



**Jammu & Kashmir
Horticultural Produce Marketing & Processing Corporation (JKHPMC) Ltd.
Rajbagh, Srinagar- J&K 190008**

REQUEST FOR PROPOSAL

For

**Design and Construction of Fruits & Vegetable (F&V) Aggregation, Processing and
Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, Jammu & Kashmir.**

Tender Ref. No.: 118 of 2022

Issued on: 07-12-2022

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Tender Details:

Name of Work	RFP for Design and Construction of Fruits & Vegetable (F&V) Aggregation, Processing and Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, Jammu & Kashmir
Name of Client	Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd. Srinagar J&K
Date of Issue	07-12-2022
Pre-Bid meeting	19-12-2022 ; 03:00 PM
Bid Document Cost	Rs. 10,000/- (Rupees Ten Thousand Only) NON-REFUNDABLE Demand Draft drawn in favour of JKHPMC Ltd Rajbagh, Srinagar, J&K + 18% GST
Bid Security (Earnest Money)	Rs. 2.51 Lacs (Rupees two Lakhs fifty one thousand only) to be submitted along with the RFP.
Project cost	Rs. 2.51 Crore (Rupees two Crore and fifty one Lakhs only)
Last Date of Online Bid submission	07-01-2023
Date of Bid Opening	09-01-2023
Validity of the Bid	120 days from the date of receipt of the Tender.

DISCLAIMER

The information contained in this Request for Proposal document ("RFP document) or subsequently provided to Applicant(s), whether verbally or in documentary or in any other form, by or on behalf of J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) or any of its employees or advisors, is provided to the Applicant(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided in writing.

This RFP document is intended to be and is hereby issued only to the prospective Applicants. The purpose of this RFP document is to provide the Applicant(s) with information for **Design and Construction of Fruits & Vegetable (F&V) Aggregation, Processing and Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, Jammu & Kashmir**. This RFP document does not purport to contain all the information that each Applicant may require. This RFP document may not be appropriate for all persons, and it is not possible for the J&K Horticulture Produce Marketing and Processing Corporation Ltd., its employees or advisors to consider the investment objectives, financial situation and particular needs of each Applicant who reads or uses this RFP document. The assumptions, assessments, statements and information contained in the RFP document may not be complete, accurate, adequate or correct. Each Applicant should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP document and where necessary obtain independent advice from appropriate sources. The J&K Horticulture Produce Marketing and Processing Corporation Ltd., its employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, adequacy, correctness, reliability or completeness of the RFP document.

Information provided in this RFP document to the Applicant(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The J&K Horticulture Produce Marketing and Processing Corporation Ltd., its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP document or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP document and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP document or arising in any way for participation.

The J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Applicant upon the statements contained in this RFP document.

The J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP document before the last date of bid submission.

The issue of this RFP document does not imply that the J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) is bound to select an Applicant or to appoint the selected Applicant or Concessionaire, as the case may be, for the Project and the J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) reserves the right to reject all or any of the Applicants or Bids without assigning any reason whatsoever.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Applicant and the J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

For more details contact The Managing Director, J&K Horticulture Produce Marketing and Processing Corporation Ltd., contact no.+91-194-2950685 and through mail at jkhpmcltd@gmail.com

Also, the tender document can be downloaded from the following portals: <https://jktenders.gov.in/>.

Section 1: Letter of Invitation

The J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) (hereinafter called “Employer”) is inviting Proposal Document of executing agency for **Design and Construction of Fruits & Vegetable (F&V) Aggregation, Processing and Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, Jammu & Kashmir**

1. More details on the services are provided in the Terms of Reference in this RFP document and qualification requirement is at Instructions to Bidders.
2. BIDDER will be selected under “Lowest Bidder (L1)” and procedures described in this RFP.
3. The RFP includes the following documents:

Section 1 - Letter of Invitation

Section 2 - Instructions to Bidders (Part 1)

Section 3 - Instructions to Bidders (Part 2)

Section 4 - Terms of Reference

Section 5 - Technical Proposal

Section 6 - Financial Proposal

Section 7 – Technical Specifications

Sd/-

Managing Director

JKHPMC Ltd.

Section 2: Instructions to Bidders - Part 1

2.1. Definitions

- a) "Addendum" means the clarification issued against the bidder's query placed before the employer in writing before or during the pre-bid meeting. It may be release in form of addendum or corrigendum.
- b) "Employer" means the J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) who have invited the bids for the services and/ or with which the selected Bidder signs the Contract for the Services and to which the selected bidder shall provide services as per the terms and conditions and PD of the contract.
- c) "Bidder" means any entity or person or associations of person who have been requested to submit their proposals that may provide or provides the Services to the Employer under the Contract.
- d) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause, that is the General Conditions (GC), the project Specific Conditions (SC), and the Appendices.
- e) "Project specific information" means such part of the Instructions to Bidders used to reflect specific project and assignment conditions.
- f) "Day" means calendar day.
- g) "Government" means the government of India /State/Local Government.
- h) "Instructions to Bidders" means the document which provides Bidders with all information needed to prepare their proposals.
- i) "LOI" means the Letter of Invitation being sent by the Employer to the bidders.
- j) "Personnel" means professionals and support staff provided by the Bidder or by any Sub-Bidder and assigned to perform the Services or any part thereof; "Foreign Personnel" means such professionals and support staff who at the time of being so provided had their domicile outside the Government's country; "Domestic Personnel" means such professionals and support staff who at the time of being so provided had their domicile in India.
- k) "Proposal" means the Technical Proposal and the Financial Proposal.
- l) "RFP" means the Request for Proposal prepared by the Employer for the selection of Bidders, based on the SRFP.
- m) "SRFP" means the Standard Request for Proposals, which must be used by the Employer as a guide for the preparation of the RFP.
- n) "Assignment / job" means the work to be performed by the Bidder pursuant to the Contract.
- o) "Sub-Bidder" means any person or entity with whom the Bidder subcontracts any part of the Assignment/ job.

- p) "Terms of Reference" (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Employer and the Bidder, and expected results and deliverables of the Assignment/ job.

2.2. Introduction

- a) The Employer named in the Data Sheet will select Bidder (the Bidder) meeting basic eligibility criterion as mentioned in document and in accordance with the method of selection specified in the document.
- b) The name of the Assignment/ job has been mentioned in the Data Sheet. Detailed scope of the assignment/ job has been described in the document.
- c) The date, time and address for submission of the proposals has been given.
- d) The Bidders are invited to submit their Proposal, for Assignment/ job named. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Bidder.
- e) Bidders should familiarize themselves with Local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the Assignment/job and Local conditions, Bidders are encouraged to submit the clarification online before or on the date of pre-bid meeting and are also advised to attend a pre-bid meeting. Attending the pre-proposal meeting is optional.
- f) The Employer will provide at no cost to the Bidders the inputs and facilities specified in the document, assist the bidders in obtaining licenses and permits needed to carry out the Assignment/ job, and make available relevant project data and reports.
- g) Bidders shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Employer is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Bidders.

2.3. Eligibility of Association of bidders and sub-bidders

- a) Bidder shall form an association, joint-venture or consortium of bidders for this proposal. Number of partners in a Joint Venture shall not exceed **2 (Two)**

2.4. Clarification and Amendment of RFP Documents

- a) Bidders may request a clarification on any clause of the RFP documents till or on the date of pre- bid meeting. Any request for clarification must be sent by standard electronic means to the Employer's address indicated.
- b) At any time before the submission of Proposals, the Employer may amend the RFP by issuing an addendum by standard electronic means.

2.5. Conflict of Interest

- a) Employer requires that Bidders provide professional, objective, and impartial advice and at all times hold the Employer's interests paramount, strictly avoid conflicts with other Assignment/ jobs or their own corporate interests and act without any consideration for future work.
- b) Without limitation on the generality of the foregoing, Bidders, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:
 - **Conflicting activities:** (i) Bidder that has been engaged by the Employer to provide goods, works or Assignment/ job other than Assignment/ job for a project, and any of its affiliates, shall be disqualified from providing Assignment/ job related to those goods, works or Assignment/ job. Conversely, Bidder hired to provide Assignment/ job for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or Assignment/ job other than Assignment/ job resulting from or directly related to the BIDDER's Assignment/ job for such preparation or implementation. For the purpose of this paragraph, Assignment/ job other than consulting Assignment/ job are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.
 - **Conflicting Assignment/ job;** (ii) A Bidder shall not be hired for any Assignment/ job that, by its nature, may be in conflict with another Assignment/ job of the Bidder to be executed for the same or for another Employer. For example, a Bidder assisting an Employer in the privatization of public assets shall not purchase, nor advice purchasers of, such assets. Similarly, a Bidder hired to prepare Terms of Reference for an Assignment/ job shall not be hired for the Assignment/ job in question.
 - **Conflicting relationships** (iii) A Bidder (including its Personnel) that has a business or family relationship with a member of the Employer's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the Assignment/ job, (ii) the selection process for such Assignment/ job, or (iii) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Employer throughout the selection process and the execution of the Contract.
- c) Bidders have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Employer, or that may reasonably be perceived as having this effect. Any such disclosure shall be made as per the Standard forms of technical proposal provided herewith. If the bidder fails to disclose said situations and if the Employer comes to know about any such situation at any time, it may lead to the disqualification of the Bidder during bidding process or the termination of its Contract during execution of assignment.

2.6. Unfair Advantage

- a) If a Bidder could derive a competitive advantage from having provided consulting Assignment/ job related to the Assignment/ job in question and which is not defined as conflict of interest, the Employer shall make available together with this RFP all information that would in that respect give such Bidder any competitive advantage over competing Bidders.

2.7. Proposal

Bidders may only submit one proposal. If a Bidder submits or participates in more than one proposal, such proposals shall be disqualified.

2.8. Proposal Validity

120 days from the date of receipt of the Tender.

2.9. Preparation of Proposals

- a) The Proposal as well as all related correspondence exchanged by the Bidders and the Employer, shall be written in English language.
- b) In preparing their Proposal, Bidder is expected to examine in detail the documents comprising the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.
- c) While preparing the Technical Proposal, Bidder must give particular attention to the following:
 - i. Depending on the nature of the Assignment/ job, Bidders are required to submit a Technical Proposal (TP) in forms provided in the RFP. Form Tech – I is a sample letter of technical proposal which is to be submitted along with the technical proposal.
 - ii. A brief description of the bidder's, organization will provide details of experience of assignments which are similar to the proposed assignment/ job as per the terms of reference. For each Assignment/ job, the outline should indicate the duration of the Assignment/ job, contract amount, and Bidder's involvement. Information should be provided only for those Assignment/ jobs for which the Bidder was legally contracted by the Employer as a Bidder. Bidders should be prepared to substantiate the claimed experience along with the proposal and must submit letter of award / copy of contract for all the assignments mentioned in the proposal.
 - iii. A description of the approach, methodology and work plan for performing the Assignment/ job covering the following subjects: technical approach and methodology, work plan, and organization schedule. Guidance on the content of this section of the Technical Proposals is provided. The work plan should be consistent with the Work Schedule which will show in the form of a bar chart the timing proposed for each activity.

- d) Financial Proposals: The Financial Proposal shall be prepared using the attached Standard Forms. It shall list all costs associated with the Assignment/ job. The financial proposal shall not include any conditions attached to it and any such conditional financial proposal shall be rejected summarily.

2.10. Taxes

- a) The Bidder shall fully familiarize themselves about the applicable taxes (such as: GST or income taxes, duties, fees, levies) on amounts payable by the Employer under the Contract. All such taxes must be included by the bidder in the financial proposal excluding GST.

2.11. Currency

- a) Bidders must express the price of their Assignment/ job in India Rupees.

2.12. Earnest Money Deposit (EMD) and Bid Processing Fees

All bids must be accompanied by a Bid Security (EMD) of Rs.2.51 Lacs (**Rupees Two Lacs Fifty One Thousand only**) in accordance with the provisions of this RFP in the form of **CDR/FDR/TDR/Bank Guarantee of scheduled Bank** which shall be duly pledged in favor of “**Managing Director Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd**” payable at Srinagar. The scanned copy of bid document fee (Tender Cost), Earnest Money, Power of attorney must be up loaded electronically along with all the bid documents.

Bank Guarantee for an equivalent amount is acceptable with below mentioned conditions: The Bank Guarantee is to be necessarily drawn-up before closing of Bid, and a scanned copy of the Bank Guarantee is required to be mandatorily uploaded along with other documents as a part of Technical Bid.

The Bank Guarantee instrument in physical form has to reach in a ‘Sealed Envelope’ super-scribing the eNIT number and Project Title, to be delivered in person or by Post before the date of bid submission. The Bid will not be considered for evaluation, unless the physical Bank Guarantee is received before the date of bid submission.

The Bank Guarantee will be verified for its genuineness from the issuing bank immediately after receiving of the physical Bank Guarantee.

2.13. Bid Processing Fees

All bidders are required to pay Rs. 10,000/- (**Rupees Ten Thousand only**) +18% GST in the form of DD of scheduled Bank which shall be in favor of **JKHPMC Ltd. Rajbagh, Srinagar, J&K**. The Bid Processing Fee is Non-Refundable. Non-submission of Bid Processing fee along with the Technical Proposal will be treated as non-responsive bid.

2.14. Submission, Receipt and Opening of Proposal

- a) The original proposal, both technical and Financial Proposals shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidders themselves. The person who signed the proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should respectively be in the format of TECH-1.
- b) An authorized representative of the Bidders shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompany the Proposal or in any other form demonstrating that the representative has been dully authorized to sign.
- c) Applicant (authorized signatory) shall submit its offer for preliminary qualification, technical and financial proposal e-procurement system. However, Tender Document Fees, and Earnest Money Deposit (EMD) should be deposited as per details provided in the bid document. The bid document complete in all respect is to be submitted on or before the time of last date of submission of bid through e-procurement system [https:// jktenders.gov.in/](https://jktenders.gov.in/). J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) will not be responsible for delay in submission due to any reason.
- d) Bidders who wish to participate in this proposal will have to register on e- procurement system of Jammu and Kashmir Govt. [https:// jktenders.gov.in/](https://jktenders.gov.in/) to participate in online proposals, bidders will have to procure Digital Signature Certificate. Bidders who already have a Valid Digital Certificate need not procure a new digital certificate. Before electronic submission of proposal, it should be ensured that all the proposal papers including conditions of contract are read, understood by the Applicant. The uploaded document of the bid shall contain no alteration, or additions, unless notified. In case, the bidder makes addition and/or correction, the provision written in the original document, read with the addendum or corrigendum issued shall prevail. However, scanned copy or proposals technical eligibility document and financial eligibility documents and all original papers related to Bank Guarantee, Power Attorney etc. should be uploaded with the technical bid. The Applicant shall provide all the information sought under this RFP document. The J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) will evaluate only those Bids that are received in the required formats and complete in all respects.
- e) The Bid shall be typed or written in indelible ink and signed by the authorized signatory of the Applicant who shall also initial each page, in blue ink. All the alterations, omissions, additions or any other amendments made to the Bid shall be initialed by the person(s) signing the Bid.
- f) Bidder shall submit their offer only in online electronic format both for technical and financial proposal and all documents should be digitally signed. However, scanned copy of Proposal fees, EMD and all original papers related to Bank guarantee, power of attorney etc. as mentioned in Table and should be uploaded along with the technical bid.

