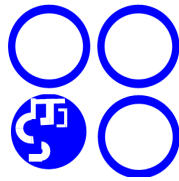


**Gwalior Sahakari Dugdh Sangh Maryadit  
Gwalior (MP)**



**NATIONAL COMPETITIVE BIDDING for CIVIL WORKS**

**For**

**Establishment of 20 TPD Dairy Plant at Milk Chilling  
Centre, Shivpuri , District –Shivpuri (MP)**

**Chief Executive Officer  
Gwalior Sahakari Dugdh Sangh Maryadit,  
Gola Ka Mandir, Gwalior-474005 (MP)**

# **Gwalior Sahakari Dugdh Sangh Maryadit Gwalior (MP)**

## **BALANCE CATTLE FEED PLANT PROJECT**

### **NATIONAL COMPETITIVE BIDDING for CIVIL WORKS**

#### **Bidding Schedule**

NAME OF WORK	:	NATIONAL COMPETITIVE BIDDING for CIVIL WORKS For Establishment of 20 TPD Dairy Plant at Milk Chilling Centre, Shivpuri, District – Shivpuri (MP)
PERIOD OF SALE OF BIDDING DOCUMENT	:	FROM 22/08/2019 TO 30/08/2019 upto 03.00 pm
TIME AND DATE OF PRE-BID CONFERENCE	:	DATE 24/08/ 2019 TIME 1.00 pm
LAST DATE AND TIME FOR RECEIPT OF BIDS	:	DATE 30/08/2019 TIME 3.00 pm
TIME AND DATE OF OPENING OF BIDS	:	DATE 31/08/2019 TIME 04.00 pm
PLACE FOR SALE OF BIDDING DOCUMENT	:	Office of the Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, Gola Ka Mandir, Gwalior -474005
PLACE OF PRE BID MEETING & OPENING OF BIDS	:	Office of the Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, Gola Ka Mandir, Gwalior -474005
COST OF BID DOCUMENT	:	Rs.1000/-
EMD	:	Rs.200000/-
OFFICER INVITING BIDS	:	Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, Gola Ka Mandir, Gwalior -474005

**INVITATION FOR BID**

**(IFB)**

# **Gwalior Sahakari Dugdh Sangh Maryadit Gwalior (MP)**

INVITATIONS FOR BIDS (IFB)

## **SECTION - I**

### **NATIONAL COMPETITIVE BIDDING**

**(Single Stage Bidding)**

**The Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior invites sealed bids from reputed eligible bidders for Establishment of 20 TPD Dairy Plant at Milk Chilling Centre, Shivpuri, District Shivpuri (MP) as per the following works:**

**Tender Reference :**

**Cost of Bidding Document: Rs.1000/-**

- 1) **Bidders are advised to note the minimum qualification criteria specified in the Instructions to Bidders to qualify for the award of the contract.**
- 2). The Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit invites bids for the construction of works detailed in the table.
- 3). Bidders may purchase bidding documents online from **[mpenders.gov.in](http://mpenders.gov.in)** and also submit **[mpenders.gov.in](http://mpenders.gov.in)** . Portal charges and Tender fee must be paid online
- 4). Bids must be accompanied by security of the amount Rs.200000/- (Rs. Two lakh) in the form of DD from nationalized bank drawn in favour of **Gwalior Sahakari Dugdh Sangh Maryadit**. It must reach physically Bid security will have to be in any one of the forms as

specified in the bidding document and shall have to be valid for 45 days beyond the validity of the bid.

- 5). Bids must be submitted online on or before 01 pm hours on 16/08/2019 and will be opened on the same day at 3.00 pm hours, in the presence of the bidders who wish to attend. If the office happens to be closed on the date of receipt of the bids as specified, the bids will be received and opened on the next working day at the same time and venue.
- 6). A prebid meeting will be held on 05/08/2019 at 1.00 pm hrs. at the office of the Manager Milk Chilling Center, Shivpuri-MP to clarify the issues and to answer questions on any matter. Prospective bidders have to submit their queries upto 02/08/2019. GSDS will consider only those queries which are received upto 02/05/2019 only.

#### 7). **Purchase of Bidding Document**

Bid documents are available at [www.mpetenders.gov.in](http://www.mpetenders.gov.in) for purchase. Bidders may purchase tender document by making online charges and after filling the documents may submit at [mpetenders.gov.in](http://mpetenders.gov.in) along with all required documents and .

The bid documents will be available in the website at [www.mpcdf.gov.in](http://www.mpcdf.gov.in) only for reading. Physical submission of tender liable to be rejection.

(b) It is hereby brought to the notice of all bidders that if any change/additions/ deletions/alterations are found to be made by them in the tender and the same is subsequently noticed at any stage, even after award of the contract, the bidders are liable for all consequences thereof and GSDS shall be free to take suitable action as deemed necessary.

#### 9) **Submission of bid**

The bidders, who purchase the bidding document, are eligible for submission of bids in their names only.

#### 10) **Bid Security**

All bids must be accompanied by bid security and the same should be in the form specified in the bidding document & incorporated in the **technical bid (cover I)**.

Bids not accompanied with EMD, shall be summarily rejected.

#### 11) **OPENING OF BIDS:**

Bids will be opened in the presence of those bidders or their authorized representatives who choose

to attend at the office of the Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior 474 005, at the address of communication.

**13) Rights Reserved by GSDS**

Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior 474 005 does not bind itself to accept the lowest bid. GSDS reserves the right to award the job either in part or full. GSDS at its sole discretion and without assigning any reason thereof, also reserves the right to accept any/or reject any or all bids.

**13) Address for Communication:**

**Chief Executive Director,  
Gwalior Sahakari Dugdh Sangh Maryadit,  
Gola Ka Mandir, Morar  
Residency Road  
Gwalior-474005  
Madhya Pradesh  
Email: gwaliordairy@gmail.com Fax number: 0751-2366981**

**14) Place of Opening of :** office of the Chief executive Officer  
, Gwalior Sahakari dugdh sangh, Gola Ka Mandir, Gwalior-MP ).  
**Issued by: Gwalior Sahakari Dugdh Sangh Maryadit, Gwalior – 474005 (MP)**

## **Instructions to Bidder**

### **A. General**

#### **1. Scope of Bid**

**1.1** The Chief Executive Officer, Gwalior Sahakhari Dugdh Sangh (referred to as Employer in these documents) invites bids for the construction of works (as defined in these documents and referred to as "the works") detailed in the table given in IFB. The bidders may submit bids for any or all of the works detailed in the table given in IFB.

**1.2** The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.

#### **2. Eligible Bidders**

**2.1** All bidders shall provide in **Section 2, Forms of Bid** and Qualification Information, a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Borrower to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.

**3.0** Government-owned enterprises in the Employer's country may only participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the Borrower or Sub-borrower.

#### **4. Qualification of the Bidder**

**4.1** All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.

**4.2** In the event that Pre-qualification of potential bidders has been undertaken, only bids from prequalified bidders will be considered for award for Contract. These qualified bidders should submit with their bids any information updating their original prequalification applications or, alternatively, confirm in their bids that the originally submitted prequalification information remains essentially correct as of date of bid submission. The update or confirmation should be provided in Section 2.

**4.3** If the Employer has not undertaken prequalification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2:

(a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;

(b) Total monetary value of construction work performed for each of the last five years;

(c) experience in works of a similar nature and size for each of the last five years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts;

(d) Major items of construction equipment proposed to carry out the Contract;

(e) Qualifications and experience of key site management and technical personnel proposed for the Contract;

(f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;

(g) Evidence of adequacy of working capital for this contract (access to line (s) of credit and availability of other financial resources);

(h) Authority to seek references from the Bidder's bankers;

(i) Information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last five years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute;

(j) proposals for subcontracting components of the Works which in aggregate add to more than 20 percent of the Bid Price (*for each, the qualifications and experience of the identified subcontractor in the relevant field should be annexed; no vertical splitting of work for sub-contracting is acceptable*); and

(k) the proposed methodology and program of work including Environmental Management Plan, backed with equipment, materials and manpower planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones (*for all contracts over Rs. 10 M*).



**4.4** Where it is proposed to accept Joint Ventures, incorporate all changes as indicated in the Attachment at the end of this document, otherwise state as 'Bids from Joint ventures are not acceptable'.

**4.5A. To qualify for award of the contract, each bidder in its name should have in the last five years i.e. 2013-14 to 2018-19**

(a) achieved, in at least two financial years, a minimum annual financial turnover (in all civil works only) of @ Rs 1 **crore**....(usually not less than two times the estimated annual payments under the contract);

b) Satisfactorily completed (not less than 90% of contract value), as a prime contractor, (or as subcontractor duly certified by the employer/main contractor) at least **one similar work** of value not less than Rs. 0.80 crore @ (usually not less than 80% of estimated value of contract);

(c) The contractor or his identified sub-contractor should possess required valid electrical license for executing the building electrification works.

(d) The contractor or his identified sub-contractor should possess required valid license for executing the water supply/sanitary engineering works

(e) IMPOTANT ELIGIBILITY CRITERIA

i) Bidder's must have valid registration of MP PWD in appropriate class

ii) Bidder should have adequate technical staff

iii) Bidder has executed two similar or large project in last **05** years

**4.5B. To qualify for a package of contracts made up of this and other contracts for which bids are invited in the IFB**, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

**4.6** Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.5 .

**4.7** Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

## **5. One Bid per Bidder**

**5.1** Each bidder shall submit only one bid for one contract. A bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

## **6. Cost of Bidding**

**6.1** The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

## **7. Site visit**

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

## **B. Bidding Documents**

### **8. Content of Bidding Documents**

**8.1** The set of bidding documents comprises the documents listed in the table below and addenda issued in accordance with Clause 10:

#### Invitation for Bids

Section	1	Instructions to Bidders
	2	Forms of Bid and Qualification Information
	3	Conditions of Contract

4	Contract Data
5	Specifications
6	Drawings
7	Bills of Quantities
8	Forms of Securities

**8.2** Of the three sets of the bidding documents supplied, two sets should be completed and returned with the bid.

## **9. Clarification of Bidding Documents**

**9.1** A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification which he received earlier **than 15 days prior to the deadline for** submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

### **9.2 Pre-bid meeting**

**9.2.1** **The bidder or his official representative is invited to attend a pre-bid meeting which will take place at Office of the Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit, Gola Ka Mandir, Gwalior-474005 on 05/08/2019.**

**9.2.2** The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

**9.2.3** The bidder is requested to submit any questions in writing or by email to reach the Employer not later than one week before the meeting.

**9.2.4** Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents.

Any modification of the bidding documents which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.

**9.2.5** Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

## **10. Amendment of Bidding Documents**

10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.

10.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.

10.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with **Sub-Clause 20.2 below**.

### **C. Preparation of Bids**

#### **11. Language of the Bid**

11.1 All documents relating to the bid shall be in the English language.

#### **12. Documents comprising the Bid**

12.1 The bid submitted by the bidder shall comprise the following:

- (a) The Bid (in the format indicated in Section 2).
- (b) Bid Security;
- (c) Priced Bill of Quantities;
- (d) Qualification Information Form and Documents;

and any other materials required to be completed and submitted by bidders in accordance with these instructions.

12.2 Bidders bidding for this contract together with other contracts stated in the IFB to form a package will so indicate in the bid together with any discounts offered for the award of more than one contract.

#### **13. Bid Prices**

13.1 The contract shall be for the whole works , based on the priced Bill Quantities submitted by the Bidder.

13.2 The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total bid price (both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.

13.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

13.4 The rates and prices quoted by the bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment on any account.

#### **14. Currencies of Bid and Payment**

14.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

#### **15. Bid Validity**

15.1 Bids shall remain valid for a period not less than **ninety days after the deadline** date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

15.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid except as provided in 15.3 hereinafter, but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

15.3 In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), in the event that the purchaser requests and the Bidder agrees to an extension of the validity period, the contract price, if the Bidder is selected for award shall be the bid price corrected as follows :

The price shall be increased by the factor (value of factor B)<sup>1</sup> for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of issue of letter of acceptance to the successful Bidder.

15.4 Bid evaluation will be based on the bid prices without taking into consideration the above correction.

## 16. Bid Security

16.1 The Bidder shall furnish, as part of his Bid, a Bid security Rs.200000/- . This bid security shall be in favour of **“Gwalior Sahakari Dugdh Sangh Maryadit”** and may be in one of the following forms:

- Through RTGS

Or

- Bank draft in favour of “Gwalior Sahakari Dugdh Sangh Maryadit” payable at Gwalior (MP).

16.2 Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 above shall be rejected by the Employer as non-responsive.

16.3 The Bid Security of unsuccessful bidders will be returned within 90 days of the end of the bid validity period specified in Sub-Clause 15.1.

16.4 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.

16.5 The Bid Security may be forfeited

- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
- (b) if the Bidder does not accept the correction of the Bid Price, **pursuant to Clause 27; or**
- (c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to
  - (i) sign the Agreement; or
  - (ii) furnish the required Performance Security.

## 17. Alternative Proposals by Bidders

17.1 Bidders shall submit offers that comply with the requirements of the bidding documents, including the basic technical design as indicated in the drawing and specifications. Alternatives will not be considered.

