
- 8.7** In addition to the tests required under above clauses thereof, the engineer or his representative may order tests to be carried out by an independent person appointed by him at such place or in such laboratory as he may determine in accordance with the appropriate clauses of relevant standard specifications and the cost of such tests shall be borne by the contractor.
- 8.8** Testing record shall be maintained as per standard testing Performa enclosed in contract document for proper testing and their record.

9.0 Plant & Machinery Required for the Works

- 9.1** It will be the responsibility of the Contractor to arrange all plant & machinery, trucks, vibratory, Road roller, etc, required by him for execution of works.
- 9.2** The contractor will also arrange for getting permission (for their use) if required from local or other concerned authorities for use as well as for their transportation to site.
- 9.3** All expenditure incurred in this connection will be borne by the Contractor.
- 9.4** No plant or machinery will be issued on hire by the J K AGRO.

10.0 Arrangement of Water for execution of works

- 10.1** The contractor will have to make his own arrangements for obtaining water to be used for execution of the works.
- 10.2** J K AGRO may permit to contractor to install borewell at site at his own cost for execution of work. In this case contractor will ensure compliance of statutory requirements of the regulatory authority. After completion of the work, borewell with pump and its fittings in working conditions shall be handed over to J K AGRO free of cost.
- 10.3** All temporary or pucca bunds or diversion of water courses, nallahs, etc, shall be done by contractor's at his own cost and after obtaining permission of concerned local authorities, and the same shall be removed after completion of the works and area restored to original state.

11.0 Arrangements for Electric connection, Lighting & other purpose

- 11.1 If for reasons of urgency the work has to be executed at night, contractor shall make his own arrangement for illuminating the site. Nothing extra will be paid for doing works at night.
- 11.2 Contractor will have to make his own arrangements for arranging electricity if the same is required for illumination purposes or for running of any plant or machinery and nothing extra will be paid for the same.
- 11.3 J K AGRO may supply electric power if available and charges will be paid by contractor.

12.0 Definitions & Interpretations etc, relevant to items of Schedule of Rates and Specifications.

- 12.1 Wherever there is any reference to Engineer, Dy. Chief Engineer, Divisional Engineer, Assistant Engineer, it shall mean the Engineer-Incharge / Consultant appointed by J K AGRO for the work.
- 12.2 Wherever there is a reference to I.S. Code/specifications or any other code, it shall refer to latest code with correction slips as in vogue on the date of tendering.
- 12.3 **Item rate** means the rate to be quoted against the specific item of the schedule of items provided in the tender document.

13.0 Maintenance after Completion

- 13.1 All works executed under this agreement shall be maintained by the contractor at his own cost for a period of **12 (twelve) months** from the actual date of completion as per agreement.

14.0 Miscellaneous

- 14.1 Customary standards/local traditions will not be the criteria for the standards. All works shall be up to the CPWD/DSR 2021 standards and as ordered by Engineer incharge and where any doubt may exist the specifications as given in the BIS specifications should be followed.
- 14.2 J K AGRO may provide space for setting up construction plants, T & P, site office, laboratory, storage of material, labour, etc, free of cost if the surplus land is available with prior permission from the Engineer Incharge during the construction period of the project.
- 14.3 No areas outside work site/ depot will be made available to the contractor for storage of construction materials and construction of site office etc, and if required, contractor will make his own arrangement for the same by personal negotiation with the owners at his own cost.

15.0 Recovery of Royalty in case of materials quarried from J K AGRO's Land.

- 15.1 Without the sanction of the J K AGRO, no material of any kind such as sand, stone or moorum whether required for the performance of this Agreement or not, shall be quarried and/or collected from land belonging to or held by the J K AGRO.
- 15.2 As and when the Contractor quarries and/ or collects material from J K AGRO land for the purpose of supply of materials and/or of work under an Agreement based on special rates obtained for various items of work or supplies contractor shall be liable to pay applicable royalty to concerned authority at the rate prescribed by the State Government Authorities and in enforce during the period of contract.

16.0 Handling of Materials

- 16.1 No lead is payable on water for works done under any section of CPWD Schedule of Rates or for the work done under any non-scheduled item Rate.
- 16.2 No extra payment can be claimed for carrying materials in extreme conditions of climate and weather and all precautions taken to protect materials by suitable coverings to prevent damage due to sun, rain and wind while carrying by carts or trucks.
- 16.3 It is the Contractor's responsibility to see that all J K AGRO materials entrusted to him are carried safely and expeditiously to the site of the work.
- 16.4 If J K AGRO materials are lost, stolen or damaged while in transit or under custody of the contractor, the cost of the same @ twice of the prevailing market rate will be recovered from the Contractor's dues and Contractor will have no claim whatsoever on this account.
- 16.5 During execution of work, if J K AGRO materials, tools & plants (i.e., cables and pipelines etc, are damaged then same will be set right by contractor at his cost within a reasonable time as decided by the site engineer. In case contractor fail to rectify the damages caused during construction/ under their custody, the cost of the damaged material shall be recovered from the contractor @twice of prevailing

market from the contractor dues/ bills and contractor will not have any claim whatsoever on this account.

17.0 Adherence to labour law and regulations

17.1 The Contractors, who are working in the establishments through Contract Labour and/or employing labour themselves directly should get themselves registered with the Assistant Labour Commissioner concerned as required under Contract Labour (Regulation and Abolition) Act 1971 and obtain a license from the Assistant Labour Commissioner concerned and produce the same to Engineer – incharge, in compliance to above and Condition of Contract.

17.2 Employment of labour from scarcity area

If the Government declares a state of scarcity of famine to exist in any village situated within 15 km of the work, piece worker/contractor shall employ upon such parts of the works as unskilled labour any person found suitable and certified to him by the Engineer-in-charge or by any person to whom the Engineer-in-charge may have delegated in writing, to be in need to relief and shall be bound to pay to such person wages not below the minimum which Government may have fixed in this behalf. Any dispute which may arise in connection with the implementation of this clause shall be decided by the J K AGRO whose decision shall be final and binding on the piece worker/ contractor.

18.0 Provision of extra/additional items

If the altered/additional work required to be executed as per J K AGRO's requirements, for which there are no established rates in Schedule of Rates, the same shall be payable as per provisions stated hereunder: -

- a) As far as possible the rates for such items shall be derived from agreed schedule of rates on pro-rata basis.
- b) If direct working out is not possible, the contractor shall be paid on the basis as under: -
 - (i) Material, labour either or both: Reasonable cost of materials plus reasonable cost of labour inclusive of tools, plants and machinery and plus 15% of so derived cost, to cover contractor profit, supervision, overheads, establishments, etc.
 - (ii) Engineer's decision regarding reasonable labour cost and reasonable material consumption/and cost shall be final and binding on contractor.
- c) The rates can also be derived based on the LAR rate of similar items of same area or nearby area.

19.0 Escalation (Price Escalation Clause/ PVC)

19.1 No Escalation on account of any increase in price index in the price of materials, imposition of Goods and Service Tax or other tax etc. or imposition of levies etc. will be payable.

19.2 No price escalation shall be applicable even during the extended period for completing the works.

20.0 Completion Drawings

20.1 Completion drawings of all the completed works for showing the layout of the area with dimensions, slopes and details of building, reinforcements used, pavement, drain, cable trenches, machine foundations, etc, shall be prepared by the contractor at his own cost.

20.2 Contractor will supply **three copies** of completion drawings along with soft copy in CD / Pen-drive with the final bill. In case contractor does not submit the completion drawing within **15 days** of information that the final bill is ready, an amount of **Rs.1 lakh** shall be deducted from the final bill.

21.0 Storage of inflammable articles: -

No inflammable materials, such as petroleum, oil, etc, within the meaning of the Indian Petroleum Act and Indian Explosives Act shall be stored at site or adjacent land until the approval of the J K AGRO and necessary license under the Act has been obtained by the contractor. All due precautions as required under the Acts shall be taken by the contractor.

22.0 Night Work: -

If the J K AGRO is however satisfied that the work is not likely to be completed in time except by resorting to night work, by special order, the contractor would be required to carry out the work even at night, without conferring any right on the contractor for claiming for extra payment for introducing night working. The decision of the Engineer in this regard will be final and binding on the contractor.

23.0 Notice to Public Bodies: -

The contractor shall give to the Municipality, Police and other authorities, all notices that may be required by the law and obtain all requisite licenses for temporary obstructions, enclosures and pay all fees, taxes and charges, which may be livable on account of his own operations in executing the contract. He should make good any damage to adjoining premises whether public or private and provide and maintain any light, etc, required at night and no extra payment will be made on this account.

24.0 Plea of custom: -

The plea of 'Custom' prevailing will not on any account be permitted as an excuse for infringement or any of the conditions of contract or specifications.

25.0 Care of Staff: -

No guarantee will be provided by J K AGRO for accommodation of the contractor or any of his staff employed on the work. The contractor may be allowed to erect labour camps for housing the labour at or near the site of work on available J K AGRO's land. The contractor shall at his own cost make all necessary and adequate arrangements for importation, feeding and preservation of the hygiene of his staff. The contractor shall permit inspection at all times of all sanitary arrangements made by him by the Engineer or his assistant or the medical staff of the J K AGRO. If the contractor fails to make adequate medical and sanitary arrangements, these will be provided by the J K AGRO and the cost thereof will be recovered from the contractor.

26.0 First aid: -

The contractor shall maintain in a readily accessible place first aid appliance including an adequate supply of sterilized dressing and sterilized cotton wool. The appliances shall be placed under the charge of responsible person who shall be readily available during working hours.

27.0 Damage from Accidents or floods or Tides: -

The contractor shall take all precautions against damages from accidents, floods or tide. No compensation will be allowed to the contractor for his tools, plants, materials, machines and other equipment lost or damaged by any cause whatsoever. The contractor shall be liable to make good the damages to any structure or part of structure, plant or material of every description belonging to the J K AGRO administration, lost or damaged by any cause during the course of contractor's work.

The J K AGRO will not be liable to pay to the contractor any charges for rectification or repairs to any damages, which may have occurred from any cause whatsoever, to any part of the new structures during construction. No claims in this regard will be arbitrable.

28.0 Trespass: -

The contractor shall at all times be responsible for any damages or trespass committed by his agents and workmen in carrying out the work, unless such trespass is authorized by the Engineer at site.

29.0 Variation in Quantities and Vitiatio: -

29.1 In case of variation in quantities, the vitiatio statement will be prepared. In case, there is vitiatio, then the vitiated amount shall be recovered from the contractor's bill/security deposit.

30.0 Use of J K AGRO Materials secured with Government Assistance: -

30.1 Where any raw materials for the execution of the contract are procured with the assistance of Govt. either by issue from Government, stocks or purchases under arrangements made or permit(s) or licence (s) issued by the Government, the contractor shall hold the materials as trustee for the Government and use such materials economically and solely for the purpose of contract against which they are issued and not dispose off them without permission of the Government and return if required by the

Government all surplus or unserviceable materials that may be left by him after completion of the contract or at its termination for any reason whatsoever on his being paid such price as Government may fix with the due regard to the condition of the materials. The freight charges for the return of the material according to the direction of the purchaser shall be borne by the contractor, in the event of contract being cancelled for any default on his part, the decision of Government shall be final and conclusive.