2.15. Proposal Evaluation

- a) From the time the Proposals are opened to the time the Contract is awarded, the Bidders should not contact the Employer on any matter related to its Technical and/or Financial Proposal. Any effort by Bidders to influence the Employer in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Bidders' Proposal.
- b) The employer has constituted an Evaluation Committee which will carry out the entire evaluation process.
- c) **Evaluation of Technical Proposals:** The Evaluation Committee while evaluating the Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded and the competent authority accepts the recommendation.
- d) The Evaluation Committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and by applying the evaluation criteria, sub-criteria specified in the Data sheet. In the first stage of evaluation, a Proposal shall be rejected if it is found deficient as per the requirement indicated in the Data sheet for responsiveness of the proposal. Only responsive proposals shall be further taken up for evaluation. Evaluation of the technical proposal will start first and at this stage the financial bid (proposal) will remain unopened. The qualification of the bidder and the evaluation criteria for the technical proposal shall be as defined in the Data sheet.
- e) **Opening of the Financial Proposals:** Financial proposals of only those bidder that are technically qualified shall be opened.
- f) In case of discrepancy between a partial amount and the total amount, or between word and figures, the former will prevail. In addition to the above corrections the items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.
- g) After opening of financial proposals, appropriate selection method shall be applied to determine the bidder who will be declared winner and be eligible for award of the contract. The methods of selections are described in the RFP document [The employer shall mention here which method out of all listed method shall be applied for selection of bidder for this assignment / job]. This selected bidder will then be invited for negotiations, if considered necessary.

2.16. Negotiation

- a) Negotiations will be held at the date, time and address intimated to the qualified and selected bidder. Representatives conducting negotiations on behalf of the Bidder must have written authority to negotiate and conclude a Contract.

- b) Conclusion of the negotiations: Negotiations will conclude with a review of the draft Contract. To complete negotiations the Employer and the Bidder will initial the agreed Contract. If negotiations fail, the employer will reject all the proposals received and invite fresh proposals.

2.17. Award of Contract

- a) After completing negotiations, the Employer shall issue a Letter of Intent to the selected Bidder and promptly notify all other Bidders who have submitted proposals about the decision taken.
- b) The bidders will sign the contract after fulfilling all the formalities/ pre-conditions including Performance Guarantee as mentioned in the standard form of contract within 10 days of issuance of the letter of intent.
- c) The Bidder is expected to commence the Assignment/ job on the date and at the location specified in the document.

2.18. Performance Security

- a) Within 21 (twenty one) days after the date of receipt of the Letter of Acceptance, the successful bidder/contractor shall deliver to the Employer/concerned authority, a Performance Security in the shape of CDR/FDR/BG for an amount equivalent to 3% of contract price.
- b) If the Performance Security is provided by the successful bidder in the form of a bank guarantee, it shall be issued by a Nationalized / Scheduled Indian Bank.
- c) Failure of the successful bidder to comply with this requirements shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

2.19. Deleted

2.20. Dispute Review Expert:

The Employer proposes to be appointed a Dispute Review Expert under the contract.

2.21. Confidentiality

- a) Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Bidders who submitted the Proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Bidder of confidential information related to the process may result in the rejection of its Proposal and may be subject to the provisions of the Employer's antifraud and corruption policy.
- b) The employer reserves the right to verify all statements, information and documents submitted by the Applicant in response to the RFP. Any such verification or the lack of such verification by the Employer

to undertake such verification shall not relieve the Applicant of its obligation or liabilities here under nor will it affect any rights of the Employer here under.

- c) The selection process shall be governed by and construed in accordance with the laws of India and Distt. Courts at Srinagar and High Court of judicature at Srinagar shall have exclusive jurisdiction and all disputes arising under pursuant to and/or in connection with the Selection Process.

2.22. Joint Venture (J.V.)

1. Number of partners in a Joint Venture shall not exceed **2 (Two)**. The partners shall comply with the following requirements:
 - a) one of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
 - b) the bid and, in case of a successful bid, the Agreement, shall be signed so as to be legally binding on all partners;
 - c) the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge;
 - d) all partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under[c] of above, as well as in the bid and in the Agreement tin case of a successful bid];
 - e) The joint venture agreement should indicate precisely the role of all members of IV in respect of planning, design, construction equipment key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer;
 - f) The-joint venture agreement should be registered, so as to be legally valid and binding on all partners
 - g) A copy of the joint Venture Agreement entered into by the partners shall be submitted with the bid.
2. The figures for each of the partners of a joint venture shall be added together to determine the Bidder's compliance with the minimum qualifying criteria required for the bid. All the partners collectively must meet the criteria specified in full. Failure to comply with this requirement will result in rejection of the joint venture's bid.
3. The performance security of a joint venture shall be in the name of the partner Lead Partner/joint venture.
4. Attach the power of attorney of the partners authorizing the Bid signatory(ies) On behalf of the joint venture

5. Attach the agreement among all partners of the joint venture [and which is legally binding on all partners], which shows the requirements as indicted in the Instructions to Bidders’.
6. Furnish details of participation proposed in the joint venture as below:

DETAILS OF PARTICIPATION IN THE JOINT VENTURE

PARTICIPATION DETAILS	FIRM ‘A’ (Lead Partner)	FIRM ‘B’
Financial		
Name of the Banker(s)		
Planning		
Construction Equipment		
Key Personnel		
Execution of Work (Give details on contribution of each)		

7. The partners of J.V. should satisfy the qualification criteria as below:
 - a) The Lead Partner must meet at least 50% requirement of Technical and Financial eligibility criteria required for the bid.
 - b) The other partner(s) must meet at least 25% requirement of Technical and financial eligibility criteria required for the bid.
 - c) The lead partner and the other partners should together meet 100% of all the eligibility criteria required for the bid.
8. For the meeting, the minimum qualification criteria of experience of similar nature work. Every partner can have experience of different works as defined in similar nature works and together should have the experience of all type of works described in similar nature works

2.23. Project Management Consultancy (PMC)

JKHPMC has engaged the services of Project Management Consultant (PMC) for provision of Technical Advice to MD, JKHPMC in the setting up the facility. The objective of PMC is to assist the Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd in implementation of the Project till the successful completion and handing over of all works to the “Employer” and comprehensively

supervise the works and activities carried out by the Contractors Engineer's Representative" under the respective contract(s) in a manner that would ensure:

- a) Total compliance of technical specifications and various other requirements contained in the respective contracts by the Contractor
- b) High standards of quality assurance system in the Consultancy as well as the works and activities of the Contractor
- c) Comprehensive and documented reporting to the "Employer" of Consultant's own activities, progress of the Project(s) and compliances/ non-compliances by the Contractor
- d) Proper verification of measurements and bills submitted by the contractor so that payments made by the "Employer" against these bills truly reflect the actual work done at site complying with the requirements of the respective contract(s);
- e) proper interface and coordination among the "Employer", contractor other contractors and local bodies/ state government; and
- f) Full documentation of the completed works including applications for various approvals.

The objectives of the PMC is not limited to the above, The MD J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) have discretion implement other objectives for the completion of the project.

Section 3: Instructions to Bidders - Part 2

DATA SHEET

1. Name of the Assignment		RFP for Fruits & Vegetable (F&V) Aggregation, Processing and Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, J&K.
2. Eligibility of Association of bidders and sub-bidders		<ol style="list-style-type: none"> 1. The Bidder may be Single Entity means a company registered under companies act 1956 or companies act 2013 & operating in India for last 5 Years 2. The Entity shall have experience in the field of, Engineering Designing and Detailing, Procurement, Construction, Commissioning, Project Monitoring and all related fields required for successful completion of Project Objective 3. Bidder should not be black listed with any Govt./ semi-Govt./ Statutory bodies/ Organizations 4. Where Joint Ventures are permitted: <ol style="list-style-type: none"> a) The individuals or firms in a joint venture shall be jointly and severally liable. b) Place where the agreement to form JV to be registered in place of the leading JV Partner c) Maximum number of partners in the Joint Venture (JV) shall be: Two (02) and should include the Technology Provide mandatorily. d) Civil work to be carried out by J& K government registered Contractor A/A+ or CPWD/ MES registered contractor or bidder having construction work experience of minimum 5 year at J & K state or bidder having construction work experience of minimum 5 year in the similar field Pan India. e) The joint venture agreement should define precisely the division of assignments to each partner of JV. All partners of JV should have active participation in the execution during the currency of the contract. This should not be varied/ modified subsequently without prior approval of the Employer. Bidder participating in form of JV will be required to create separate account for proposed project

		<p>under discussion; wherein JKHPMC will have full rights to ask the lead bidder for details of the payment done towards their sub-contractor, consultant, etc. (Selected Bidder should open an escrow account where all payments would be received and JKHPMC can ask details of the account ensuring timely payments to JV partners/ vendors Payments can only be made to the escrow account created for the project).</p> <p>5. Experience in Turn-key implementation including design supply, installation, testing & commissioning as well as O&M of postharvest infrastructure facility (Cold storage/Pack houses/ Ripening Room/Warehouse/Food processing centers/ Perishable Cargo Center) under contracts in the role of contractor for at least the value not less than Rs. 82 lacks (33 % of the value of proposed contract) last Five [5] years prior to the applications submission deadline in any Govt / PSU /Private Entity:</p> <p>Bidder must fulfill all the criteria mentioned In addition to above Technical Eligibility :</p> <ul style="list-style-type: none"> i. Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 200 Lakhs comprising 300 SQM PEB Building Works - 1 work. Or ii. Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 125 Lakhs comprising 190 SQM PEB Building Works - 2 work. Or iii. Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 100 Lakhs comprising 150 SQM PEB Building Works - 3 work. iv. Bidder shall have successfully operated and maintained at least one Food processing Plant for a minimum period of two years in the last five years.
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		6. The Bidder should have average aggregate annual financial turnover of at least Rs. 75 lakhs during the last 5 financial years ending 31st March 2022. The Bidder should also have profits after taxes for each of these last 5 financial years.
Evaluation Criteria: Criteria, sub- criteria, for evaluation of Technical Proposals have been prescribed		Detailed evaluation as mentioned below this Table of Data Sheet
4. Start date for Purchase of Tender		10-12-2022
5. Last date for Purchase of Tender		07-01-2023
6. Last date of Pre bid quires to be sent through mail		19-01-2023
7. Last date for submission of tender		07-01-2023
8. Last date for Submission of Hard Copy of Technical Bid (Proposal Only)		09-01-2023
9. Technical Bid Opening Date		09-01-2023
Tender Document and other details shall be available on: www.jktenders.gov.in		
10. Address for Correspondence : Managing Director , Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd,		
11. Amendment to NIT, if any would be published on website only.		

Procedure for Detailed evaluation of technical qualifications

The BIDDERS will be shortlisted against the pre-qualification criteria. Those who qualify/fulfill these criteria, shall be considered for technical evaluation.

Sr.	Particulars	For Single Entry	Joint Venture where permitted		
			All partners combined	Each partner	At least one partner
1.	The applicant should submit valid incorporation/registration certificate of the firm, PAN Card and GST registration certificate.	Attested Copy			Attested Copy
2.	The Bidder must have experience of at least 5 years Bidder must be a Contractor having experience in similar Work. Similar work(s) shall mean Experience in Turn-key implementation including design supply, installation, testing & commissioning as well as O&M of post-harvest infrastructure facility pack house (Cold storage/Pack houses/Warehouses/Food processing Centres/ Ripening Room/ Perishable Cargo Center) to any government body undertaking/Private entity	The work orders and completion certificates with the details of employer has to be submitted.			The work orders and completion certificates with the details of employer has to be submitted.
3.	The Bidder must have a valid GSTN certificate and EPF registration.	Copy of GSTN Certificate & EPF registration certificate			Copy of GSTN Certificate & EPF registration certificate
4.	The bidder should not be blacklisted/ debarred/ terminated of contract except by any Government/	Self-Certification by the bidder			Self-Certification by the bidder

	Government Board/ Corporation Agency/ firm/ Statutory Board/ PSU agency/ BIDDER/ Non-Government/ Government of any sovereign countries/ Private agencies and Funding agencies in the last 05 years.				
5.	The bidder should have an average minimum annual turnover of Indian Rs.75 (Seventy Five Lakhs Fifty Thousand only) during the last Five financial year 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022	Copy of the audited profit and loss account along with audited balance sheet of the Bidder showing turnover of the Bidder for last five years			Copy of the audited profit and loss account along with audited balance sheet of the Bidder showing turnover of the Bidder for last five years
6.	The bidder must have on its payroll at least 10 technically qualified staff (on permanent payrolls as on date.	Certificate from bidder's Statutory auditor/ agency/ firm secretary/ HR Head for number of technically qualified staff employed by them.			Certificate from bidder's Statutory auditor/ agency/ firm secretary/ HR Head for number of technically qualified staff employed by them.