## 18. Format and Signing of Bid-

Apart from submission of online bid bidders must -

18.1 The Bidder shall prepare one original and one copy of the documents comprising the bid as described in Clause 12 of these Instructions to Bidders, bound with the volume containing the Form of Bid, and clearly marked "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.

18.2 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, . All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.

18.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

18.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

#### **19.0 D. Submission of Bids**

19.1 The Bidder shall submit the bid online along with required documents & certificates (Scan copy)

19.2 Hadr copy of bid and documents signed by bidders authorized representative must be submitted before opening of bid at the following address:

Chief Executive Officer,  
Gwalior Sahakari Dugdh Sangh Maryadit,  
Gola Ka Mandir,Gwalior -474005

(b) bear the following identification:

- Bid for : [name of contract]
- Bid Reference No : [insert number]
- DO NOT OPEN BEFORE. : [time and date for bid opening ]

19.3 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

#### **20. Deadline for Submission of the Bids**

20.1 Bids must be received by the Employer online no later than 15/08/2019 Time 05 .30 pm.

20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

## **21. Modification and Withdrawal of Bids**

21.1 Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 20.

21.2 Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 18 & 19, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate.

21.3 No bid may be modified after the deadline for submission of Bids

21.5 Bidders may offer discounts to, or modify the prices of their Bids only by submitting Bid modifications in accordance with this clause, or included in the original Bid submission.

## **E. Bid Opening and Evaluation**

### **23. Bid Opening**

23.1 The Employer will open all the Bids received online at or after the specified date & time

### **24. Process to Be Confidential**

24.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.



## **25. Clarification of Bids**

25.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of the unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with **Clause 27**.

25.2 Subject to sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.

25.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

## **26. Examination of Bids and Determination of Responsiveness**

26.1 Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents.

26.2 A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

26.3 if a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

## **27. Correction of Errors**

27.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

(a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and

(b) where there is a discrepancy between the unit and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

27.2 The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 16.6 (b).

28. Deleted

## **29. Evaluation and Comparison of Bids**

29.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 26.

29.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:

- (a) making any correction for errors pursuant to Clause 27; or
- (b) making an appropriate adjustments for any other acceptable variations, deviations; and
- (c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 22.5.

29.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

29.4 The estimated effect of the price adjustment conditions under Clause 47 of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.

29.5 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items , to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 34 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

30. Deleted

## **F. Award of Contract**

### **31. Award Criteria**

31.1 Subject to Clause 32, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4.

### **32. Employer's Right to Accept any Bid and to Reject any or all Bids**

32.1 Notwithstanding Clause 31, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

### **33. Notification of Award and Signing of Agreement**

33.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period . This Award letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

33.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 34.

33.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and sent to the successful Bidder, or kept ready for signature of the successful bidder in the office of employer (choose one alternative) within **15 days wing** the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.

33.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

### **34. Performance Security**

34.1 Within **15 days** of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to **5%** of the Contract price :

- a bank guarantee in the form given in Section 8; or
- Bank draft, in favour of “**Gwalior Sahakari Dugdh Sangh Maryadit**” payable at GWALIOR..

34.2 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized/Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer or (c) by a foreign bank through a correspondent Bank in India [scheduled or nationalized].

34.3 Failure of the successful bidder to comply with the requirements of sub-clause 34.1 shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security, and any such other remedy the Employer may take under the contract, and the Employer may resort to awarding the contract to the next ranked bidder.

## **35 Advance Payment and Security**

35.1 The Employer will not provide an Advance Payment on the Contract Price .

## **36. DISPUTE ARBITRATION & FINAL AUTHORITY**

36.1 It should be clearly understood that in the event of tenderer failing to accept and execute the Purchase order, decision of the CEO, Gwalior Sahakari Dugdha Sangh Maryadit, in this respect will be final and binding on the tenderer.

36.2 At the time of submitting the tender, tenderer shall supply detailed information about their activities in the enclosed form.

36.3 For all the matters of dispute between supplier & Gwalior Sahakari Dugdh Sangh Maryadit, CHAIRMAN, BKDS shall be sole arbitrator for resolution of issuers & his decision shall be final and binding on both(Manufacturer/Supplier & GSDS).

13.4 For all judicial issues the venue of jurisdiction shall be Gwalior (MP) only.

**CHIEF EXECUTIVE OFFICER**

# SECTION 2:

FORMS OF BID,

QUALIFICATION INFORMATION AND

LETTER OF ACCEPTANCE

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QUALIFICATION INFORMATION

LETTER OF ACCEPTANCE

NOTICE TO PROCEED WITH THE WORK

AGREEMENT FORM

## **Contractor's Price Bid (UPLOAD ONLINE ONLY)**

**(Civil Work )**

**Description of the Works: Design, manufacture,**

**Establishment of 20 TPD Dairy Plant at Milk Chilling Centre, Shivpuri , District Shivpuri (MP) on turnkey basis**

**BID**

**To : Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit [the Employer]**

**Address: Gola Ka Mandir, Infron of Hotel Suruchi, Gwalior (MP) 474005**

**GENTLEMEN,**

~~Having examined the bidding documents including addendum, we offer to execute the Works described above in accordance with the Conditions of Contract, Specifications, Drawings and Bill of Quantities accompanying this Bid for the Contract Price of \_\_\_\_\_ [in figures] ( \_\_\_\_\_ ) [in letters].~~

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

~~We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.~~

~~We hereby confirm that this Bid complies with the Eligibility, Bid Validity and Bid Security required by the Bidding documents.~~

~~Yours faithfully,~~

~~Authorized Signature:~~

~~Name & Title of Signatory: \_\_\_\_\_~~

~~Name of Bidder : \_\_\_\_\_~~

~~Address : \_\_\_\_\_~~

**Price Breakup (UPLOAD ONLINE ONLY)**

# Technical Bid

## Qualification Information

The information to be filled in by the Bidder in the following pages will be used for purposes of post qualification as provided for in Clause 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

**1. For Individual Bidders**

**1.1 Constitution or legal status of Bidder**

**(Attach Copy)**

Place of Registration: \_\_\_\_\_  
 Principal place of Business \_\_\_\_\_  
 Power of attorney of signatory of Bid \_\_\_\_\_

**(Attach Copy)**

1.2 Total value of Civil Engineering construction work executed and payments received in the last five years (in Rs. Million)

2014-15	_____
2015-16	_____
2016-17	_____
2017-18	_____
2018-19	_____

**1.3.1 Work performed as prime contractor (in the same name) on works of a similar nature over the last five years.**

Project Name	Name of the Employer*	Description of work	Contract No.	Value of contract (Rs.Million)	Date of issue of work order	Stipulated period of completion	Actual date of completion *	Remarks explaining reasons for delay and work completed



1.3.2 Quantities of work executed as prime contractor (in the same name and style) in the last five years:

Year	Name of the Work	Name of the Employer*	Quantity of work performed (cum) @			Remarks *  (indicate contract Ref)
			Cement concrete(including RCC&PCC)	Masonry	E/works	
2014-15						
2015-16						
2016-17						
2017-18						
2018-19						

\*Attach certificate(s) from the Engineer(s)-in-Charge or concern dept./employer

1.4 Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works:

Description of Work	Place & State	Contract No. & Date	Name and Address of Employer	Value of Contract (Rs. million)	Stipulated period of completion	Value of works*Anticipated remaining to be completed (Rs. million)	Date of completion
1	2	3	4	5	6	7	8

(B) Works for which bids already submitted:

Description of Work	Place & State	Name and Address of Employer	Estimated value of works (Rs. million)	Stipulated period of completion	Date when decision is expected	Remarks if any
1	2	3	4	5	6	7

*Attach certificate(s) from the Engineer(s)-in-Charge/dept/employer.*

1.5 The following items of Contractor's Equipment are essential for carrying out the Works. The Bidder should list all the information requested below.

Item of equipment	Requirement No.Capacity	Availability proposals			Remarks (From whom to be purchased)
		Owned/leased/to be procured	Nos/capacity	Age/condition	
		-			

1.6 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to Sub Clause 4.3 and 4.5 of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

Position	Name	Qualifications	Years of experience	Years of experience in the proposed position (general) (General)

1.7 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.

1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents *[sample format attached]*.

1.9. Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.

1.10 Information on litigation history in which the Bidder is involved.

Other party(ies)	Employer	Cause of dispute	Amount involved	Remarks showing present status

1.11 Statement of compliance under the requirements of Sub Clause 3.0 of the instructions to Bidders.

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2. Joint Ventures -

3. Additional Requirements

3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.

**Letter of Acceptance**

(Letterhead paper of the Employer)

\_\_\_\_\_ [date]

To: \_\_\_\_\_ [name and address of the Contractor/  
Bidder]

Dear Sirs,

This is to notify you that your Bid dated \_\_\_\_\_ for execution of the  
\_\_\_\_\_ [name of the contract and identification  
number, as given in the Instructions to Bidders] for the Contract Price of  
Rupees.....  
(.....) [amount in figures and  
words], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our  
Agency.

You are hereby requested to furnish Performance Security for an amount of Rs. \_\_\_\_\_ within 15 days of  
the receipt of this letter of acceptance valid upto 12 months and sign the contract, failing which action as stated in  
tender terms & conditions will be taken.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

**Issue of Notice to proceed with the work**

(Letterhead of the Employer)

----- (date)

To

----- (name and address of the Contractor)

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Dear Sirs:

Pursuant to your furnishing the requisite security as stipulated in ITB clause 34.1 and signing of the contract agreement for **Establishment of 20 TPD Dairy Plant at Milk Chilling Centre, Shivpuri , District Shivpuri (MP) @ a Bid Price of Rs.....**, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

Signature

Name

Designation of signatory authorized to sign on behalf of Employer

**Agreement Form**

**Agreement**

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_, between \_\_\_\_\_

\_\_\_\_\_ [name and address of Employer]

(hereinafter called “the Employer”) of the one part and \_\_\_\_\_

\_\_\_\_\_ [name and address of contractor] (hereinafter called “the Contractor” )

of the other part.

Whereas the Employer is desirous that the Contractor execute \_\_\_\_\_

\_\_\_\_\_ [ name and identification number of Contract] (hereinafter called “the

Works”) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price of Rs.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - i) Letter of Acceptance;
  - ii) Notice to proceed with the works;
  - iii) Contractor’s Bid;
  - iv) Contract Data;
  - v) Conditions of contract (including Special Conditions of Contract);
  - vi) Specifications;
  - vii) Drawings;

viii) Work methodology/details of personnel/equipment &Any other document listed in the Contract Data as forming part of the contract.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of \_\_\_\_\_

was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

in the presence of:

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_



## **SECTION 3: CONDITIONS OF CONTRACT**

## **Conditions of Contract**

### **(For Civil Works)**

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## Conditions of Contract

### A. General

#### 1. Definitions

- 1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

**Compensation Events** are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

**Days** are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the execution of the works and administering the Contract.

**Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.

**Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.

**Plant** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

**Site Investigation Reports** are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

**Specification** means the Specification of the Works & plant and machinery included in the Contract and any modification or addition made or approved by the Employer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

**Temporary Works** are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Employer which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

## **2. Interpretation**

**2.1** In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.

**2.2** If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).

**2.3** The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works
- (3) Contractor's Bid
- (4) Contract Data
- (5) Conditions of Contract including Special Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) Details of civil work & machinery and
- (9) Any other document listed in the Contract Data as forming part of the Contract.

### **3. Language and Law**

3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

### **4. Employer's Decisions**

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

### **5. Delegation**

5.1 The Employer may delegate any of his duties and responsibilities to other people except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

### **6. Communications**

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

### **7. Subcontracting**

7.1 The Contractor may subcontract with the approval of the Employer but may not assign the Contract without the approval of the Employer in writing. Subcontracting does not alter the Contractor's obligations.

### **8. Other Contractors**

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors. The Contractor shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

### **9. Personnel**

9.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or

other personnel approved by the Employer. The Employer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

- 9.2** If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

## **10. Employer's and Contractor's Risks**

- 10.1** The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

## **11. Employer's Risks**

- 11.1** The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

## **12. Contractor's Risks**

- 12.1** All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

## **13. Insurance**

- 13.1** The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- (a) Loss of or damage to the Works

- (b)
- (c) Loss of or damage to Equipment at site or during transportation;
- (d) Loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (e) Personal injury or death.
- (f) *The Goods* supplied under the Contract shall be fully insured in Indian Rupees or a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage at site, delivery and upto to handing over of the plant and equipment in the manner specified in the Special Conditions of Contract.

Where delivery of the Goods is required by the Purchaser on a CIF basis, the Supplier shall arrange and pay for marine insurance.

The Supplier shall provide a copy of the insurance policy along with invoice to the Purchaser who will make arrangements to extend the validity of the policy, if necessary.

- 13.2** Policies and certificates for insurance shall be delivered by the Contractor to the Employer for the Employer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.3** If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4** Alterations to the terms of an insurance shall not be made without the approval of the Employer.
- 13.5** Both parties shall comply with any conditions of the insurance policies.

## **14. Site Investigation Reports**

- 14.1** The Contractor, in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder.