- 30.2 In the event of a breach of the aforesaid conditions, the contractor shall in addition to throwing himself open to action for contravention of terms of the licence(s) if the permit(s) and/or for original breach of trust be liable to account to Government for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

31.0 Insurance for Works persons and property: -

31.1 Insurance for Works: -

The contractor at the scheduled date of start of work or **before 15th day after date of issue of LOA**, without limiting his obligations and responsibilities, shall insure the works at his own cost and keep them insured until the virtual completion of the contract against all acts of God including Fire, Theft, riots, War, Floods, etc, with a Insurance Agency approved by Insurance Regulatory and Development Authority (IRDA) in the joint names of the employer and Contractor (the name of the former being placed first in the policy) for the full amount of the originally awarded contract value irrespective of revised / modified contract value later on. Such policy shall cover the property of the J K AGRO and fees for assessing the claim and in connection with his services generally therein and shall not cover any property of the Contractor or of any sub contractor.

The Contractor shall deposit the policy and receipt for the premiums with the J K AGRO within 30 days from the date of signing the contract or commencement of execution of work, whichever is earlier, or unless otherwise instructed by the J K AGRO. In default of the Contractor insuring as provided above, the J K AGRO on his behalf may so insure and may deduct the premiums paid from any moneys due or which may become due to the Contractor. The Contractor shall, as soon as any claim under the policy is settled or the works reinstated by the Insurance Office should elect to do so, proceed with all due diligence with the completion of the works in the same manner as though the misfortune/accident had not occurred and in all respects under the same conditions of contract. The Contractor in case of rebuilding or reinstatement after accident shall be entitled to such extension of time for completion as the J K AGRO deems fit.

31.2 Insurance in respect of damages to persons and property: -

- i) The Contractor shall be responsible for all injury to persons, animals or things and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any approved sub contractor's or Employees, whether such injuries or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include any damage to buildings, whether immediately adjacent or otherwise and damage to road, streets footpaths, bridges and works forming the subject of this contract by frost or other inclemency of the weather. The Contractor shall indemnify the J K AGRO and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and in respect of any claims made in respect of injury or damage under any Acts of government or otherwise and also in respect of any award of compensation of damage consequent upon such claims.
- ii) The Contractor shall reinstate all damages of every sort mentioned in this clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.
- iii) The Contractor shall indemnify the J K AGRO against all claims which may be made against the J K AGRO by the member of the public or other third party in respect of works in consequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the contract, **an Insurance Policy with Insurance Agency approved by IRDA in the joint names of the J K AGRO and Contractor against such risks and deposit such policy or policies with the J K AGRO from time to time during the currency of this contract.** The contractor shall similarly indemnify the J K AGRO against all claims which may be made upon the J K AGRO whether under the Workman's Compensation Act or any other statuette in force during the currency of this contract or at common law

in respect of any employee of the Contractor or any sub contractor and shall at his own expense effect and maintain with an approved office a policy of insurance in the joint names of the J K AGRO and the Contractor against such risks and deposit such policy or policies with the J K AGRO from time to time during the currency of the Contract. The Contractor shall be responsible for anything which may be excluded from the Insurance policies above referred to and also for all other damage to any property arising out of an incidental to the negligent or defective carrying out of this contract. He shall also indemnify the J K AGRO in respect of any costs, charges or expenses arising out of any claim re-proceedings and also in respect of any award of or compensation of damages arising there from

- iv) The Employer shall be at liberty and is empowered to deduct the amount of any damage, compensation costs, charges and expenses arising or accruing from or in respect of any such claim or damage of any sum or sums due to or become due to the Contractor including the Security Deposit.
- v) If the Contractor fails to comply with the terms of these conditions, the Employer may insure the works and may deduct the amount of the premiums paid from any moneys that may be or become payable to the Contractor or may at the option, do not release running payment to the Contractor until the Contractor shall have complied with the terms of this condition.

31.3 ANY OTHER INSURANCE REQUIRED UNDER LAW OR REGULATIONS OR BY J K AGRO.

Contractor shall also carry and maintain any other insurance which he may be required under law or regulation from time to time. He shall also carry and maintain any other insurance which may be required by J K AGRO.

32.0 CLAIMS

- 32.1 The provision of Conditions of contract will be applicable only for settlement of claims or disputes between the parties for value less than or equal to 20% of the value of the contract and when claim or disputes are of value more than 20% of the value of the contract, relevant clauses of the Conditions of contract will not be applicable and arbitration will not be remedy for settlement of such disputes.
- 32.2 The contractor shall not be entitled to ask for reference to Arbitrator before the completion of the work assigned to him under this contract. The contractor shall seek reference to arbitration to settle the disputes only once within the ambit of condition mentioned above.
- 32.3 The contractor shall not be entitled to make any claim whatsoever against the J K AGRO under or by virtue of or arising out of this contract, nor shall the J K AGRO entertain or consider any such claim if made by the contractor, after he shall sign a "NO CLAIM CERTIFICATE" in favour of the J K AGRO, in such a form as shall be required by the J K AGRO, after the works are finally measured up. The contractor shall be debarred from disputing the correctness of the items covered by "NO Claim Certificate" or demanding a reference to Arbitration in respect thereof.
- 32.4 The successful tenderer/s contractor/s shall put up their claims as per Conditions of contract during the progress of work and not after completion of the work. All such claims and disputes shall be settled promptly during the progress of the work. Apart from the decisions given at various levels the final authority for giving the decisions on claims and disputes put up by the contractor/s shall be the MD/J K AGRO only and the decisions regarding measurements, method of measurements meaning and intent and interpretation of specifications of the contract given and made by the MD/J K AGRO shall be final and binding on the contractor/s. Such decisions by the MD/J K AGRO shall be treated as "Excepted Matters" in terms of the conditions of the contract. These Special Conditions shall prevail over existing of the Conditions of contract other than provisions relating to "Excepted Matters".

33.0 SITE OFFICE

Contractor shall have to provide temporary site office with requisite furniture & appliances and godown for storing/stacking construction materials at their own cost for which no extra payment will be made.

34.0 PF COMPLIANCE

It will be responsibility of the contractor to obtain separate code/identification No. for contractor's deposit of PF dues, if applicable with concerned authority directly. Copy of PF Registration / code no. alongwith copy of PF paid Challans shall be submitted alongwith Running Account or Final Bill.

35.0 Recoveries/Withhold

- 35.1** In case of any technical deficiencies, lapses on account of non compliance of PF/ESI, Insurance (CAR & WC Policies), labour license, or any other reasons not covered in any clause of tender documents etc., are noticed by the Engineer-in-charge/J K AGRO, then a sum as recommended or decided by Project/Engineer-in-charge may be withheld, till rectification/remedy/compliance of the deficiencies.
- 35.2** Recoveries, if any, on account of uncovered period of insurance (CAR & WC Policies), defective work, losses to J K AGRO or any other liability not fulfilled by contractor etc., shall be effected from the contractor's bill/any other due (s) amount (i.e. Final Bill, Security Deposit & Performance Bank Guarantee, etc.)

36.0 Payment of Wages act & Minimum Wages act:

- 36.1** Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages act in terms of Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website: www.shramikkalyan.gov.in. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration updation of Portal shall be done as under:
- (a) Contractor shall apply for onetime registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
 - (b) Contractor once approved by an Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LoAs issued in his favour.
 - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LoA). Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 day of receipt of such request.
 - (d) After approval of LoA by Engineer, Contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
 - (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour and payments made thereof after each wage period.
- 36.2** While processing payment of any, 'On Account bill' or 'Final bill' or release of Performance Guarantee/Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Shramikkalyan portal at '.....n' till.....Month.....Year."
- 37.** The Contractor shall coordinate with various government departments/agencies and obtain all statutory approvals required for the carrying out the civil work under tender viz. Building Plan Sanction, Pollution NOC, Fire NOC, Forest Department Approval for removal of trees etc. JK Agro however will make all payments towards the statutory fees/ deposits etc to these departments/agencies.

38. Extension Of Time For Delay Due To Contractor :

- 38.1** **Extension in time:** If the contractor shall desire an extension in time for completion of the works on the grounds of his having been un-avoidably hindered in its execution or on any reasonable ground certified as such by the Engineer-in-charge, he shall apply to the Managing Director JK AIDCL within 02 days of the date of such event. The Managing Director, JK AIDCL may on reasonable grounds therefore authorize such extension as in his opinion is necessary for completion of the works in its entirety.
- 38.2** **Penalty:** In the event of contractor's failure, neglecting declining or delaying the supplies / installation or in the event of any damage occurring or being caused or in the event of any default or failure in complying with any of the terms and conditions of the contract, the corporation shall with

or without prejudice any other remedy available to it under any law for the time being in force in the:

- a. Terminate the contract after 30 days notice.
- b. Recover the amount of loss caused by damage failure or default including the consequential damage as may be determined by the department and/or
- c. Recover the extra cost, If any, involved in allotting the contract to other party and/or.
- d. Impose a penalty in form of liquidated damages on accounts of delay beyond the scheduled delivery period subject to 0.1%value of the contract per day and not exceeding 10% value of the contract and /or.
- e. Forfeiture of security deposit/Performance guarantee

39. Assignment Or Subletting Of Contract : The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein any manner whatsoever without the special permission in writing of the JK Agro. Any breach of this condition shall entitle the Railway to rescind the contract under Clause 62 of these Conditions and also render the contractor liable for payment to the Railway in respect of any loss or damage arising or ensuing from such cancellation; provided always that execution of the details of the work by petty contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this clause. The permitted subletting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the JK Agro and shall not relieve the Contractor of any responsibility under the Contract.

40. Indemnity By Contractors : The Contractor shall indemnify and save harmless the JK Agro from and against all actions, suit proceedings losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against the JK Agro by reason of any act or omission of the Contractor, his agents or employees, in the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

41. Force Majeure Clause : If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics, strikes, lockouts or acts of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

42. Extension For Delay Due To JK Agro : In the event of any failure or delay by the JK Agro to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the JK Agro due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefor, but in any such case, the JK Agro may grant such extension or extensions of the completion date as may be considered reasonable.

43. Illegal Gratification : Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the Contractor or his partner, agent or servant or, anyone on his behalf, to any officer or employee of the JK Agro, or to any person on his behalf in relation to obtaining or execution of this

or any other contract with the JK Agro shall, in addition to any criminal liability which he may incur, subject contractor to the rescission of the contract and all other contracts with the JK Agro and to the payment of any loss or damage resulting from such decision and the JK Agro shall be entitled to deduct the amounts so payable from any moneys due to the Contractor(s) under this contract or any other contracts with the JK Agro.