Factor	Historical Contract Non-Performance					
Sub-Factor	Criteria				Documentation Required	
	Requirement	Bidder				
		Single Entity	Joint Venture where permitted			
			All partners combined	Each partner	At least one partner	
History of non-performing contracts	Non-performance ⁸ of a contract did not occur within the last 5 <i>(Five)</i> years prior to the deadline for application submission, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the bidder have been exhausted.	Must meet requirement by itself or as partner to past or existing JV	N / A	Must meet requirement by itself or as partner to past or existing JV	N / A	
Litigation	All pending litigation shall in total not represent more than Fifty percent (50%) of the Bidder’s net worth and shall be treated as resolved against the Bidder	Must meet requirement by itself or as partner to past or existing JV	N / A	Must meet requirement by itself or as partner to past or existing JV	N / A	

Declaration: Environmental, Social, Health, and Safety (ESHS) past performance	Declare any contracts that have been suspended or terminated and/or performance security called by an employer for reasons related to the noncompliance of any environmental, or social, (including sexual exploitation and abuse (SEA) and gender based violence (GBV)), or health or safety requirements or safeguard in the past five years ⁹	Must make the declaration. Where there are Specialized Sub contractor/s, the Specialized Sub contractor/s must also make the declaration	N / A	Each must make the declaration. Where there are Specialized Sub contractor/s, the Specialized Sub contractor/s must also make the declaration	N / A	ESHS Performance Declaration
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Factor	Financial Situation					
Sub-Factor	Criteria					Documentation Required
	Requirement	Bidder				
		Single Entity	Joint Venture where permitted			
			All partners combined	Each partner	At least one partner	
Historical Financial Performance	Submission of audited balance sheets, for the last Five [05] years to demonstrate the current soundness of the bidders’ financial position and its prospective long term profitability. (a) Total Assets (TA) (b) Total Liabilities (TL) (c) Net worth (NW) (d) Current Assets (CA) (e) Current Liabilities.	Must meet requirement	N / A	Must meet requirement	N / A	The bidder shall have to produce documentary evidence.

Average Annual Turnover	Minimum average annual turnover in last five years shall be INR Rs.75 Lacs calculated as total certified payments. Out of these years, one year should have an aggregate total turnover above 110.00 Lakhs	Must meet requirement	Must meet requirement	Must meet Ten percent (10 %) of the requirement	Must meet fifty percent (50%) of the requirement	The bidder shall have to produce documentary evidence.
Financial Resources	The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet: (i) the following cash-flow requirement: INR : 25 Lakhs (Twenty Five Lakhs Only) <i>[about 3 months cash flow at peak installation/ construction period]</i> and (ii) The overall cash flow requirements for this contract should be more than estimated cost of the project.	Must meet requirement	Must meet requirement	Must meet Ten percent (25%) of the requirement	Must meet fifty percent (50%) of the requirement	

Factor	Experience					
Sub-Factor	Criteria					Documentation Required
	Requirement	Bidder				
		Single Entity	Joint Venture where permitted			
			All partners combined	Each partner	At least one partner	
General Experience	Experience in Turn-key implementation including design supply, installation, testing & commissioning as well as O&M of post-harvest infrastructure facility (Cold storage/Pack houses/Warehouses/Food processing Centres/ Ripening Room/ Perishable Cargo Center for Horticulture produce” under contracts in the role of contractor for at least the last Five [5] years prior to the applications submission deadline in any Govt undertaking/ PSU /Private Entity.	Must meet requirement	N / A	Must meet requirement	N / A	

Specific Experience	(a) Participation as contractor, joint venture partner, management contractor, in at least One contracts within the last Five (5) years, each with a value of at least INR: Rs.75.00 Lakhs (Seventy-Five Lakhs only) that have been successfully and substantially completed and that are similar to the proposed Plant and Installation Services. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Section VI, Employer's Requirements.	Must meet requirement	Must meet requirements for all characteristics	N/A	Must meet requirement for one characteristic <i>[Must have done installation, design ,testing and commissioning of Food Processing with Packaging facility)</i>	
	<p>(b) For the above or other contracts executed during the period stipulated in above, a minimum experience in the following key activities:</p> <p><i>Turn-key implementation including design supply, installation, testing & commissioning as well as O&M of post-harvest infrastructure facility (Cold storage/Pack houses/Warehouses/Food processing Centers/ Ripening Room/ Perishable Cargo Center)</i></p> <p>Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 200 Lakhs comprising 300 SQM PEB Building Works - 1 work.</p> <p style="text-align: center;">Or</p>	Must meet requirement	Must meet requirement	N/A	Must meet requirement	

	<p>Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 125 Lakhs comprising 190 SQM PEB Building Works - 2 work.</p> <p style="text-align: center;">Or</p> <p>Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 100 Lakhs comprising 150 SQM PEB Building Works - 3 work</p> <p>Bidder shall have successfully operated and maintained at least one Food processing Unit for a minimum period of one years in the last five years.</p>					
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The detailed technical evaluation of Proposals satisfying minimum eligibility conditions as above shall be done. The Criteria, sub-criteria and point system for detailed evaluation shall be as follows:

S...No.	Evaluation parameter	Marks
1.	Financial turnover	20
	Rs. 75 Lacs and less then Rs. 1.50 crores	10
	Rs.1.50 crores and above	10
2	Specific experience of the Bidder relevant to the assignment / job	25
2a	1) Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 200 Lakhs comprising 300 SQM PEB Building Works - 1 work . OR 2) Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 125 Lakhs comprising 190 SQM PEB Building Works - 2 work . OR 3) Installation of plant and machinery for Pack houses/Food Processing centers/Warehouses/ Cold stores / and above including design, machinery supply, installation, testing and commissioning for a Value not less than 100 Lakhs comprising 150 SQM PEB Building Works - 3 work	10
2b	4) Installation of plant and machinery for the Grading, Sorting Packaging Plant or above - additional 2.5 marks for each work maximum up to 4 projects	10
2c	5) Bidder shall have successfully operated and maintained at least one Food processing Plant for a minimum period of two years during the last	05
3.	Organization structure and set up	20
	Established above 5 years	10
	Established above 10 years	10
4.	Organization & staffing	10

	10 Numbers technically qualified staff on permanent payroll	05
	20 Numbers technically qualified staff on permanent payroll	10
5.	Proposed Strategy, methodology and work plan in response to the terms of reference. Presentation in front of evaluating committee.	25
	a) Proposed concept Plan and design of building 20% b) Detailed Construction Methodology Including Obtaining Necessary Permission.30% c) Detailed Work Plan & Technical personal to be Deployed 30% d) Innovativeness in Construction of F&V Processing Center 20%	

1. Evaluation of Technical Proposal: Only those proposals which score a minimum of 70 marks out of 100 in the Technical Evaluation shall qualify for next stage of bidding process i.e. opening of Financial Bids
2. Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd will determine whether the Financial Proposals are complete, unqualified and unconditional. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of works. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfill its obligations as per the TOR within the total quoted price shall be that of the Applicant.

Section 4: Terms of Reference (TOR)

3.1 Introduction and Background

Jammu & Kashmir Horticultural Produce Marketing and Processing Corporation Ltd. popularly known as JKHPMC was established in the year 1978 as State Public Undertaking with the objective to develop, aid, assist, initiate, promote, organize fresh fruits production, marketing processing, warehousing and cold storing and processing of all types of fruits. It has developed the most modern system of marketing in the country. Most unique characteristic of this organization is that it provides all the services to the fruit growers, which are required for marketing of fruits. Since its inception, Corporation has engaged itself in establishment of pre and post-harvest activities, comprising of an integrated network of mechanized pack houses, cold storages, trans-shipment centers and fruit processing plants, besides a net-work of sales offices in the terminal markets, railways stations and airports throughout the country. The entire infrastructure of grading/ packing houses, pre-cooling and cold storages has been established in rural areas for providing pre and post-harvest facilities to the farmers at their door step. Presently, JKHPMC has emerged as one of the leading and largest organizations for the post-harvest handling of horticultural produce in India. Under its guidance in the past few years, the entire fruit industry has witnessed radical changes from conventional to modern marketing system JKHPMC has contributed substantially to mechanized grading and scientific packing of fruits, substitution of conventional wooden cases by tray packed telescopic cartons, distribution network, introduction of juice dispensing machines, thereby making the health and pure apple juice, a common man's drink, manufacture of apple and pear juice concentrate and development of a sound base for the export of apple and other fruit products. It is a service-oriented organization with a commitment to ensure remunerative returns to the fruit growers and nutritive quality products at a reasonable price to the consumers. **Keeping in view, for the demand in food processing, the Corporation has envisaged establishing Fruits & vegetable processing centers in Jammu & Kashmir fruit markets to reap the benefits during off season. Following processing lines are proposed in the project:**

3.2 Pack House for Fruits & Vegetables

Receiving of Raw Material: Raw materials are received from various sources for the further processing. The produce being proposed for this project is fruits and vegetables. The major produce can be apple, pear, cherry and other fresh fruits and Cabbage, Potato, Cauliflower, Radish, Onions, Beans, tomato in vegetables. All the materials are in field temperature at the receiving yard. Before going for processing it is necessary to decrease the temperature before further processing.

Removal of rejects: After receiving, the first operation that usually follows is the removal of unmarketable material. This is because handling of plant material that cannot be sold is costly. This is performed prior to sizing and grading. Primary selection is one of the four basic operations for market preparation carried out in the field. This step involves

the removal of over mature, too small, severely damaged, deformed or rotting units. Culls as well as other plant parts from cutting, peeling, trimming, bruised and spoiled fruits can be used for animal feeding. When not used for animal feeding, they can be disposed as sanitary fillings or organic soil amendments.

Washing & Cleaning: Cleaning and washing is required to clear the commodity of any acquired latex stain and injuries caused during harvesting.

Drying: Produce is dried after cleaning and washing before they are sent to conveyer belt for grading and packing.

Sorting & Grading: Sorting, grading and packing lines is an important component in the Pack House Infrastructure. These lines add shelf life to the products and ease the handling by packing into smaller and big packs as required. Ventilated boxes are a common form of packaging for chilled cargo as it allows for good airflow through the product. The sorting can be done at the farm level infrastructure using standard sorting mechanisms and packaging solutions and can also be implemented before the individual quick freezing (IQF) processing. These systems alone can bring significant reduction in spoilage. Also, in most cases well packaged products will attract better prices.

Packing: The main purpose of packaging is to ensure that the product is inside a container along with packing materials to prevent movement and to cushion the produce (plastic or molded pulp trays, inserts, cushioning pads, etc.) and for protection (plastic films, waxed liners, etc.). It needs to satisfy three basic objectives. These are to:

- a) Contain product and facilitate handling and marketing by standardizing the number of units or weight inside the package.
- b) Protect product from injuries (impact, compression, abrasion and wounds) and adverse environmental conditions (temperature, relative humidity) during transport, storage and marketing.
- c) Provide information to buyers, such as variety, weight, number of units, selection or quality grade, producer's name, country, area of origin, etc. Recipes are frequently included such as nutritional value, bar codes or any other relevant information on traceability. Packaging can be viewed as a convenience in achieving orderly marketing. The package is convenient unit for transporting the produce from the place of production to the point of sale or consumption. As per requirements, the graded produce will be packed in respective sizes. For e.g. 1, 2 or 5 kg for retail markets. Packed produce will be shifted to a pre cooling unit which will help in rapid removal of heat from freshly harvested produce. This process is typically done before the produce is shipped to market or put into cold storage.

3.3 Cold Store (50MT)

A Cold Store room to maintain the temperature of frozen food items at below -18°C is required. Cold Store is one of the most widespread industrial methods of food preservation. It delays spoilage and keeps foods safe by preventing microorganisms from growing and by slowing down the enzyme activity that causes food to spoil. Cold storages basically enhance the shelf life of products as it maintains the temperature which reduces the chances of spoilage.

by 100%. As the water in the food freezes into ice crystals, it becomes unavailable to those microorganisms that need it for growth. 50 MT Cold Store is proposed at Rajbagh. Frozen vegetables and fruits, Meat, fish, ice creams etc. can be stored.

3.4 Scope of work of the Contractor

3.4.1 Brief Scope of Work

The brief scopes of EPC are Pre-Engineering Survey, Detailed design/ engineering based on Basic Engineering package, Procurement, Manufacturing & Delivery, Fabrication and supply, site grading and leveling, Construction (Civil and Structural), Transportation, Erection / Installation, Piping, Hookup to the systems, Painting, Instrumentation, Electrical works, Testing, Pre-commissioning and Commissioning after successful completion of 6 months continuous Performance Guarantee Test Run (PGTR) of the total System on **Lump sum Turn Key Basis (LSTK)** including supply of mandatory spares.

It is not the intent to completely specify all the details of design and construction, nevertheless the unit shall conform in all respects to high standards of design, engineering and workmanship. Any piece of unit or equipment not specifically mentioned in this specification, but required to make the unit complete, safe, operable and consistent with good engineering practices shall be provided by the contractor at no extra cost and shall be deemed to have specified. EPC Contractor shall prepare the detailed document control index / document schedule based on the respective Job Specifications for the complete project and submit the same during Kick-Off meeting as first document for JKHPMC/Consultant review. Any additions to this document during the progress of the project by JKHPMC/Consultant shall be taken care by the EPC contractor without cost / time implications. Document submission shall be strictly as per this Index.

GENERAL:

Contractor shall guarantee that the design and engineering works and services shall be as specified and technical documentation to be developed shall be in accordance with sound and established engineering practices, using International Standards and Indian Codes and Regulations, wherever applicable, for the purpose specified, free from defects and suitable for respective uses intended.

In the event of faulty engineering, procurement, construction i.e. error or omission the technical studies, work performed by EPC Contractor; in respect of work described herein, for which Contractor will be solely responsible, Contractor must agree to provide services to furnish corrective technical studies & engineering, and replace plant/ machineries/ equipment as may be required without any additional cost to JKHPMC.

EPC Contractor will obtain required guarantees/ warranties from EQUIPMENT and MATERIAL VENDORS and erection Contractors against defects in materials and workmanship.

DRAWINGS/ DOCUMENTS:

1. The EPC Contractor shall prepare all engineering documentation & drawings and submit three (3) sets each to JKHPMC/Consultant of the scrutiny and approval before execution. The EPC Contractor further shall submit to JKHPMC Six (6) sets of finally approved documents and laminated drawings along with two (2) set of soft copies stored in R/W Compact Disks (CD).
2. In particular, but not limited to, Contractor will provide the documents & drawings which shall include (including those mentioned in the entire tender)-
 - a Plant Layout.
 - b Drawing showing a bird's eye view of the plant layout and the surrounding features in a radius of 500 m around the plant boundary.
 - c Updated Process Flow Diagram(s).
 - d Mechanical Flow sheet(s).
 - e Updated Piping & Instrumentation Diagram(s) (P&IDs).
 - f Detail Engineering Documentation including data sheets, type & specifications of equipment & facilities.
 - g G.A. Drawings.
 - h Civil foundation, Building detail drawings.
 - i Structural & Fabrication Drawings.
 - j Construction & Working drawings.
 - k Electrical single-line Diagram.
 - l Earth Resistivity values.
 - m Plant Operating and Maintenance Manual.
 - n Hazardous Area classification drawings
 - o As-built Drawings
 - p Fire Fighting Network
 - q electrical Cable route Layout
 - r Drainage system Layout
 - s Project Dossier

INTEGRATION & CO-ORDINATED EXECUTION:

The scope of work of Contractor includes coordinated execution of the entire project without any time overrun as per the time frame through integration of all facilities, components and equipment. The Scope of Work also covers, amongst others, close liaison with JKHPMC and such aspects as may be necessary for maintaining technical and procedural integrity for ensuring execution of the entire project in a time-framed, systematic, secure, safe and environment-friendly manner.