**15. Queries about the Contract Data**

15.1 The Employer will clarify queries on the Contract Data.

**16. Contractor to Construct the Works**

16.1 The Contractor shall do the civil work and supply machines & install the Works in accordance with the Specification and Drawings, and as per instructions of Employer.

**17. The Works to Be Completed by the Intended Completion Date**

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

**18. Approval by the Employer**

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

**19. Safety**

**19.1** The Contractor shall be responsible for the safety of all activities on the Site.

**20. Discoveries**

**20.1** Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

**21. Possession of the Site**

**21.1** The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

**22. Access to the Site**

**22.1** The Contractor shall allow the officials of Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

**23. Instructions**

**23.1** The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

**23.2** The Contractor shall permit the bank to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Bank, if so required by the Bank.

**24. Disputes**

**24.1** If the Contractor believes that a decision taken by the Employer was either outside the authority given to the Employer by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Employer's decision.

**25. Procedure for Disputes**

**25.1** The Arbitrator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

**25.2** Whatever decision is reached by the Arbitrator will be binding to Either party

**26. Extension of the Intended Completion Date**

**26.1** The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.

**26.2** The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

**27. Delays Ordered by the Employer**

**27.1** The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

**28. Management Meetings**

**28.1** Either the Employer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

**28.2** The Employer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

**29. Early Warning**

**29.1** The Contractor is to warn the Employer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the

Contract Price or delay the execution of works. The Employer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.

- 29.2** The Contractor shall cooperate with the Employer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Employer.

## **B. Quality Control**

### **30. Identifying Defects**

- 30.1** The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect.
- 30.2** The contractor shall permit the Employer's Technical auditor to check the contractor's work and notify the Employer and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Employer's responsibility as defined in the Contract Agreement.

### **31. Tests**

- 31.1** If the Employer 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.

### **31. Correction of Defects**

- 31.1** The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

**31.2** Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

## **32. Uncorrected Defects**

**32.1** If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

*Note:*

*Where in certain cases, the technical specifications provide for acceptance of works within specified tolerance limits at reduced rates, Employer will certify payments to Contractor accordingly.*

## **C. Cost Control**

### **33. Details of civil work and plant & machineries :**

**33.1** The **Details of civil work** shall contain items for the construction, and commissioning work to be done by the contractor.

### **34. Changes in the Quantities**

**34.1** If the final quantity of the work done differs from the quantity in the **Details of civil work** for the particular item by more than 25 percent, provided the change exceeds 1% of Initial Contract Price, the Employer shall adjust the rate to allow for the change.

**34.2** The Employer 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.

**34.3** If requested by the Employer, the Contractor shall provide the Employer with a detailed cost breakdown of any rate in the Bill of Quantities.

### **35. Variations**

**35.1** All Variations shall be included in updated Programs produced by the Contractor.

## **36. Payments for Variations**

- 36.1** The Contractor shall provide the Employer with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Employer. The Employer shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Employer and before the Variation is ordered.
- 36.2** If the work in the Variation corresponds with an item description in the **Details of civil work** if, in the opinion of the Employer, the quantity of work above the limit. or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the **civil work** 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 **civil work** , the quotation by the Contractor shall be in form of new rates for the relevant items of work.
- 36.3** If the Contractor's quotation is unreasonable (or if the contractor fails to provide the Employer with a quotation within a reasonable time specified by the Employer in accordance with Clause 40.1), the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.
- 36.4** If the Employer 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.
- 36.5** The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

## **37. Cash flow forecasts**

- 37.1** When the Program is updated, the contractor is to provide the Employer with an updated cash flow forecast.

## **37. Payment Certificates**

- 37.1** The Contractor shall submit to the Employer monthly statements of the estimated value of the work completed less the cumulative amount certified previously along with details of measurement of the quantity of works executed in a tabulated form as approved by the Employer.

- 37.2** The Employer shall check the details given in the Contractor's monthly statement and within 14 days certify the amounts to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts .
- 37.3** The value of work executed shall be determined by the Employer after due check measurement of the work claimed as executed by the contractor.
- 37.4** The value of work executed shall comprise the value of the **civil work** completed..
- 37.5** The value of work executed shall include the valuation of Variations and Compensation Events.
- 37.6** The Employer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

## **38. Payments**

- 38.1** Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Employer within 30 days of the date of each certificate. If payment delayed then employer may relaes 80 % of amount of contractor's running bill to be certify.
- 38.2** Items of the Works for which no rate or price has been entered will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

## **39. Compensation Events**

- 39.1** The following are Compensation Events unless they are caused by the Contractor:
- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
  - (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
  - (c) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.

- (d) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (e) The Employer unreasonably does not approve for a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effect on the Contractor of any of the Employer's Risks.
- (k) The Employer unreasonably delays issuing a Certificate of Completion.
- (l) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

**39.2** If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

**39.3** As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

**39.4** The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.



## **40. Tax**

**40.1(a)** The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

## **41. Currencies**

**41.1** All payments shall be made in Indian Rupees.

## **42. Price Adjustment**

**42.1** Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in the contract data:

(a) The price adjustment shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Employer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.

## **43. Retention**

**43.1** The Employer shall retain 5 % amount from each payment due to the Contractor until Completion of the whole of the Works.

**43.2** On Completion of the whole of the Works the total amount retained is repaid to the Contractor and when the Defects Liability Period has passed and the Employer has certified that all Defects notified by the Employer to the Contractor before the end of this period have been corrected.

**43.3** On completion of the whole works, the contractor may substitute retention money with an "on demand" .

#### **44. Liquidated Damages**

- 44.1** The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the **Contract Data** for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.
- 44.2** If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the over payment calculated from the date of payment to the date of repayment at the rates 8 %

#### **45. Securities**

- 45.1** The Performance Security(5 % ) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 30 days from the date of expiry of Defects Liability Period and from the date of issue of the certificate of completion.

#### **46. Cost of Repairs**

- 46.1** Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

### **D. Finishing the Contract**

#### **47. Completion**

- 47.1** The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Work is completed.

#### **48. Taking Over**

- 48.1** The Employer shall take over the Site and the Works within seven days of the Employer issuing a certificate of Completion and certificate of satisfactory trial run of plant.

#### **49. Final Account**

**49.1** The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

#### **50. Operating and Maintenance Manuals**

**50.1** If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

**50.2** If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

#### **51. Termination**

**51.1** The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

**51.2** Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Employer;
- (b) the Employer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) a payment certified by the Employer is not paid by the Employer to the Contractor within 56 days of the date of the Employer's certificate;

- (e) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;
- (f) the Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (h) if the Contractor, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 64, in competing for or in executing the Contract.

**51.3** When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 59.2 above, the Employer shall decide whether the breach is fundamental or not.

**51.4** Notwithstanding the above, the Employer may terminate the Contract for convenience.

**51.5** If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

## **52. Payment upon Termination**

**52.1** If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

**52.2** If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

**53. Property**

**53.1** All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

**54. Release from Performance**

**54.1** If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Employer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

## **F. Special Conditions of Contract**

### **1. LABOUR :**

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

### **2. COMPLIANCE WITH LABOUR REGULATIONS :**

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Employer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

**SALIENT FEATURES OF SOME MAJOR LABOUR LAWS**  
**APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER**  
**CONSTRUCTION WORK.**

(The law as current on the date of bid opening will apply)

- a) **Workmen Compensation Act 1923**: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
  
- b) **Payment of Gratuity Act 1972**: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
  
- c) **Employees P.F. and Miscellaneous Provision Act 1952**: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are :
  - (i) Pension or family pension on retirement or death, as the case may be.
  - (ii) Deposit linked insurance on the death in harness of the worker.
  - (IV) payment of P.F. accumulation on retirement/death etc.
  
- d) **Maternity Benefit Act 1951**: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
  
- e) **Contract Labour (Regulation & Abolition) Act 1970**: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the

Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.

- f) **Minimum Wages Act 1948:** The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.
- g) **Payment of Wages Act 1936:** It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) **Equal Remuneration Act 1979:** The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) **Payment of Bonus Act 1965:** The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/-per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- j) **Industrial Disputes Act 1947:** The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (Standing Orders) Act 1946:** It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.



- l) **Trade Unions Act 1926**: The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
  
- m) **Child Labour (Prohibition & Regulation) Act 1986**: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
  
- n) **Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979**: The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.
  
- o) **The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996**: All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
  
- p) **Factories Act 1948**: The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

v) . **PROTECTION OF ENVIRONMENT:**

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 causes arising as a consequence of his methods of operation.

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 bye-laws of the State or Central Government, or local authorities and any 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 the local authority.

**Salient features of some of the major laws that are applicable are given below:**

**The Water (Prevention and Control of Pollution) Act, 1974,** This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

**The Air (Prevention and Control of Pollution) Act, 1981,** This provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

**The Environment (Protection) Act, 1986,** this provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, microorganism and property.

**The Public Liability Insurance Act, 1991**, This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

*[Employers should note that the Loan Agreement between IBRD and the borrowing country may establish specific measures to be taken during construction of the Works for the protection of the environment. Sub-clause 16.2 should be modified/expanded to take into account such specific measures or other measures considered appropriate by the Employer]*

**6. TAX:**

**Add the following sub-clauses**

In the contract work for construction. The workers welfare cess shall be deducted at source while making payment . and shall be deposited to workers welfare fund as per the provision of Building and other construction work welfare cess .

The Royalty charge shall be paid by the contractor as per rules which will not be refundable to the contractor. The Contractor shall however be paid his final bill for the work only upon production of the “No Royalty” charges outstanding certificate issued by the collector.

**7. LIQUIDATED DAMAGES:**

Please substitute the last sentence with the following:

Payment of liquidated damages does not affect the contractor liabilities and payment or deduction of liquidated damages shall not relieve the contractor from his obligation to complete the work as per agreed construction program and milestones or from any other of the contractor’s obligations and liabilities

## **Section IV**

### **CONTRACT DATA**

### **Contract Data**

The above insertions should correspond to the information provided in the Invitation of Bids.

The Employer is

Name: Chief Executive Officer, Gwalior Sahakari Dugdh Sangh Maryadit

Address: Gola Ka Mandir, Infront of Hotel Suruchi, Gwalior -474005

(1.1)

Name of authorized Representative: \_\_\_\_\_

The name and identification number of the Contract is \_\_\_ /GSDS/2019

The Works consist of **Establishment of 20 TPD Dairy Plant at Milk Chilling Centre, Shivpuri , District Shivpuri (MP) on turnkey basis**

The Start Date shall be the date of issue of notice to proceed with the work.

The Intended Completion Date for the whole of the Works is 03 months with the following milestones:

**Milestone dates:**

	<u>Financial works to be completed</u>	<u>Period from the date of issue of notice to proceed with the work</u>
Milestone 1 -	25 % of Total Estimated cost	01 <u>months.</u>
Milestone 2 -	60 % of Total Estimated cost	02 <u>months.</u>
Milestone 3	15 % of Total Estimated cost	01 <u>months.</u>

The following documents also form part of the Contract:

Credential of the Bidder

The Contractor shall submit a revised Program including Environmental

Management Plan for the Works (in such form and detail as the Employer shall reasonably prescribe) within 15 days of delivery of the Letter of Acceptance.

The Site Possession Dates shall be: Site will be available within 15 days

The Site is located at ***Milk Chilling Centre, AB Road, Guna Naka, Shivpuri***

**The Defects Liability Period is 03 years from the date of certification**

of completion of works (where sectional completion certificate is issued this will apply from those dates for those sections)

The following events shall also be Compensation Events:

1. (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
- (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
- (c) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
- (d) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (e) The Employer unreasonably does not approve for a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.

- (j) The effect on the Contractor of any of the Employer's Risks.
  - (k) The Employer unreasonably delays issuing a Certificate of Completion.
  - (l) Other Compensation Events listed in the Contract Data or mentioned in the Contract.
- 2** If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 3** As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.
- 4**

The liquidated damages for the whole of the works are Rs. 20000/- per day and that for the milestone are as under [

For milestone 1   Rs.2000 *per day of contract value of milestone*  
 For milestone 2   Rs.2000 *per day of contract value of milestone*  
 For milestone 3   Rs.2000 *per day of contract value of milestone*

*[To be fixed at not less than 0.05% per day of contract value of each milestone]*

The maximum amount of liquidated damages for the whole of the works is ten percent of final contract price.

The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price: Performance Security for 5 per cent of contract price

The standard form of Performance Security acceptable to the Employer shall be an unconditional



Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

The date by which operating and maintenance manuals are required is within 30 days of issue of certificate of completion of whole or section of the work, as the case may be.

The date by which “as-built” drawings (in scale ...) in 2 sets are required is within 30 days of issue of certificate of completion of whole or section of the work, as the case may be. Bidder must coordinate with Consultant and mechanical contractor for working drawings etc.

The amount to be withheld for failing to supply “as built” drawings and/or operating and maintenance manuals \*by the date required is Rs. 1.00 lakh

The percentage to apply to the value of the work not completed representing the Employer's

additional cost for completing the Works shall be 20 percent.