- 44. Maintenance Of Works :** The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the Tender Form after the date of passing of the certificate of completion by the Engineer or any other earlier date subsequent to the completion of the works that may be fixed by the Engineer be responsible for and effectively maintain and uphold in good substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times as often as the Engineer shall require, any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and shall pay and make good to the JK Agro or other persons legally entitled thereto whenever required by the Engineer so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to by reasons or in consequence of the operations of the Contractor or of his failure in any respect.
- 45. Post Payment Audit :** It is an agreed term of contract that the corporation reserves to itself the right to carry out a post-payment audit and or technical examination of the works and the final bill including all supporting vouchers, abstracts etc. and to make a claim on the contractor for the refund any excess amount paid to him, if as a result of such examination any over-payment to him is discovered to have been made in respect of any works done or alleged to have been done by him under the contract.
- 46. Defects Liability Period:** The firm shall be bound for a period of 12 months from the date of commissioning and handing over of job for satisfactory operation of the same and shall furnish a guarantee to this effect to the corporation. Any defects found in equipment or any part thereof, which may be caused by bad workmanship, use of inferior material or otherwise, or if in the opinion of the department, any repairs/ replacement are required to be made to the equipment the firm shall be liable to remove the defect/ or conduct repairs at his own cost and expenses within a period of 03days of the receipt of the notice from the corporation. In the event of failure on the part of the firm to remove these defects or make repairs within the stipulated period, the department may get the defects removed or repairs made by any other agency and the cost thereof shall be recovered from the firm.
- 47.** The bidders are requested to visit the site at **B-13 & 14, Lawrence, Delhi** to get acquainted with the nature and quantum of job.
- 48.** Before starting of the work the contractor will verify all the dimension given by himself as per the site.
- 49.** Tests: If the Engineer-in-charge and Project Management Committee instructs the contractor to carry out a test not specified in the specification to check whether any work has a defect and the test confirms the defect, then the contractor shall have to pay for the tests and the defective work shall have to be dismantled and reconstructed in accordance to the IRC/MOST/BIS/CPWD/NBO specifications as applicable
- 50.** The contractor will furnish documentary proof of procurement of material like cement, steel and other equipments and goods to the engineer-in-charge and Project Management Committee. This will include original vouchers for all quantities in lieu of purchase of material/equipments etc from the original manufacturer or authorized dealer/distributor to the satisfaction of engineer-in-charge and Project Management Committee for ascertaining of genuineness of materials.

No extra payment on account of quality control measures shall be paid to the contractor.

51. Identifying defects: The engineer shall check the contractor's work and notify the contractor of any Defects that are found. Such checking shall not affect the contractor's responsibilities. The engineer may instruct the contractor to search for a defect and to uncover and test any work at site.
52. Correction of defects: The engineer shall give notice to the contractor of any defects before the end of the Defect Liability Period, which begins at completion and is defined in the contract data. The DPL shall be extended for as long as defect remains to be corrected.
53. Every time notice of a defect is given, the contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.
54. Uncorrected Defects: If the contractor has not corrected a defect within the time specified in the Engineer's notice, the engineer will assess the cost of having the Defect corrected, and the contractor will pay this amount.
55. The material used by the contractor at site should be of approved brand/quality/specifications and any lapse in this regard shall be responsibility of the contractor.
56. Tests: the contractor shall be solely responsible for carrying out the mandatory tests (Concrete Block etc) required for the quality control at his own cost including that of material supplied for execution.
57. Restoration of site: On completion of contract, the contractor shall be responsible to remove all unused material and clearing of site.
58. Treasures & Fossils: Anything of historical or other interest or of significant value unexpectedly found on the site shall be the property of Government.

SAFETY RULES

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra labourer shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable and hand holds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 (one horizontal to four vertical).
2. Scaffolding or staging more than 3.5 meters above the ground or floor swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached bolted, braced and otherwise secured at least one meter high above the floor or platform of such scaffolding or staging and extending along the entire length thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swinging from the building or structure.
3. Working platform gangways and stairways should be so constructed that they should not sag unduly or unequally, and where the height of the platform or the gangway or the stairway is more than 3.5 meters above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in the Para above.
4. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 10 meters in length while the width between side rails in swung ladder shall in no case be less than 300 mm. for ladder upto and including 3.5 meters in length. For longer ladders this width should be increased by at least 20 mm. for each additional meter of length. Uniform steps spacing shall not exceed 300 mm. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials or any of the sides of work shall be so stacked or placed as to cause danger for inconvenience to any persons or the public.

The contractors shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defence of every suit action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such persons or which may with the consent of the contractor be paid to compromise any claim by any such person.

5. Demolition before any demolition work is commenced and also during the process of the work: -
 - a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion of flooding. No floor, roof or other part of the building shall be so overloaded with debris of materials as to render it unsafe.
6. All necessary personal safety equipment as considered adequate by the Engineer in charge should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by these concerned.
 - a) Workers employed on mixing asphaltic materials, cement and lime mortar shall be provided with protective goggles.
 - b) Of these engaged in white washing and mixing or attacking of cement bags or any materials, which is injurious to the eyes, shall be provided with protective goggles.
 - c) Those engaged in welding works shall be provided with welder's protective eye sight lids.
 - d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
7. The JK Agro will be sole judge in the absolute discretion, of the fact that it is necessary to post any staff, that which of the staff will be suitable for the purpose, that what should be the wage and other allowance payable by the contractor for staff posted for the purpose. The JK Agro will have a right without prejudice to other remedies to deduct the wages etc, of such staff from the bills of the contractor in respect of this contract of from any moneys or the contractor whatsoever available with the JK Agro. The contractor will

- be liable for any over payments under Workman Compensation Act on account of any injury sustained to JK Agro servant during that period.
8. When the work is done near any place, where there is risk of drowning, all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any persons in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
 9. Use of hoisting machines and tackle including their attachment anchorage and supports shall conform the following standards or conditions: -
 - a)
 - i) These shall be of good mechanical construction, ground materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
 - ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
 - b) Every Crane driver or hoisting appliances operator shall be properly qualified and no person under the age of 21 years shall be incharge of any hoisting machine, including any scaffolding.
 - c) In case of every hoisting machine and of every cabin ring, shackle, swivel and pulley block used in hoisting or as means of suspension safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with in the safe working load.
 In case of a hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machinery or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - d) In case of departmental machine, the safe working load shall be notified by the Electrical Engineer in charge. As regards contractor's machine, the contractor shall notify safe working load of the machine to the Engineer in charge whenever he brings any machinery to site of work, get it verified by the Electrical Engineer concerned.
 10. Motors, gearing transmission electric wiring and of the dangerous part of hoisting appliances should be provided with efficient safe guards, hoisting appliances should be provided with such means will as reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energized, insulating mates, wearing apparel, such as gloves, sleeves and both as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
 11. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold ladder or equipment shall be altered or removed while it is use. Adequate washing facilities should be provided at or near places of work.
 12. These safety provisions should be brought to the notice of all concerned display on a notice board at a prominent place at the work spot. The persons responsible for compliance of the safety code shall be named therein by the contractor.
 13. To ensure effective endorsement of the rules and Regulations relating to safety precautions, the arrangements made by the contractor shall be opened to inspection by Labour Officer/Engineer in charge of the Department of their representative.
 14. Notwithstanding the above clauses from (1) to (13), there is nothing in these to exempt the contract from the operations of any other act or Rule in force in the Republic of India.
 15. The Contractor shall follow strict safety norms at all times during work in progress. In case of failure of the contractor to comply with the strict safety norms, a penalty of Rs 5000/- per instance shall be levied on the contractor. The decision of Engineer In charge shall be final and binding on the contractor.

SECTION – VII

(TECHNICAL SPECIFICATIONS)

TECHNICAL SPECIFICATIONS**1.0 GENERAL****1.1 SCOPE**

The scope of work includes: **“PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.”** These specifications establish and define the materials and constructional requirements for civil engineering construction works in brief.

1.2 EQUIVALENCY OF STANDARDS AND CODES, MEASUREMENTS & MATERIALS

- 1.2.1 Wherever reference is made in the contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the contract. In case, no reference is made for any particular work, relevant IS /BIS Codes will be followed.
- 1.2.2 Providing and operating necessary measuring and testing devices and materials including all consumables are included in the Scope of Work. No separate measurement or payment for testing the work shall be made but rates quoted for various items shall be deemed to include cost of such tests, which are required to ensure achievement of specified quality.
- 1.2.3 All materials shall be of standard quality, manufactured by renowned concerns, conforming to Indian Standards and shall have certification work from Bureau of Indian Standards as far as possible, unless otherwise approved by Engineer. The contractor shall get all materials approved by Engineer prior to procurement and use. The contractor shall furnish manufacturer's certificates, for materials supplied by him when asked for. Further to that he shall get materials tested from an approved Test House, if asked for by the Engineer. The cost for all the tests and test certificates shall be borne by the contractor. No separate payment shall be made for the testing. The Engineer shall have the right to determine whether all or any of the materials are suitable. Any materials procured or brought to site and not conforming to specifications and satisfaction of the Engineer shall be rejected and the contractor shall have to remove the same immediately from site at his own expense and without any claim for compensation due to such rejection.
- 1.2.4 All goods and materials to be incorporated in the works shall be new, unused, of the most recent or current models and incorporate all recent improvements in design and materials, unless provided otherwise in the contract.
- 1.2.5 Wherever referred to in this tender document, only the latest revision of specifications, Codes of Practice and other publications of the Indian Standards shall be applicable.

1.3 WORK SPECIFICATIONS

The works will be executed, as indicated in the nomenclature of each items, Bill of Quantities, Drawings, Specification and Terms and Conditions read in conjunction with those given in this Contract. In the absence of any definite provision in the specifications, contained herein, reference may be made particularly to:

- a) For Pavements works - Latest MORTH / CPWD/DSR 2021 Specifications/ Specified Specifications.
- b) For items/structure, covered by CPWD: Latest specification for Materials & works shall be followed.
- c) DSR 2021 specification for all items pertaining to DSR 2021.
- d) IS code of practice for planning and reinforced concrete for general building construction (IS 456-2000 with latest correction slip/amendment)
- e) IS code of practice (IS 800 – 2007 with latest correction slip/amendment) revised 10th print 1981 for structural steel.
- f) IS 383-1970 with latest correction slips/amendment for fine and coarse aggregate.
- g) Any other IS code relevant in case the DSR 2021 standard specifications either refer to or the later is not clear.
- h) For all electrical work Latest DSR 2021 specifications with all correction slips will be followed.
- i) For items make – Contractor needs to get the approval from designated officer of JK Agro/PMC for the makes of all items to be supplied / utilized under the tender. The designated officer of JK Agro/ PMC shall have full authority to seek details/ test reports/ documentation in relation to the makes offered for supply by contractor. The designated officer of JK Agro/ PMC shall have full authority to reject any of the offered makes if found unsuitable/ not acceptable to standard makes & quality and this decision shall be binding on the contractor. In case any material is supplied without approval from the designated officer of JK Agro/PMC then it shall be automatically deemed as rejected.

1.3.1 The list is not exhaustive. The relevant, IS codes will be followed where the DSR 2021 / MORTH specifications, do not cover any item of works.