DETAIL ENGINEERING:

“Basic Engineering & Front End Engineering Design (FEED) to establish the system requirements considering entire life of the field, which is approved by JKHPMC”.

The Contractor should carry out design of Fruit and Vegetable processing center as detailed below:

1. The FEED documents prepared by JKHPMC & its representatives are a guide line documents and inputs to Contractor to carry out detail engineering, procurement & Construction of Fruit and Vegetable processing center. The Contractor shall carry out any other engineering, procurement, construction etc., over and above of that mentioned in the guidelines, required to complete the Project with no extra cost to the Company. All such activities shall be vetted by JKHPMC & its representatives
2. Detail Design/ Engineering shall include detailed study of site, local custom, Preparation of 3D Computer modeling with simulation of the Fruit and Vegetable processing center on PDS (Plant Design System) or PDMS (Plant Design Management System). Following on from Basic or FEED engineering work, EPC contractor will develop Detailed Engineering as per Consultant's guidelines. Detailed Engineering phase shall include submission of Detailed Engineering plan and Quality assurance plan, both specific to this project, procurement support, fabrication drawings, construction drawings for foundation, steel frame, construction drawings for electrical equipment, instrumentation and piping, vents/drain, Hook ups, Loops, vendor data etc.
3. All detailed Engineering, Civil, Structural, Mechanical, Instrumentation etc. which forms a part of the Project shall be approved by the JKHPMC & its representatives .Construction work shall only be carried out based on Approved for Construction (AFC) drawings released by the JKHPMC & its representatives
4. Updating of construction sequences in the 3D computer animated model with simulation. EPC needs to provide PDS/PDMS software with assurance for maintenance support from the OEM/authorized dealer for minimum 5 years.
5. Inspection and expediting services.
6. Construction supervision and assistance in project management.
7. Adherence to the TOR requirements and control.
8. Ensure quality control and safety of operation and certify the jobs executed
9. Ensure adherence to statutory guidelines followed in upstream food process industry.
10. Provide statutory approvals for individual equipment /instrument.
11. Ensure that all equipment's / instruments have statutory approvals for installation in Hazardous area.
12. Finalization & completion of as built live 3D computer animated walkthrough model of the Fruit and Vegetable processing center by EPC contractor with Consultant's approval and submission to JKHPMC.

13. Submission of list of BOM (Bill of materials) in soft and hard form against all materials & equipment's installed at the Fruit and Vegetable processing center along with quantities, manufacturer details, technical specifications etc.
14. Pre-commissioning of individual process blocks and equipment submit commission report to JKHPMC & its representatives.
15. Successful continuous Trouble free Trial run of the Plant along with all installed equipment's 6 (six) months.

PROCUREMENT

The scopes of work of this Contract are composite in nature which contains broadly:

1. All items as mentioned in detailed engineering section shall be procured.
2. All materials required for successful completion of this project shall be procured by the contractor from the vendors with specific approval from JKHPMC & its representatives. It is mandatory that all equipment's, machines and bulk materials are procured only from seek JKHPMC approval on the proposed list of vendors during Bid Stage for all major items. Any Deviation to vendor list should be brought out in the offer and no other vendor shall be accepted afterwards. Documentary evidence with respect to procurement from approved manufacturers as well as test report (Mill Test Certificate) must be submitted to JKHPMC for approval before starting the job.
3. All materials including the vessels, equipment (fixed and rotary), indirect heaters (including chimney), accessories of vessels and equipment, raw materials for tanks construction, pipes of different dia. and length, valves, pipe fittings, all structures, structural platforms / ladders, stairs, supports electrical items, instrumentation items, paints etc. within the specified battery limits etc. will be procured and transported to project site by EPC Contractor.
4. Unloading at site, Safe storage at project site and site transportation are under scope of EPC contractor.

MAJOR EQUIPMENT LIST

The EPC Contractor should submit the major equipment list with make and brand name.

3.4.2 DETAILED SCOPE OF WORK

PHASE-I: APPROVALS

- i) Contractor shall place order only after obtaining confirmation from JK HPMC.
- ii) Contractor shall carry out Inspection and expediting services for all the ordered items for the project. Wherever required, JK HPMC will also visit vendor shops to witness inspection / testing.

- iii) Contractor shall carry out Construction of Fruit and Vegetable Processing Center as per latest codes & standards. Contractor's Site-in-charge shall report to competent person of JK HPMC deputed at site on day to day basis.
- iv) Contractor shall have competent Project Manager & Construction Manager with relevant experience at design office & site.
- v) Contractor shall depute team of planning engineers at design office as well as site to monitor & control the project progress.
- vi) Contractor shall depute competent persons to ensure quality control and safety of operations.
- vii) Contractor shall construct temporary site office with all amenities and facilities for execution of site activities.
- viii) Contractor shall adhere to statutory guidelines followed in upstream Apple Grading, Packing, Sorting, Waxing Line industry.
- ix) Arrange for construction power, water and other utilities required during construction, pre-commissioning & commissioning phases.
- x) Start-up/Pre-commissioning and integration of the plant. JK HPMC shall be associated during pre-commissioning & trial run of the plant.
- xi) Commissioning assistance.
- xii) Engaging competent manpower for pre-commissioning, preparation of manpower deployment pattern as per provisions of Govt. regulation.
- xiii) Provide inputs and assist JKHPMC in preparation of equipment log book, Safe Operating Procedure for all equipment and various facilities including and not limited to civil, mechanical, electrical, instrumentation.
- xiv) Finalization & completion of live 3D computer animated walkthrough model by Contractor with JKHPMC's approval and putting it in-line.
- xv) Arranging training of JK HPMC personnel in coordination and conjunction with JK HPMC.

PHASE-II: PROJECT MANAGEMENT STAGE: CONSTRUCTION MANAGEMENT OF SITE COVERING

After awarding of contract, the EPC Contractor shall carry out following activities, but not limited to, to complete the construction of the project under supervision of MD, JKHPMC or his representative.

Contractor shall prepare 3D walk through Computer model on (Plant Design System) PDS platform for Fruit and Vegetable Processing Center based on detail engineering carried out by them. Project management and monitoring to ensure timely completion of the work.

- i) Submission of monthly progress report detailing the physical progress of work.
- ii) Quality Assurance Plan (QAP), Quality Management Plan (QMP) and Project Monitoring, i.e. PERT/CPM/MS Projects sheet, with milestones. Relevant Codes Manual, DSR, CPWD specification, agreement copy, QAP, testing frequency, along with special construction methodology, if any, should be available at site.

- iii) For day to day supervision and management of site works, including quality control, Consultant shall deploy adequate and competent manpower of different disciplines like civil, electrical, refrigeration etc. being deputed and take prior approval before commencement of the work at construction sites as per JKHPMC's extant guidelines. Consultant shall convey the name and mobile nos. of Engineers and other officers posted on the awarded project of JKHPMC. Details of Project managers /site engineer should be specifically mentioned. Responsibility shall rest with regular employee & officers, of Consultant, with respect to, correctness of design & drawings, technical specification and methodology of construction and field/site supervision should be clearly defined.
- iv) Maintenance of site records as per the rules and regulations of Government, CVC, internal vigilance and other instructions of JKHPMC, if any.
- v) Inspection of Project sites by the Supervisory Engineers & Project Coordinators of suitable level as per the JKHPMC guidelines at planned intervals, along with recording of observations in the Site Order Book & other important registers, including issue of inspection notes for observations recorded during their visits of project sites, to all concerned including JKHPMC, for compliance and information.
- vi) Certification of contractor's bills as per extant norms, including recording of test checks as per the JKHPMC guidelines.
- vii) Monitoring of adherence by the contractor to the time schedules, various labour laws, safety regulations, insurance policy and any other statutory requirements, supervision and inspection of work during the construction period.
- viii) Supervision and inspection of work during the construction and Defect Liability Period.
- ix) Issue of work completion certificate after successful completion of construction work in parts or full, after the joint survey of JKHPMC and Contractor.
- x) Defect Liability Period (DLP) shall be normally two year after the handing over of site or issue of successful work completion certificate, whichever is earlier. MD, JKHPMC or his representative shall supervise rectification works of defects noticed during the DLP. MD, JKHPMC or his representative or Project In-Charge / Executive of JKHPMC shall issue maintenance completion certificate, after successful completion of DLP. In the eventuality of Representative not responding and organizing defects rectification works through contractor, during the DLP, matter will be reported to higher management of Representative for timely intervention and compliance.
- xi) Coordination and liaison with various outside agencies and officials of:
 - a) JKHPMC and regional offices for expeditious and hindrance free / smooth execution of work.
 - b) In case, the work is examined by Chief Technical Examiner; Chief Vigilance Officer, internal Vigilance or Technical Audit of JKHPMC, it will be Consultant's responsibility to supply and submit all necessary reply, clarifications and justification to these department(s). Consultant role shall be limited to the extent; Consultant

has been involved in preparation of Detailed Engineering DPR, BOQ, tender document, specifications & drawings, Construction Management & Supervision.

- c) If required Consultant shall assist JKHPMC in arbitration and litigation cases that may arise out of contracts entered into by JKHPMC. Consultant shall also assist JKHPMC in replying to Audit paras.
- d) If required Consultant will assist JKHPMC to obtain statutory approvals from relevant authorities and coordinate and file all papers/applications (wherever required, JKHPMC officials will sign relevant papers) on behalf of JKHPMC.
- e) If required Consultant shall provide technical data from site as and when required.
- f) Consultant shall provide clarification to various technical/commercial points cropping up during execution of work.
- g) If required Consultant shall provide necessary help and do spade works in obtaining various approvals, attend meetings with local body, State Govt., etc.
- h) If required Consultant shall submit completion plan & drawings (two sets) on completion of the project. Complete set of soft copies of drawings and plan shall also be supplied to JKHPMC.
- i) Performance, testing and commissioning.
- j) All building plans.
- k) Pressure testing for refrigeration system- Standing pressure and vacuum test.
- l) Leakage test for Cold Storage room and air-conditioning duct.
- m) Balancing of Air flow, water, and refrigeration circuits.
- n) Hydraulic testing for water distribution for pipe work system
- o) Acoustic tests.
- p) Measurement of insulation resistance values of HT & LT electrical system.
- q) Functioning of fire alarm detection system.
- r) Final performance tests i.e. cooling capacity of refrigeration system, working of temperature, humidity, current voltage, CO2 level etc.
- s) Issue of test certificates and “as fitted/completion drawings”.
- t) Availability of operation maintenance and service.
- u) Seasonal performance testing for maintenance of specified temperature of Refrigeration system for all seasons.

PHASE-III:

Two Successful Trial runs on Full Load and three Successful Trail runs on No Load should be provided by the Contractor with commissioning assistance from MD, JKHPMC or his representative. **The Raw Material for all the Trail Runs shall be provided by the Contractor till satisfaction to the Authorities.** It is a strict time bound work and will require best efforts and deployment of best qualified experience personnel from the Contractor. In case any defects

are found during the trail run, the Trail Run period shall be extended, at no extra cost until all the rectifications are addressed. The bidder, at their own cost, should rectify the defects and hand over the facility.

PHASE-IV: Annual Maintenance

After successful completion of trail run, the procuring entity shall engage service provider for AMC/CMC by inviting bid during construction period.

3.5 Suggested Team Composition & Qualification Requirements

Project Manager having graduate in Civil/Mechanical Engineering having experience of 8 years and minimum 5 years similar experience Supervisor having graduate in any discipline.

3.6 Time Schedule

The project duration is **180 Days** from the date of contract. If the work is not completed within the stipulated period as per approved proposal, J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) will not give any extra payment during the extended time period.

3.7 Payment Schedule

Payment will be made against achieving milestones of the project as stated in the contract as submitted by the invoice within 15 days after verification of the work.

3.8 Penalty clause

- a) In case of delay in delivery of material, the purchaser may at his option, impose a penalty calculated at the rate of 0.1% per each day of the delayed goods and up to a maximum deduction of 5% of the delayed supply or services as per tender conditions of such portion only of the quantity as have not been delivered on the specified date (three months from the date of agreement). Such reduction shall be in full satisfaction of the supplier's liability for the delay but shall not in any case exceed five per cent of the value. Once the maximum is reached the department may consider termination of contract.

Section 5: Technical Proposal

FORM TECH-1

LETTER OF PROPOSAL SUBMISSION

[Location, Date]

To,

The Managing Director,

Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd

Dear Sir,

We, the undersigned, offer to provide the Assignment/ job for “**Design and Construction of Fruits & Vegetable (F&V) Aggregation, Processing and Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, J&K**” in accordance with your Request for Proposal dated [30/06/2022] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal with requisite EMD and bid processing fees. We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signatory

[In full and initials]

Name and Title of Signatory:

Name of Organization:

Address:

FORM TECH-2

FORM 2 A: BIDDER'S ORGANIZATION AND EXPERIENCE

Details of Bidder

a.	Name of BIDDER with full address	
b.	Tel. No.	
c.	Fax No.	
d.	Email	
e.	Year & Date of Registration.	
f.	Name and address of the person holding the Power of Attorney.	
g.	Name of Bankers with full address.	
h.	GSTN Registration Number (copy).	
i.	Permanente Account Number (copy).	
j.	Are you presently debarred / Blacklisted by any Government Department /Public Sector Undertaking /Any Employer? (If Yes, please furnished details)	
k.	Name and details (Tel / Mobile / E mail) of contact persons	

FORM 2B: FORMAT FOR FINANCIAL CAPABILITY OF THE BIDDER

(Equivalent in Rs. crores)

Bidder	<i>(Name of Bidder)</i>						
FY	2017-18	2018-19	2019-20	2020-21	2021-22	Total	Average
Annual Turnover							

Certificate from the Statutory Auditor

This is to certify that..... *(Name of the Bidder)* has received the payments and annual turnover as shown above against the respective years.

Name of the audit firm:

Seal of the audit firm Date:

(Signature, name and designation of the authorized signatory)

FORM 2C: ENGAGEMENT EXPERIENCE

LIST OF PROJECTS IN THE LAST FIVE YEARS WHICH ARE SIMILAR TO THAT IN THE RFP.