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## **SECTION 5: Bill of Quantities**

Sr.No.	MPPWD/SOR-14	Description of Item	Quantity	Unit
<b>Sub-Head : Earth Work</b>				
1.1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means)		
a)	2.6.1	All kinds of soil	486.61	Cum One Cubic Metre
1.2	2.28	Supplying and filling in plinth with hard moorum/hardcopra under floors including watering ramming consolidating in layers not exceeding 20 cm in depth and dressing complete.	332.13	Cum One Cubic Metre
1.3	2.30	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti- termite treatment (excluding the cost of chemical emulsion) :		
a)	2.30.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :		
i)	2.30.3.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.	265.32	Sqm One Square Metre
<b>Total of the Sub-Head - Earth Work :</b>				
<b>Sub-Head : Concrete Work</b>				
2.1	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :		
	4.1.2	With 40 mm nominal size graded stone aggregate		
a)	4.1.2.2	Nominal Mix-1 cement : 3 sand : 6 graded stone aggregate (M10)	50.75	Cum One Cubic Metre
2.2	4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (Zone III) : 4 graded stone aggregate 20mm nominal size).	24.32	Sqm One Square Metre
2.3	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	7.78	units per 50 kg cement
2.4	4.13	Applying a coat of residual petroleum bitumen of grade of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	24.32	Sqm One Square Metre
2.5	4.17	Making plinth protection 50 mm thick of cement concrete grade M10 over 75 mm bed of dry metal ballast 40 mm nominal size well rammed and consolidated and filled with sand including finishing the top smooth (with 20 mm nominal size graded stone aggregate).	66.00	Sqm One Square Metre
<b>Total of the Sub-Head - Concrete Work :</b>				
<b>Sub-Head : Reinforced Cement Concrete</b>				
3.1	5.9	Centering and shuttering including strutting, propping etc. and removal of form for all heights:		
a)	5.9.1	Foundations, footings, bases of columns, etc, for concrete up to plinth	353.35	Sqm One Square Metre
b)	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	333.73	Sqm One Square Metre
c)	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	558.46	Sqm One Square Metre
d)	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	213.53	Sqm One Square

					Metre
e)	5.9.19	Weather Shade, Chajjas, corbels etc., including edges	6.60	Sqm	One Square Metre
3.2	5.16	Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. Complete			
f)	5.16.6	Thermo-Mechanically Treated bars of grade Fe-500 D or more.	70269.49	Kg	One Kilogram
3.3	5.24	Providing for plaster drip course/groove in plastered surface or moulding to R.C.C projections	21.00	RM	One Running Metre
3.4	5.27	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but , excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.			
		(Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately)			
a)	5.27.1	All work upto Plinth level	153.91	Cum	One Cubic Metre
b)	5.27.2	All works above plinth level up to floor V level.	135.54	Cum	One Cubic Metre
3.5	5.35	Smooth finishing of exposed surface of RCC work with 6 mm thick cement 1:3 (1 Cement:3 Sand)	1465.67	Sqm	One Square Metre
<b>Total of the Sub-Head - Reinforced Cement Concrete :</b>					
<b>Sub-Head : Brick Work</b>					
4.1	6.1	Brickwork with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40 kg/cm <sup>2</sup> and water absorption not more than 15% in foundation and plinth i/c curing etc. complete.			
a)	6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	54.73	Cum	One Cubic Metre
4.2	6.2	Brickwork with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40 kg/cm <sup>2</sup> and water absorption not more than 15% in superstructure above plinth level and upto floor two level i/c curing etc. complete.			
a)	6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	238.71	Cum	One Cubic Metre
<b>Total of the Sub-Head - Brick Work :</b>					
<b>Sub-Head : Steel Work</b>					
5.1	10.6	Supplying and fixing rolling shutters of approved make,made of required size of M.S.laths inter locked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to I.S-4454-Part-1 and M.S top cover of required thickness for rolling shutters.			
a)	10.6.2	80x1.20 mm M.S laths with 1.20 mm thick top cover	27.00	Sqm	One Square Metre

5.2	10.7	Providing and fixing ball bearing for rolling shutters.	4.00	No.	Each
<b>Total of the Sub-Head - Steel Work :</b>					
<b>Sub-Head : Flooring</b>					
6.1	11.22	Providing and fixing 18 mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 ( 1 cement: 4 sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish whereverrequired etc. complete at all levels. samples approved by Engineer-in-Charge.			
a)	11.22.2	Granite of any colour and shade	9.00	Sqm	One Square Metre
6.2	11.36	Providing edge moulding to 18 mm thick marble stone counters, vanities, window sills etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge			
a)	11.36.2	Granite Work	30.00	M	One Running Metre
6.3	11.34	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand):			
a)	11.34.1	25 mm thick.	40.38	Sqm	One Square Metre
6.4	11.35	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	4.76	Sqm	One Square Metre
6.5	11.46	Providing and fixing 1st quality ceramic glazed wall tiles 300x450 mm or more (having thickness 6to 7 mm) of 1st quality conforming to IS:15622, of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	401.50	Sqm	One Square Metre
6.6	11.68	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid/oralkali resisting mortar bedding and joints filled with acid and/or alkali resisting cement as per IS:4457 complete as per the direction of Engineer-in-Charge.			
a)	11.68.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement:4 sand)			
i)	11.68.1.1	Acid and alkali resistant tile	265.32	Sqm	One Square Metre
b)	11.68.2	In Dado/Skirting on 12 mm thick mortar 1:4 (1 acid proof cement:4 sand)			
i)	11.68.2.1	Acid and alkali resistant tile	12.75	Sqm	One Square Metre
<b>Total of the Sub-Head - Flooring :</b>					
<b>Sub-Head : Roofing</b>					
7.1	12.26	Providing gola 75 x 75 mm in cement concrete 1:2:4 ( 1 cement:2 sand: 4 stone aggregate 10 mm and down grade) including finishing with cement mortar 1:3 ( 1 cement : 3 sand) as per standard design:			

a)	12.26.1	In 75 x 75 mm deep chase	64.16	M	One Running Metre
7.2	12.27	Making Khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement:2 Sand: 4 graded stone aggregate of 20 mm nominal size) over P.V.C sheet 1m x 1m x 400 micron , finished with 12 mm cement plaster 1:3 (1 cement : 3 Sand) and a coat of neat cement rounding the edge and making and finishing the outlet complete	5.00	Nos.	One Each
7.3	12.32	Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS:13592 Type A including jointing with scalling conforming to IS:5383 leaving 10 mm gap for thermal expansion. (i) Single socketed pipes			
a)	12.32.2	110 mm diameter (minimum wall thickness 2.2 mm)	35.00	M	One Running Metre
7.4	12.33	Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS:13592 Type A including jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion			
a)	12.33.1	Coupler			
(i)	12.33.1.2	110 mm (minimum wall thickness 2.2 mm)	5.00	Nos.	One Each
b)	12.33.5	Bend 87.5°			
(i)	12.33.5.2	110 mm (minimum wall thickness 2.2 mm)	5.00	Nos.	One Each
<b>Total of the Sub-Head - Roofing :</b>					
<b>Sub-Head : Finishing</b>					
8.1	13.1	12 mm cement plaster of mix :			
a)	13.1.1	1:4 (1 cement: 4 coarse sand)	956.24	Sqm	One Square Metre
8.2	13.5	15 mm cement plaster on rough side of single or half brick wall of mix :			
a)	13.5.1	1:4 (1 cement: 4 coarse sand)	560.70	Sqm	One Square Metre
8.3	13.38	Providing and applying plaster of paris 2 mm thickness over plastered surface to prepare the surface even and smooth complete	2137.18	Sqm	One Square Metre
8.4	13.45	Distemping with dry distemper of approved brand and manufacture (two or more coats) of required shade on new work, over and including water thinnable priming coat to give an even shade	2137.18	Sqm	One Square Metre
8.5	13.47	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade			
a)	13.47.1	New work (two or more coats) over and including water thinnable priming coat with cement primer	2137.18	Sqm	One Square Metre
8.6	13.54	Finishing walls with textured exterior paints of required shade:			
a)	13.54.1	New work (two or more coats applied @3.28 ltr/10 sqm) over and including priming coat with exterior primer applied @ 2.20 kg/10 Sqm	257.17	Sqm	One Square Metre
8.7	13.55	Finishing walls with Acrylic Smooth exterior paints of required shade:			
a)	13.55.1	New work (two or more coats applied @1.67 ltr/10 sqm) over and including priming coat with exterior primer applied @ 2.20 kg/10 Sqm	843.51	Sqm	One Square Metre
8.8	13.68	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:			
a)	13.68.1	Two or more coats on new work.	9.00	Sqm	One Square Metre

8.9	13.84	Providing and applying Granules homogenous wall finishing system consisting of a two component system of dry granules (25 kgs/pack) made of 92% silica particles coated with fade resistant pigments and a 100% acrylic polymer bonding agent (5kgs/pack) applied thickness of the coating being between 0.8-1.2 mm, to be applied in single coat, on a cured, smooth level plaster surface without keying, as per the shades/ combinations approved, as per manufacturer, as per direction/ supervision of the engineers-in-charge inclusive of one coat of primer on the base at all heights etc all complete	560.70	Sqm	One Square Metre
<b>Total of the Sub-Head - Finishing :</b>					
<b>Sub-Head : Repairs to Buildings</b>					
9.1	14.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sqm and under including cutting the patch in proper shape, raking out joints and preparing and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 m lead:			
a)	14.1.1	With cement mortar 1:4 ( 1 cement : 4 sand)	1577.68	Sqm	One Square Metre
9.2	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:			
a)	14.5.2	Float glass panes of thickness 5.5 mm	27.00	Sqm	One Square Metre
9.3	14.28	Distempering with dry distemper of approved brand and manufacture (one or more coats) of required shade on old work to give an even shade	1577.68	Sqm	One Square Metre
9.4	14.29	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade:			
a)	14.29.1	Old Work (One or more coats)	1577.68	Sqm	One Square Metre
9.5	14.30	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	3155.36	Sqm	One Square Metre
<b>Total of the Sub-Head - Repairs to Buildings :</b>					
<b>Sub-Head : Dismantling and Demolishing</b>					
10.1	15.3	Demolishing R.C.C work manually/by mechanical means including stacking of steel bars and disposal of unservicable material 50 metres lead as per direction of Engineer-in-Charge.	4.26	Cum	One Cubic Metre
10.2	15.4	Extra for cutting reinforcement bars manually/by mechanical means in R.C.C work (Payment shall be made on the cross sectional area of R.C.C work) as per direction of Engineer-in-Charge)	21.30	Sqm	Each
10.3	15.5	Extra for scrapping, cleaning and straightening reinforcement from R.C.C work	958.50	Kg	Each
10.4	15.6	Demolishing brickwork manually/ by mechanical means including stacking of servicable material and disposal of unservicable material within 50 metres lead as per direction of Engineer-in-Charge.			
a)	15.6.3	In cement mortar	33.89	Cum	One Square Metre
10.5	15.7	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):			
a)	15.7.2	From brick work in cement mortar	16.95	1000 Nos	One Thousand Nos

10.6	15.14	Dismantling doors, windows and clerestorey windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:			
a)	15.14.1	of area 3 sq. metres and below	2.00	Nos	One Each
10.7	15.15	Taking out doors, windows and clerestorey window shutters (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:			
a)	15.15.1	of area 3 sq. metres and below	2.00	Nos	One Each
10.8	15.51	Dismantling of manhole including R.C.C top slab, C.I cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead:			
a)	15.51.2	Rectangular manhole 120 X 90 cm and 90 cm deep	6.00	Nos	One Each
10.9	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	532.76	Cum	One Cubic Metre
10.10	1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.			
		Note - item to be applicable in urban areas having directions for restricted hours for movement/ plying of load carrying motor vehicle of 3.5 cum or more.	532.76	Cum	One Cubic Metre
<b>Total of the Sub-Head - Dismantling and Demolishing:</b>					
<b>Sub-Head : Aluminium Work</b>					
11.1	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :			
a)	21.1.1	For fixed portion			
i)	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	46.70	Kg	One Kilogram
b)	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)			
i)	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	154.75	Kg	One Kilogram
11.2	21.2	Providing and fixing 12 mm thick pre-laminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.			
a)	21.2.2	Pre-laminated particle board with decorative lamination on both sides	12.96	Sqm	One Square Metre



11.3	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):			
a)	21.3.2	With float glass panes of 5.50 mm thickness	21.60	Sqm	One Square Metre
12.5	21.5	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.			
a)	21.5.1	With stainless steel cover plate minimum 1.25 mm thickness	8.00	No.	One Each
12.6	21.9	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.			
a)	21.9.1	Upto 5mm depth and 5 mm width	21.00	m	One Running Metre
<b>Total of the Sub-Head - Aluminium Work :</b>					
<b>Sub-Head : Water Proofing Work</b>					
12.1	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for Treatment of roofs, balconies, terraces etc, consisting of following operations. (a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietary water -proofing compound cleaning the surface before treatment, (b) Laying cement concrete using broken bricks / brick bats 25 mm to 100 mm size with 50 % of cement mortar 1:5 (1 cement: 5 coarse sand ) admixed with proprietary water proofing compound conforming to IS : 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS 2545 to required slope and treating similar the adjoining walls up to 300 mm height including rounding of junctions, or walls ad slabs. (c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to IS: 2645. (d) Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement: 4 coarse sand ) admixed with proprietary water proofing compound conforming to IS : 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 x 300 mm square. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test, All above operations to be done in order and as directed and specified by the Engineer-in-Charge.			
a)	22.7.1	With average thickness of 120 mm and minimum thickness at khurras point to be 65	1014.65	Sqm	One Square Metre