1.3.2 Wherever referred specifications are silent, the construction and completion of the works shall conform to relevant I.S Code of practice. In case of any dispute arising out of the interpretation of the above, the decision of Engineer shall be final and binding on the contractor.

1.3.3 Copies of DSR 2021 Specifications can be obtained from DSR 2021, on payment from CPWD office. ISI and other codes may be purchased from Manager Government of India Publication Branch, Patiala House, New Delhi and Director ISI Manak Bhawan, Bahadur Shah Zafar Marg, New Delhi or when available.

1.4 The excavation in foundation will include all shoring and protection works that may be required for ensuring safety during execution. Nothing extra will be paid for wet

excavation or bailing out water. **The contractor will have to make his own arrangement for bailing out water including pumping.**

- 1.5** Contractor shall bring samples of all materials to be used on the work. One set of such sample will be kept in the Engineer – incharge’s office at site and other will be available with the contractor at site. Both the samples shall be jointly signed and sealed by Engineer-in-charge and contractor.

2.0 Bituminous Works

This specification covers earthwork, sub-grade, sub-base, and base-course and wearing course for concrete pavement as well as bitumen pavement. Specification for Road and Bridge works by MORTH shall be followed for pavement works, unless mentioned otherwise in this specification. Specification for WBM, WMM, GSBC, DBM, AC & Tack Coat, etc, shall be as per MORTH specification. Bituminous works shall be as per DSR 2021/MORTH Specification. Wherever the item is based on DSR 2021, DSR 2021 Specifications shall be followed.

2.1 Site Clearance:

Before the earthwork is started, the area coming under cutting and filling shall be cleared of shrubs, rank vegetation, grass, brushwood, trees and sapling of girth up to **30cm.** measured at a height of one meter above ground level and rubbish removed outside boundary. The roots of trees and saplings shall be removed to a depth of **60 cm.** below ground level or 30 cm below formation level or **15cm** below sub-grade level whichever is lower and holes or hollows filled up with the earth, rammed or leveled. Payment of this item of site clearance will be made as per relevant item in BOQ.

2.2 Concrete work

All mixed design concrete shall be executed by Concrete Batch Mix Plant of suitable capacity, to be installed by Contractor at site. In special cases RMC shall be allowed by Engineer on written request of the contractor but the RMC should also be from a plant of appropriate capacity. **No extra payment shall be allowed on account of Concrete from batch mix plant or RMC.**

If at any stage of the work , during or after placing the concrete in the structure the work is found defective such concrete shall be removed and work be done with fresh concrete and adequate rigid forms at the cost of the contractor. The contractor shall be liable to bear the cost for the cement concrete thus dismantled.

The construction work shall be done with proper and assured system of curing duly identified areas with dates marked in paint. In hot weather the contractor shall take relevant care to cover the work with wet gunny bags/hessian cloth or use continuous ponding of water on surface so as to keep the surface wet.

2.3 Fine Aggregates

Coarse sand of approved quality conforming to relevant IS code shall be used as fine aggregate. For cement concrete, reinforced cement concrete and concrete of any other type, sand / quarries dust shall be cleaned and absolutely free from dirt and no other

deleterious material shall be permitted. Samples of sand to be used shall be approved by Engineer-in-charge or his authorised representative.

2.4 Coarse Aggregate

The coarse aggregate which may be either stone ballast or stone chips as directed, should be well graded and preferably machine broken and should conform to DSR 2021 / or relevant IS code and should be obtained from approved quarries. The stone should be free from soft thin elongated or laminated or decayed particles. The aggregates should be free from dust. Cleaning and washing, if necessary, should be carried out as per the direction of the Engineer or his authorised representative.

The mention of any sources does not, however, absolve the contractor's for his / their liability to ensure that the coarse sand, stone chips and ballast as may be required for the work strictly in accordance with Standard Specification .In case, these materials cannot be had according to specification, from these sources the contractor may bring the materials from any other sources by obtaining prior permission of the Engineer – in-charge, provided materials are according to standard specifications.

In addition to the routine tests, special tests on materials will be carried out whenever required by the Engineer .The cost of the special test done will be borne by the contractor. Necessary facilities in the form of moulds, cones, scales materials, labour for casting, curing, specimen and such other facilities as pre –requisite to any standard concrete tests will in any case be afforded by the contractor free of cost.

2.5 Form work and shuttering

For cement concrete in slabs, columns, beams, chajjas, etc, the contractor should use water proof plywood / steel shuttering plate sets as per the drawing. The steel plate should have smooth surface and should be free of bulge during the concreting. The entire shuttering should be water proof and conform to relevant IS Code. If however, the contractor wants to use wooden shuttering, he will have to use new planks and scanting, for fabrication of such shuttering so as to ensure smooth and leak proof surface.

2.6 Reinforcement

TMT bars of Fe 500 D should be used. Binding wire of approved quality shall be arranged by the contractor himself and the rates quoted for RCC work will includes cost of binding wire and the process, of binding etc,

2.7 All works shall be done strictly in accordance with the approved drawings and no departure shall be made by the contractor without the order of the Engineer in writing.

2.8 Paint

Standard brands of paints and primers as per relevant IS code or as specified, all labour and materials, cleaning materials, ladder scaffolding, tools plant and equipment's including brushes of approved /pattern of contractor expenses.

2.9 Any other work not included in above paras should be executed as per relevant specifications and as directed by Engineer in-charge.

3.0 Specification for laying of cable duct:

3.1 Specification for PVC pipe for cable duct shall be

Outside dia	-	110mm
Tolerance on outside dia (Plus)	-	0.4mm
Wall thickness	-	7mm
Working Pressure	-	10kg/sqm

OR, diameter and working pressure of the PVC pipe as specified in the relevant BOQ item.

Joining the PVC pipes shall be done using approved solvent cement as per approved method. Checking for correct alignment, straightness and smooth obstruction free passage shall be done by use of mandrels of approved design. Contractor must ensure that such mandrels are available at work site at all times during checking. Ducts not passing the requirement have to be redone at contractor's cost. All accessories for PVC for jointing separators for positioning shall be approved by Engineer before execution of work.

Duct pipes shall be kept closed through a provision or stoppers at both ends of approved design. All cable ducts are to be provided with Nylon wire of approved size. These wire ropes shall be kept fastened to the stoppers. No object shall be left in the pipes and it shall be ensured that dirt, animals etc, cannot enter the duct. Any dirt, which is, present in or ends up in the pipe attachment etc, must be removed.

- 3.2** All earthworks are to be done which is necessary for correct execution of work. Sufficient measures to be taken to prevent subsidence of neighboring areas, drainage, cable ducts supports, any other structures. Width of bottom of work ditch must be 25cm plus external diameter of pipe for depth up to 1m. For depth exceeding one meter an allowance of 5 cm per meter of depth for each side of trench shall be added to above width. Where more than one pipe are to be laid, the diameter shall be reckoned as the horizontal distance from outside of the outer most pipes.

Pipe shall be laid as shown in the drawing with sand layer below pipe in between and above pipe. Back filling must be done in layers of 20cm and soil must be compacted so as to achieve 97% of dry density at OMC as per IS: 2720 Part VIII Soil, rubble whichever not appropriate to fill up must be kept outside by the contractor. The back filling shall be done only after activities executed in them have been approved by Engineer in charge.

4.0 Brickwork

Bricks used shall have compressive strength not less than 75 Kg/sq cm. Other specifications shall be as per DSR 2021 Specifications. In case bricks of compressive strength 75/kg per sqm are not available and the structure is not of load bearing nature, then use of less compressive strength bricks can be relaxed as per CPWD/DSR 2021 specification, at reduced rate as worked out by the Engineer in-charge.

5.0 TESTING OF MATERIALS

- 5.1** All materials to be used in and on every part of the works shall be subjected, from time to time, such tests as given in List of Mandatory Tests or as required as per CPWD/DSR 2021 specifications. These tests/norms are the Minimum requirement and the Engineer-in-Charge may supplement these with additional tests/checks according to the site condition, at no extra cost. **All tests shall be performed at the expenses of the contractor as defined in Special Conditions of Contract.** The samples for tests shall be in all cases selected by the Engineer-in-charge and supplied by the contractor as part of the contract. If at any time, any material so tested, fails to meet the acceptance criteria, the same shall be removed from the site of works and other materials substituted therefore, but in the absence of any specified test/acceptance criteria, the decision of the Engineer-in-charge shall be final and binding as to whether the said material or materials shall be used on the works, or forthwith removed and other material substituted.
- 5.2** The contractor shall permit the Engineer-in-charge or his authorized representative to be present during any of or all the tests. The notification to the Engineer-in-charge that the work has been completed, the contractor shall make under the direction and in the presence of Engineer-in-charge such tests and inspections as have been specified or as the engineer-in-charge shall consider necessary to determine whether or not the full intent of requirements of the plans and specifications have been fulfilled. In case the work does not meet the full intent of the specifications it shall be rectified by the contractor at no extra cost and the contractor shall bear all the expenses for any further tests considered necessary.
- 5.3** The contractor shall arrange for conducting tests, specified in Quality Assurance Plan (QAP), in the presence of an officer, authorized by the Engineer-in-Charge. Full records of all tests conducted shall be maintained by the contractor in the format given by Engineer-in-Charge which will be made available to the Engineer-in-Charge or to any officer authorized by him whenever required.
- 5.4** The purchaser representative shall be free to visit the manufacturer work at all reasonable times to witness and inspect the testing of equipment. It is the duty of tender to see that all equipments supplied are tested as per relevant IS specifications. The contractor shall furnish Manufacturer Test Certificate (MTC) for the routine and type test conducted on the equipment offered, if necessary the contractor shall arrange to conduct all the routine test at the manufacturer premises in presence of JK AGRO/PMC representative on receipt of material/equipment at site the tenderer shall offer equipment/material for inspection and get approved before installations.

6.0 Preparation of sub-grade

- 6.1** Where the pavement is to be laid on surface obtained after cutting the soil, the sub-grade for pavement shall be prepared as per specifications relevant to item in BOQ for achieving not less than 97% of dry density as per IS : 2720 Part VIII at no extra cost or otherwise as per the procedure mentioned hereafter.

The sub-grade shall be excavated to a depth of 0.5 meter, watered and compacted in layers not exceeding 250mm thickness, dressing to required camber and profile and

consolidation with vibratory roller of 80 to 100 KN static weight so as to achieve not less than 97% of dry density as per IS : 2720 Part VIII. However, before relaying and compacting the loosened material the surface below this level shall be suitably consolidated as directed by the Engineer but with a minimum six passes of vibratory roller. If the next 15 cm below this level does not have a relative compaction of 90%, it shall be compacted until not less than 95% dry density is obtained. Rate for work of this nature shall be covered in the item of preparation of sub-grade. Where the pavement is to be laid on fill and height of proposed fill is less than 0.5 meter, the procedure for sub-grade preparation as mentioned above shall be followed.