Assignment name:	Value of the contract (in current INR):
Country:	Duration of assignment (months):
Name of Employer:	Total No of staff-months of the assignment:
Address:	
Start date (month/year): Completion date (month/year):	
Narrative description of Project:	

(Along with the details the bidder is also required to submit the supportive documents (work orders, completion certificates)/ Work undertaken for each of the projects)

FORM TECH-3

DESCRIPTION OF APPROACH, METHODOLOGY, AND WORK PLAN IN RESPONDING TO THE TERMS OF REFERENCE

A description of the approach, methodology and work plan for performing the assignment, including a detailed description of the proposed methodology and staffing for training.

1. Technical Approach and Methodology
 2. Work Plan
 3. Organization and Staffing
-
- a) **Technical Approach and Methodology.** Please explain your understanding of the objectives of the assignment as outlined in the Terms of Reference (TORs), the technical approach, and the methodology you would adopt for implementing the tasks to deliver the expected output(s), and the degree of detail of such output.

 - b) **Work Plan.** Please outline the plan for the implementation of the main activities/tasks of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and tentative delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing your understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents (including reports) to be delivered as final output(s) should be included here. The work plan should be consistent with the Work Schedule Form.

 - c) **Organization and Staffing.** Please describe the structure and composition of your team, including the list of the Key Experts, Non-Key Experts and relevant technical and administrative support staff.}

FORM TECH-4

CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. Proposed Position:

[For each position of key professional separate form Tech-6 will be prepared]:

2. Name of Organization:

[Insert name of BIDDER proposing the staff]:

3. Name of Staff:

[Insert full name]:

4. Date of Birth:

5. Nationality:

6. Education:

[Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment]:

7. Membership of Professional Associations:

8. Other Training:

9. Countries of Work Experience:

[List countries where staff has worked in the last ten years]:

10. Languages [For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]:

11. Employment Record:

[Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.]:

From [Year]:

To Year]:

Employer:

Positions held:

12. *Detailed Tasks Assigned*

[List all tasks to be performed under this Assignment/job]

13. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

[Among the Assignment/jobs in which the staff has been involved, indicate the information for those Assignment/jobs that best illustrate staff capability to handle the tasks.]

Name of Assignment/job or project:

Year:

Location:

Employer:

Main project features:

Positions held:

Activities performed:

14. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date:
representative of the staff]

[Signature of staff member or authorized Place:

[Full name of authorized representative]

FORM TECH-5

STAFFING SCHEDULE

Sr.	Name of Staff	Staff input (in the form of bar chart)							Total Months
1		1	2	3	4	N	
2									
3									
4									

FORM TECH-6

LETTER OF DECLARATION FOR NOT HAVE BEEN BLACKLISTED

[Location, Date]

To,
The Managing Director,
J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC)

Subject: Letter of Declaration for not have been Blacklisted

We, *[Name of BIDDER]* have not been black listed/ debarred/ termination of contract except for reasons of convenience of Employer by any Government/ Government board/ Corporation/ Agency/ firm/ Statutory Body/ PSU Agency/ firm/ Non-Government/ Government of any sovereign countries/ Private Agencies and Funding Agencies in the last 15 years.

For *[Name of BIDDER]*,

Authorized Signatory [In full and initials]

Name and Title of Signatory:

Name of BIDDER:

Address

FORM TECH-7

POWER OF ATTORNEY

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Power of Attorney to be provided by the BIDDER in favor of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We.....(name and address of the registered office of the BIDDER, as applicable) do hereby constitute, appoint and authorize Mr./ Ms.....(name and residential address) who is presently employed with us and holding the position of, as our Attorney to do in our name and our behalf all or any of the acts, deeds or things necessary or incidental to submission of our "....." in response to the TOR Document dated.....issued by The Managing Director, J&K Horticulture Produce Marketing and Processing Corporation Ltd. (JKHPMC) (the BIDDER) including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the BIDDER may require us to submit. The aforesaid Attorney is further authorized for making representations to the BIDDER or any other authority, and providing information/responses to the BIDDER, representing us in all matters before the BIDDER, and generally dealing with the BIDDER in all matters in connection with our Bid till the completion of the bidding process as per the terms of the TOR Document and further till the Contract is entered into with the BIDDER and thereafter till the expiry of the Contract.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the TOR Document

Signed by the within named ----- [Insert the name of the executant BIDDER] Through the hand of Mr..... Duly authorized by the Board to issue such Power of Attorney

Date this.....day of..... Accepted..... Signature of Attorney

(Name, designation and address of the Attorney)

Attested

..... (Signature of the executant)

(Name, designation and address of the executant)

.....

Signature and stamp of Notary of the place of execution

FORM TECH- 8

Format for Joint Bidding Agreement for Joint Venture

(To be executed on Stamp paper of appropriate value)

THIS JOINT BIDDING AGREEMENT is entered into on this the day of 20...

AMONGST

1. {..... Limited, and having its registered office at} (hereinafter referred to as the **"First Part"** which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. {..... Limited, having its registered office at} and (hereinafter referred to as the **"Second Part"** which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above mentioned parties of the FIRST and SECOND PART are collectively referred to as the **"Parties"** and each is individually referred to as a **"Party"**

WHEREAS,

- (A) Jammu & Kashmir Horticultural Produce Marketing & Processing Corporation Ltd. Srinagar J&K, represented by its Managing Director and having its registered offices at Rajbagh, Srinagar- J&K 190008. (hereinafter referred to as the **"Authority"** which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited bids (the **"Bids"**) by its Request for Proposal No. dated(the **"RFP"**) for award of contract for rehabilitation and augmentation of***** Project (the **"Project"**) through an EPC Contract.
- (B) The Parties are interested in jointly bidding for the Project as members of a Joint Venture and in accordance with the terms and conditions of the RFP document and other bid documents in respect of the Project, and
- (C) It is a necessary condition under the RFP document that the members of the Joint Venture shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Application.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

2. Joint Venture

- 2.1 The Parties do hereby irrevocably constitute a Joint Venture (the **"Joint Venture"**) for the purposes of jointly participating in the Bidding Process for the Project.
- 2.2 The Parties hereby undertake to participate in the Bidding Process only through this Joint Venture and not individually and/ or through any other Joint Venture constituted for this Project, either directly or indirectly.

3. Covenants

The Parties hereby undertake that in the event the Joint Venture is declared the selected Bidder and awarded the Project, it shall enter into an EPC Contract with the Authority for performing all its obligations as the Contractor in terms of the EPC Contract for the Project.

4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) Party of the First Part shall be the Lead member of the Joint Venture and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Joint Venture during the Bidding Process and until the Appointed Date under the EPC Contract;
- (b) Party of the Second Part shall be {the Member of the Joint Venture}

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the RFP and the EPC Contract, till such time as the completion of the Project is achieved under and in accordance with the EPC Contract.

6. Share of work in the Project

The Parties agree that the proportion of construction in the EPC Contract to be allocated among the members shall be as follows:

First Party:

Second Party:

7. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- (a) Such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- (b) The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Joint Venture Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - (i) require any consent or approval not already obtained;
 - (ii) violate any Applicable Law presently in effect and having applicability to it;
 - (iii) violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof;
 - (iv) violate any clearance, permit, concession, grant, license or other governmental authorisation, approval, judgement, order or decree or any mortgage agreement, indenture or any other instrument to which such Party

is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or

- (v) create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- (c) this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- (d) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Agreement.

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until Project completion (the "Defects Liability Period") is achieved under and in accordance with the EPC Contract, in case the Project is awarded to the Joint Venture. However, in case the Joint Venture is either not pre-qualified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Applicant is not pre-qualified or upon return of the Bid Security by the Authority to the Bidder, as the case may be.

9. Miscellaneous

- 9.1 This Joint Bidding Agreement shall be governed by laws of {India}.
- 9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Authority.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

For and on behalf of

SIGNED, SEALED AND DELIVERED SIGNED, SEALED AND DELIVERED

LEAD MEMBER by:

SECOND MEMBER by:

Name:

Name:

Designation

Designation

Signature

Signature

Witness:

i.

ii.

FORM TECH- 9

Performance Bank Guarantee

To,..... [Name of Employer]

.....[address of Employer]

WHEREAS _____[name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract"); AND

WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a Nationalized/Scheduled bank of India for the sum specified therein as security for compliance with his obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee.

NOW THEREFORE we hereby affirm that we are the guarantor and responsible to you on behalf of the Contractor, up to a total of Rs. [amount of guarantee] (Rupees _____) such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 28 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____

Name and Designation _____

Name of the Bank _____

Address _____

Date _____

* An amount shall be inserted by the Guarantor, representing the percentage the contract price specified in the contract including additional security for unbalanced Bids. If any and denominated in Indian Rupees.

Section 6: Financial Proposal

6.1 Terms of Payment of Contract Price

a) ACTIVITY SCHEDULING:

D = Date of issue of work order

Activity	Duration (in days)
Survey and Investigation	D+5
Preparation of detailed design drawings	D+15
Submission and Approval	D+25
Plinth work for PEB & Allied structures	D+50
Installation of PEB structure	D+80
Installation of Machinery, Equipment & Utilities	D+120
Electrical External/Internal Service Connections.	D+150
On final testing, commissioning of all equipment	D+180
Trial run for 6 Months post commissioning	

S No.	PAYMENT DURING DETAIL DESIGN & DRAWINGS	5% of the project cost	Cumulative %
1	On signing of contract and submission of Design & Drawings	50%	50%
2	On approval of Design & drawings	50%	100%
B	PAYMENT DURING CONSTRUCTION STAGE	95% of the project cost	Cumulative %
1	On completion of Plinth work.	10%	10%
2a	Supply of PEB Structure material	10%	20%
2b	Installation & Fabrication of PEB Structure material	5%	25%

3	On Completion of Allied structures /Machine Room, Toilet Block, STP/ETP Plant or above, External Electrification /Street Lighting	15%	40%
4	Installation of All Processing Lines & Cold Chambers	20%	60%
5	Completion of Electrical & Instrumentation (E & I) (S.no 3 & 4)	5%	65%
6	On final testing, commissioning of all equipment	5%	70%
7	Completion of Weighing Bridge, Organic Waste Composter and other utilities	20%	90%
8	Submission of As built drawing, proving training, manual & obtaining all statutory clearances	5%	95%
9	After completion of Defect Liability period of 2 years	Balance payment (5%)	100%
	Note: Pro-rata payment options will be considered for the respective milestones if there is any change of scope.		

Section 7: Technical Specifications

A. Design, Supply Installation Testing & Commissioning of Fruit and Vegetable processing center.

The employer invites BIDS for **"Design and Construction of Fruits & Vegetable (F&V) Aggregation, Processing and Packaging Centre with Marketing Kiosk at Rajbagh, Srinagar, Jammu & Kashmir**, comprising Civil Works , ESHS ,Pre-Engineered Steel Structure (PEB), Insulation and Miscellaneous equipment , Installation Services on **turnkey basis**.

The Bidding Document includes preliminary layout drawings, description of goods & Services, materials and workmanship, civil works and environmental, social, health and safety requirements. Contour plans and soil bearing capacity, topographical survey reports to be arranged by the successful contractor for detailed design /drawings.

The Bidder/ Contractor, while designing the facility shall ensure performance parameters and functional guarantees specified in the tender document as well as in the description of goods& services, materials and workmanship requirements. The plant Chamber size and Cold Chamber sizes have been specified in the layout drawing and therefore equipment offered shall fit into the space / area provided

Bill of quantities for civil works mentioned in the BID document have been estimated based on the concept layout drawings attached with the tender BID and hence can vary on either side when final Good for Construction (GFC) drawings are prepared by the contractor. The contractor therefore, needs to appoint the architect and structural consultant immediately on award of the contract and prepare execution drawings & B.O.Q and then submit these to JKHPMC for the approval within 30 days of award of contract. Thereafter the Same drawings should be vetted from the Govt. Institutes like D Q I C or IIT's or NIT's. The Vetting Charges shall be borne by the Contractor.

B. STEEL STRUCTURE.PRE ENGINEERING BUILDING (PEB)

Supply & installation of Pre- Engineered Steel Structure (PEB) shall be complete with all components required to construct the primary and secondary framing, wind bents, wall & roof purling plus the wall cladding and roof sheeting including hardware's and anchor bolts.

The PEB shall be designed & manufactured in accordance with the following codes and suitable to withstand following climatic conditions

1) Designed codes: As per the Latest Relevant BIS Codes.

2) Average Climatic Conditions

S. Nos.	parameters	Unit	Range
1.	Average Max./Min. ambient Temperature during the year	°C	35°C Max. & Min. 10°C
2.	Average Relative Humidity during the year	%	75-80%
3.	Wind Speed (Normal)	m/sec	Max. 5 Min.1.85
4.	Annual Average Rainfall	mm	Max. 1104
5.	UV index	m Watt /	Max. 515 & min. 240
6.	Seismic Zone- Rajbagh		V
7.	Vulnerability		High risk zone

Table 1: Average Climatic condition – Rajbagh, Srinagar

3) Requirement of PEB.

Type	Indian Standard Medium Channel (ISMC).
PEB Size	As per attached drawing (Minimum Requirement)
Length	As per attached drawing (Minimum Requirement)
Width	As per attached drawing (Minimum Requirement)
Clear height	As per attached drawing (Minimum Requirement)
Intermediate Columns	As per attached drawing (Minimum Requirement)
Roof Slope	As per attached drawing and Requirement (Minimum Requirement)
Bay spacing – Length wise	As per attached drawing (Minimum Requirement)
Bay spacing – width wise	As per attached drawing (Minimum Requirement)
Front End frame	Non expandable rigid frame/ post end frame (Minimum Requirement)
Back End frame	Non expandable rigid frame/ post end frame (Minimum Requirement)
Future Expandability	Non expandable rigid frame/ post end frame (Minimum Requirement)
Type of bracing on roof & wall	ISMC bracing.
Roofing	Providing corrugated G. S. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (upto any pitch in horizontal/vertical or curved surface)excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required. 1.25 mm thick with zinc coating not less than 350 gram/m ²
Roof Over Hang	Roof overhang should extend and cover O/O steel structure as per drawing.
Steel Work Finish	
Frames, Built-Up / plate HR Sections	The PEB items shall be supplied with two coat of Zinc Chromate Red Oxide Primer. Two Coat of approved synthetic enamel paint shall be applied at site by the certified/ approved painter.