12.2	22.17	Providing and laying in situ six course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40 Kg per Sqm, 2nd, 4th and 6th courses of bonding material @1.20 Kg/Sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS:702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/Sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and polymeric mix is protected on both sides with 20 micron HMHDPE film. (With 5 years service gaurantee)	1014.65	No.	One Each
<b>Total of the Sub-Head - Water Proofing Work :</b>					
<b>Sub-Head : Pile Work and Drain</b>					
13.1	20.1	Providing,driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-35 of specified diameter and length below and pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe cement concrete and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):			
a)	20.1.1	400 mm dia piles	480.00	M	One Running Metre
13.2	AOR	Drain Line (300X450)	44.93	M	One Running Metre
<b>Total of the Sub-Head - Pile Work and Drain:</b>					
<b>Sub-Head : Water Supply</b>					
14.1	18.12	Providing and fixing G.I pipes complete with G.I fittings including trenching and refilling etc. External Work	120.00	M	One Running Metre
a)	18.12.8	80 mm dia nominal bore			
14.2	18.32	Providing and fixing gun metal gate valve with C.I wheel of approved quality (screwed end):			
a)	18.32.6	80 mm dia nominal bore	4.00	No.	One Each
14.3	18.4	Constructing masonry Chamber 60 X 60 X 75 cm inside, in brick work in cement mortar 1:4 ( 1 Cement : 4 Sand ) for sluice valve, with C.I surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (insside) with chained lid and RCC top slab 1:2:4 mix (1 cement:2 sand: 4 graded stone aggregate 20 mm nominal size). i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 sand: 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement:3 sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design:			
a)	18.40.1	With common burnt clay bricks of 25 kg/sqcm compressive strength	4.00	No.	One Each
14.4	18.45	Painting G.I pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality:			
a)	18.45.8	80 mm dia nominal bore	120.00	M	One Running Metre
14.5	18.46	Providing and filling sand all round the GI Pipes in external work			
a)	18.46.8	80 mm dia nominal bore	120.00	M	One Running Metre
14.6	18.47	Providing and fixing G.I Union in G.I pipe including cutting and threading the pipe and making long screws etc. complete (New Work)			
a)	18.47.8	80 mm dia nominal bore	40.00	No.	One Each

14.7	18.81	Making connection of G.I distribution branch with G.I main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:			
a)	18.81.2	50 to 80 mm dia nominal bore	40.00	No.	One Each
<b>Total of the Sub-Head - Water Supply:</b>					
<b>Sub-Head : Miscellaneous Items</b>					
15.1	N.S.	Providing and fixing of " SKYPORT D LINE INDIA " or equivalent modular passivated stainlesssteel " Wold free " railing system for staircase and handcapped ramp of required and approved size and shape confirming to ASAISI - 304 grade stainless steel tube of 42.3mm dia X 1.6mm thickness for top rails and verticals and three rows of stainless steel tube of AISI - 304 grade stainless steel of 16mm dia X 1.2mm thickness for intermediate steel tube and components duly in box coated and all components of investments costing with all visible steel metal in 240 grit satin finish complete with installations at site, by fixing in walls and floors all complete as per approved pattern and of Engineer-In-Charge.	200.00	Kg	One Each
15.2	N.S.	Removing Generator from its current position and repositioning it suitably or as per the drawing or as directed by Engineer-in-Charge	1.00	Job	One Job
15.3	DSR/2.34	Supplying chemical emulsion in sealed containers including delivery as specified.			
a)	2.34.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	265.32	ltr	One Litre
15.4	DSR/15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	712.88	Sqm	One Square Metre
15.5	DSR/15.27	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	53.47	Cum	One Cubic Metre

DSR-16 Code	Description of Item	Nos	L	B	H	Quantity	Unit
<b>Sub-Head : Earth Work</b>							
2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m,disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means)						
2.6.1	All kinds of soil						
	For Foundation Work	6.00	3.200	3.200	2.000	122.880	Cum
		2.00	3.200	2.000	2.000	25.600	Cum
		2.00	4.400	4.400	2.000	77.440	Cum
		2.00	4.400	2.600	2.000	45.760	Cum
	For Spread Footing						
	Along Grid X1	1.00	11.680	1.400	1.500	24.528	Cum
	Along Grid X3	1.00	11.680	1.100	1.500	19.272	Cum
	Along Grid X2	1.00	7.910	1.400	1.500	16.611	Cum

	Along Grid Y3/Y4/Y6	3.00	5.450	1.400	1.500	34.335	Cum
	Along Grid Y5	1.00	2.996	1.400	1.500	6.292	Cum
	Foundations for Electrical Room Extension	1.00	3.500	3.500	2.000	24.500	Cum
	Extension for Transformer Room	2.00	2.500	2.500	2.000	25.000	Cum
		1.00	10.000	1.400	1.500	21.000	Cum
	Excavation for Drain Line	1.00	44.930	0.600	0.750	20.219	Cum
	Total Quantity				463.436	23.172	Cum
	<b>Total</b>					<b>486.61</b>	<b>Cum</b>
	<b>Say</b>					<b>486.61</b>	<b>Cum</b>
2.28	Supplying and filling in plinth with hard moorum/hardcopra under floors including watering ramming consolidating in layers not exceeding 20 cm in depth and dressing complete.						
	<b>Calculation for Carpet Area</b>						
	Pouch Packing Area	1.00	6.100	5.750		35.075	Sqm
	Refrigeration Section	1.00	11.650	6.500		75.725	Sqm
	Packaging	1.00	5.300	13.700		72.610	Sqm
	Cold Storage	1.00	6.100	7.650		46.665	Sqm
	Dispatch Dock	1.00	13.300	1.700		22.610	Sqm
	Total Carpet Area				252.685	12.634	Sqm
	<b>Total Carpet Area</b>					<b>265.32</b>	<b>Sqm</b>
	<b>Amount of filling required</b>						
	Total Earthwork (Refer Item S.No. 1.1)					<b>486.61</b>	<b>Cum</b>
	Deduction for PCC in Foundation					-12.02	Cum
	Deduction for RCC in Foundation					-112.74	Cum
	Deduction for PCC in Spread Footing					-8.07	Cum
	Deduction for Brick Work in Spread Footing					-46.94	Cum
	Deduction for RCC in Plinth Beam					-14.50	Cum
	<b>Calculation for Sand Filling</b>	1.00	265.32	Sqm	0.150	39.798	Cum
	<b>Total</b>					<b>332.13</b>	<b>Cum</b>
	<b>Say</b>					<b>332.13</b>	<b>Cum</b>

2.30	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti- termite treatment (excluding the cost of chemical emulsion) :							
2.30.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor :							
2.30.3.1	With Chlorpyriphos/Lindane E.C. 20% with 1% concentration.							
	Total Carpet Area (Refer Item S.No. 1.3)						265.32	Sqm
	<b>Total</b>						<b>265.32</b>	<b>Sqm</b>
	<b>Say</b>						<b>265.32</b>	<b>Sqm</b>
<b>Sub-Head : Concrete Work</b>								
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :							
4.1.2.2	Nominal Mix-1 cement : 3 sand : 6 graded stone aggregate (M10)							
	Under Foundations	6.00	3.000	3.000	0.100	5.400		Cum
		2.00	3.000	1.800	0.100	1.080		Cum
		2.00	4.200	4.200	0.100	3.528		Cum
		2.00	4.200	2.400	0.100	2.016		Cum
	Under spread footing along the total length of brick wall	1.00	90.710	0.890	0.100	8.073		Cum
	PCC Under Floor (Refer Item S.No. 1.3)	1.00	265.319	Sqm	0.100	26.532		Cum
	Under extra foundation	1.00	3.000	3.000	0.100	0.300		Cum
	Transformer Area Extension	2.00	2.000	2.000	0.100	0.400		Cum
		1.00	10.000	0.890	0.100	1.000		Cum
	Total for Concrete Work					48.329	2.416	Cum
	<b>Total</b>						<b>50.75</b>	<b>Cum</b>
	<b>Say</b>						<b>50.75</b>	<b>Cum</b>
4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(Zone III) : 4 graded stone aggregate 20mm nominal size).							
	Along the length of Brick wall at a height of .15m above plinth level							
	Total length of 230 mm thick brick wall	1.00	90.710	0.230		20.863		Sqm
	Transformer Area Extension	1.00	10.000	0.230		2.300		Sqm
	Total for DPC					23.163	1.158	Sqm

		<b>Say</b>					<b>24.32</b>	<b>Sqm</b>
4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.							
	Total concrete work in DPC	1.00	24.321	Sqm	0.050	1.216	Cum	
	Cement used in 1 cum of Mix = 6.4 bags							
	Cement used in mix					7.783	Bags.	
	<b>Say</b>					<b>7.78</b>	<b>Units.</b>	
4.13	Applying a coat of residual petroleum bitumen of grade of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with apiece of cloth lightly soaked in kerosene oil.							
	Same as DSR item No. 4.11					24.32	Sqm	
	<b>Say</b>					<b>24.32</b>	<b>Sqm</b>	
4.17	Making plinth protection 50 mm thick of cement concrete grade M10 over 75 mm bed of dry metal ballast 40 mm nominal size well rammed and consolidated and filled with sand including finishing the top smooth (with 20 mm nominal size graded stone aggregate).							
	Along the perimeter of building	1.00	11.950	21.050		66.00	M	
	1 metre wide plinth protection	1.00	66.000	M	1.000	66.00	Sqm	
	<b>Say</b>					<b>66.00</b>	<b>Sqm</b>	
<b>Sub-Head : Reinforced Cement Concrete</b>								
5.9	Centering and shuttering including strutting, propping etc. and removal of form for all heights:							
5.9.1	Foundations, footings, bases of columns, etc, for concrete up to plinth							
	RCC Footings	6.00	3.000	3.000		128.40	Sqm	
		2.00	3.000	1.800		31.28	Sqm	
		2.00	4.200	4.200		72.72	Sqm	
		2.00	4.200	2.400		51.12	Sqm	
	Transformer Area Extension	1.00	3.000	3.000		23.40	Sqm	
		2.00	2.000	2.000		29.60	Sqm	
	Total for Shuttering				336.520	16.826	Sqm	
	<b>Total</b>					<b>353.35</b>	<b>Sqm</b>	
	<b>Say</b>					<b>353.346</b>	<b>Sqm</b>	
5.9.3	Suspended floors, roofs, landings, balconies and							

	access platform.						
	Area of Slab	1.00	11.950	24.050		287.398	Sqm
	Edge of Slab	1.00	66.000	M	0.200	13.200	Sqm
	Front Entrance Staircase	1.00	8.050	0.900		7.245	Sqm
	Transformer Area Extension	1.00	2.000	5.000		10.000	Sqm
	Total for Shuttering				317.843	15.892	Sqm
	<b>Total</b>					<b>333.73</b>	<b>Sqm</b>
	<b>Say</b>					<b>333.735</b>	<b>Sqm</b>
<b>5.9.5</b>	<b>Lintels, beams, plinth beams, girders, bressumers and cantilevers.</b>						
	Total Length of Plinth Beam						
	Along Grid X1	1.00	19.570			19.570	M
	Along Grid X2	1.00	19.570			19.570	M
	Along Grid X3	1.00	19.570			19.570	M
	Along Grid Y3	1.00	10.900			10.900	M
	Along Grid Y4	1.00	10.900			10.900	M
	Along Grid Y5	1.00	10.900			10.900	M
	Along Grid Y6	1.00	10.900			10.900	M
	Total Length of Plinth Beam				102.310	5.116	M
	<b>Total</b>					<b>107.426</b>	<b>M</b>
	For Plinth Beam	1.00	107.426	0.300	0.450	<b>161.138</b>	<b>Sqm</b>
	Plinth Beam Extension	1.00	44.930	0.150	0.600	<b>67.395</b>	<b>Sqm</b>
	Total Length of Roof Beam						
	Along Grid X1	1.00	19.570			19.570	M
	Along Grid X2	1.00	19.570			19.570	M
	Along Grid X3	1.00	19.570			19.570	M
	Along Grid Y3	1.00	10.900			10.900	M
	Along Grid Y4	1.00	10.900			10.900	M
	Along Grid Y5	1.00	10.900			10.900	M
	Along Grid Y6	1.00	10.900			10.900	M
	Total Length of Roof Beam				102.310	5.116	M
	<b>Total</b>					<b>107.426</b>	<b>M</b>
	Beam in Cantilevered Floor	3.00	3.000			<b>9.000</b>	<b>M</b>