Where the pavement is to be laid on fill and the height of proposed fill is more than 0.5 meter, preparation of sub-grade is not required at these locations, however, in such locations original ground level shall be compacted by rolling as directed by the Engineer as much as possible but with a minimum of six passes of vibratory roller of 80 to 100 KN static weight. No separate payment shall be made for this, as same shall covered in item of earth work in excavation and / or filling.

6.2 **Specification of GSBC**

The work of sub base to be executed as per MORTH Specification of each layer not exceeding of **150mm thickness** to achieve not less than **98% MDD** as per IS-2720 Part-VIII.

6.3 **Specification of WBM/WMM**

The work of WBM to be executed as per MORTH Specification of each **layer not exceeding of 75mm thickness**.

6.4 **Specification for base concrete**

The specification covers laying of **M-10 concrete** in base course under concrete block pavement, over granular sub-base. The work of M-10 concrete for base course shall be executed as per section 601 of MORTH specification for Dry Lean Concrete (DLC) with modifications as mentioned below:-

- a. Design mix for M-10 concrete shall be as per IS specifications.
- b. Concrete mixing shall be done as with batching plant with facilities of mixing concrete by weight.
- c. Concrete shall be laid/placed by a **paver finisher** as mentioned in MOST / MORTH specifications. Before laying the concrete, surface shall be got inspected by Site Engineer.
- d. Compaction shall be done using smooth wheeled vibratory roller of minimum 80 to 100 KN static weight.
- e. Curing should be done by covering the surface by gunny bags / hessian or by providing bund over the concrete surface with standing water on top surface of concrete as per MORTH specification.
- f. After the end of days work, the edge of the concrete is to be provide with such shuttering so that clear and straight edge are available on the next days.
- g. The cement content of M-10 concrete shall not be less than **150 kg per cum**.

6.5 **Specification for Pavement Quality Concrete(PQC)**

The work of PQC pavement for road work shall be executed as per latest CPWD/DSR 2021 Specification and minimum cement content shall **not be less** than as specified for design mix cement concrete. However if higher grade and of concrete is to be executed excess / less cement used as per design mix shall be payable / recoverable separately as per relevant BOQ item.

6.6 Specification for Kerb Stone

The work of Kerb Stone of specific grade cements concrete to be executed as per latest CPWD/DSR 2021 Specification. The Kerb stone shall be factory machine made with Strong Vibratory compaction and exposed concrete finished. No site production shall be allowed. Repaired, plastered & damaged Kerb stone shall not be allowed

TECHNICAL SPECIFICATIONS

PEB STRUCTURE TECHNICAL SPECIFICATION

1.0 SCOPE

The scope of work covers preparation of Fabrication drawings, fabrication, supplying, painting, erection and commissioning of Pre-Engineered Structural Steel Cold Store Buildings along with roof sheeting, side wall cladding, and canopy, anchor Bolts, rolling shutter/door frames, gutter & rain water down-comer etc.

Clear eaves heights are measured from finished floor level up to bottom of rafter knee level. The Building to have rolling shutters, doors etc. Rolling shutter & doors shall be supplied by other agency; however steel frame for rolling shutters & doors shall be included in this scope. The side cladding shall be provided to all peripheral walls as shown in GA excepting at rolling shutter & door locations where it is upto the top of shutter frame. The side cladding shall be fixed with main steel columns with requisite flashing arrangement to prevent entry of rain water inside the shed. The building shall have gutter (metal) and rain water down come along two opposite longitudinal sides. Materials of construction for gutters has to be of steel material with appropriate corrosion protection. Roof purlin & side runner spacing shall be decided based on applicable wind force on the sheeting that can with stand without deformation. Refer attached Tonnage BOQ.

1. DESIGN LOADS

Buildings shall be designed for the following loads:-

- Dead Load: self-weight of the building+15Kg/m² (Roof Sheet + purlins+Accessories)
- Collateral Load: Load due to solar panel in cold room area as 20Kg/Sqm.
- Live load: As per IS: 875(Part-III)-1987 on roof
- Wind load: Wind load shall be as per provisions of IS: 875(part3). Basic wind Speed (V_b) is 47 meters/sec.

For calculation of Design Wind Speed (V_z) the following coefficients shall be adopted.

K_1 =Probability Factor for a return period of 50years=1.0

K_2 =Terrain, height and structure size factor (to be determined from Table 2 of IS: 875 (Part3) = 1.03

Terrain classification=Category 2

K_3 =Topography Factor =1.00

K_4 =1.0

$V_z = V_b K_1 K_2 K_3 K_4$ and Design wind pressure

2. Internal Pressure coefficient = +/-0.2

$P_z = 0.6 V_z^2$ where

P_z =Design Wind Pressure in N/mm² at height Z

V_z =Design Wind Speed in m/s at height Z .

- Seismic load: Zone IV as defined in IS: 1893– 2002.

2.1 Seismic load

This building structure will be designed for seismic forces in accordance with IS: 1893 (part- I & IV):2002.

For calculation of W , which is equal to $A_h \times W$ the following parameters will be considered:

Zone factor $Z = 0.24$ (Zone-IV (As per tender documents))

Importance factor, $I = 1.0$ (Ref: table 5 of IS: 1893-IV)

Response reduction factor, $R = 4.0$ (special moment frame)

Damping Factor = 2%

3.0 Applicable codes, standards & specifications

The Pre-Engineered Building described above is designed according to the latest IS Design Codes.

Apart from the IS Codes mentioned in particular for wind, live and earthquake loads, all other Relevant codes such as American standards (AISC, MBMA, AISI & AWS specifications)

Related to the specific job may be followed wherever applicable, if the specifications for the Same are not available in the relevant IS codes.

Loading codes

IS: 875 Code of Practice for design loads (other than earthquake) for Buildings and structures (All parts).

IS: 1911-1967 Schedule of unit weights of building materials.

IS: 1893 (Part-1(2002) Criteria for earthquake resistant design of structure.

Structural steel

IS: 800 2007 Code of Practice for general construction in steel

IS 801 1975 Code of practice for use of cold formed light gauge steel structure member

IS: 806 Code of Practice for use of steel tubes in general building construction

IS: 808 Dimensions for hot rolled steel beam, column channel and angle section

IS 811 Cold formed light gauge structural steel section

IS: 813- Scheme of symbols for welding

IS: 816- Code of Practice for use of metal arc welding for general construction in mild steel

IS 822 Code of procedure for inspection of weld

IS:1161- Steel tubes for structural purposes

IS 1367 Technical supply condition for threaded fastener

IS: 2062- Steel for general structural purpose

IS 3757 High strength structural bolt

IS: 4000- Code of Practice- High Strength bolts in steel structures-

IS 4923 Hollow Steel section for structural use

IS 8500 Structural Steel micro alloyed (Medium & high strength Qualities)

Load Combinations: - (As per table 4 of IS 800-2007)

1. 1.5 Dead Load + 1.5 Live Load + 1.5 Collateral

2. 1.5 Dead Load + 1.5 Wind Load

3. 1.5 Dead Load +/- 1.5 Seismic Load

4. 1.2 Dead Load + 1.2 live Load + 1.2 Collateral +0.6 wind load

5. 1.2 Dead Load + 1.2 live Load + 1.2 Collateral +/-0.6 seismic load

6. 1.2 Dead Load + 1.2 live Load + 1.2 Collateral + 1.2 wind load

7. 1.2 Dead Load + 1.2 live Load + 1.2 Collateral + +/-1.2 seismic load

For serviceability check (As per table 4 of IS 800-2007)

8. 1.0 Dead Load + 1.0 Live Load + 1.0 Collateral

9. 1.0 Dead Load + 1.0 Wind Load

10. 1.0 Dead Load + /- 1.0 Seismic Load

11. 1.0 Dead Load + 1.0 live Load + 1.0 Collateral

12. 1.0 Dead Load + 0.8 live Load + 0.8 Collateral + 0.8 wind load

13. 1.0 Dead Load + 0.8 live Load + 0.8 Collateral +/- 0.8 Seismic Load

4.0 OTHER CRITERIA

- Frame work shall be robust and self-supporting
- PEB rigid frame comprises columns and rafters as per design
- Grade slab shall not be used for resisting horizontal forces
- All welding shall be continuous both side. Stitch welding shall not be allowed
- No hollow section shall be used unless success is available for maintenance and painting
- Deflection criteria shall be as per IS: 800-2007
- Sag rods shall be provided for purlin & side runner.
- Side lapin sheeting shall be min 150 mm and end lap shall be minimum 200 mm
- The roof sheeting shall be provided in a manner, which prevents ingress of rainwater. Silicon sealant tape to be provided for all joints with self-tapping screws/rivets. Self-drilling Screws shall be of “ITW Buildex” with EPDM washer or equivalent make.
- Roof slope shall not be flatter than 1:10
- Min thickness for B/U section should be 6mm.

5.0 STRUCTURAL STEEL

5.1 PRIMARY MEMBERS

All primary structural members like columns, roof/portal beams or roof trusses, bracings etc shall be in structural steel conforming to ASTM 572 Grade 50 or IS-2062 Grade E 350, The yield strength of material shall be 345 Mpa. **The structural steel members shall be made-up from built-up sections using plates of minimum thickness 5 mm.** The building shall be Designed in accordance with specifications of IS: 800, IS: 875, IS: 1893 Codes.

5.2 SECONDARY MEMBERS

Purlin, girts, eaves struts, etc made out of cold roll steel factory profiled shall have flanges and webs with physical specifications equivalent and having minimum yield Strength of 345 MPa conforming to ASTM – A 607 (Grade 50) or IS-513 of minimum thickness of 1.6 mm. The sagrod shall have minimum yield strength of 250 Mpa conforming to IS-2062.

All members excepting sagrod & bracing will be pre – galvanized with minimum coating material of 180 GSM. The members shall be designed in accordance to IS: 801.

6.0 HOLDING DOWN BOLTS

All holding down bolt assemblies shall be designed, detailed and approval obtained from Engineer, supplied and transported to site including threading, provision of nuts, locknuts, washers, and pipe sleeves etc all as per specifications and approved fabrication drawings.

7.0 FLASHING AND TRIM

This will be furnished at the rake, corners, framed openings, accessories and wherever necessary to provide weather tightness and finished appearance.

8.0 CLOSURE STRIP

Closure matching the profile of the panel shall be supplied along with the eave and rake.

9.0 SEALER/ROPE SEAL

This is to be applied at all side laps and end laps of roof panels and around self – flashing windows/louvres. Sealer shall be 6 mm wide x 5 mm thick, as best of fiber filled pressure sensitive Butyl tape. The sealer shall be non-asphalted, non- shrinking, non- drying & non-toxic and shall have superior adhesion to metals, plastics and painted surfaces at temperature from -51 deg „C“ to +104deg „C“.

10.0 ANGLE/ ROD BRACING

Diagonal angle/rod bracing shall be supplied in the roof and side walls to brace the building against wind load, seismic load or any other horizontal load. Bracing is essential to the stability of the building. Location and profile of bracings shall be decided in consultation with the owner/consultant.

11.0 WELDING OF PRIMARY MEMBERS

11.1 SHOP

Weld shall be of controlled CO2 welding like MIG/ MAG in accordance to IS816 or submerged arc welding type in accordance to AWS D1.1. Minimum throat thickness of weld shall be 5 mm.

11.2 FIELD

All primary connection fasteners shall be High Strength Bolts of Grade 8.8 conforming to IS:3757, IS: 400 or IS: 1367 or ASTM A 325 or equivalent. All secondary connection fasteners shall be with bolts of property class 4.6 conforming to IS: 1363 or IS: 1367 or ASTM A 307 or equivalent. The fasteners shall be galvanized.

12. SHEETING SYSTEM FOR ROOF & SIDE CLADDING

Providing & fixing pre coated Galvanized iron roof profile sheet 0.50mm (+0.05%) TCT with zinc coating 120 Gram/m² as per IS:277 in 240 Mpa steel grade, 5-7 microns epoxy primer on both side of the sheet & polyester top coat 15-18 microns. Sheet should have protective guard film of 25microns. The sheet shall be fixed using self-drilling/self-tapping screws of size (5.5x55mm) with EPDM seal.

13.0 The following is the list of the material standards and specifications for which the building components have been designed

Sl. No	Materials	Specifications	Yield Strength
1.	Built-Up Members	IS:2062/IS 8500	Fy = 345 MPa
2.	Hot Rolled Secondary Members	IS:2062	Fy = 250 MPa
3.	Cold Formed Secondary Members	IS 1079	Fy = 345MPa
4.	Anchor bolt	IS 1369 class 4.6(grade B)	Fy = 250 MPa
5.	High Strength Bolts for Primary Connections	IS:1367 Gr. 8.8 /	Fy = 640 MPa
6.	Machine Bolts for Secondary Connection	IS:1367 Gr. 4.6 /	Fy = 250 MPa

NOTE:

- The design & drawing of PEB structure would be checked for economical design by a 3rd party designer as per the instruction of the Engineer In-charge/J K Agro and after that same will be get vetted from the IIT/NIT. The fees for proof checking of the design drawing by the 3rd party designer and vetting by IIT/NIT will be borne by the agency/contractor.

SECTION VIII

APPENDIX SHOWING IMPORTANT SCHEDULES

- | | | | |
|-----|--|---|---|
| 1. | SIGNING THE AGREEMENT | : | Within 30 days after the date of issue of Letter of Acceptance. |
| 2. | COMMENCEMENT OF WORK | : | 15th days after date of the issue of letter of Acceptance (LOA). |
| 3. | EMD TO BE SUBMITTED ALONG WITH TENDER | : | Rs 18.84 lacs should be submitted through e-payment and the receipt of the same should be scanned and uploaded alongwith tender. |
| 4. | PERIOD OF COMPLETION | : | 12 Months from the 15 th day after date of issue of letter of acceptance. |
| 5. | LIQUIDATED DAMAGES | : | As per Tender Conditions |
| 6. | VALUE OF RUNNING ON ACCOUNT BILL | | Running account bill not less than 7.5% of contract value. |
| 7. | PERFORMANCE GUARANTEE | : | 5% of the contract value in the form of irrevocable Bank Guarantee to be deposited before signing of agreement.
(within 30 days from date of issue of LOA & with penalty upto 60 days as per CC |
| 8. | SECURITY DEPOSIT | : | 3% of the contract value or modified contract value. EMD will be converted in Security Deposit. Recoveries will be made @ 10% from each running on account/final bills till it reaches SD amount. |
| 9. | INCOME TAX, GOODS AND SERVICE TAX DEDUCTIONS | : | At prevailing rate from each bill. |
| 10. | DEFECTS LIABILITY PERIOD | : | 12 months after actual & final completion of work. |
| 11. | PERIOD OF FINAL MEASUREMENT | : | 03 months after physical completion of work |

Section - IX

BANK DETAILS PERFORMA

Banker details for refund of EMD through E-payment

Name of Work: PEB Building including civil works (Package 1) - Construction of New Cold Rooms and Up-gradation of Cold Rooms at B- 13&14, Lawrence Road, Delhi.

Name of contractor :

Name of Bank :

Address of Bank :

Type of Bank Account :

Bank Account No. :

MICR NO. :

Bank's Sort Code :

Bank's Swift Code :

RTGS Code (IFSC Code)
(Alphanumeric 11 digit code)

Bank Telephone :

One cheque duly cancelled (signature not required) :

Signature of contractor with office seal

Section - X

LIST OF MANDATORY TESTS

SECTION – X

LIST OF MANDATORY TESTS					
S. No.	Description of Material	Test	Reference of IS Code / Specification for testing	Field / Laboratory test	Frequency of testing
1	Cement (Approved brand :-JK, Gujarat Ambuja, Birla Uttam, ACC, Vikram Shree, Ultratech, Binani, Lafarge, Madras Cement (Ramco), India Cement, Jaypee, J K Laxmi, Dalmia)	Physical & chemical properties	IS : 4031	Lab	Initial Test-01 test for each brand of cement. Subsequently, 01 test for 200 MT or part thereof for each brand. Cement should be of approved brand and each lot should be accompanied by manufacturer's test certificates
2	Reinforcement steel (Approved brand:-SAIL, TATA, RINL, JINDAL)	Physical & chemical properties	IS :1786	Lab	Initial Test-01 test for each brand and each dia of reinforcement steel , Subsequently - One test for every 35 MT or part thereof. Reinforcement Steel should be of approved brand and each lot should be accompanied by manufacturer's test certificates
3	Water	PH value, chlorides, sulphates, alkalinity test, acidity test, suspended matter, organic matter and inorganic matter	IS:3025	Lab	Initial Test- Source approval at commencement of work and Subsequently- every six months or change of source.
4	Coarse Aggregate - Building works	Gradation	IS 2386 - I	Field / Lab	Minimum one test for every 50 cum or part thereof.
		Deleterious material	IS 2386 - II	Field / Lab	
		Specific Gravity	IS 2386 - III	Field / Lab	
		Crushing value	IS 2386 - IV	Field / Lab	
		impact value	IS 2386 - IV	Field / Lab	
		10% fine value	IS 2386 - IV	Field / Lab	
5	Fine Aggregate- Building works	Organic impurities	Appendix 'A 'of chapter 3, CPWD/DSR 2021 Specifications	Field	Minimum one test for every 50 cum or part thereof.

		Silt content	Appendix 'C' of chapter 3 ,CPWD/DSR 2021 Specifications	Field	
		Bulking of Sand	Appendix 'D' of chapter 3 ,CPWD/DSR 2021 Specifications	Field	
		Gradation	Appendix 'B' of chapter 3 ,CPWD/DSR 2021 Specifications	Field / Lab	
6	Coarse Aggregate - Road , Pavement works	Gradation	IS 2386 - I	Field / Lab	One test for everyday's work.
		Flakiness and Elongation Index	IS 2386 - I	Field / Lab	Once for each source of supply and subsequently on monthly basis.
		Deleterious material	IS 2386 - II	Lab	One test for everyday's work.
		Water Absorption	IS 2386 - III	Lab	Regularly as required subject to a minimum one test a day. This data shall be used for correcting the water demand of mix on a daily basis
		Los Angeles Abrasion Value/Aggregate Impact value	IS 2386 - IV	Lab	Once for each source of supply and subsequently on monthly basis
		Soundness	IS 2386 - V	Lab	Before approving the aggregates and every month subsequently.
		Alkali aggregate reactivity	IS 2386 - VII, IS:456	Lab	Before approving the aggregates and every month subsequently.
7	Fine Aggregate - Road , Pavement works	Gradation	IS 2386 - I	Field / Lab	One test for everyday's work.
		Deleterious material	IS 2386 - II	Lab	One test for everyday's work.
		Water Absorption	IS 2386 - III	Lab	Regularly as required subject to minimum two test per day. This data shall be used for correcting the water demand of mix on a daily basis.
		Silt Content	Appendix 'C' of chapter 3 ,CPWD/DSR 2021 Specifications	Field	Minimum one test for everyday's work.
8	Slump Test - Building Works		Appendix 'D' of Chapter 4, CPWD/DSR 2021 Specifications	Field	Minimum one test for every 20 cum of concrete or part thereof
9	Slump Test - Pavement Works		IS 1199	Field	One test per each dumper load at both Batching plant site and paving site initially when work starts. Subsequently, sampling may be done from alternate dumper.

10	Cube Test				
(i)	Reinforced Cement Concrete - Building works	7 days and 28 days Compressive strength	IS 516	Lab	One sample of six cubes for every 50 cum or part thereof
(ii)	Dry Lean Concrete (DLC) - Pavement Work	7 days compressive strength	IS 516	Lab	One sample of five cubes for every 150 cum or part thereof
(iii)	Pavement Quality Concrete (PQC) - Pavement Work	Compressive strength, flexure strength	IS 516	Lab	2 cube set samples and 2 beam set samples per 150 cum or part thereof for each day production.
11	Earthwork				
		Gradation/clay & sand content	IS 2720 -IV	Lab	2 tests per 3000 cum or part thereof for each source.
		Atterberg's limit	IS: 2720-V	Lab	
		California Bearing Ratio	IS 2720-XVI	Lab	
		Maximum dry density / OMC	IS 2720-VIII	Lab	
		Deleterious content	IS: 2720-XXVII	Lab	
		Free swelling Index	IS: 2720-XXXX	Lab	As and when required by Engineer
		Field density	IS: 2720-XXVIII	Field	(a) One set of 10 measurements for each layer per 3000 sqm of compacted area for embankment (b) One set of 10 measurements for each layer per 2000 sqm of compacted area of shoulder and sub-grade.
		Moisture content	IS: 2720-II	Field	2 tests per 1000 cum
12	Granular Sub base				
		Gradation	IS 2386- I	Field / Lab	Minimum 01 test per source and additional test after every 1000 cum
		Water absorption	IS 2386- III	Lab	Minimum 01 test per source and additional test as required by Engineer
		Wet Aggregate Impact Value test (if WA >2.0%)	IS 5640	Lab	As required by Engineer
		Aggregate Impact Value	IS 2386- IV	Lab	Minimum 01 test per source and additional test after every 2000 cum
		Atterberg's limit	IS 2720-V	Lab	Minimum 01 test per source and additional test after every 1000 cum
		Maximum dry density /OMC	IS 2720-VIII	Lab	Minimum 01 test per source and additional test as required by Engineer
		Moisture content prior to compaction	IS 2720-II	Field	Minimum 01 test every 400 cum