Galvanized steel deck sheet	Providing and fixing roofing consist of 0.8 mm thick galvanized steel deck sheet confirming to IS 277:1992 used as permanent shuttering over which MS wire mesh 3mm laid at 100x100 mm grid including edge trim covered with concrete. This metal deck will be supported on structural steel beam with shear studs. (Structural steel like Beam, column, joists etc. & concrete of different grade as per design will be paid separately).
Doors and Windows & Exhaust Fans.	
Rolling Shutters	80x1.20 mm M.S. laths with 1.20 mm thick top cover as per drawings
Windows with grill & wire-	Size: (L) x 2100 mm (H) & 3000 mm (Numbers as per drawings).
Standard Material Specifications	
Built up sections	As per ASTM 572 , Grade- 50 , 345 MPA
Hot Rolled Sections	Angles , Beams and Channels- As per IS 2062, E250A , 250 MPA
Cold Rolled cold formed	As per ASTM A 1011M SS Grade 50, Class-2, 340 MPA black, ASTM A653 Pre-
Flange Brace/ Sag Angles	As per IS 2062, 250 MPA
Bracing Materials	As per IS 2062, E- 250A 250 MPA
Anchor Bolts	As per IS 2062, E- 250A 250 MPA
Nuts & Washer	Galvanized as per relevant IS Code

Table 2: Requirement of Pre-Engineered Steel Structure.

4) Design Criteria of Pre-Fabricated structures

Design Loads: Pre-fabricated steel structure shall be designed taking into account all loads viz. structural load, uniformly distributed load on account of various electrical fixtures, cable trays, piping, air-conditioning ducts and pointed or concentrated load.

Note: While the average climatic conditions, loading and PEB dimensions have been specified, however, bidders/contractors have to ascertain these from state meteorological department & architecture drawings and design and offer suitable PEB as per best engineering practices.

5) Components of PEB other than trusses.

- Ridge / Crown Height:** Ridge/crown height shall be so designed that the rain water has smooth flow. The bidder shall indicate the slope or gradient considered for the design.
- Gutter & down pipe:** Provision for collection of the rain water, sliding down the roof of the structure, shall be made at the eave height. The section of the gutter channel shall be adequate to handle the rain water in the worst situation. The down pipe of PVC or sheet metal shall be located in such a way that the water out let is placed out of the store platform. (Out let in the process area shall not be permitted).
- Painting:** The entire structure shall be cleaned by wire brush or sand blasted and then applied with red oxide primer at factory and then given two coats of synthetic enamel paint at site. The bidder shall indicate the color code of the paint to be applied and obtain approval from the customer before commencing painting work.

- d) **Anchor Bolts & Templates:** The bidder shall be responsible to supply the suitable size anchor bolts to the civil contractor and shall super wise, instruct, & guide the civil contractor for its fixing, alignment, verticality etc. and ensure its correctness from all angles before the anchor bolts are grouted so that there is no difficulty while erecting the columns. The columns shall be vertical, true to the plumb.
- e) **Approval of Drawing:** The Contractor shall agree to provide the final drawing for approval within two weeks after the award of the contract by JKHPMC. All works will be commenced after the approval of drawing by engineering department of JKHPMC/agency appointed by JKHPMC for such purpose.
- f) **False Ceiling** Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS:277 and consisting of angle cleats of size 25 mm wide x 1.6mm thick with flanges of 27mm and 37 mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 40mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.5mm of required length with nuts & bolts of required size and other end of angle hanger fixed with G.I. channels 45x15x0.9 mm running at the spacing of 1200 centre to centre, to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having clips of 10.5 mm at 450mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5mm thick 27mm high having flanges of 20mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre to centre, with 25mm long drive-all screws @ 230 mm interval, including fixing of gypsum board/calcium silicate board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5x25mm at 230mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the gypsum board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150mm on both sides of joint and two coats of primer suitable for board, all as per manufacturers' specification and also including the cost of making openings for light fittings, grills diffusers, cutouts made with frame of perimeter channels suitably fixed all complete as per drawing and specification and direction of the Engineer-in-Charge but excluding the cost of painting with:
- g) **Barge Board** Providing and fixing percolated galvanized steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self-drilling/ self-tapping screws complete : Barge board (Up to 300 mm)
- h) **Paneling** Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.

6) **Lighting Arrestor:**

Supply & Installation of suitable "lighting arrestor" complete with down copper strip at-least 20x3 mm size, air termination as per is code: 2309:1989 (revised up to date) for protection of buildings and allied structures against

lightning and earthing thereof as per is code: 3043-1987(revised up to date).misc. Items: sealer, rope seal, filler strip, ridge cap, flashing & trim or / and any other item not specifically mentioned here but are required for completion of the job shall be included in the scope of work & indicated in the offer by the bidder along with their specification.

7) Installation testing & commissioning of PEB steel structure

- a) The Contractor shall prepare PEB layout drawing and obtain approval from engineering department of JKHPMC or from the representatives appointed by JKHPMC for such purpose.
- b) Supplier/ Contractor shall submit 3 sets of approved drawing and ensure availability of one set of approved drawing with the erection staff at site.
- c) Supplier/ Contractor shall depute a technically qualified project manager at site to carry out installation, testing & commissioning of all accessories of PEB Steel Structure as per approved drawing and as per good engineering practice.
- d) The bidder shall be responsible to supply the suitable size anchor bolts to its executing team and shall supervise, instruct, & guide the team for its fixing, alignment, verticality etc. and ensure its correctness from all angles before the anchor bolts are grouted so that there is no difficulty while erecting the columns. The columns shall be vertical, true to the plumb.
- e) All PEB Structural parts both primary and secondary components shall be tested and aligned perfectly at the manufactures works. The alignment should be checked at the site prior to installation, testing & commissioning. It should be re-checked for alignment and if the alignment is stable and within the tolerance as per manufacturer's recommendation, the PEB Structural parts both primary and secondary components or should be welded / bolted as required to prevent from moving and facilitate repositioning.
- f) Installation of complete PEB Steel structure along with PUR insulated roof panel shall be carried out as per approved drawings and with good engineering practice.
- g) The entire structure shall be cleaned by wire brush and then given two coats of synthetic enamel paint at site as per shade approved by the employer.
- h) The contractor/ Supplier shall provide three sets of as executed drawings to EMPLOYER.

8) OTHER ALLIED CIVIL WORKS.

- i. The Area of Allied Structures should not be less than the area of **Toilet Block (10 SQM)** & are proposed in RCC (M20) Frame and Brick Masonry Structure.
- ii. Plinth Protection around Plant As per requirement.
- iii. Structural Steel Stair as per requirement
 - a. Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.
 - b. Brick Masonry with common burnt Clay should be provide b/w the RCC columns & Cement plaster of mixture 1:6 (1 Cement & 6 Sand) should be done over Brick Masonry work, after plastering white cement based putty of

specified thickness, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth & Wall Painting with acrylic emulsion paint of approved brand and manufacture to give an even shade.

- c. 02 number of Toilets with all necessary sanitary fixtures is proposed to be provided separately for Men & Women. A covered Overhead Tank of capacity 2000 Liters should be provided along with an Underground Septic Tank of capacity 48 m3 for waste Discharge
- d. Internal & External Plaster with Painting is proposed to be done .Plinth Protection should be provided. In addition, there should be the provision of the following furniture for Control Room, Engineer Room and Record Room. Additional and High quality furniture as discussed below should be provided.
- Water supply, plumbing electrical complete.
 - The Other services compulsory in construction or P/F for the job should be provided.
 - Internal Water Supply & Sanitary Installations for office building.
 - Electrical External Service Connections.
 - Internal Electric Installations.
 - Power wiring and plugs.

9) Machine Room/Staff Operator Room of area (Min 30 Sqm)

- i. M/C Room cum staff operator room should not be less than the area **(30 Sqm.)** & Structure of M/C room is included reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in charge.
- ii. Steel Reinforcement should comply with to the Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, and binding all complete.
- iii. Brick Masonry with common burnt Clay should be provide b/w the Rcc columns & Cement plaster of mixture 1:6 (1 Cement & 6 Sand) should be done over Brick Masonry work, after plastering white cement-based putty of specified thickness, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth & Wall Painting with acrylic emulsion paint of approved brand and manufacture to give an even shade. Two or more coats on new work.
- iv. Providing & fixing of vitrified floor tiles to floor.
- v. Supplying and fixing rolling Aluminum Door.

10) Fire Fighting system.

The contractor shall carry out and complete the said work under this contract in every respect and in conformity with the current rules and regulations of the local Fire Authority, the Indian Standards and with the directions of and to the satisfaction of the Consultant and Owner. The Contractor shall furnish all labor and install all materials, appliances, equipment required for the fire safety system to the unit.

C. PROJECT SCOPE

The project will deploy for a state of the art technology for setting up functional Fruits & Vegetables Processing Centre
Comprising of:

1. Vegetable process & Packaging line - 2.5 MTPD
2. Cold Room 50-MT.
3. Miscellaneous Equipment (Mandatory Utilities).

Loading area for in and outgoing product

The area for loading and unloading will be used for temporarily storage of product prior to dispatch. This area will be maintained at environmental temperature.

1. Vegetable process & Packaging line - 2.5 MTPD

Sno	Item	Technical Specification of Item	Quantity Required	Unit
1	Elevator conveyor	<ul style="list-style-type: none"> • Conveyor Belt width 800 mm • Conveyor belt Length 2000 mm • Conveyor belt type Modular Belt, • Conveyor Drive 1.0 H.P., 440 Volt • Collection Hopper 1200X 800 mm, Stainless Steel, Provide for collection • Drive unit: 1HP • Main Frame: Make by S.S. Section & Pipe 304, • Contact Part of Fruit make by S.S. 304 • Contact Part: All Fruit Contact Part in Stainless Steel • Control Panel: Switch & Controller for Conveyor Operations. 	1	No
2	Size Grader Conveyor	<ul style="list-style-type: none"> • The machine is having 4 size grading options, 3 sizes is • Custom design, and the final one is over size. • Technical Specification: • Orientation – Horizontal, • Conveyor Details • Grading Belt details – Wyma belt, The holes is done by • Water jet cutting machine. • Machine Length – 5.6 Meters • Machine Width –1.2 Meters, 	1	No

		<ul style="list-style-type: none"> • Machine height: 1.2 Meters (Adjustable +/-50mm) • Support Tube - 50/50 mm Sq. Tube. • Leveling Element: +/-50 mm Height Adjustment. Stud • MS, Base Ball feet • MOC of Machine Structure – Panel & Structure M.S Painted • Motor – ABB /LHP/ Equivalent • Gearbox - Mak –Bonfiglioli/Equivalent • VFD – Delta/Siemens/Equivalent • Switchgear – Schneider /Equivalent • Cable – Polycab/Lapp/Equivalent • Utility Details: • Power Consumption: 4 HP/Hr 		
3	Inspection Conveyor	<ul style="list-style-type: none"> • The conveyor is used for manual inspection of dumped mangoes. It is provided with food quality PVC belt supported at both ends on rubber-covered pulley. • The workers standing on either side can pick, collect the damaged, spoiled vegetables • Putting them to the collection crates put beside the stand provided with the conveyor. SS side guides provided with wear strips to prevent the product cottages and easy movement of the products. • The equipment is completely made with SS 304 construction • PVC Food grade endless belt supported at both ends in • PVC supporting rollers at return side of belt. • Side stands to keep the collecting trays • Belt cleaning arrangement at bottom side of discharge end of conveyor. • Variable speed drive with geared motor. • Machine dimensions – 800 mm Width x 3000 Length x 1000mm Height • Total Connected Load : - 1.5 kW (2.0 HP) 	1	No

4	Fresh Water Bubble Washing (ALKALINE WASH)	<ul style="list-style-type: none"> • Capacity : 0.5 Ton/Hr • Configuration: straight through • Machine Dimensions: 4.5 Mtrs L X 1.3 Mtrs W X 1.5MtrsH • Water Consumption : 600 Liters • Power Consumption: 7.5 HP (5HP High Pressure bubble generator-1No, 1.5Hp Gear Box, 1HP SS CP Spray Pump). • Conveyor Belt : 800mm Width PP Modular Belt 15mmThick. 	1	No
5	Vegetable Washing Machine	<ul style="list-style-type: none"> • Capacity: 0.5 Ton/Hr • Configuration: straight through • Machine Dimensions: 4.5 Mtrs L X 1.3 Mtrs W X 1.5MtrsH • Water Consumption: 600 Liters • Power Consumption: 7.5 HP (5HP High Pressure bubble generator-1No, 1.5Hp Gear Box, 1HP SS CP Spray Pump). • Conveyor Belt : 800mm Width PP Modular Belt 15mmThick 	1	No
6	Ozone Ventury System with Oxygen Concentrator	<ul style="list-style-type: none"> • Model el-oz-o-10 Consisting, • 10gm/hr ozone generator • 5lpm oxygen concentrator • Venturi system • Silicon tubing's. • Electric supply • Local plumbing accessories • Venturi requires 2kg pressure to function 	1	No
7	Air Dryer with Air Knife System Conveyor Type	<ul style="list-style-type: none"> • Capacity 0.5 Ton per hour (VFD) • Type: Multi stage Belt Conveyor. • Dimensions: Length X Width (4.5 Mtrs Length X 1.2 Mtrs Width) • Drive Unit:2 HP with 1440RPM Motor – 1 No's • Air Fans: 0.5HP Capacity Industrial Axial Air fans are required and it should mount on top of the machine, • It has a long conveyor which can dewater lots of Vegetables at the same time. It is mainly used to remove the water from Vegetables by using Air spraying system. Fans to be provided for removing the moisture from vegetables • Doors: Easy Operating doors offered for the entire drying tunnel, 	1	No

8	Electrical Control Panel	Electrical Control Center for above Equipment's	1	Lot
9	Net Packing Machine	<ul style="list-style-type: none"> • Capacity :- 10 bags/min • Packing weight :- up to 5kg • Packing type :- net • Clipping :-manual • Weighing :- manual • Model :- semi automatic 	1	No
10	Vegetable packing with weighing & labeling	<ul style="list-style-type: none"> • Packing speed-15package/minute • Length of product--80—350mm • Width of product---80—230mm • Height of product--10—150mm • Weight of product--100g—3kg • Plastic Wrap film width--350-500mm • Machine Dimension --840*888*1415mm • Touch screen--10.2 inch,TFT Colorful screen, screen ratio16:9 • Screen resolution ratio--1024*600 • Voltage--220V / 50HZ, single phase • Power--1860W • Working humidity--10-90%RH • Cylinder –SMC • Low voltage electrical appliance --Schneider • Machine frame material -- stainless steel. 	1	No
11	Electrical works	Electrical Equipment's, Electrical Equipment's (APFC with all MCB,s & accessories, Earthling, Cabling, Lighting, Lighting arrestors, Street Poles with lighting, Cable trays, Conduits, MCCB Box Outdoor type 250 Ampere, Chemical earthling, CTPT Metering Cubical Panel Outdoor Type for Transformer etc. complete all necessary electrical item for the unit)	1	Lot

Cold Store - 50MT.