	For Roof Beam	1.00	107.426	0.400	0.600	<b>214.851</b>	<b>Sqm</b>
	For Cantilevered Roof Beam	1.00	9.000	0.400	1.200	<b>28.800</b>	<b>Sqm</b>
	Lintel Beams	12.00	1.500	0.230	0.230	<b>16.560</b>	<b>Sqm</b>
	Coping Beam	1.00	72.000	0.230	0.150	<b>54.720</b>	<b>Sqm</b>
	Transformer Area Extension (Plinth Beam)	1.00	10.000	0.300	0.450	<b>15.000</b>	<b>Sqm</b>
	<b>Total</b>					<b>558.46</b>	<b>Sqm</b>
	<b>Say</b>					<b>558.464</b>	<b>Sqm</b>
<b>5.9.6</b>	<b>Columns, Pillars, Piers, Abutments, Posts and Struts</b>						
	Columns	8.00	0.400	0.400	7.000	89.600	<b>Sqm</b>
		4.00	0.900	0.900	7.000	100.800	<b>Sqm</b>
	Transformer Area Extension (Column)	2.00	0.450	0.450	3.600	12.960	<b>Sqm</b>
	Total for Shuttering				203.360	10.168	<b>Sqm</b>
	<b>Total</b>					<b>213.53</b>	<b>Sqm</b>
	<b>Say</b>					<b>213.528</b>	<b>Sqm</b>
<b>5.9.19</b>	<b>Weather Shade, Chajjas, corbels etc., including edges</b>						
	Weather Shades	5.00	1.500	0.600	0.100	6.600	<b>Sqm</b>
	<b>Total</b>					<b>6.60</b>	<b>Sqm</b>
	<b>Say</b>					<b>6.600</b>	<b>Sqm</b>
<b>5.16</b>	<b>Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. Complete</b>						
<b>5.16.6</b>	<b>Thermo-Mechanically Treated bars of grade Fe-500 D or more.</b>						
	Under Plinth						
	Reinforcement in Footings @ 1.75%	108.216	@	1.75%		14866.173	<b>Kg</b>
	Reinforcement in Column Under Plinth @ 3.50%	4.520	@	3.50%		1241.870	<b>Kg</b>
	Reinforcement in Plinth Beams @ 3.00%	14.502	@	3.00%		3415.325	<b>Kg</b>
	Reinforcement in Column above Plinth @ 3.50%	31.640	@	3.50%		8693.090	<b>Kg</b>
	Reinforcement in Roof Beams @ 3.00%	25.782	@	3.00%		6071.689	<b>Kg</b>
	Reinforcement in Cantilevered Roof Beams @ 3.00%	4.320	@	3.00%		1017.360	<b>Kg</b>



	Reinforcement in Roof @ 2.50%	57.480	@	2.50%		11280.352	Kg
	Reinforcement in Weather Shades @ 2.00%	0.450	@	2.00%		70.650	Kg
	Reinforcement in lintel beam @ 1.75%	0.952	@	1.75%		130.808	Kg
	Reinforcement in Dispatch Dock @ 1.75%	4.522	@	1.75%		621.210	Kg
	Reinforcement in Coping @ 3.00%	2.484	@	3.00%		584.982	Kg
	Plinth Beam Extension @ 3.00%	4.044	@	3.00%		952.291	Kg
	Reinforcement in Foundation of Transformer Extension @ 1.50%	8.100	@	1.50%		953.775	Kg
		7.200	@	1.50%		847.800	Kg
	Reinforcement in Column of Transformer Extension @ 3.50%	1.458	@	3.50%		400.586	Kg
	Total Reinforcement				51147.961	2557.398	Kg
	For Plinth Work	480.000	m @	0.1256	Sqm	60.288	Cum
	Reinforcement in Pile Work @ 3.50%	60.288	@	3.50%		16564.128	Kg
	<b>Total</b>					70269.487	Kg.
	<b>Say</b>					<b>70269.49</b>	<b>Kg.</b>
<b>5.24</b>	<b>Providing for plaster drip course/groove in plastered surface or moulding to R.C.C projections</b>						
	On Weather Shades	5.000	1.500	0.600		<b>21.00</b>	<b>M</b>
<b>5.27</b>	<b>Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but , excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.</b>						
	<b>(Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately)</b>						
<b>5.27.1</b>	<b>All work upto Plinth level</b>						
	RCC Footings	6.00	3.000	3.000	0.900	48.600	Cum
		2.00	3.000	1.800	0.900	9.720	Cum
		2.00	4.200	4.200	0.900	31.752	Cum

		2.00	4.200	2.400	0.900	18.144	Cum
	Columns under Plinth	8.00	0.400	0.400	1.000	1.280	Cum
		4.00	0.900	0.900	1.000	3.240	Cum
	For Plinth Beams	1.00	107.426	0.300	0.450	14.502	Cum
	Plinth Beam Extension	1.00	44.930	0.150	0.600	4.044	Cum
	Foundation for Transformer Extension	1.00	3.000	3.000	0.900	8.100	Cum
		2.00	2.000	2.000	0.900	7.200	Cum
	Total for RCC below Plinth				146.582	7.329	Cum
	<b>Total</b>					<b>153.91</b>	Cum
	<b>Say</b>					<b>153.911</b>	<b>Cum</b>
<b>5.27.2</b>	<b>All works above plinth level up to floor V level.</b>						
	Columns above Plinth	8.00	0.400	0.400	7.000	8.960	Cum
		4.00	0.900	0.900	7.000	22.680	Cum
	Roof Beams	1.00	107.426	0.400	0.600	25.782	Cum
	Cantilevered Beams	1.00	9.000	0.400	1.200	4.320	Cum
	Roof	1.00	11.950	24.050	0.200	57.480	Cum
	Weather Shades	5.00	1.500	0.600	0.100	0.450	Cum
	Lintel Beams	12.00	1.500	0.230	0.230	0.952	Cum
	Dispatch Dock	1.00	13.300	1.700	0.200	4.522	Cum
	Coping over Parapet Wall	1.00	72.000	0.230	0.150	2.484	Cum
	Columns for Transformer Extension	2.00	0.450	0.450	3.600	1.458	Cum
	Total for RCC above Plinth				129.088	6.454	Cum
	<b>Total</b>					<b>135.54</b>	Cum
	<b>Say</b>					<b>135.542</b>	<b>Cum</b>
<b>5.35</b>	<b>Smooth finishing of exposed surface of RCC work with 6 mm thick cement 1:3 (1 Cement:3 Sand)</b>						
	Same as Area of Shutterings					<b>1465.673</b>	<b>Sqm</b>
<b>Sub-Head : Brick Work</b>							
<b>6.1</b>	<b>Brickwork with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40 kg/cm2 and water absorption not more than 15% in foundation and plinth i/c curing etc. complete.</b>						
<b>6.1.1</b>	<b>Cement mortar 1:4 (1 cement : 4 coarse sand)</b>						
	Area of Spread Footing Foundation						

	$= (0.23*(0.3+.45))+(0.46*0.3)+(0.69*0.3)$						
	$=0.1725+0.138+0.207$						
	$=0.52\text{sqm}$						
	For total legth of Half and Full length of wall	1.00	90.710	0.518	Sqm	<b>46.94</b>	Cum
	For Transformer Extension	1.00	10.000	0.518	Sqm	<b>5.18</b>	Cum
	Total for Brickwork in Footing					52.12	<b>2.61</b> Cum
	<b>Total</b>						<b>54.73</b> Cum
	<b>Say</b>						<b>54.729</b> Cum
6.2	Brickwork with well burnt chimney bricks in bulls patent trench kiln manufactured by ghol process, crushing strength not less than 40 kg/cm2 and water absorption not more than 15% in superstructure above plinth level and upto floor two level i/c curing etc. complete.						
6.2.1	Cement mortar 1:4 (1 cement : 4 coarse sand)						
	<b>Horizontal Walls</b>						
	Between X1 and X3 along Grid Y3	1.00	10.900	0.230	7.000	17.549	Cum
	Between X1 and X3 along Grid Y4	1.00	10.900	0.230	7.000	17.549	Cum
	Between X1 and X3 along Grid Y5	1.00	5.700	0.230	7.000	9.177	Cum
	Between X1 and X3 along Grid Y6	1.00	10.900	0.230	7.000	17.549	Cum
	<b>Verical Walls</b>						
	Between Y3 and Y6 along Grid X1	1.00	19.570	0.230	7.000	31.508	Cum
	Between Y3 and Y6 along Grid X2	1.00	13.170	0.230	7.000	21.204	Cum
	Between Y3 and Y6 along Grid X3	1.00	19.570	0.230	7.000	31.508	Cum
	Total					146.043	Cum
	Adding Extra 50% for Elevation Treatment					73.022	Cum
	Transformer Extension	1.000	10.000	0.230	3.600	8.280	Cum
	Total for Brickwork					227.34	11.37 Cum
	<b>Total</b>						<b>238.712</b> Cum
	<b>Say</b>						<b>238.71</b> Cum
<b>Sub-Head : Steel Work</b>							
10.6	Supplying and fixing rolltng shuters of approved make,made of required size of M.S.laths inter locked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arragements for insfde and outside locking with push and pull operation complete including the cost of prioiving and fixing						

	necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to I.S-4454-Part-1 and M.S top cover of required thickness for rolling shutters.						
10.6.2	80x1.20 mm M.S laths with 1.20 mm thick top cover						
	Area of Rolling Shutter	2.00	3.000		4.500	27.000	Sqm
	Say					27.000	Sqm
10.7	Providing and fixing ball bearing for rolling shutters.						
	For Rolling Shutter	2.00	2.000			4.000	Nos
	Say					4.000	Nos
<b>Sub-Head : Flooring</b>							
11.22	Providing and fixing 18 mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 ( 1 cement: 4 sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish whereverrequired etc. complete at all levels. samples approved by Engineer-in-Charge.						
11.22.2	Granite of any colour and shade						
	Window sills	10.00	1.500	0.600		9.000	Sqm
						9.000	Sqm
11.36	Providing edge moulding to 18 mm thick marble stone counters, vanities, window sills etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge						
11.36.2	Granite Work						
	Window sills	20.00	1.500			30.000	M
						30.000	M
11.34	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand):						
11.34.1	25 mm thick.						

	Exterior Corridor	1.00	23.750	1.700		40.375	Sqm
						<b>40.375</b>	<b>Sqm</b>
11.35	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.						
	Risers of Steps	14.00	1.700	0.200		4.760	Sqm
						<b>4.760</b>	<b>Sqm</b>
11.46	Providing and fixing 1st quality ceramic glazed wall tiles 300x450 mm or more (having thickness 6to 7 mm) of 1st quality conforming to IS:15622, of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete						
	One internal face of Outer wall	1.00	11.650	20.430	3.000	192.480	Sqm
	Both sides of Inner Walls	2.00	31.650		3.000	189.900	Sqm
	Total for Ceramic Glazed Tile				382.380	19.119	Sqm
	<b>Total</b>					<b>401.499</b>	<b>Sqm</b>
	<b>Say</b>					<b>401.499</b>	<b>Sqm</b>
11.68	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid/oralkali resisting mortar bedding and joints filled with acid and/or alkali resisting cement as per IS:4457 complete as per the direction of Engineer-in-Charge.						
11.68.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement:4 sand)						
11.68.1.1	Acid and alkali resistant tile						
	For Flooring (Total Carpet Area)					265.319	Sqm
	<b>Total</b>					<b>265.319</b>	<b>Sqm</b>
11.68.2	In Dado/Skirting on 12 mm thick mortar 1:4 (1 acid proof cement:4 sand)						
11.68.2.1	Acid and alkali resistant tile						
	Skirting all along the length of intenal faces of of walls	1.00	11.650	20.430	0.100	6.416	Sqm
		2.00	31.650		0.100	6.330	Sqm
	<b>Total</b>					<b>12.746</b>	<b>Sqm</b>
<b>Sub-Head : Roofing</b>							

12.26	Providing gola 75 x 75 mm in cement concrete 1:2:4 ( 1 cement:2 sand: 4 stone aggregate 10 mm and down grade) including finishing with cement mortar 1:3 ( 1 cement : 3 sand) as per standard design:						
12.26.1	In 75 x 75 mm deep chase						
	On Terrace along Parapet	1.00	11.650	20.430		64.160	Sqm
	<b>Total</b>					<b>64.160</b>	<b>Sqm</b>
12.27	Making Khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement:2 Sand: 4 graded stone aggregate of 20 mm nominal size) over P.V.C sheet 1m x 1m x 400 micron , finished with 12 mm cement plaster 1:3 (1 cement : 3 Sand) and a coat of neat cement rounding the edge and making and finishing the outlet complete						
	On Terrace	5.00				5.000	Nos
	<b>Total</b>					<b>5.000</b>	<b>Nos</b>
12.32	Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS:13592 Type A including jointing with scalling conforming to IS:5383 leaving 10 mm gap for thermal expansion. (i) Single socketed pipes						
12.32.2	110 mm diameter (minimum wall thickness 2.2 mm)						
	Rain Water Pipe	5.00	7.000			35.000	M
	<b>Total</b>					<b>35.000</b>	<b>M</b>
12.33	Providing and fixing on wall face Unplasticised Rigid PVC rain water pipes conforming to IS:13592 Type A including jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion						
12.33.1	Coupler						
12.33.1.2	110 mm (minimum wall thickness 2.2 mm)						
		5.00				5.000	Nos
	<b>Total</b>					<b>5.000</b>	<b>Nos</b>
12.33.5	Bend 87.5°						
12.33.5.2	110 mm (minimum wall thickness 2.2 mm)						
	Rain Water Pipe	5.00				5.000	Nos
	<b>Total</b>					<b>5.000</b>	<b>Nos</b>
<b>Sub-Head : Finishing</b>							
13.1	12 mm cement plaster of mix :						
13.1.1	1:4 (1 cement: 4 coarse sand)						
	<b>Horizontal Walls</b>						