		Field Density	IS 2720-XXVIII	Field	one test per 2000 Sqm or part thereof
		Deleterious material	IS: 2720-XXVII	Lab	Minimum 01 test per source and additional test as required by Engineer
		CBR	IS 2720-XVI	Lab	Minimum 01 test per source and additional test as required by Engineer
13	Water Bound Macadam				
		Gradation	IS 2386- I	Field / Lab	Minimum 01 test per source and additional test after every 500 cum
		Aggregate Impact Value	IS 2386- IV or IS5640	Lab	Minimum 01 test per source and additional test after every 500 cum
		Combined Flakiness and Elongation Indices	IS 2386- I	Lab	Minimum 01 test per source and additional test after every 500 cum
		Atterberg's Limit (Screening, Binding Material)	IS 2720-V	Lab	Minimum 01 test per source and additional test after every 500 cum or part thereof
		Water absorption	IS 2386-III	Lab	Minimum 01 test per source and additional test as required by Engineer
		Sulphur Content, Water Absorption, Chemical Stability, Density for Crushed Slag (if used)	To comply with requirements of Appendix of BS : 1047	Lab	As required by Engineer
		Soundness test (if WA >2.0%)	IS 2386-V	Lab	As required by Engineer
14	Wet Mix Macadam	Gradation	IS 2386 - I	Field / Lab	Minimum 01 test per source and additional test after every 500 cum
		Water Absorption	IS 2386-III	Lab	Minimum 01 test per source and additional test as required by Engineer
		Soundness (if WA > 2.0%)	IS 2386-V	Lab	As required by Engineer
		Atterberg's limit of portion of aggregate passing 425 micron sieve	IS 2720 - V	Lab	Minimum 01 test per source and additional test after every 500 cum or part thereof
		Aggregate Impact value	IS 2386- IV or IS 5640	Lab	Minimum 01 test per source and additional test after every 500 cum
		Maximum Dry Density / OMC	IS 2720 - VIII	Lab	Minimum 01 test per source and additional test as required by Engineer
		Combined Flakiness and Elongation Indices	IS 2386 - I	Lab	Minimum 01 test per source and additional test after every 500 cum
		Moisture content	IS 2720-II	Field	Minimum 03 tests per day
		Field Density	IS 2720 - XXVIII	Field	One set of three test per 2000 sqm or part thereof
15	Prime /Tack Coat				
		Quality of Binder	IS 73, IS 217, IS 8887	Lab	No. of samples per lot and tests as per IS 73, IS 217, IS 8887as applicable

		Binder Temperature for Application	As per MORTH specifications	Field	At regular close interval
		Rate of Spread of Binder	As per MORTH specifications	Field	Minimum 03 tests per day
16	Dense Bituminous Macadam / Bituminous Concrete				
		Mix grading	IS 2386- I	Lab	One set for individual constituent and mixed aggregates from dryer for each 400 tonnes of mix subject to a minimum of two tests per day per plant
		Plasticity Index	IS 2720-V	Lab	One test for each source and whenever there is change in the quality of aggregate.
		water absorption	IS 2386-III	Lab	One test for each source and whenever there is change in the quality of aggregate.
		Soundness (if WA>2%)	IS 2386-V	Lab	One test for each source and whenever there is change in the quality of aggregate
		Impact value / Abrasion value	IS 2386-IV	Lab	One test per 350 cum of aggregates for each source and whenever there is change in the quality of aggregates
		Combined flakiness and elongation Indices	IS 2386- I	Lab	One test per 350 cum of aggregates for each source and whenever there is change in the quality of aggregates
		Stripping value	IS 6241	Lab	Initially one set of 3 aggregate representative specimen and then for each change in quality of aggregate
		Stability and Void Analysis of Mix	ASTM: D-1559	Lab	Three tests for stability, flow value, density and void contents for each 400 tonnes of mix subject to minimum of two tests per day per plant
		Retained Tensile test (if retained Coating <95%) / Moisture Susceptibility Mix	AASHTO T283	Lab	one test for each mix type whenever there is change in quality or source of coarse or fine aggregate
		Binder Content	IRC: SP 11 Appendix 5	Field	Minimum 2 tests per day
		Field Density	IRC: SP 11 Appendix 5	Field	One test per 700 sqm
		Quality of Binder	IS 1201 to IS 1220	Lab	number of samples per lot (as in IS 73) and tests as per IS 73
		Temp Control at the time of laying and compaction		Field	At regular interval
17	Brick work / brick tiles / sewer brick/Burnt clay perforated building Bricks				
		Dimension	Appendix A, B, C & D of Chapter 6 of CPWD/DSR	Lab	Minimum one test for every 50000 bricks or part thereof
		Compressive strength		Lab	

			2021 Specifications		
		Water Absorption		Lab	
		Efflorescence		Lab	
18	Stone work				
		Water absorption	IS 1124	Lab	Minimum one test for every 200 sqm / 100 cum or part thereof
		Transverse Strength	IS 1121 - II		
		Resistance to wear	IS 1706		
		Durability	IS 1126		
19	Marble				
		Moisture absorption	IS 1124	Lab	Minimum one test for every 100 sqm or part thereof
		Hardness test	Mho's Scale		
		Specific Gravity	IS 1122		
20	Granite				
		Moisture	IS 1124	Lab	Minimum one test for every 100 sqm or part thereof
		Specific Gravity	IS 1122		
21	Structural Steel (other than PEB)				
		Tensile strength	IS 1599	Lab	Minimum one test for every 20 tonnes or part thereof per source and also manufacturer's test certificates for each consignment should be accompanied.
		Bend Test			
22	Steel Tubular pipes				
		Tensile test	IS 1608	Lab	Minimum one test for every 8 tonne or part thereof per source and also manufacturer's test certificates for each consignment should be accompanied.
		Bend Test	IS 2329		
		Flattening Test	IS 2328		
23	M 50 Grade Cement Concrete Paver Blocks				
(i)	M-50 Grade Pre-Cast Concrete Paving Blocks	Compressive Strength	As per Technical Specifications	Field / Lab	<p>a) 16 paving blocks for everyday production. If, however, the average strength of the first 04 blocks tested is not less than 54 N/sqm, the sample shall be deemed to comply and the remaining 12 blocks from the sample need not be tested.</p> <p>b) If blocks are procured from outside and not manufactured at project site 01(one) test of 16 blocks per 10,000 nos. paving blocks or part thereof</p>

		Dimensions	As per Technical Specifications	Field / Lab	a)16 paving blocks for everyday production b) If blocks are procured from outside and not manufactured at project site 01(one) test of 16 paving blocks per 10,000 nos. paving blocks or part thereof
(ii)	Sand for Bedding Layer				
		Percentage of Deleterious material	IS 2386	Lab	Minimum one test for every 50 cum or part thereof
		Particle Size Distribution	As per Technical specification	Field / Lab	
		Silt Content	As per Appendix 'C' of Chapter 3 of CPWD/DSR 2021 Specifications	Field	
		Moisture Content	IS 2720	Field	
(iii)	Sand for Joint Filling	Particle Size Distribution	As per Technical specification	Field / Lab	Minimum one test for every 50 cum or part thereof
Note:-	For items not covered above may be dealt with as per the technical specifications in the contract.				

SECTION – XI

(TESTING PROFORMAS)

1. Site Order Book

[illegible]

2. Hindrance Register

[illegible]

3. Drawing Register

[illegible]

4. Cement Register

[illegible]

5. Steel Register

S I. N o	Date of Rec eipt	Sou rce of Rec eipt & Ch. No. /Bill No.	Qty Recei ved (MT)	Cum Qty Recei ved (MT)	Da te of Iss ue	Qty iss ued (MT)	Cumul ative qty issued (MT)	Bala nce at the end of the Day (MT)	Item of work in which consu med	Sign. Of Site Engi neer with date	Sign. Of contra ctor with date	Manufa cture Test certific ate details	Rem arks
1	2	3	4	5	6	7	8	9	10	11	12	13	14

6. Sieve Analysis of Stone Aggregate Nominal Size

[illegible]

Note: Size of Sieve should be as per CPWD/DSR 2021 manual/BIS specification

7. Silt Contents of Fine Sand/Coarse Sand

[illegible]

8. Slump Test

[illegible]

9. Cube Test

Sl. No.	Date of Collection	Grade of Mix	Mark of Specimen	7 days Test Result				28 days Test Result				Required specified strength	Approx. qty represented by Specimen	Item of work from where the sample is collected	Sign. Of Site Engineer with date	Contractor / contractor's representative Signature with Name & date
				Date of Testing	Load in KN	Compressive strength (KN / mm ²)	Average compressive strength (KN / mm ²)	Date of Testing	Load in KN	Compressive strength(KN / mm ²)	Average compressive strength (KN / mm ²)					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

10. Density Test by Core Cutter Method

MDD as per lab test W5.....

SI. No	Location (C.H.) / Area Represented by the Test	Core Cutter Nos.	Weight of Core Cutter + Weight of Soil (in gram) (W1)	Weight of Empty Core cutter (in gram) (W2)	Weight of Wet Soil (in gram) W= W1-W2	Volume of Core Cutter (in CC) V	Bulk Density (gram/cc) W3= W/V	Moisture Content of compaction layers (M)	Dry Density gram/cc W4 = W3/(1+M)	Degree of compaction W4/W5	Acceptability limit	Sign. of Site Engineer with date	Contractor / contractor's representative Signature with Name & date
1	2	3	4	5	6	7	8	9	10	11	12	13	14

11. Test for Thickness and Density of the Compacted Layer (By Sand Replacement Method)

for Asphalt Concrete / Bitumen Macadam / CC Pavement

Lab Test Density in gms/CC

Sl. No	Date of Test	Qty. represented by the test	Location of holes	Thickness of Layer		Weight of materials removed from the carpet Hole	Initial weight of sand taken in Cylinder	Weight of sand filling in cone of cylinder	Weight of sand remaining in cylinder	Predetermined bulk density of sand	Density = $\frac{A.d.}{(W1+W2)}$	Remarks / Acceptability	Sign. Of Site Engineer	Contractor / contractor's representative Signature with Name & date	Action Taken
				Individual (mm)	Average (mm)	A gm	W gm	W1 gm	W2 gm	d gm/CC	gm/CC				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Unit Wt. of Standard Sand in grams/CC (W6) =
Lab Test MDD in gms/CC (W10) =

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13. Test of the Brick / Brick Tiles for Compressive Strength

Sl. No	Date of collection of sample	Date of testing	Wt. (in Kg)	No. of Specimen	Size in cm/Area in cm ²	Compressive Strength obtained for individual bricks in Kg. per Cm ²	Average Strength in Kg/Cm ²	Specified Compressive Strength in Kg/Cm ²	Acceptability	Sign. Of Site Engineer with date	Contractor / contractor's representative Signature with Name & date	Action Taken / Remark
1	2	3	4	5	6	7	8	9	10	11	12	13

14 Inspection Register

Sl. No	Date and time	Officer's Name and designation	Items inspected and specific defects noticed & action to be taken	Signature	Defects taken to Site Order Book/letter written			Final action / result
					Site Order Book Page no. / letter no.	Date	Sign. of Site Engineer / PMC	

15. Admixture Register

[illegible]

Bill Performa

Name of work :

LOI No.

Name of Contractor :

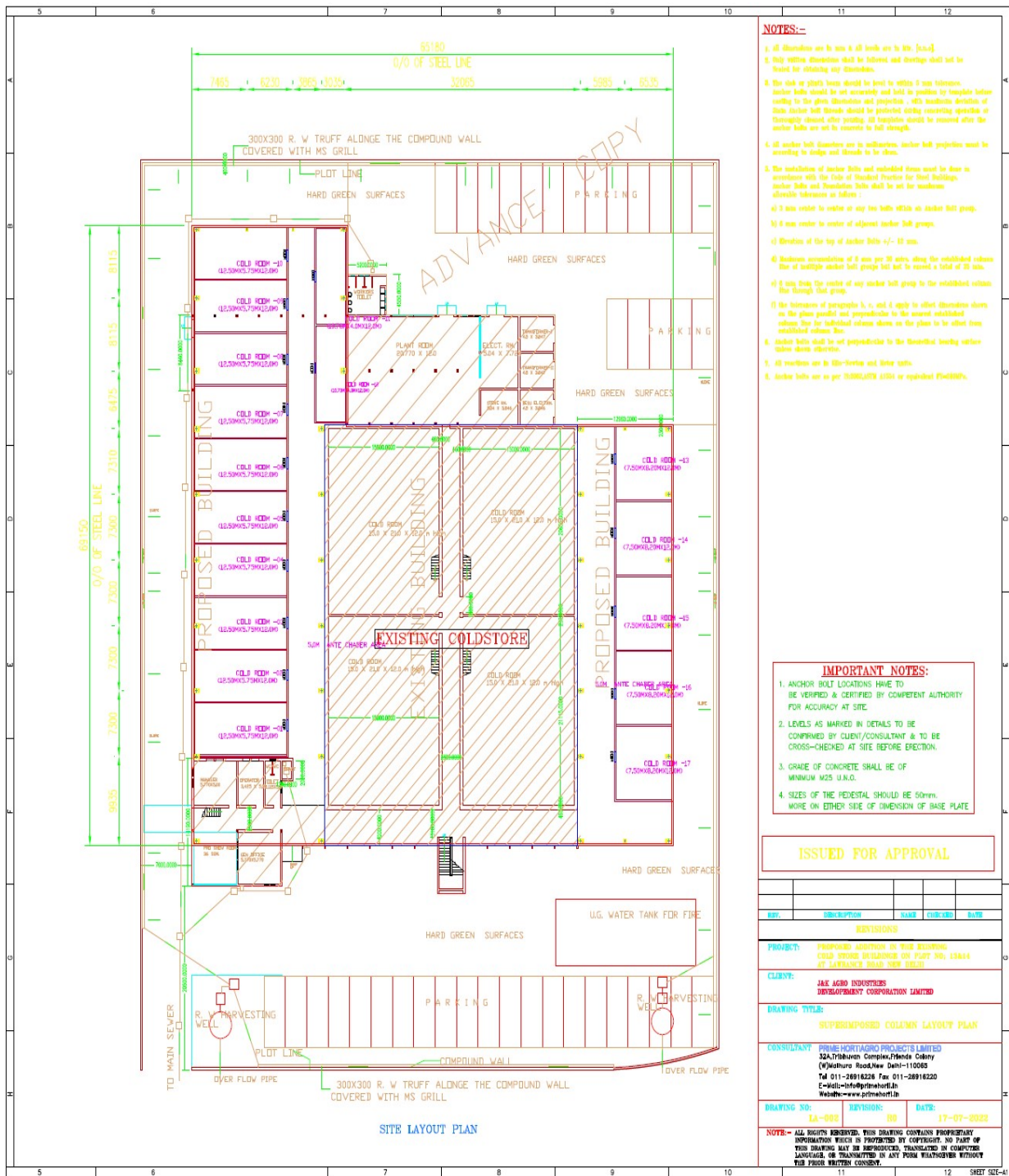
Date of Start :

Date of Preparation of Bill :

S N	Item No.	Descri ption of Items	Unit	Qty as per Agt .	Rate as per Agt.	Qty as per Pre. Bill	Qty as per this Bill	Cumu lative Qty.	Amt. as per Previo us Bill	Amt. as per this Bill	Cumul ative Amount
1											
2											
3											
4											
5											
						Total of Schedule A					
						Add Enhancement or Rebate @					
						Grand Total of Schedule A					

SECTION – XII

(TENDER DRAWING)





Sl. No	Material	Specifications	Grade
1.	Brick 1/2, Medium	IS-3002	F ₁ = 10.5 N/mm ²
2.	Hot Rolled Structural Medium	IS-2002	F _y = 248 MPa
3.	Cold Formed Secondary Members	ASTM A1013 (C-70)	F _y = 141 MPa
4.	Structural Paints	ASTM D690	F _y = 60 N/mm ²
5.	30 Mm Medium Bars	IS-2002: 1153	F _y = 248 MPa
6.	Aluminum	IS-2002: 1181A/1181B	F _y = 240 MPa
7.	High Tensile Bars - Primary	IS-2002: 1181A/1181B	F _y = 240 MPa
8.	High Tensile Bars - Secondary	IS-2002: 1181A/1181B	F _y = 240 MPa

PROJECT: MULTIPURPOSE MODERN GOLD STORAGE
A MINING FACILITY

CLIENT:
JAK AGRO INDUSTRIES
DEVELOPMENT CORPO

DRAWING TITLE:

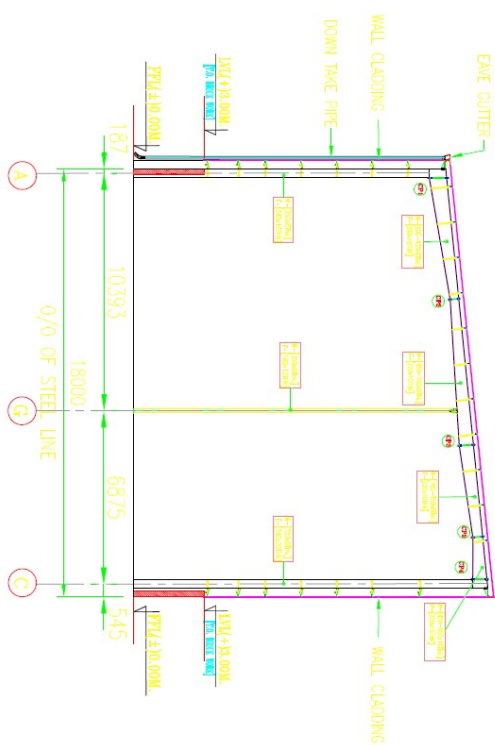
CROSS SECTION

PRIME HORTIGRO PROJECTS LIMITED
CONSULTANT
32A, Tribhuvan Complex, Panchs Colony

Tel 011-26916226 Fax 011-26916220
E-Mail: info@prfmehor.lt
Web: www.prfmehor.lt

DRAWING NO:	GA-003	REVISION:	NO	DATE:	
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END FRAME-2
CROSS-SECTION

CONNECTION PLATE			
TYPE	BOLT	NO	CONN PL. THK
CP1	24 DIA.	16	28 THK.
CP2	20 DIA.	10	20 THK.
CP3	24 DIA.	10	20 THK.
CP4	24 DIA.	16	28 THK.

SI	Materials	Specifications	Grade
		<p>Material Specifications</p> <p>The following is the list of the material materials and building components from items analyzed:</p> <ul style="list-style-type: none"> 1. CONCRETE: ALL DIMENSIONS WITH SET OFFING, REINFORCEMENT AND PROTECTION. 2. ALL BUILDING WORK SHALL CONFORM TO THE 1997 EDITION, FOR REPAIR CONSTRUCTION AND CHANGE. 3. 1997 EDITION, FOR REPAIR CONSTRUCTION AND CHANGE. 4. 1997 EDITION, FOR REPAIR CONSTRUCTION AND CHANGE. 	

GENERAL NOTES :-

Sl. No	Material	Specifications	Grade
1.	Brick/100mm	IS-2002	$f_{\text{c}} = 3.5 \text{ MPa}$
2.	1st Floor Reinforcing Steelbars	IS-2002	$f_{\text{c}} = 240 \text{ MPa}$
3.	Cold Form Reinforcing Steelbars	ASTM A 615 (G 40)	$f_{\text{c}} = 341 \text{ MPa}$
4.	Rebaring Profile	ASTM 7024	$f_{\text{c}} = 502 \text{ MPa}$
5.	2nd Storey Reinforcing Steel	IS-2002	$f_{\text{c}} = 240 \text{ MPa}$
6.	Rebaring Profile	ASTM 7024	$f_{\text{c}} = 502 \text{ MPa}$
7.	High Strength Reinforcing Primary	ASTM A 615 (G 40)	$f_{\text{c}} = 341 \text{ MPa}$
8.	High Strength Reinforcing Secondary	ASTM A 615 (G 40)	$f_{\text{c}} = 341 \text{ MPa}$
9.	Modular Mortar to Formwork Concrete	ASTM C 1097	20 MPa (29 MPa, 4.4)

Material Specifications

[illegible]

PROJECT: PROPOSED ADDITION IN THE EXISTING
COLD STORE BUILDING ON PLOT NO. 13414
AT LAKHANGT ROAD NEW TOWN

CLIENT:
J&K AGRO INDUSTRIES
DEVELOPMENT CORPORATION LIMITED

DRAWING TITLE:

CONSULTANT PRIME HERITAGE PROJECTS UNIT
COLDSTORE-1

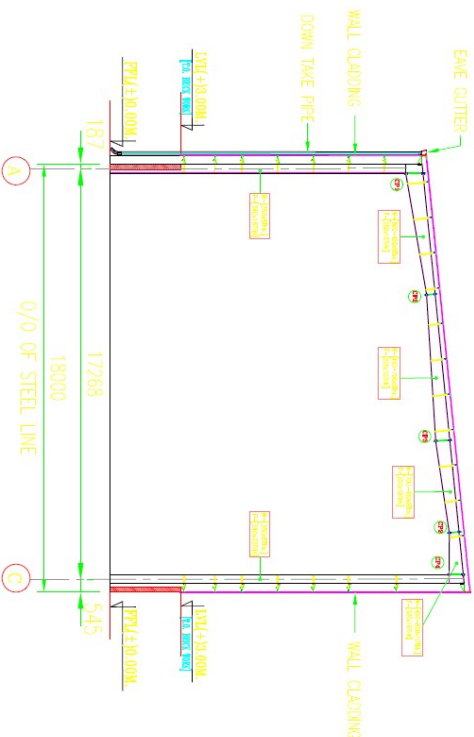
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DRAWING NO:	REVISION:	DATE:
GA-009	00	

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MAIN FRAME-2

CONNECTION PLATE			
TYPE	BOLT	NO	CONN. PL. THK
CP1	24 DIA.	16	28 THK.
CP2	20 DIA.	10	20 THK.
CP3	24 DIA.	10	20 THK.
CP4	24 DIA.	16	28 THK.

CONSULTANT				PRIME CONTRACTOR PROJECTS LIMITED	
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E-mail: www.projects@prl.co.in				E-mail: www.projects@prl.co.in	
DRAWING NO.		SECTION NO.		DATE	
CA-006		10		01-08-20	

THE PRIOR WRITTEN CONSENT.

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