Sno.	Description of Item	Technical Specification	Qty	Unit
1	50MT Cold Store	<p>Air Cooled Condensing Unit Bitzer Compressor Condensing Unit Operating Temperature = Minus 22 Deg. Cecluis. Evaporator Unit Capacity = 3 KW, SST minus 27 Deg. Cecluis, Condensing Temp = 50 deg. Cecluis, Coil material- Copper, Refrigerant = R404a, Thermostatic expansion valve with automatic control, Working based on Super heat. Room temperature controller maintain the room temperature on requirement, Monitor the Room temperature & RH, Coil temperature. Control the Defrosting system to melt the ice from Evaporator coil. Room Control Panel equipped with compressor motor starter, Evaporator fan starter, defrost heater starter, Temperature controller wiring. Electrical cables laying among Condensing unit to evaporator fan motors, control panel to condensing units, control panel to evaporator heater, control panel to temp sensor & RH sensors. Room Control panel Positioning will be nearby condensing unit. Copper fittings (Elbow, Reducer socket, joint coupler) all heavy duty fittings. Evaporator Drain line CPVC pipe 25 MM with proper fittings, clamping. U trap in drain line. Installation labor for Refrigeration copper piping, complete Pipe insulation, control wiring from control panel to evaporator, expansion valve. Freon Gas R404a, Puff Panel for Cold Storage 120 MM Thick, Floor Insulation Sheet, Puff Panel for Anti Room, Pop Revets, Silicon and Puff chemical, flashing for Corners, Puff Door 1 Mtr X 2 Mtr Hinge Door</p>	1	Nos.

Details Cold Room F&V Processing Centre Rajbagh

Sno.	Description of Item	Technical Specification	Quantity	Unit
1	Air Cooled Condensing Unit	Air Cooled Condensing Unit Bitzer Compressor Condensing Unit Operating Temperature = Minus 22 Deg. Celsius.	3	Nos.
2	Evaporator Unit	Evaporator Unit Capacity = 3 KW, SST minus 27 Deg. Celsius, Condensing Temp = 50 deg. Celsius, Coil material- Copper, Refrigerant = R404a .	3	Nos.
3	Thermostatic Expansion Valve	Thermostatic expansion valve with automatic control, Working based on Super heat.	3	Nos.
4	Room Temperature controller	Room temperature controller maintain the room temperature on requirement, Monitor the Room temperature & RH, Coil temperature. Control the Defrosting system to melt the ice from Evaporator coil.	2	Nos.
5	Room Control Panel	Room Control Panel equipped with compressor motor starter, Evaporator fan starter, defrost heater starter, Temperature controller wiring.	2	Nos.
6	Electrical Cable	Electrical cables laying among Condensing unit to evaporator fan motors, control panel to condensing units, control panel to evaporator heater, control panel to temp sensor & RH sensors. Room Control panel Positioning will be near by condensing unit.	2	Lot
7	Copper Valves & Fittings	Copper fittings (Elbow, Reducer socket, joint coupler) all heavy duty fittings.	2	Lot
8	Copper Pipes	Copper Pipe laying from condensing unit to evaporator units.	40	Kg
9	Nitrile Rubber Insulation	Nitrile rubber insulation for suction line copper pipe. Insulation one layer. Insulation thickness 19 MM	60	RFT
10	Drain Line	Evaporator Drain line CPVC pipe 25 MM with proper fittings, clamping. U trap in drain line.	2	Nos.
11	Installation	Installation labor for Refrigeration copper piping, complete Pipe insulation, control wiring from control panel to evaporator, expansion valve.	2	Lot
12	Freon Ga	Freon Gas R404a	25	Kg

13	Puff Panel Cold Storage	Puff Panel for Cold Storage 120 MM Thick	155	SQM
14	Floor Insulation	Floor Insulation Sheet	120	SQM
15	Puff Panel Ante Room	Puff Panel for Anti Room	55	SQM
16	Misc.	Pop Revets, Silicon and Puff chemical	1	Lot
17	Flashing of Corners	Flashing for Corners	80	Kg
18	Door	Puff Door 1 Mtr X 2 Mtr Hinge Door	1	Nos.
19	Puff Panel Installation	Puff panel Installation Labor	330	SQM

Technical specification of the proposed storage facilities for Cold Room Temperature	
Room Size (Feet's)	30 ft X 20 ft X 10 ft
Anti-Room Size	30 ft X 12 ft X 10 ft
Total Number of room	1
Room Wall Panel Thickness (MM)	120
Room Roof Panel Thickness (MM)	120
Room Bottom Puff Slab 2 Layer thickness (MM)	50 X 2 MM
Doors for Cold room	
Door Size (MM)	1000 MM X 2000 MM
Door Thickness (MM)	120
Total Number of Door	2
Door Opening Type	RHS
Door Puff Panel Thick	120
Door Operating Temperature	Negative Temperature
Machine Details	
Power Consumption Per Hour	12 KW Both Unit
Per Day Running Hours	16 Hour

MISCELLANEOUS EQUIPMENT (Mandatory Utilities – Minimum Requirement)

Sno.	Description of Item	Technical Specification	Qty	Unit
1	RO Water Treatment unit	Usage/Application, Industrial and Commercial, RO Capacity, 1000 (Litre/hour), Purification Type, 5stage purification RO system, Material FRP Type Water Softener, Softener Tank Type Vertical, Cleaning System RO,	1	Nos.
2	Air Compressor	Horse Power 15 HP, Compressor Technology Reciprocating Compressor, Discharge Pressure 10-12 Bar, Air Tank Capacity 220 L, Maximum Flow Rate 501 - 1000 cfm, Cooling Method Air Cooled, Working Pressure 7/10/12 Kg'/CM'G, Free Air Delivery 61/53/43 CFM 103.4/89.8/72.9 m'/hr.	1	Nos.
3	Water Chiller	Nominal Capacity (TR) 5TR, Refrigerant R-22, Compressor Qty 1 no., Maximum Allowable Ambient Temp. 37°C, Water Flow Rate 1250 LPH, Evaporation Temperature In 05° C, Water Temperature In \out 28° C\12° C, Voltage / Connected Load KW 440V, 50 Hz, 3 PH, 10 KW, Control Range in Deg. Cal. +8 TO +28,	1	Nos.
4	82.5 KVA Diesel	Generator Power (kVA), 82.5 kVA, Phase 3 Phase, Fuel Consumption (at 100% Load), 30.25 Ltr/hr, Fuel Tank Capacity 290 Ltr, Dry Weight (Kg) 2200, Frequency 50 Hz. With closed canaopy	1	Nos.
5	Distribution Transformer SITC :	SITC : Distribution Transformer Rating : 100kVA , 3 Phase 4 Wire Aluminium Wound Oil Cooled Pole Mounted , 11kV/0.433 V as per IS:1180 Energy Efficient Level (EEL) -2	1	Nos.
6	Steel racks.	Heavy Duty Rack(powder coating) Size-(D)1200X(L)2400X(H)6000mtr Pillar:-2mm,Beam:-2mm,Panel:-1.2mm	As per requirement. Min it should cover 70% of the space.	
7	Plastic Crates	Plastic Capacity of 18-25 Kg	300	Nos.
8	Hand Pallets	Hand Pallet of Lifting Capacity 50 Kg Above	1	Nos.
9	Plumbing Works	Water Tank 2000 ltr with pumps, necessary isolation valves, pipes and fitting shall be made available near the processing & washing area & in allied structures	1	Lot

Completion of other utilities

Diesel Generator

82.5 KVA DG set with sound proof enclosure comprising water/ air cooled diesel engine rated at 1500 rpm conforming to ISO 3046 with 10% overloading for one hour in every twelve hour duration complete with air intake system, Turbo charged after cooled exhaust manifold, cooling system for water/ air as the case may be, lubricating system with lube oil cooler and filter, fuel system, battery operated starting system complete with battery, instrument panel, safety controls.

Diesel engine shall be directly coupled to Synchronous Alternator for continuous operation at 1500 rpm generating 415 Volts at 0.8 p.f. (Lag) at 50 Hz, three phase 4 wire system. The Alternator shall be brushless, single bearing, self-excited & self-regulated with an AVR. The alternator will be suitable for tropical climate and shall generally conform to IS: 4722.

REVERSE OSMOSIS PLANT:

A reverse osmosis plant is a manufacturing plant where the process of reverse osmosis takes place. Reverse osmosis is a common process to purify or desalinate contaminated water by forcing water through a membrane. Water produced by reverse osmosis may be used for a variety of purposes, including desalination, wastewater treatment, concentration of contaminants, and the reclamation of dissolved minerals. An average modern reverse osmosis plant needs six kilowatt-hours of electricity to desalinate one cubic metre of water. The process also results in an amount of salty briny waste. The challenge for these plants is to find ways to reduce energy consumption, use sustainable energy sources, and improve the process of desalination and to innovate in the area of waste management to deal with the waste. Self-contained water treatment plants using reverse osmosis, called reverse osmosis water purification units, are normally used in a military context.

Water Chiller

A **water chiller** is a device used to lower the temperature of water. Most chillers use refrigerant in a closed loop system to facilitate heat exchange from water where the refrigerant is then pumped to a location where the waste heat is transferred to the atmosphere. However, there are other methods in performing this action.

In hydroponics, pumps, lights and ambient heat can warm the reservoir water temperatures, leading to plant root and health problems. For ideal plant health, a chiller can be used to lower the water temperature below ambient level; 68 °F (20 °C) is a good temperature for most plants. This results in healthy root production and efficient absorption of nutrients.

In air conditioning, chilled water is often used to cool a building's air and equipment, especially in situations where many individual rooms must be controlled separately, such as a hotel. A chiller lowers water temperature to between 40 °F (4 °C) and 45 °F (7 °C) before the water is pumped to the location to be cooled.

Transformer

A distribution transformer or service transformer is a transformer that provides the final voltage transformation in the electric power distribution system, stepping down the voltage used in the distribution lines to the level used by the customer. The invention of a practical efficient transformer made AC power distribution feasible; a system using distribution transformers was demonstrated as early as 1882.

If mounted on a utility pole, they are called pole-mount transformers. If the distribution lines are located at ground level or underground, distribution transformers are mounted on concrete pads and locked in steel cases, thus known as distribution tap pad-mount transformers.

Distribution transformers normally have ratings less than 200 kVA, although some national standards can allow for units up to 5000 kVA to be described as distribution transformers. Since distribution transformers are energized for 24 hours a day (even when they don't carry any load), reducing iron losses has an important role in their design. As they usually don't operate at full load, they are designed to have maximum efficiency at lower loads. To have a better efficiency, voltage regulation in these transformers should be kept to a minimum. Hence they are designed to have small leakage reactance.

D. Scope of Civil Works for Post-Harvest Infrastructure Facility

1. Drawings

This project is to be executed on turnkey basis. The Employer shall supply only preliminary concept layout drawings. The contractor shall submit the detailed contour plan along with soil testing report before vetting of drawings. The contractor has to appoint architect and structural consultant for preparation of Good for Construction (GFC) drawings at his own cost and also get it approved from Project Manager (Project-in-charge deployed by employer) before implementation.

2. Bill of Quantities (B.O.Q.)

Bill of quantities for civil works mentioned in the BID document have been estimated based on the concept layout drawings attached with the tender BID and hence can vary on either side when final Good for Construction (GFC) drawings are prepared by the contractor. The contractor therefore, needs to appoint the architect and structural consultant immediately on award of the contract and prepare execution drawings and B.O.Q. and

submit these to JKHPMC for the approval after getting it vetted from the recognized govt. institutes like DQIC or IIT's or NIT's or reputed engineering institutes within 15 days of award of contract.

3. Technical Specification of Civil Works

The technical specification mentioned in "Bill of Quantities "(B.O.Q.) against each item are mostly as per market rates and scheduled items. However, there are "Non- Scheduled Items" for which SOR reference/ item are not there, bidders have to follow specification given in B.O.Q. items.

These specifications are intended for general descriptions of quality and workmanship of materials and finished work. They are not intended to cover minute details. The work shall be executed in accordance with sound engineering practice.

Where reference is made to any standard specification of bureau of Indian standards or any other similar body, the information and provisions of the latest revised edition of the specifications on the date of submission of the tender shall be applicable. If the provisions of such standard specifications are in conflict with the provision stated in these specifications, the latter provisions shall have precedence.

4. Measurement & Payment

Civil Works is an item rate/admeasurements contract. Measurements of the work shall be done generally in accordance with IS.1200 -2(1974) method of measurement of building works, except where the stipulations of this tender are contradictory.

5. Layout & Surveys

Before commencement of the work, accurate surveys and levels of the ground proposed to be excavated or filled up shall be taken jointly by the Project Manager / his representative and the contractor or his agent, and drawing shall be prepared from such levels and surveys by the contractor. These shall be signed by the Project Manager/ his representative and the contractor or his agent. The quantities obtained from these plans shall be final and binding upon the contracting parties. The contractor's attention is drawn to the fact that the concept site layout plan attached herewith is approximate.

The contractor shall provide suitable stones with flat tops and build the same in rubble masonry or concrete for temporary benchmarks. Pegs shall be provided for setting out the work and fixing the necessary levels required for execution. These if required shall likewise be built in masonry or cement concrete at such places and in such manner as the Project Manager/ his representative may direct the contractor or his agent shall maintain without disturbance all such benchmarks and reference stations during the course of excavation of the work. The cost of performing the surveys, preparation of drawings and the cost of setting out, constructing and maintaining all the reference stations and benchmark shall be borne by the contractor.

3. General Conditions of Contract

In addition to the terms & conditions mentioned in this BID document, following **General Conditions (GC)** will also be applicable for carrying out civil works:

3.1 Contractor to construct the works including protection of environment, and assurance of public health and safety:

- a) The Contractor shall construct and install the Works in accordance with the Specifications and Drawings and as per instructions of Project Manager,
- b) The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other cause arising as a consequence of his methods of operation,
- c) During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made thereunder, regulations, notifications and by-laws of the State or Central Government, or local authorities and other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or Local Authorities.

3.2 Relation to other documents

The technical specifications are intended for general description of items listed in the schedule of quantities. All works specified implied in the specifications form a part of the item in the schedule of quantities. Similarly, all indications in the drawings the general description of works whether specified or implied form a part of the item in the schedule of quantities.