	Between X1 and X3 along Grid Y3	1.00	11.950		7.000	83.650	Sqm
	Between X1 and X3 along Grid Y4	2.00	11.950		7.000	167.300	Sqm
	Between X1 and X3 along Grid Y5	2.00	6.100		7.000	85.400	Sqm
	Between X1 and X3 along Grid Y6	1.00	11.950		7.000	83.650	Sqm
	<b>Verical Walls</b>						
	Between Y3 and Y6 along Grid X1	1.00	21.050		7.000	147.350	Sqm
	Between Y3 and Y6 along Grid X2	2.00	14.000		7.000	196.000	Sqm
	Between Y3 and Y6 along Grid X3	1.00	21.050		7.000	147.350	Sqm
	Total for Internal Plaster Work				910.700	45.535	Sqm
	<b>Total</b>					956.235	Sqm
	<b>Say</b>					<b>956.24</b>	<b>Sqm</b>
<b>13.5</b>	<b>15 mm cement plaster on rough side of single or half brick wall of mix :</b>						
<b>13.5.1</b>	<b>1:4 (1 cement: 4 coarse sand)</b>						
	Between X1 and X3 along Grid Y3	1.00	11.950		7.000	83.650	Sqm
	Between X1 and X3 along Grid Y6	1.00	11.950		7.000	83.650	Sqm
	Between Y3 and Y6 along Grid X1	1.00	21.050		7.000	147.350	Sqm
	Between Y3 and Y6 along Grid X3	1.00	21.050		7.000	147.350	Sqm
	Transformer Extension	2.00	10.000		3.600	72.000	Sqm
	Total for Internal Plaster Work				534.000	26.700	Sqm
	<b>Total</b>					560.700	Sqm
	<b>Say</b>					<b>560.70</b>	<b>Sqm</b>
<b>13.38</b>	<b>Providing and applying plaster of paris 2 mm thickness over plastered surface to prepare the surface even and smooth complete</b>						
	Same as area of Interior Walls					956.235	Sqm
	Subtracting for Area of Tiles					-401.499	Sqm
	Transformer Extension					72.000	Sqm
	<b>Repairwork of Staff Quarters</b>						
	<b>Ground floor (Internal Walls)</b>						
	<b>Vertical walls</b>						
	On grid A & F - grid 1/3	2	5.87		3.03	35.51	
	B/w grid B/C & D/E - grid 1/3	2	0.87		3.03	5.26	

	On grid C & D - grid 1/3	2	6.54		3.03	39.57
	On grid B & E - grid 1/3	2	7.51		2.70	40.55
	B/w grid B/C & D/E - B/w grid 2/3	2	1.83		2.70	9.88
	On grid A & F - B/w grid 1/2	2	1.75		0.30	1.05
	Front varandah	2	0.75		0.30	0.45
	Side varandah	2	0.90		0.30	0.54
	Staircase steps	22	1.40		0.45	13.86
	<b>Horizontal walls</b>					
	On grid 1 - grid A/C & D/F	2	6.19		3.03	37.45
	B/w grid 1/2 - B/w grid A/B	2	0.60		3.03	3.63
	B/w grid 2/3 - grid C/D	1	2.80		3.03	8.47
	On grid 3 - grid A/C & D/F	2	4.79		3.03	28.98
	B/w grid 2/3 - B/w grid B/C & D/E	2	1.51		3.03	9.14
	B/w grid 1/2 - grid A/B & E/F	2	3.53		2.70	19.06
	On grid 2 - grid A/C & C/F	2	4.88		2.70	26.35
	B/w grid 2/3 - B/w grid A/C & D/F	2	1.77		2.70	9.56
	Front varandah	2	3.00		0.30	1.80
	Side varandah	2	3.00		0.30	1.80
	Entrance	2	1.90		0.30	1.14
	<b>Deduction</b>					
	D1	-4	1.00		2.65	-10.60
	D2	-4	0.90		2.10	-7.56
	D2A	-2	0.90		2.65	-4.77
	D3	-2	0.90		2.65	-4.77
	D4	-2	0.75		2.10	-3.15
	D4A	-4	0.75		2.65	-7.95
	W1	-6	1.20		1.75	-12.60
	W2	-2	0.75		1.60	-2.40
	W3	-2	0.60		1.75	-2.10
	V1	-4	0.60		0.60	-1.44
	Staircase	-1	2.34		2.10	-4.91
	<b>First Floor (Internal Walls)</b>				<b>231.80</b>	
	Same as ground floor quantity	1	231.80			231.80
	Entrance	-2	1.90		0.30	-1.14
	<b>Mumty</b>					
	On grid C & D - grid 1/3	2	4.97		2.25	22.37





13.45	Distempering with dry distemper of approved brand and manufacture (two or more coats) of required shade on new work, over and including water thinnable priming coat to give an even shade							
	Same as area of Putty						2137.183	Sqm
	<b>Say</b>						<b>2137.18</b>	<b>Sqm</b>
13.47	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade							
13.47.1	New work (two or more coats) over and including water thinnable priming coat with cement primer							
	Same as area of Putty						2137.183	Sqm
	<b>Say</b>						<b>2137.18</b>	<b>Sqm</b>
13.54	Finishing walls with textured exterior paints of required shade:							
13.54.1	New work (two or more coats applied @3.28 ltr/10 sqm) over and including priming coat with exterior primer applied @ 2.20 kg/10 Sqm							
	25% area of Exterior Walls	25.00%	of	1028.675	Sqm		257.169	Sqm
	<b>Say</b>						<b>257.17</b>	<b>Sqm</b>
13.55	Finishing walls with Acrylic Smooth exterior paints of required shade:							
13.55.1	New work (two or more coats applied @1.67 ltr/10 sqm) over and including priming coat with exterior primer applied @ 2.20 kg/10 Sqm							
	75% area of Exterior Walls	75.00%	of	1028.675	Sqm		771.507	Sqm
	Transformer Extension						72.000	Sqm
	<b>Say</b>						<b>843.51</b>	<b>Sqm</b>
13.68	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:							
13.68.1	Two or more coats on new work.							
	Railing for Inner Staircase	2.00	3.000			1.500	9.000	Sqm
	<b>Say</b>						<b>9.00</b>	<b>Sqm</b>
13.84	Providing and applying Granules homogenous wall finishing system consisting of a two component system of dry granules (25 kgs/pack) made of 92% silica particles coated with fade resistant pigments and a 100% acrylic polymer bonding agent (5kgs/pack) applied thickness of the coating being between 0.8-1.2 mm, to be applied in single coat, on a cured, smooth level plaster surface without keying, as per the shades/ combinations approved, as per manufacturer, as per direction/ supervision of the engineers-in-charge inclusive of one coat of primer on the base at all heights etc all complete							

		Area of Exterior Walls					560.700	Sqm
		<b>Say</b>					<b>560.70</b>	<b>Sqm</b>
<b>Sub-Head : Repairs to Buildings</b>								
14.1		Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sqm and under including cutting the patch in proper shape, raking out joints and preparing and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 m lead:						
14.1.1		With cement mortar 1:4 ( 1 cement : 4 sand)						
		Taking Lumpsum 50% area of Existing Building Walls for Repair						
			10.00	21.230		7.000	1486.100	Sqm
			6.00	31.500		7.000	1323.000	Sqm
			4.00	7.000		7.000	196.000	Sqm
		Total				3005.100	150.255	Sqm
		Total Area					3155.355	Sqm
		50% of Total Area					1577.678	Sqm
		<b>Say</b>					<b>1577.678</b>	<b>Sqm</b>
14.5		Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:						
14.5.2		Float glass panes of thickness 5.5 mm						
		Windows of Existing building	15.00	1.500		1.200	27.000	Sqm
		<b>Say</b>					<b>27.000</b>	<b>Sqm</b>
14.28		Distempering with dry distemper of approved brand and manufacture (one or more coats) of required shade on old work to give an even shade						
		50 % of Existing Building Walls Area					1577.678	Sqm
		<b>Say</b>					<b>1577.678</b>	<b>Sqm</b>
14.29		Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade:						
14.29.1		Old Work (One or more coats)						
		50 % of Existing Building Walls Area					1577.678	Sqm
		<b>Say</b>					<b>1577.678</b>	<b>Sqm</b>
14.30		Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete						
		Existing Building Walls Area					3155.355	Sqm
		<b>Say</b>					<b>3155.355</b>	<b>Sqm</b>
<b>Sub-Head : Dismantling and Demolishing</b>								

15.3	Demolishing R.C.C work manually/by mechanical means including stacking of steel bars and disposal of unservicable material 50 metres lead as per direction of Engineer-in-Charge.							
	Existing Dock	1.00	14.200	1.500	0.200	4.260	Cum	
	<b>Say</b>					<b>4.260</b>	<b>Cum</b>	
15.4	Extra for cutting reinforcement bars manually/by mechanical means in R.C.C work (Payment shall be made on the cross sectional area of R.C.C work) as per direction of Engineer-in-Charge)							
	Existing Dock	1.00	14.200	1.500		21.300	Sqm	
	<b>Say</b>					<b>21.300</b>	<b>Sqm</b>	
15.5	Extra for scrapping, cleaning and straightening reinforcement from R.C.C work							
	Taking weight of Reinforcement @45kg/Sqm					958.500	Kg	
	<b>Say</b>					<b>958.500</b>	<b>Kg</b>	
15.6	Demolishing brickwork manually/ by mechanical means including stacking of servicable material and disposal of unservicable material within 50 metres lead as per direction of Engineer-in-Charge.							
15.6.3	In cement mortar							
	Demolishing Existing Brick Wall BW-1	1.00	21.050	0.230	7.000	33.891	Cum	
	<b>Say</b>					<b>33.891</b>	<b>Cum</b>	
15.7	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):							
15.7.2	From brick work in cement mortar							
	No of Bricks (500 bricks in 1 Cum)	1.00	33.891	Cum	500.000	16945.250	Nos	
						<b>16.945</b>	<b>1000 Nos</b>	
	<b>Say</b>					<b>16.945</b>	<b>1000 Nos</b>	
15.14	Dismantling doors, windows and clerestorey windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:							
15.14.1	of area 3 sq. metres and below							
	Windows towards the Extension Portion	2.00				2.000	Nos	
	<b>Say</b>					<b>2.000</b>	<b>Nos</b>	
15.15	Taking out doors, windows and clerestorey window shutters (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:							
15.15.1	of area 3 sq. metres and below							

	Windows towards the Extension Portion	2.00				2.000	Nos
	<b>Say</b>					<b>2.000</b>	<b>Nos</b>
15.51	Dismantling of manhole including R.C.C top slab, C.I cover with frame including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead:						
15.51.2	Rectangular manhole 120 X 90 cm and 90 cm deep						
	Windows towards the Extension Portion	6.00				6.000	Nos
	<b>Say</b>					<b>6.000</b>	<b>Nos</b>
15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.						
	Total Malba					46.151	Cum
	Soil to be disposed					486.608	Cum
	<b>Say</b>					<b>532.758</b>	<b>Cum</b>
1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge.						
	Note - item to be applicable in urban areas having directions for restricted hours for movement/ plying of load carrying motor vehicle of 3.5 cum or more.						
	Total Malba					532.758	Cum
	<b>Say</b>					<b>532.758</b>	<b>Cum</b>
<b>Sub-Head : Aluminium Work</b>							
21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :						

21.1.1	For fixed portion							
21.1.1.2	<b>Powder coated aluminium (minimum thickness of powder coating 50 micron)</b>							
	Door Frame as per Hindalco Rectangular Tube TU 3941 (150 X 25 X 2.0) mm thk	4.00	6.000	@	1.853	44.472		Kg
						44.472	2.224	Kg
	Total						46.696	Kg
	<b>Say</b>						<b>46.70</b>	<b>Kg</b>
21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)							
21.1.2.2	<b>Powder coated aluminium (minimum thickness of powder coating 50 micron)</b>							
	Lock Rail as per Hindalco Doors Vertical SP5289 (85.0 X 44.50 X 2.0) mm thk	8.00	0.900	@	1.485	10.692		Kg
	Top Rail as per Hindalco Doors Center SP3622 (86.70 X 44.50 X 3.0) mm thk	8.00	0.900	@	2.024	14.573		Kg
	Bottom Rail as per Hindalco Doors Bottom SP3413 (86.70 X 44.50 X 3.0) mm thk	8.00	0.900	@	2.710	19.512		Kg
	Side Rail as per Hindalco Doors Vertical SP1771 (85.0 X 44.50 X 3.0) mm thk	16.00	2.400	@	2.100	80.640		Kg
	Snap Beading	4.00	31.200	@	0.176	21.965		Kg
						147.382	7.369	Kg
	Total						154.751	Kg
	<b>Say</b>						<b>154.75</b>	<b>Kg</b>
21.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.							
21.2.2	Pre-laminated particle board with decorative lamination on both sides	8.00	1.800		0.900	12.960		Sqm
	<b>Say</b>						<b>12.96</b>	<b>Sqm</b>
21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):							
21.3.2	With float glass panes of 5.50 mm thickness							