The quoted rates in schedule of quantities shall be assumed to include all the specified and implied work of schedule drawings and general description of works even when not specifically mentioned in the schedule of quantities.

3.3 Quality Assurance.

- a) The Contractor shall institute Quality Assurance (QA) and Quality Control (QC) systems in accordance with Quality Assurance Plan to demonstrate compliance with the requirements of the Contract as approved by the Project Manager.
- b) Compliance with the QA/QC systems shall not relieve the Contractor of any of his duties obligations or responsibilities under the Contract.

3.4 Quality Tests.

- a) The Contractor shall provide all apparatus, assistance, documents, checklists and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently.
- b) If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

3.5 Identifying and correction of Defects

- a) The Project Manager shall check the Contractor's work and notify the Contractor of any defects that are found specifying a time by which it should be corrected. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- b) The contractor shall permit the Employer's Technical auditor to check the contractor's work and notify the Project Manager and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Project Manager's responsibility as defined in the Contract Agreement
- c) The Project Manager shall give notice to the Contractor of any Defects [specifying a time limit by which it should be corrected] before the end of the Defects Liability Period, which begins at Completion. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- d) Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

3.6 Uncorrected Defects

- a) If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected and the Contractor shall pay this amount.

3.7 Contract Price

- a) The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

3.8 . Changes in the Contract Price

- 3.8.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.
- a) If the quantity of work executed exceeds the quantity of the item in BOQ beyond the higher specified limit the Project Manager shall fix the rate to be applied for the additional quantity of the work executed.

b) If the quantity of work executed less than the quantity of the item in BOQ lesser than the lower specified limit, the Project Manager shall fix the rate to be applied for whole of the quantity of the work so executed.

3.8.2 The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.

3.8.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

3.9 Variations

3.9.1 All Variations shall be included in updated Programs, produced by the Contractor.

3.9.2 The Contractor shall provide the Project Manager with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

3.9.3 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Clause or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.

3.9.4 If the Contractor's quotation is unreasonable, *[or if contractor fails to provide the Project Manager with a quotation within a reasonable time specified by Project Manager in accordance with clause* the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs

3.9.5 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

3.9.6 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

3.10 Water & Electricity requirement for construction

Electricity and Water required for construction shall be arranged by the Contractor. However, contractors shall have access to the available water and electricity at the sites for construction at chargeable rates, in case the contractor's requirement is in excess to the availability of water and electricity, the contractor shall make their own arrangements

E. ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY REQUIREMENTS.

Specifications established for Environment, Health and Safety (EHS) management requirement to be complied with, by the Contractors during construction

REQUIREMENT OF ENVIRONMENT, HEALTH & SAFETY (EHS) MANAGEMENT SYSTEM TO BE COMPLIED BY BIDDERS

1. The Contractor shall ensure that the Environment, Health & Safety (EHS) requirements are clearly understood & faithfully implemented at all levels at site.
2. The Contractor shall promote and develop consciousness for Safety, Health and Environment among all personnel working for the Contractor. Regular awareness, program site meetings shall be arranged on EHS activities to cover hazards involved in various operations during construction.
3. The contractor shall arrange all suitable first aid measures such as First Aid Box, trained personnel to give First Aid, stand by Ambulance or Vehicle and shall install fire protection measures such as: adequate number of steel buckets with sand and adequate fire extinguishers to the satisfaction of JKHPMC/Owner.
4. Contractor shall ensure deployment of appropriate equipment and appliances for adequate safety and health of the workmen and protection of surrounding areas.
5. Hazardous and/or toxic materials such as solvent coating or thinners shall be stored in appropriate containers.
6. All hazardous materials shall be labelled with the name of the materials, the hazards associated with its use and necessary precautions to be taken.
7. Contractor shall ensure that during the performance of the work, all hazards to be health of personnel have been identified, assessed and eliminated.
8. All persons deployed at site shall be knowledgeable of and comply with the environmental laws, rules & regulations relating to the hazardous materials substances and wastes. Contractor shall not dump, release or otherwise discharge or dispose of any such materials without the express authorization of JKHPMC/Owner
9. The Contractor shall ensure that all their staff and workers including their subcontractor(s) shall wear Safety Helmet and Safety shoes. Contractor shall also ensure use of safety belt, protective goggles, gloves etc. by the personnel as per job requirements. All these gadgets shall conform to relevant IS specifications or equivalent
10. The contractor shall ensure provision of a Crèche wherever 10 or more female workers having children below the age of 6 years are involved in process/operation activities.
11. Contractor shall ensure well equipped with trained caretaker and material for complementary nutrition, cleaning, personal hygiene, sleeping and medical aid.
12. All worker employed should be screened and contagious disease free and shall have appropriate Personal Protective Equipment (PPE).
13. Safe Drinking Water Provision Contractor should ensure suitable facilities of drinking water, at site and labor

camps, commensurate with applicable Laws / Legislation at contractor cost

14. Job Safety Sign Board

The general contractor/construction manager shall post and maintain a job safety board at the project site in a conspicuous location that is accessible to the sub-contractors/ trade contractors, workers and other personnel arriving at or entering the project site. The general contractor/construction manager shall notify all persons working on the project site of the location of the job safety board. At a minimum, the Board shall provide the following information and items:

- Basic project information,
- Code and Conduct poster,
- General contractor/construction manager names and contact numbers for key personnel and sub-contractors/ trade contractors,
- Emergency procedures and contact numbers,
- Location where project-specific plan can be found,
- Location of project-related material safety data sheets, Shutdown notices and posting of other activities requiring coordination,
- Notices for upcoming job and safety meetings,
- Location of accident report forms,
- Monthly summary of recordable injuries/ illnesses, lost-time and total recordable rates, near miss incidents,
- Hot Work permit kit and
- Location of first aid station

15. The following list of elements of a project-specific safety plan is provided to assist the general contractor/construction manager. The Plan may include only elements that are necessary for the given project and do not need to comply with this particular format.

- Accountability
- Audits/Inspections
- Cell phone usage
- Communication
- Competent person
- Confined spaces
- Cranes and hoists
- Demolition
- Electrical safety
- Environmental and Occupational Health

- Equipment safety
- Excavation and trenching
- Fall protection
- Fire prevention and protection
- Hazard communication
- Housekeeping
- Incident management and prevention- emergency action plan
- Ladders
- Personal protective equipment (PPE)
- Safety meetings
- Signs, signals and barricades
- Steel erection.

F. CODE OF CONDUCT: ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY (ESHS)

A satisfactory code of conduct should contain obligations on all Contractors' personnel (including sub-contractors and day workers) that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to particular concerns of the region, the location and the project sector or to specific project requirements. The issues to be addressed include:

1. Compliance with applicable laws, rules, and regulations,
2. Compliance with applicable health and safety requirements to protect the local community (including vulnerable and disadvantaged groups), the Employer's and Project Manager's personnel, and the Contractor's personnel, including sub- contractors and day workers, (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment),
3. The use of illegal substances,
4. Non-Discrimination in dealing with the local community (including vulnerable and disadvantaged groups), the Employer's and Project Manager's personnel, and the Contractor's personnel, including sub-contractors and day workers (for example on the basis of family status, ethnicity, race, gender, religion, language, marital status, age, disability (physical and mental), sexual orientation, gender identity, political conviction or social, civic, or health status),
5. Interactions with the local community(ies), members of the local community (ies), and any affected person(s) (for example to convey an attitude of respect, including to their culture and traditions),
6. Sexual harassment (for example to prohibit use of language or behavior, in particular towards women and/or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate),
7. Violence including sexual and/or gender based violence (for example acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion, and deprivation of liberty,
8. Exploitation including sexual exploitation and abuse (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading behavior, exploitative behavior or abuse of power),
9. Protection of children (including prohibitions against sexual activity or abuse, or otherwise unacceptable behavior towards children, limiting interactions with children, and ensuring their safety in project areas),
10. Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas),
11. Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal

connection),

12. Respecting reasonable work instructions (including regarding environmental and social norms),
13. Protection and proper use of property (for example, to prohibit theft, carelessness or waste),
14. Duty to report violations of this Code
15. Non retaliation against workers who report violations of the Code, if that report is made in good faith.
16. The Code of Conduct should be written in plain language and signed by each worker to indicate that they have:
 - Received a copy of the code;
 - Had the code explained to them;
 - Acknowledged that adherence to this Code of Conduct is a condition of employment; and.
 - Understood that violations of the Code can result in serious consequences, up-to and including dismissal, or referral to legal authorities.

A copy of the code shall be displayed in a location easily accessible to the community and project affected people. It shall be provided in languages comprehensible to the local community, Contractor’s personnel (including sub-contractors and day workers), Employer’s and Project Manager’s personnel, and affected persons. As a minimum, the policy is set out to the commitments to:

- i. Apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;
- ii. Provide and maintain a healthy and safe work environment and safe systems of work;
- iii. Protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;
- iv. Ensure that terms of employment and working conditions of all workers engaged in the Works meet the requirements of the ILO labor conventions to which the host country is a signatory;
- v. Be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for GBV, inhumane treatment, sexual activity with children, and sexual harassment;
- vi. Incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the Works;
- vii. Work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;
- viii. Engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;
- ix. Provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation, and protects whistle blowers;
- x. Minimize the risk of COVID/HIV transmission and to mitigate the effects of COVID/HIV/AIDS associated with

the execution of the Works;

- xi. The policy should be signed by the senior manager of the Employer. This is to signal the intent that it will be applied rigorously.

G. INDICATIVES OF SOCIAL MANAGEMENT STRATEGIES.

ESHS Requirements, Risks, & Priorities	Key Strategies / Actions
1. Code of Conduct	<ul style="list-style-type: none"> (i) Prepare and submit a code of conduct, and its implementation plan, compliant with the ESHS obligations under this contract; (ii) Inclusion of code of conduct in conditions of employment/engagement; (iii) Regular Orientation of all Staff, Subcontractors, Workers and local communities/stakeholders;
Construction Labour Camp Management	<ul style="list-style-type: none"> (i) Temporary Accommodation, with adequate lighting (ii) Drinking Water (iii) Sanitation, with separate facilities for women (iv) Clean Cooking Fuel (v) Camp boundary, when appropriate
Labour Influx Management	<ul style="list-style-type: none"> (i) Regular Documentation of local/migrant labor at all times. (ii) Regular Orientation of labor, drivers, workers, and local communities on code of conduct, including health issues/HIV AIDS and community context/relations (iii) Labour Transportation Vehicle
Labour, Occupational Health and Safety	<ul style="list-style-type: none"> (i) Use of required Protective Equipment by labor and employees (ii) Regular Training on Occupational Health & Safety, ESHS, HIV/AIDS and other health risks (iii) In-premises dispensary/health center for workers (iv) Regular Health/Medical Camps & Presence/Provision of ambulance
Stakeholder Engagement & Grievance Redress Mechanism	<ul style="list-style-type: none"> (i) Regular consultations with local community representatives and other stakeholders. (ii) Appointment of Community Relations & Grievance Officer; (iii) Mechanisms for Registration, Resolution and Tracking Grievances for Workers and community grievances, including women;

Community Access, Health and Safety	<p>(i) Water, Dust, Noise, Traffic and Waste Disposal and Management Activities covered under the EMP;</p> <p>(ii) Safety, Access and Traffic related Signage in local language</p> <p>(iii) Periodic Review of Community Grievances</p> <p>(iv) Measures to avoid adverse impacts on private and/or</p>
Women’s Safety and Prevention of Sexual Abuse, Harassment and Violence	<p>(i) Availability of Female Nodal Officer for Women’s Issues</p> <p>(ii) Regular GBV/SEA sensitization & training for all employees, workers, transporters, drivers and contractors.</p> <p>(iii) Inclusion in Code of Conduct, and dissemination</p> <p>(iv) Regular Consultation/Counselling of Women employees and workers, including for survivors</p>
Children’s Safety, Protection & Prevention of Child Labor	<p>(i) Orientation on code of conduct on Children’s Safety, Protection and Child Labour, including for parents;</p> <p>(ii) Establishment of Crèche’ for workers children within facility;</p>
Local Skills & Livelihood	<p>(i) Skills upgradation and jobs for local youth;</p> <p>(ii) Opportunities for local businesses and enterprises</p>

H. IMPLEMENTATION OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN DURING CONSTRUCTION PHASE – CA/GP.

Environmental, Health & Safety and amenities	Description	Units/ Dimensions
Environmental, Health & Safety equipment (Sign Boards)	Sign boards for equipment & locations (Including fixing & erection) , As per IS 9337 & IS : 13386	05 nos.
Hand Appliances (Fire Extinguishers)	Fire extinguishers (Class A type, Class B type Class C type) As per IS 9337 & IS : 13386	6 Nos. (2- CO2, 2- H2O and 2-foam type)
Safety Siren/Alarm	Safety siren/ alarm at admin/ control Chamber	1 no.

Construction Labour Amenities & Labour	Temporary sheds for accommodation of 15 migrant workers & Crèche (All	Shed -1 (for migrant labour)
influx Management, temporary accommodation, Mobile Toilets, Healthcare facilities	weather resistant temporary sheds accommodations for Men & Women)	(12.46m x 6.46m 3 m H) + Shed -2 (for Crèche)
	Provision of drinking water (Pure water Dispenser) Contractor has to provide as per code of Conduct. To all workers at site.	
	Prefabricated Mobile Toilet (on rental basis /monthly)	Multi-unit Prefabricated Toilet, 10 seater capacity
Health Centre	Setting up of In-premises dispensary/ health center for workers	1 unit (3.6 x 3.0 x 3.0)

I. ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY REQUIREMENTS

The Employer should use the services of a suitably qualified environmental, social, health and safety specialist/s to prepare the specifications for ESHS working with a procurement specialist/s.

The Employer should attach or refer to the Employer’s environmental, social, health and safety policies that will apply to the project. If these are not available, the Employer should use the following guidance in drafting an appropriate policy for the Plant Supply & Installation.

PAYMENT FOR ESHS REQUIREMENTS

The Employer’s ESHS and procurement specialists should consider how the Contractor will cost the delivery of the ESHS requirements. In the majority of cases, the payment for the delivery of ESHS requirements shall be a subsidiary obligation of the Contractor covered under the prices quoted for other Bill of Quantity items or activities. For example, normally the cost of implementing work place safe systems of work, including the majors necessary for ensuring traffic safety, shall be covered by the Bidder’s rates for the relevant works. Alternatively, provisional sums could be set aside for discrete activities for example for HIV counselling service, and, GBV/SEA awareness and sensitization or to encourage the contractor to deliver additional ESHS outcomes beyond the requirement of the Contract.