		8.00	1.800		1.500	21.600	Sqm
	Total					21.600	Sqm
	Say					21.60	Sqm
21.5	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.						
21.5.1	With stainless steel cover plate minimum 1.25 mm thickness						
	One for each Shutter					8.00	Nos.
21.9	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.						
21.9.1	Upto 5mm depth and 5 mm width						
	Same as length of door Frame	4.00	1.800		2.400	21.000	m.
	Total					21.000	m.
	Say					21.00	m.
<b>Sub-Head : Water Proofing Work</b>							
22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for Treatment of roofs, balconies, terraces etc, consisting of following operations. (a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietary water -proofing compound cleaning the surface before treatment, (b) Laying cement concrete using broken bricks / brick bats 25 mm to 100 mm size with 50 % of cement mortar 1:5 (1 cement: 5 coarse sand ) admixed with proprietary water proofing compound conforming to IS : 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS 2545 to required slope and treating similar the adjoining walls up to 300 mm height including rounding of junctions, or walls ad slabs. (c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing						

	compound conforming to IS: 2645. (d) Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement: 4 coarse sand ) admixed with proprietary water proofing compound conforming to IS : 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 x 300 mm square. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test, All above operations to be done in order and as directed and specified by the Engineer-in-Charge.						
22.7.1	With average thickness of 120 mm and minimum thickness at khurras point to be 65						
	Total Terrace Area of Extension	1.00	11.950	24.050		287.398	Sqm
	Total Terrace Area of Existing Building	1.00	21.000	24.050		505.050	Sqm
		1.00	7.230	24.050		173.882	Sqm
	Total Roof Area				966.329	48.316	Sqm
	<b>Total</b>					<b>1014.645</b>	<b>Sqm</b>
	<b>Say</b>					<b>1014.645</b>	<b>Sqm</b>
22.17	Providing and laying in situ six course water proofing treatment with APP (Atactic Polypropylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40 Kg per Sqm, 2nd, 4th and 6th courses of bonding material @1.20 Kg/Sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS:702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 2.0 mm thick of 3.00 Kg/Sqm weight consisting of five layers prefabricated with centre core as 100 micron HMHDPE film sandwiched on both sides with polymeric mix and polymeric mix is protected on both sides with 20 micron HMHDPE film. (With 5 years service gaurantee)						
	Same as Item S.No 12.1					1014.645	Sqm
	<b>Say</b>					<b>1014.645</b>	<b>Sqm</b>
<b>Sub-Head : Pile Work and Drain</b>							



20.1	Providing,driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-35 of specified diameter and length below and pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe cement concrete and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap):						
20.1.1	400 mm dia piles						
	Total Length of Pile Work	48.00	10.000			480.000	M
	Say					480.000	M
AOR	Drain Line (300X450)						
	Total Length of Drain Line (Towards 3 sides of Extension Building)	1.00	11.950	21.030		44.930	M
	Say					44.930	M
<b>Sub-Head : Miscellaneous Items</b>							
N.S.	Providing and fixing of " SKYPORT D LINE INDIA " or equivalent modular passivated stainlesssteel " Wold free " railing system for staircase and handicapped ramp of required and approved size and shape confirming to ASAISI - 304 grade stainless steel tube of 42.3mm dia X 1.6mm thickness for top rails and verticals and three rows of stainless steel tube of AISI - 304 grade stainless steel of 16mm dia X 1.2mm thickness for intermidiate steel tube and components duly in box coated and all components of investments costing with all visible steel metal in 240 grit satin finish complete with installations at site, by fixing in walls and floors all complete as per approved pattern and of Engineer-In-Charge.						
	Total Length of internal staircase railing					12.500	R.Mt
	Taking weight @16kg/metre					200.000	Kg
	Total					200.000	kg
DSR/2.34	Supplying chemical emulsion in sealed containers including delivery as specified.						
2.34.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%						
	@ 1 ltr. Per Sqm of Area in Item S.No 1.5					265.32	Litres
	Total					265.32	Litres
	Say					265.32	Litres
DSR/15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.						

	Total Terrace Area of Existing Building	1.00	21.000	24.050		505.050	Sqm
		1.00	7.230	24.050		173.882	Sqm
	Total Roof Area				678.932	33.947	Sqm
	<b>Total</b>					<b>712.878</b>	<b>Sqm</b>
	<b>Say</b>					<b>712.878</b>	<b>Sqm</b>
DSR/15.27	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.						
	Same as Item S.No. 14.4	1.00	712.878	Sqm @	0.075	53.466	Cum
	<b>Say</b>					<b>53.466</b>	<b>Cum</b>

Sr.No.	MPPWD/SOR-14	Description of Item	Quantity	
<b>Sub-Head : 300X450 Drain</b>				
1.1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means)		
a)	2.6.1	All kinds of soil	12.72	cum
1.2	2.27	Supplying and filling in plinth with hard moorum/hardcopra under floors including watering ramming consolidating in layers not exceeding 20 cm in depth and dressing complete.	2.40	cum
1.3	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:		
	4.1.2	With 40 mm nominal size graded stone aggregate		
b)	4.1.2.2	Nominal Mix-1 cement : 3 sand : 6 graded stone aggregate (M10)	0.80	cum
1.4	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).		
	5.3.1	M-20 Grade Concrete	2.70	cum
1.5	5.9	Centring and shuttering including strutting, propping etc. and removal of form for:		
a)	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	30.00	sqm
b)	5.9.3	Suspended floors, roofs, landings, balconies and access platform.	10.83	sqm
1.6	5.16	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.		
a)	5.16.6	Thermo-Mechanically Treated bars.	333.82	kg
1.8	11.2	52 mm thick cement concrete flooring with concrete hardener topping under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume	3.00	sqm

		.hardening compound is mixed @ 2 litre per 50kg of cement or as per manufacturers specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.		
1.9	13.1	12 mm cement plaster of mix:		
a)	13.1.1	1:4 (1 cement : 4 fine sand)	18.00	sqm
1.10	13.10	Neat cement punning	18.00	sqm

Sr.No.	MPPWD/EMSOR-14	Description of Item	Quantity	
<b>Sub-Head : Wiring in Steel &amp; PVC Conduit</b>				
<b>Wiring in Surface Rigid P.V.C Conduit System with Copper Conductor Using Modular Accessories</b>				
1.1	3	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit etc. as required as per specification for :-		
	3.1	Light Point/Fan Points.		
	b)	Medium Point	64.00	Each
	3.2	3 Pin 6 Amp socket outlet on Separate Board		
	b)	Medium Point	30.00	Point
1.2	3.6	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size etc. as required as per specification		
	a)	2X2.5 Sqmm	171.82	m
	b)	4X2.5 Sqmm	171.82	m
<b>Power Wiring in Surface Rigid P.V.C. Conduit (MMS) system with copper conductor</b>				
1.3	7.1	Point wiring (excluding metallic switch box & sheet ) for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C, Conduit (MMS) ISI Marked of suitable size etc. with 16 Amp. F.T. Switch & Socket / S.S. Combined 6/16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
		<b>On Separate Board</b>		
	B.	Medium Point	20.00	Point
	7.2	Same board switch socket 6/16 Amp	10.00	Point
1.4	19	Supplying and drawing single core PVC insulated cable FR with copper multi strand conductor ISI marked in existing rigid PVC Casing-N-Capping / conduit in surface or concealed as per specification.		
	19.3	1 X 4.00 sq mm		
	19.3.4	(d) 4 X 4.00 sq.mm	98.76	m

<b>Metallic Switch Boxes &amp; Modular Boxes</b>				
1.5	18.2	Supplying and fixing of approved make modular type metal box with modular frame/ base plate and cover plate including fixing in concealed / surface excluding switch,socket etc. as required for:-		
	18.2.2	3 module	8.00	No.
	18.2.3	4 module	10.00	No.
	18.2.4	6 Module	10.00	No.
	18.2.6	12 module	5.00	No.
	18.2.7	16 module	5.00	No.
<b>Total of the Sub-Head - Wiring in Steel &amp; PVC Conduit :</b>				
<b>Sub-Head : MCCB, MCB &amp; DB's</b>				
2.1	27.9	Supplying of approved make Vertical TPN MCB DB Metal Double Door IP 43 protection with provision for FP CB/Isolator/RCCB/RCBO as incomer and SP/TP MCBs as outgoing inclusive of Bus bar, Neutral bar, Earth bar & two earth terminals etc. complete as per IS:13032( exclusive of MCB & isolator)		
	27.9.3	12 way (8 + 36)	1.00	Each
2.2	27.5	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle , 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-		
	27.5.1	Single pole		
	27.5.1.2	6 Amp to 32 Amp Rating	12.00	Each
2.3	27.6	Supplying of MCB Isolators suitable for 240/415 Volts, 50 Hz AC supply with KA value rating 10 kA of approved make confirming to IS :13947-Part III : 1993 & IEC :609473:2001 (without enclosures ) :-		
	27.6.4	Four Pole		
	27.6.4.1	40 amps	1.00	Each
	27.6.4.2	63 amps	1.00	Each
		TPN RCCB:		
2.4	27.12	Supplying & fixing of approved make Industrial type metal plug & socket DBs (without MCB) SPN sheet encloser (dust protected ) inclusive of 2 pole and earth metal plug and socket and space to incorporate SP MCB complete as per specification as required.		
	27.12.2	20 Amps	12.00	Each
2.5	27.13	Supplying & fixing of ISI marked Industrial type metal plug socket D.B.s (without MCBs) for TPN encloser three pole and earth metal plug and socket including space incorporating TP MCB complete as per specification as required.		
	27.13.2	30 Amps	12.00	Each
<b>Total of the Sub-Head - RMCCB, MCB &amp; DB's :</b>				
<b>Sub-Head :Lighting Fixtures and Fan</b>				
3.1	30.5	Supplying and fixing of Deluxe fresh air fan with louvers (ventilating fan ) with self closing louvers of decorative PVC blades mounting square frame of approved make complete with all necessary material as required		
	30.5.4	300mm RPM1300/1400	12.00	No.

3.2	30.1	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS :374/1979 with up to date ammendments		
	30.1.1	Ceiling Fan (5 star & ISI)-1200 mm Sweep	12.00	No.
3.3	31.22	Supply and fixing Led tube rod comprising of LED tube with non integral / integral driver, 6500K color temp having 40000 burning hrs life with minimum @ L 70, system lumen output should be minimum with efficacy > 80 lm/W. LED driver PF 0.95 & THD < 20%. The colour rendering index of LED light should be more than 70. Submission LM 80-08 Form LED Source Manufacturer & LM79-08 / IS16106 from NABL approved lab. Manufacturer mandatory i/c connection wire, testing etc. to complete the job. 2 Yrs Guarantee certificate from manufacturer.		
	31.22.3	1 X 18/20/22W, Non Integral with driver	40.00	No.
		<b>Total of the Sub-Head - Lighting Fixtures and Fan :</b>		
		<b>Grand Total :</b>		
		<b>Total of Schedule Items (CI applicable) :</b>		
		<b>Total of LMR Items (CI not applicable) :</b>		

## SECTION 6: DRAWINGS

## **SECTION 7: FORMS OF SECURITIES**



## **Forms of Securities**

Acceptable forms of securities are annexed. Bidders should not complete the Performance Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

**Annex A:** Bid Security (Bank Guarantee)

**Annex B:** Performance Bank Guarantee

**BID SECURITY (BANK GUARANTEE)**

WHEREAS, \_\_\_\_\_ [*name of Bidder*] (hereinafter called "the Bidder") has submitted his Bid dated \_\_\_\_\_ [*date*] for the construction of \_\_\_\_\_ [*name of Contract*] (hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that We \_\_\_\_\_ [*name of bank*] of \_\_\_\_\_ [*name of country*] having our registered office at \_\_\_\_\_ (hereinafter called "the Bank") are bound unto \_\_\_\_\_ [*name of Employer*] (hereinafter called "the Employer") in the sum of \_\_\_\_\_<sup>1</sup> for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_.

THE CONDITIONS of this obligation are:

- (1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;

or

- (2) If the Bidder having been notified of the acceptance of his bid by the Employer during the period of Bid validity:
  - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or
  - (c) does not accept the correction of the Bid Price pursuant to Clause 27;

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date \_\_\_\_\_<sup>2</sup> days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE \_\_\_\_\_ SIGNATURE OF THE BANK \_\_\_\_\_

WITNESS \_\_\_\_\_ SEAL \_\_\_\_\_

\_\_\_\_\_  
[signature, name, and address]

\_\_\_\_\_

- 1 The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.
  
- 2 45 days after the end of the validity period of the Bid.

## 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 recognized bank 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 \_\_\_\_\_ [*amount of guarantee*]  
<sup>1</sup> \_\_\_\_\_ [*in words*], 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*]<sup>1</sup> 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 thereunder 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 ..... (i.e.) 28 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

1 An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees