



JAIPUR DEVELOPMENT AUTHORITY

**Name of Work:- SITC and operation maintenance (05
Yr) of Lift elevators at RIC near OTS
Jaipur.**

TECHNICAL BID

**EXECUTIVE ENGINEER (ELECT.-IV)
JAIPUR DEVELOPMENT AUTHORITY,
JAIPUR**

जयपुर विकास प्राधिकरण, जयपुर

इन्दिरा सर्किल जे.एल.एन. मार्ग, जयपुर

बिड सूचना/जविप्रा/अधि.अभि./विद्युत-चतुर्थ/2022-23/डी- 159 दिनांक: 19.05.2022

पूर्ण कालीन बिड सूचना सं. 03/2022-23

जविप्रा के जोन (विद्युत-चतुर्थ) में " **SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur.**" जिसकी अनुमानित राशि रू. 275.50 लाख के लिए ऑनलाईन बिड्स दिनांक 13.06.2022 सायंकाल 06:00 बजे तक आमंत्रित की जाती हैं। निविदा बोली का ऑनलाईन आवेदन व भुगतान जयपुर विकास प्राधिकरण पोर्टल पर करने की अन्तिम तिथि 13.06.2022 को सायंकाल 06.00 बजे तक हैं। निविदा बोली के दस्तावेजों का विस्तृत विवरण www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jda.urban.rajasthan.gov.in पर देखा जा सकता है।

UBN No.....

निविदादाता को निविदा में भाग लेने हेतु आवश्यक है कि :-

1. जयपुर विकास प्राधिकरण की वेबसाईट www.jda.urban.rajasthan.gov.in पर पंजीकृत हो तथा निविदा शुल्क व आर.आई.एस.एल. प्रक्रिया शुल्क केवल ऑनलाईन ही देय होगी।
2. ऑन लाईन निविदा में भाग लेने हेतु राजस्थान सरकार के पोर्टल www.eproc.rajasthan.gov.in पर पंजीकृत हो।

अधिशाषी अभियन्ता (विद्युत-चतुर्थ),
जविप्रा, जयपुर।

JAIPUR DEVELOPMENT AUTHORITY

Room No. CCC-B-1, CCC Building, Ram Kishore Vyas Bhavan, Indira Circle, JawaharLal Nehru Marg, Jaipur - 302004

Telephone: +91-141-2569696 e.mail: satyendrameena.jda@rajasthan.gov.in

No. JDA/XEN/Elect-IV/2022-23/D- 159

Dated : 19.05.2022

NOTICE INVITING BID

NIB No.- : 03/2022-23

Online Bids are invited up-to 06:00 PM of 13.06.2022 for **“SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur.”** estimated cost of Rs. 275.50 Lacs. The last date for applying bid and making online payment on JDA portal is up to 06.00 PM dated 13.06.2022. Details may be seen in the Bidding Document at our office or the website of State Public Procurement Portal website www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in and www.jda.urban.rajasthan.gov.in.

UBN No.....

To participate in the bid, bidder has to be:

1. Registered on JDA website www.jaipurida.org For participating in the Bid, the Bidder has to apply for the Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.
2. Registered on e-Procurement Portal of Government of Rajasthan www.eproc.rajasthan.gov.in for online e-Bid submission.

Executive Engineer (Elect-IV)
JDA, Jaipur

JAIPUR DEVELOPMENT AUTHORITY

Room No. CB FF 121, CCC building, Ram Kishore Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302004 Telephone: +91-141-2569696 e.mail : xxxxxxx@jaipurjda.org

JDA/XEN/Elect-IV/2022-23/D- 159

Dated : 19.05.2022

NOTICE INVITING BID

NIB No. : 03/2022-23

Name & Address of the Procuring Entity	<ul style="list-style-type: none">➤ Name: Executive Engineer (Elect-IV), Jaipur Development Authority➤ Address: Room No. MB FF-134, Main Building, Ram Kishore Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302004
Subject Matter of Procurement	<ul style="list-style-type: none">➤ SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur➤ JDA/EE Project 02/A & F/2019-2020/Mar/NR-014 Dated : 13/03/2020
Bid Procedure	<ul style="list-style-type: none">➤ Two Bid, eg. Two stage open competitive. eBid procedure at http://eproc.rajasthan.gov.in
Bid Evaluation Criteria (Selection Method)	<ul style="list-style-type: none">➤ L1 (eg.Least Cost Based Selection (LCBS)-L1)
Websites for downloading Bidding Document, Corrigendum's, Addendums, etc.	<ul style="list-style-type: none">➤ Websites: www.sppp.rajasthan.gov.in, www.eproc.rajasthan.gov.in, jda.urban.rajasthan.gov.in
Website for online Bid application and payment *	<ul style="list-style-type: none">➤ Website: http://jda.urban.rajasthan.gov.in➤ For participating in the Bid, the Bidder has to apply for this Bid and pay the Bidding Document Fee, RISL Processing Fee and Bid Security Deposit, online only.<ul style="list-style-type: none">○ Bidding document fee: Rs. 1000.00 (Rupees One Thousand only)○ RISL Processing Fee: Rs. 1000.00 (Rupees One Thousand only)○ Requisite Bid Security Deposit -
Estimated Procurement Cost	<ul style="list-style-type: none">➤ INR 275.50 Lacs (Rs. Two Crore Seventy Five Lacs Fifty Thousand Only)
Bid Security Deposit	<ul style="list-style-type: none">➤ Amount (INR) : 2% 551000.00) of Estimated Procurement Cost, 0.5% of S.S.I. of Rajasthan, 0.5% (137750.00) for Bidder registered as contractor in JDA, 1% for Sick Industries, other than S.S.I., whose cases are pending with Board of Industrial & Financial Reconstruction➤ (*2% for bidder who is E-I class contractor registered in other Govt. Department) / 0.5% for bidder registered as contractor E-I in JDA.➤ Micro small medium Enterprises situated in Rajasthan Tender Fee 50% EMD value 0.5%➤ Incase of department of the state govt. and undertaking, corporations, Autonomous bodies, Registered societies, cooperative societies which are owned or controlled or managed by the state Govt. and Govt. undertaking of the central Govt. shall submit a bid securing declaration in lieu of bid security.➤ Eligibility: Bidder who is A and AA, E-I class contractor registered in other Govt. Department and bidder registered as contractor AA, A, E-I, in JDA
Date/Time/Place of Pre-Bid	<ul style="list-style-type: none">➤ N/A
Applying bid and making online payment on JDA portal (www.jda.urban.rajasthan.gov.in)	<ul style="list-style-type: none">➤ Start Date: 23.05.2022at 9.30 AM onwards➤ End Date: 13.06.2022 at 06:00 PM➤ In case EMD in from BG original bank guarantee is to be submitted in room no MB-SF-225A (Room no. of DD (E&B) of main building, JDA, Jaipur by 14.06.2022 to 16.06.2022 up to 4.00 PM
Bid submission on e-procurement portal of GOR (www.eproc.rajasthan.gov.in)	<ul style="list-style-type: none">➤ Start Date: 23.05.2022 at 9.30 AM onwards➤ End Date: 13.06.2022 at 06:00 PM
Date/ Time/ Place of Technical Bid Opening	17.06.2022 at 11.00 AM, Room No. CCC TF-311, Citizen Care Center , Ram Kishore Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302004
Date/ Time/ Place of Financial Bid Opening	<ul style="list-style-type: none">➤ Informed latter to qualified bidders
Bid Validity	<ul style="list-style-type: none">➤ 120 days from the bid submission deadline
Time Period	<ul style="list-style-type: none">➤ 4 (Four) Months

Note:

1. Bidder (authorized signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal.
2. In case, any of the bidders fails to pay the Tender Fee, BSD, and RISL Processing Fee, online (subject to confirmation), its Bid shall not be accepted.
3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Type III) as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, Safe crypt, Ncode etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC. Also, bidders must register on <http://eproc.rajasthan.gov.in> (bidders already registered on <http://eproc.rajasthan.gov.in> before 30-09-2011 must register again).
4. JDA will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
5. Bidders are also advised to refer "Bidders Manual Kit" available at eProc website for further details about the e-Tendering process.
6. Training for the bidders on the usage of e-Tendering System (eProcurement) is also being arranged by DoIT&C, GoR on a regular basis. Bidders interested for training may contact e-Procurement Cell, DoIT&C for booking training slot.
Contact No: 0141-4022688 (Help desk 10 am to 6 pm on all working days) e-mail: eproc@rajasthan.gov.in
Address : e-Procurement Cell, JDA, Yojana Bhawan, Tilak Marg, C-Scheme, Jaipur
7. The procuring entity reserves the complete right to cancel the bid process and reject any or all of the Bids.
8. No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder.
9. Procurement entity disclaims any factual/ or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal.
10. The provisions of RTPPA Act 2012 and Rules thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and Rules thereto, the later shall prevail.

➤ **The Following condition is now the part of the tender document.**

- **Difference amount BG refunded after successful completion of DLP period as per order of Principal Secretary UDH Vide no. P-01(24)NVV/1/25020 Loos Jaipur dated 20.09.2021**

**Executive Engineer (Elect-IV)
JDA, Jaipur**

JAIPUR DEVELOPMENT AUTHORITY JAIPUR

TECHNICAL BID **(POTENTIAL ASSESSMENT)**

Envelop-1

FOR

**SITC and operation maintenance (05 Yr) of Lift elevators at RIC near
OTS Jaipur.**

Period of Sale: - FROM 23.05.2022, 9.30 am To 13.06.2022, 6.00 pm
Date of receipt of the tender: - UP TO 13.06.2022, 6.00 PM
Date of opening of Technical bid: - On 17.06.2022 AT 11.00 AM at Room No. CCC TF-311,
Citizen Care Center , Ram Kishore Vyas Bhawan, Indira
Circle, Jawahar Lal Nehru Marg, Jaipur - 302004
Cost of tender: - Rs. 275.50 Lacs
Completion period: - 04 Months

NAME OF AGENCY -----

EXECUTIVE ENGINEER (Elect.-IV)
JDA, Jaipur.

Jaipur Development Authority, Jaipur

Office Order

No. : JDA/IT(1074501)/E-Services/2015-16/D-399

Dated: 4-10-2016

Subject: Payment mechanism for participating in tender.

Jaipur Development Authority has decided to receive Earnest Money Deposit (EMD) (Bid Security), Tender Fee and RISL processing fee online through JDA Portal. The bid security options available in tender for participants are as mentioned below:

A. Payment Options:

Option-1: Bank Guarantee (BG) against EMD / Bid Security

Bidder may opt Bank Guarantee (BG) against EMD (Bid Security), for which bidder requires to prepare BG before applying in the tender. The details of BG requires to be fed on JDA portal before paying balance amount (Tender Fee + RISL Processing Fee). This amount will be paid through **Payment Gateway only**, option to make balance payment through EFT (RTGS/NEFT) will not be available.

If bidder does not opt for BG against EMD, options of making complete payment through Payment Gateway or through EFT (NEFT / RTGS) will be available.

Option-2: Electronic Fund Transfer (EFT: NEFT/RTGS)

If the bidder selects payment mode as EFT (NEFT/RTGS), "**Paying Slip for EFT (NEFT/RTGS)**" will be generated by the system for the complete amount. The payment can be made from **any Bank any Branch** using this Paying Slip through NEFT/RTGS (Claim against payment made through EFT in any other JDA bank account will not be acceptable and bidder stands disqualified from participation in the bid applied for). After successful transaction through NEFT/RTGS, as per the standard procedures it may take 4 to 24 hours in process of confirmation of EFT through Auto-Process depending on the time of EFT done. Therefore, option to make payment through EFT (NEFT/RTGS) will be available till 2 days prior to closing date of bid participation.

Option-3: Payment Gateway (Aggregator)

The facility to make payment through Debit Card, Credit Card, Net banking etc., will be available. User can use this facility from **anywhere any time** till the closing date & time of bid participation.

B. Bid Participation Receipt

After confirming payment, the bidder will get Bid Participation Receipt on the basis of which user will get the payment details along with other details for bidding on e-Procurement portal of GOR.

- In case of BG as the remaining payment will be done through Payment Gateway, on successful transaction the "**Bid Participation Receipt**" will be generated on real time basis.

- In case complete payment is done through Payment Gateway, on successful transaction the "Bid Participation Receipt" will be generated on real time basis.
- In case complete payment is done through EFT (NEFT/RTGS), on confirmation of payment from ICICI Bank (Auto Process) "Bid Participation Receipt" will be available on Login of Bidder on JDA portal.

This payment mechanism will come into force w.e.f 15/10/2016. Thereafter, old payment mechanism related to NEFT/ RTGS in which the bidder makes direct payment without "Paying Slip for EFT (NEFT/RTGS)" in JDA's bank account will be discontinued.

All procuring entities are hereby directed to clearly mention this procedure in NIB document.


(Pawan Arora)
Secretary

Copy for information and further necessary action to:

1. P.S. to JDC, JDA, Jaipur.
2. P.S. to Secretary, Secretary, JDA, Jaipur.
3. Director (Law / Finance / Town Planning / Engineering-I / Engineering-II), JDA, Jaipur.
4. All Additional Chief Engineer _____, JDA, Jaipur
5. DC (Administration)/DC(Store)/DC (Vehicle), JDA, Jaipur
6. System Analyst, JDA, Jaipur
7. Analyst-cum-Programmer, JDA to ensure integration of software w.e.f 01/10/2016.
8. All Xen _____, JDA, Jaipur.
9. Officer-in-charge, SPPP Portal, Jaipur.
10. OSD (Public Relation) / PRO, JDA, Jaipur.


(Brijesh Kishore Sharma)
OSD (RM)



राजस्थान सरकार
नगरीय विकास एवं आवासन विभाग

क्रमांक:- प.01(24)नविवि/1/2020 लूज

जयपुर, दिनांक:- 20 SEP 2021

आदेश

नगरीय विकास एवं आवासन विभाग के अर्न्तगत विभिन्न विकास कार्यों की निविदाओं में संवेदकों द्वारा बी.एस.आर. दर से कम दर डालने पर अन्तर राशि (AT PAR की दर से जितनी कम है) वर्क परफोरमेंस गारन्टी के रूप में कार्य प्रारम्भ करने से पूर्व ली जाएगी तथा इसे कार्य के सन्तोषजनक रूप से पूर्ण होने के पश्चात दोष निवारण अवधि में कार्य की स्थिति सन्तोषजनक पाए जाने पर, दोषनिवारण अवधि उपरान्त वापस लौटा दिया जावेगा। न्यूनतम दरदाता की बोली नियमानुसार स्वीकृत कर Letter of acceptance (LOA) जारी किया जावेगा एवं बी.एस.आर. दर से कम दर की अन्तर राशि की BG/FDR/NSC प्रस्तुत करने हेतु 14 दिवस का समय दिया जायेगा। अन्तर राशि जमा नहीं कराने पर BID SECURITY की राशि नियमानुसार जब्त कर ली जावे। यदि संवेदक वर्क परफोरमेंस गारन्टी राशि जमा कराने के पश्चात कार्य सन्तोषजनक रूप से पूर्ण नहीं करता है अथवा दोष निवारण अवधि में कार्य में खराबी होती है तो उसकी वर्क परफोरमेंस गारन्टी की राशि जब्त कर ली जावे एवं अनुबन्धानुसार अन्य कार्यवाही भी संपादित की जावे। यह आदेश तुरन्त प्रभाव से लागू किये जाते है। यह आदेश उन सभी निविदाओं पर लागू होगा जो कि भविष्य में जारी होगी तथा वे निविदाएं जो इस आदेश के जारी होने की दिनांक तक अप्राप्त है, इस सम्बन्ध में निविदा दस्तावेजों में आवश्यक संशोधन तुरन्त संबन्धित उपापन अधिकारी द्वारा किया जावे एवं नवीन सभी निविदाओं में उक्त शर्तों का समावेश किया जाना सुनिश्चित किया जावे।

यह आदेश सक्षम स्तर से अनुमोदित है।

(कुन्जीलाल मीना)
प्रमुख शासन सचिव
नगरीय विकास विभाग

Jaipur Development Authority

Bid Participation Receipt

Date & Time : 09/06/2015 05:13 PM

Bid Detail

Bid Id : 6215152001	Procurement Entity : XXXXXXXXXXXXX
Bid Title : Testing	
Bid Value : 300000	Bid Opening Place : Manthan Hall, Jaipur Development Authority

Bidder Detail

Name of Entity :	XXXXXXXXXXXX	Mobile:	9829012345
Registration Type:	Individual	Instrument Amount :	32500.00
Payment Mode:	Online/UTR	Payment Channel :	Payment Gateway/ICICI Branch - JDA
Instrument No :	456123789	Instrument Date :	17-06-2015

Dates Detail

Sr. No.	Event Name	Event Date
1	Publishing Date	01/06/2015 01:00 PM
2	Bid Opening Date	01/07/2015 03:00 PM

Specific Instrument Detail for eProc Rajasthan

Instrument Type: DD			
Instrument Number	Head Name	Amount	Date
10000	Tender Fee	400.00	05/06/2015
10001	RISL Processing Fee	1000.00	05/06/2015
10002	Bid Security Deposit	30,000.00	05/06/2015

Issuer Detail : Jaipur Development Authority **ChallanNumber:** 641515600014

Specified Bank Guarantee Performa

Section - 6

Form of (Bank Guarantee) -En cashable at branch of the bank in Jaipur City.

To Secretary,

Jaipur Development Authority,
Jaipur

Sub: Bank Guarantee No. _____ dated _____ for [amount of Security in figures] [in words] on behalf of _____ [Name of the Bidder] against the EMD/Security Deposit/Additional Performance Guarantee for the work of (..... **Name Of Work**).....

.....WHEREA S, _____ [name of Bidder with address] (**hereinafter called “the Bidder”**) has submitted his Bid dated for the **work of** (.....Name Of Work)

(hereinafter called “the Bid”). KNOW ALL PEOPLE by these presents that we _____ (Name of Bank) of having our registered office at _____ [name of country] having our registered office at _____ (hereinafter called “the Bank”) are bound unto Secretary, Jaipur Development Authority.(Hereinafter called “theEmployer”)in the sum of Rupees _____ [**Amount of Security in figures**] _____ (in words) only for which payment will and truly to be made to the said Employer, the Bank binds itself, its successors, and assigns by these presents.

That on demand of JDA , this Bank Guarantee is encashable at following branch in Jaipur City.

1. Name of Bank:
2. Name of the branch with branch code:
3. Address:
4. E-Mail Id:
5. Telephone No.
6. Fax No.:

SEALED with the Common Seal of the said Bank this _____ day of _____ of 20.

THE CONDITIONS of this obligation are:

- (1) if the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid;
- (2) if the Bidder refuses to accept the correction of errors in his bid;
- (3) 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

Instructi

ons to Bidders, or

(b) fails or refuses to furnish the Performance Security, in accordance with the

Instructions to Bidders;

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 more of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 30 days after the date of expiration of the Bid Validity, as stated in the Instructions to Bidders, or any such extension thereto as may be agreed by the Bidder, 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.

The amount covered under the above Bank Guarantee shall be automatically be credited in the accounts of JDA in ICICI Bank, JDA Campus, Jaipur through **ISFC code No ICIC0006754. Bank Account No. 675401700518** on the date of expiry or its validity, unless the agencies get it re-validated well before its expiry date or produce NOC from JDA in written for its release.

Date _____ Signature of the Bank _____

Witness _____ Seal _____ [Signature, Name and

[Note: To be furnished on appropriate non-judicial stamps.]

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

SPECIAL CONDITION

- The following condition is now the part of the tender document.
 - **“BG/FDR/NSC for difference amount shall be refunded after successful completion of DLP period as per order of Principle Sectary UDH Vide no. P-01(24)NVV/1/25020 Loos Jaipur dated 20.09.2021.**

SCHEDULE 'H'

01. If there is any typographical error or otherwise in the 'G' Schedule the rates given in the relevant BSR on which schedule 'G' has been prepared, shall prevail.
02. Special Conditions of Contract regarding Defect Liability Period (DLP) for Roads works costing Rs. 25.00 lacs and more shall be applicable
03. The contractor shall follow the contractor labour regulation and abolition Act 1970 & Rule 1971.
04. The JDA shall have right to cause on audit and technical examination of the work and the final bills of the contractor including all supporting vouchers, abstract etc. to be made within two years after payment of the final bills and if as a result such audit any amount is found to have been over paid/excess in respect of any work done by the contractor under the contract or any work claimed by him to have been done under this contract and found not to have been executed the contractor shall sum from him in ; the manner prescribed in special condition no. 8 or any other manner legally permissible and if it is found that the contractor was paid less then that was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be paid by the JDA to the contractor.
05. The contractor shall not work after the sunset and before sunrise without specific permission of the authority Engineer.
06. Whenever any claim against the contractor for the payment of a sum of money arises out or under the contracts, the JDA shall be entitled to recover the sum by appropriating in part or whole of the security deposit of the contractor. In the event of the security being insufficient of if no security has been taken from the contractor then the balance of the total sum recoverable as the case may shall be deducted from any sum then due or which a any time there contract with the JDA should this sum be sufficient to recover the full amount recoverable, the contractor shall pay to JDA on demand the balance remaining due. The JDA shall further have the right to effect such recoveries under P.D.R.Act.
07. The rate quoted by the contractor shall remain valid for a period of 4 (Four) months from the date of opening of the tenders.
08. By submission of this tender the contractor agree to abide with all printed conditions provided in the PWD manual from 64 (Chapter 3-para 36) and subsequent modification.
09. No conditions are to be added by the contractor and conditional tender is liable to be rejected.
10. All transaction in the execution of this work and this tender will be liable to sale-tax vide section 2(B) read with sub clause (4) Sale-tax Rule, 1954/ GST registration
11. If any bidder withdraws his tender prior to expiry of said validity period given at S. No. 7 or mutually extended prior or makes modifications in the rates, terms and conditions or fails to the tender within the said period, which are not acceptable to the department or fails to commence the work in the specified period, fails to execute the agreement and fails to furnish performance guarantee the department shall, without prejudice to any, other right or remedy, be at liberty to forfeit the amount of earnest money given in any from absolutely. If any contractor, who having submitted a tender does not execute the agreement or start the work or does not complete the work and the work has to be put to retendering, shall stand debarred for 6 Months from participating of tendering in JDA in addition to forfeiture of Earnest Money/Security/Performance Guarantee and other action under agreement.
12. The contractor shall arrange his own machinery required for the work.
13. The contractor shall arrange his own storage, yard of sufficient capacity for storing wherever supplied by the department.
14. Rules regarding enlistment of contractors provide that work ; upto five times limit for which they are qualified for tendering can be allotted to them Therefore, before tender the contractors will keep this in mind, and submit the details of work. Tenders with incomplete or incorrect information are liable to be rejected.
15. Any material not conforming to the specifications collected at site shall have to be removed by the contractor within a period of 3 days of the instructions, issued by the Engineer-In charge in writing. Failing which, such material shall be removed by the Engineer-In charge at risk and the contractor after expiry of 3 days period.
16. The material collected at site and paid provisionally shall remain under the watch and ward of the contractor till it is consumed, fully on the work.
17. None of the permanent works shall be carried out during night or Sunday or any authorized holiday without permission in writing of the Engineer-Incharge.
18. **The contractor shall be fully responsible to follow safety code as per IS 3764:1992 (upto date). The work should be executed without damaging existing water pipe line, LT/HT electric under ground cable, poles, existing surface drain, water connection, Telephone cable etc. In case of any damage the penalty/liability imposed for such work shall be borne by the contractor and shall be got repaired immediately by arranging material/labor/ assistance etc. In case of delay JDA reserve right to execute/get executed the work at the cost and risk of the contractor.**

19. The contractor/firm or company will display necessary signboards & lights from safety point on view during nights at site of work on his own cost as directed by the authorized Engineer Incharge.
20. The surplus earth & damaged materials will be immediately removed from the site of work & dumped as per instruction of Engineer Incharge.
21. No extra payment will be made to the contractor on account of clearance of soakage well/septic falling in the alignment of overhead or undergroundline.
22. The onus of safety and security of men and material at work including the road user shall be completely of the contractor only.
23. The rate provided in tender documents is inclusive of all Taxes &royalty.
24. The bidder are required to furnish the following documents along with the tender:
 - i. Duly executed power of attorney in original along with two certified copies in the name of the tender's authorized representative to act on behalf of the bidder and the power to agree to refer dispute to arbitration.
 - ii. Sales Tax & Income-Tax clearance certificate.
 - iii. Construction programme of work in the form of bar charts.
 - iv. Financial resources with particulars.
 - v. Constitution, capital, registration, place of business of the bidder.
 - vi. Particulars of registration with central or State Government Organization if any.
 - vii. Details of work of similar type and magnitude already carried out by the tender.
 - viii. Details of work tendered for and as on the date of issue of tender.
 - ix. Details of Plant machinery available with the tender for this work.
 - x. Details of plant machinery proposed to be used on the work; but not immediately available.
 - xi. **Details of qualified technical personnel proposed to employ on the work.**
 - xii. A declaration to the effect that the bidder is engineering construction firm or any associate of such firms which has successfully carried out large works of this nature and have adequate organization and experienced personnel to handle the present work.
 - xiii. Copies of certificates if any.
25. No extra load of earth / material shall be paid over and above as specified in 'G' Schedule. Source/ borrow Pit area for earth shall have to be arranged by the Contractor at his own cost.
26. Undersigned has full right to reject any or all tenders without given any reasons.
27. It is a mandatory condition that contractor will get all insulated material tested from CTL of JVVNL before using it at site.
28. All the provision of the RAJASTHAN TRANSPARENCY IN PUBLIC PROCURMENT ACT, 2012 AND RULES, 2013 WILL BE APPLICABLE. IF THERE IS ANY CONTRADICTIONS IN EXISTING SPECIAL CONDITIONS AND PROVISION OF THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCURMENT ACT, 2012 AND RULES, 2013 SHALL BE APPLICABLE.

**SIGNATURE OF CONTRACTOR
WITH FULL ADDRESS:**

**EXECUTIVE ENGINEER (Elect.IV)
JDA, JAIPUR**

Annexure A : Compliance with the code of Integrity and No Conflict of Interest

Any person participating in a procurement process shall –

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit the misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of Interest:-

The Bidder participating in a bidding process must not have a Conflict of interest. A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

- i. A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:
 - a. Have controlling partners/shareholders in common ;or
 - b. Receive or have received any direct or indirect subsidy from any of them;or
 - c. Have the same legal representative for purposes of the Bid;or
 - d. Have a relationship with each other; directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding the bidding process;or
 - e. The Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid;or
 - f. The Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid;or

g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-in-charge/ consultant for the contract.

Note :

1. किसी भी निविदा को बिना कारण बताए निरस्त किया जा सकता है।
2. आवेदक / संवेदक को निविदा प्राप्त करने के लिए आवेदन के साथ पंजीयन प्रमाण पत्र की प्रति प्रस्तुत करना अनिवार्य है।
3. आवेदक / संवेदक को निविदा प्रपत्र पर अपना पता एवं दूरभाष नम्बर अंकित करना अनिवार्य है।

Annexure C : Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority is **JDC, JDA Jaipur**

The designation and address of the Second Appellate Authority is **EC, JDA, Jaipur**

(1) Filing an appeal

If any Bidder or prospective bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued thereunder, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved: Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings: Provided further that in case a Procuring Entity evaluates the Technical Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.

(2) The officer to whom an appeal is filed under para (1) shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it of within thirty days from the date of the appeal.

(3) If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

(4) Appeal not to lie in certain cases

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely :-

- (a) Determination of need of procurement;
- (b) Provisions limiting participation of Bidders in the Bid process;
- (c) The decision of whether or not to enter into negotiations;
- (d) Cancellation of a procurement process;
- (e) Applicability of the provisions of confidentiality.

(5) Form of Appeal

- (a) An appeal under para (1) or (3) above shall be in the annexed form along with as many copies as there are respondents in the appeal.
- (b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.
- (c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorized representative.

(6) Fee for filing appeal

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

(7) Procedure for disposal of appeal

- (a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- (b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
 - (i) Hear all the parties to appeal present before him; and
 - (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

FORM No.1

[See Rule83]

**Memorandum of Appeal under the
Rajasthan
Transparency in Public Procurement Act,
2012**

Appeal No. of.....

Before the (First/Second Appellate Authority)

1. Particulars of appellant:

(i) Name of the appellant:

(ii) Official address, if any:

(iii) Residential address:

2. Name and address of the respondent (s):

(i)

(ii)

(iii)

3. Number and date of the order appealed against and name and designation of the officer/authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:

4. If the Appellant proposes to be represented by a representative, the name and postal address of the representative:

5. Number of affidavits and documents enclosed with the appeal:

6. Grounds of appeal :

(Supported by an affidavit)

7. Prayer :

Place

Date

Appellant's Signature

Annexure D : Additional Conditions of Contract

• Correction of arithmetical errors

Provided that a Financial Bid is substantially responsive, the Procuring Entity will correct arithmetical errors during evaluation of Financial Bids on the following basis:

- i. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- ii. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected and . If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.

2. Procuring Entity's Right to Vary Quantities

- (i) If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Conditions of Contract.
- (ii) On repeat order for extra items for additional quantity may be placed if it is provided in the bidding documents on the rates and conditions given in the contract, if the original order was given after inviting open competitive bids. Delivery or completion period may also be proportionately increase. The limits of repeat order shall be as under.
 - (a) 50% of the qty of the individual items and 50% of the value of original contract in case of works and
 - (b) 50% of the value of goods or services of the original contract.

3. Dividing quantities among more than one Bidder at the time of award

(In case of procurement of Goods)

As a general rule all the quantities of the subject matter of procurement shall be procured from the Bidder, whose Bid is accepted. However, when it is considered that the quantity of the subject matter of procurement to be procured is very large and it may not be in the capacity of the Bidder, whose Bid is accepted, to deliver the entire quantity or when it is considered that the subject matter of procurement to be procured is of critical and vital nature, in such cases, the quantity may be divided between the Bidder, whose Bid is accepted and the second lowest Bidder or even more Bidders in that order, in a fair, transparent and equitable manner at the rates of the Bidder, whose Bid is accepted.

JAIPUR DEVELOPMENT AUTHORITY JAIPUR

SPECIAL CONDITION OF THE CONTRACT FOR POST QUALIFICATION OF CONTRACTORS

NAME OF WORK: SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur.

Special conditions of contract for **POTENTIAL ASSESSMENT** as detailed here under, shall be applicable in addition to all other terms and condition already prescribed under standard agreement forms/rules and regulations to contract.

1. Procedure:

Procedure for **POTENTIAL ASSESSMENT** would be as follow:

- (a) Tender document shall be submitted on line e-procurement website <http://www.eproc.rajasthan.gov.in> with their digital signature. The bid is to be submitted in 2 envelop which shall comprise of Envelop-1 being for Technical Bid (Potential Assessment, EMD, GST, Registration of Contractors, tender document) and Envelop-2 being for BOQ.
- (b) The Tender fee, processing fee and earnest money will be deposited online on or before **13.06.2022 at 6:00 PM**
- (c) The Technical Bid envelope would be opened on the date 17.06.2022 at 11.00 AM CCC TF-311, Citizen Care Center, Ram Kishore Vyas Bhawan, Indira Circle, Jawahar Lal Nehru Marg, Jaipur – 302004
- (d) The Financial Bid envelope would be opened only of those bidders who fulfil the **ELIGIBILITY** criteria in technical bid.

2. Criteria:

Criteria for **Potential Assessment** would be as follows:-

- (a) The bidder should have executed following quantities of work in any one financial year during last five financial years. However the bidder may opt current year in the said financial assessment period.

S.No.	Item	Quantity
	Major Item of Schedule - G	
1.	Lift elevators minimum capacity 8 person	03 Nos
2.	Capsule passenger lift minimum capacity 8 person	01 Nos.

Note:-

- (i) **The Bidder should enclose the certificate having quantities Financial year wise other wise the certificate will not be considered.**
- (ii) **Quantities of all the items mentioned in criteria 2 (a) should be executed in one financial year.**
- (iii) **Certificate issued by Govt. of India, State Govt., Union Territory, Govt. Undertakings, Autonomous Bodies shall only be considered.**

- (b) The bidder should have completed/ executed similar nature elevator work in any fover year of last 5 financial year (including current year, if opted by the bidder) of value not less than 33.33% of the Estimated Cost of the work (bid cost) (updated to present price level)
- (c) The bidder should have completed one same nature work in previous 05 year cost of work should not less than 90.0 lacs.

Notes:-

- (i) The starting & completion date of the work is to be in between aforesaid financial year. If no then maximum work (70%) is to be completed in aforesaid financial year.
- (ii) If bidder is submitting certificate having different components / nature of work then proper completion certificate of required similar nature component is to be enclosed.
- (d) The bidder should have achieved an annual financial turnover of at least 33.33 % of the Estimated Cost of the work (bid cost) in any one of last 5 financial years (including current year, if opted by the bidder)

Note :-

- (i) The bidder should enclose certificate of Turn over from Chartered Accountant for last five financial year & audited balance sheet of the year which is considered by the bidder in criteria 2 (c).
- (ii) If current year or last year has been opted by bidder whose balance sheet is not submitted till the submission of bid then certificate from Chartered Accountant should be enclosed.

(a) The bidder should give Affidavit to deploy the machinery and equipment as specified in Schedule - III, for the execution of this work.

(b) Bid Capacity: Bidders who meet the minimum qualification criteria will be qualified only if available bid capacity is equal to or more than the total Bid value. The available bid capacity will be calculated as under:

$$\text{Bid Capacity} = (A \times N \times 3 - B)$$

Where A = Maximum value of Electrical Engineering work executed in any one year during the last 5 financial years (updated to present Price level) taking in to account the completed as well as works in progress. However, the bidder may opt current year in the five year assessment period

N = Number of year prescribed for completion of the work for which bids are invited.

B = Value, at present price level of existing commitments and on going Works to be executed during 'N' period (period prescribed for Completion of the works for which the bids are invited)

Note:-

- (i) Certificate from Chartered Accountant should be enclosed by bidder clearly indicated maximum value of Electrical Engineering Work in one Financial Year.**
- (c) **Litigation History:** - Bidder should provide an accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last five years. The maximum value (updated at the present price

level) of disputed amount claimed in the litigation / arbitration resulting from contracts executed in last five years shall be deducted from the calculated Bid Capacity of the bidder. The details shall be furnished in Schedule VI. **If schedule-VI is found blank then it will be treated as NIL.**

Note :-

(i) **The present price level for turnover, cost of completed work & disputed amount of similar nature, the previous years value shall be given weight age of 10% per year as follows :-**

(a)	For current year	1.00	2022-23
(b)	For last year	1.00	2021-22
(c)	For one year before	1.10	2020-21
(d)	For two year before	1.21	2019-20
(e)	For three year before	1.33	2018-19
(f)	For four year before	1.46	2017-18

Criteria:- Special Terms & Condition for SITC & 05 year maintenance of installation of Lift/ elevator at RIC building Jaipur.

1. Bidder has to carryout SITC of Lift, elevators as per specification given in tender schedule.
2. Joint inspection of Lift by Engineer in-charge or their representative & Bidder's representative at manufacturing location is compulsory before dispatch/ delivery at site. The charges of complete visit will be borne by the bidder. No extra or additional cost will be given to bidder for this entire "Product inspection process"

Comply to Eligibility criteria for Bidders to be uploaded with NIT Document as per below:-

1. Bidder should either be:-
 - (A). An OEM (Original Equipment Manufacturer) or its authorized representater must have a Electrical contractor license from Electrical Inspectorate Office valid up to contract period and must be attach with bid documents.
2. Bidder should submit Authorization & OEM Undertaking Certificate for providing service of its product for next 05 years after completion of work.
3. OEM or authorized representative certificate must have minimum 01 service centers in state submitted.
4. OEM's turnover in India for last 5 years shall not be less than 90 Lacs per year CA certificate.
5. OEM shall have:-
 - (a). Manufacturing and testing facility in India
 - (b). R&D center & training facility in India
6. All OEM must comply NBC-2016 Specification (as amended upto date) for lift car & door and lift act norms for installation also & Quality standards shall confirm to IS/ISO-9001:2015 submitted certificate.
7. OEM certificate must be in elevator industry for at least 15 years.
8. OEM must have in house testing tower facility upto 30 mtrs. & certificate should be submitted by bidder in technical bid.
9. Bidder should submit a certificate from OEM that "If any defect found during DLP Period then OEM is responsible to rectify the same without any extra cost".
10. Bidder has to produce supportive document of any govt agency / Private agency duly attested from CA & certificate from project managers in favour of above mentioned condition and document should be self-attested.

Special Terms & Condition for SITC of Lift/ elevator at RIC building Jaipur.

1. Bidder should submit, Authorization and OEM (original equipment manufacturer) undertaking, certificate for providing service of it's product for next 05 year after completion of work.
2. Bidder should have executed Rs. 90.00 Lacs work in the period of last 05 financial years i.e. 2021-22, 2020-21, 2019-20, 2018-19 and 2017-18 bidder should have executed SITC of 01 no capsule lift and 03 no lift/elevator work with in last financial year i.e. 2021-22, 2020-21, 2019-20, 2018-19 and 2017-18. Supportive documents should be allowed with Bid documents.
3. Defect liability period of this work will be 05 Year means 10% SD will be detained for 05 year by JDA. SD will be refund after 05 year satisfactory operation of these lift and elevators lift men will be provided by JDA. If any lift remains "off" due to any technical error, bidder has to get it repair within 72 hrs, if bidder fails to do so JDA will get repair it with JDA sources and double of the repairing cost will be recovered from bidder.
4. Monthly one day shutdown of the lift can be taken by bidder for preventive maintenance work.

5. Bid will be on two bid system.
6. Bidder should have 15 year experience in SITC of Lift elevator supportive document and work execution / completion certificate should be enclosed with bid documents.

During execution or during maintenance period of 05 year if any accidents takes place at site contractor will be fully responsible.

Bidder should be registered under suitable category for carrying out electrical works EWSD-I (Rajasthan), A-1 or A category in any Govt. organization in India.

3. Documentation:

The bidder should furnish the following documents along with the technical bid:

- (a) Information regarding financial resources and capability in Schedule-I.
- (b) Information regarding works executed in the last five years in Schedule-II
- (c) Certificates from the concerned Engineer-In-Charge in support and verification of the information furnished in Schedule-II
- (d) Affidavit regarding machinery and equipment required for deployment, as detailed in scheduled-III.
- (e) Information regarding details of maximum value of electrical engineering works executed in any one year during the last five years taking into account the completed as well as works in progress in schedule-IV.
- (f) Information regarding existing commitments and ongoing works to be completed in schedule-V. **If it is found at any stage that the bidder hides his existing commitments than proper action will be taken as per RTPP act and Rules.**
- (g) Information regarding details of litigation or arbitration contracts to be furnished in schedule-VI. **If schedule-VI is found blank then it will be treated as NIL.**
- (h) Calculation of Bid capacity in schedule-VII.
- (i) Affidavit as per Annexure I.

4. Important:

- (a) The bidder must ensure that all the information required in the Documents is furnished by him complete in all respects. He would not be allowed to withdraw any document, or to rectify any information furnished therein, after submitting the bid.
- (b) The bidder should give an affidavit that the information furnished in schedule I to VII is correct. If any information is found incorrect, the offer of the bidder shall be rejected and action be taken as per rules.
- (c) Bidders must do paging of all enclosure of bid documents.

5. Rejection of bids

The department reserves the rights to reject any bid or to disqualify any or all the bidders, without assigning any reasons at any stage.

- (i) If Bid is not accompanied with the requisite documents mentioned in clauses 3 (a) to 3 (i) or is not in accordance with procedure specified in Para 1, or is not accompanied with earnest money, tender fee, processing fee & GST registration of contractor in required category it would be liable for rejection.
- (ii) Furnishing of incorrect or incomplete or concealment of any information required in the bid documents would render the bid liable for rejection.
- (iii) If all the copies enclosed in support and affidavit is not duly attested by Notary public/ gazetted officer then bid of the bidder is to be rejected.

EXECUTIVE ENGINEER (Elect.-IV)
JAIPUR DEVELOPMENT AUTHORITY
JAIPUR

1. TECHNICAL REQUIREMENTS

- a) The Passenger & Passenger cum Service Lifts covered by this specification is for man & material movement inside plant building. The passenger and passenger cum service lifts shall be designed for man and material movement, safe operation, comfort and service.
- b) Input power supply available at site:
Voltage: 415 V $\pm 10\%$, 3 phase, 4-wire, AC, Neutral solidly grounded.
Frequency: 50Hz $\pm 5\%$.

Combined variation (Voltage and frequency): $\pm 10\%$.
- c) Testing of elevator motor and controller at manufacturer works and after installation at site including obtaining clearance from lift inspector is included in the scope of contractor.
- d) Complete set of special tools and tackles required shall be supplied along with Lift. Each tool and tackle shall be stamped so as to be identified easily for its use and size. Tools shall be supplied in a steel tool box. (The list of tools and tackles shall be furnished along with the offer).

4.1 Drive Machinery

4.1.1 Geared or Gearless machine

- a) Both geared or gearless machine for lift is acceptable. It shall consist of motor, traction sheave and brake completely aligned on a single shaft. The machine shall be driven by A.C. geared or gearless motor with VVVF drive.
- b) The Lift machine shall be based on Variable Voltage Variable Frequency (VVVF) controller (with feedback loop) with AC motor, its associated machinery like main sheave & deflector sheave (if any), electromagnetic brakes, suitable for passenger lift and passenger cum service lift, infrared door sensor, car belt/ rope, governor belts/ ropes, car enclosure, car platform, travelling communication cable, landing doors, limit switches, wiring etc. suitable for hoist way and machine room.
- c) Variable-voltage control: The control shall be variable or multi-voltage system. The system shall provide smooth and practically constant acceleration and retardation under all operating conditions. During the acceleration and retardation periods, the voltage applied to the elevator motor shall be gradually changed by the drive without interruption of power to the motor. The motor shall be wound for 415 V a.c. power supply. Overload relays shall be provided to protect the driving motors against overloads.

4.1.2 Electric Motor

- a) Motors shall be suitable for frequent starting with S4 duty class as per IS/IEC-60034-1 with CDF of 60% and 150 starts per hour at 50 deg. C ambient. Motor shall be suitable for traction duty and shall have high starting torque. Motor pull-out torque shall be 250% of rated torque. Motor shall be of TEFC type. Motor insulation shall be class F with temperature rise limited to class B.

4.1.3 Sheaves

a) Sheaves and pulleys shall be of hard alloy, cast iron, spheroidal graphite iron or steel and free from cracks, sand holes and others defects. They shall have machined belt/ rope grooves.

The traction sheave shall be grooved to produce proper traction and shall be of sufficient dimension to provide for wear in the groove. The deflector sheave shall be grooved so as to provide a smooth bed for the belt/ rope. The deflector or secondary sheave assemblies, where used, shall be mounted in proper alignment with the traction sheave. Such deflector sheaves shall have grooves larger than belt width/ rope diameter as specified in clause 8 of IS 14665 (Part – 4 – Sec 3): 2000. The size of all the sheaves shall be in accordance with clause 8.4 of IS 14665 (Part – 4 – Sec 3): 2000. Wherever required, suitable protection guards shall be provided.

4.1.4 Brake

a) The lift drive machinery shall be provided with an electro-magnetic fail-safe brake. The brake shall be designed to be of sufficient size and strength to stop/ hold the car at rated load with desired factor of safety as per relevant code. The brake should be capable of operation automatically by the various safety devices, power failure and by the normal stopping of the car. The brake shall be released electrically. It shall also have provision to release the brake manually in case of emergency.

b) At times of lift stopping due to any reasons, it shall be possible to move the lift car to the nearest landing manually. The manual operation shall be by means of a winding wheel or handle mounted on the end of the motor shaft. The up or down direction of the movement of the car should be clearly marked on the motor or at suitable location. A warning plate written in bold signal red colour advising the maintenance staff to switch off the mains supply before releasing the brake and operating the wheel is to be prominently displayed.

4.1.5 Type of Controls

4.1.5.1.1 Variable Voltage Variable Frequency

a) Incoming mains AC power is first rectified to DC and then inverted to provide controlled AC current to the elevator drive. Precision monitoring of motor speed and car direction, position and load enable the pulse width of the AC power supplied to the motor to be adjusted to ensure that elevator speed is maintained very accurately to an ideal profile.

4.1.6 Operating devices

a) In the car: The cars shall be furnished with a flush type attractive finished metal panel which shall contain a series of push-buttons numbered to correspond to the landings served, an emergency-stop switch, door open button, fan switch and an emergency call button connected to bell which would serve as an emergency signal.

b) Stainless steel car enclosure shall be provided with fixtures like LED lights, fan, emergency LED lighting fixture, battery operated alarm bell and intercom telephone facility.

- c) Cross flow fan shall be provided with heavy duty metal diffuser. Fan shall provide 12 air changes per hour in the car.
- d) Digital car position indicator shall be provided in the car with stainless steel faceplate.
- e) Provision shall be there in Lift car (such as speaker with light music), which can be hooked up with Public address system (Necessary cabling shall be provided up to Lift Machine Room).
- f) Car hangers and track locks shall be provided with mounting accessories.
- g) Infrared curtain door protection shall be provided.
- h) Door operating system shall be provided with stainless steel door for car as well as for landing doors at all floors suitable for openings with all safety features and for jerk-free operations.
- i) Flush type panel consisting of car position and direction indicator shall be provided in the car.
- j) Car-Operating Panel (COP) shall be provided with luminous operating buttons, for reaching destination stops, in stainless steel faceplate.
- k) Car weight sensing device shall be provided with overload warning indication (audio-visual) in stainless steel faceplate.
- l) Magnet switches and limit-switches shall be provided with mounting accessories.
- m) Complete control wiring in the car, hoist way, machine room shall be provided including travelling cables, junction box, troughs with cover in machine room, hoistway and all other wiring of suitable capacity. Power supply to elevator controller, wiring between the power point outlets to the controller & the wiring for power supply to mid-way junction box in the controller shall be in the scope of the contractor. However, the purchaser will provide hoist way & pit lighting and receptacles in hoistway.
- n) At Hoistway landings: Up & Down call luminous hall buttons shall be provided at each intermediate landings with Up & Down arrows in stainless steel face plate including digital car position indicators at intermediate floors and Up/ Down call luminous hall buttons with Up/ Down arrows in stainless steel faceplate including digital car position indicators for terminal floors. The panel shall be elegant flush mounting type located adjacent to the elevator entrance.
- o) Vanes & brackets in the hoist way shall be provided, as necessary.
- p) Operation with an attendant: The regular car operating panel which would include buttons, switches etc. for the collective-automatic control, shall also include the following:
 - i) A two position key operated switch marked to indicate 'ATT' (Attendant operation).
 - ii) A buzzer and a non-stop button.
 - iii) A service cabinet shall be provided for housing the above.

4.2 GUIDE RAILS

- a) Steel tee guides shall be furnished for the car and counterweight. Guide rails shall be in accordance with clause 3 of IS 14665 (Part 4 – Sec 2) 2000. Machined guide rails shall be permitted for cars for all lifts.
- b) The guide rails shall be throughout the entire travel and shall withstand, without any deformation, the loads from fully loaded car with desired factor of safety.
- c) The guide rails shall be supported by brackets secured to the hoistway frame at each floor. The rails shall be securely fastened to the brackets or other supports by approved heavy rail clamps. All necessary guide rail packing or additional supports shall be provided to prevent guide rail deflection and stresses exceeding the prescribed limits.
- d) Guide rails shall extend from pit floor to the underside of concrete slabs or graphing at top of the lift well. They shall be erected in plumb and parallel with a maximum deviation as per the design standard. Jointing plates shall be so located as not to interfere with supporting clamps and brackets. The bolts shall be used with spring lock washers. The guide rail anchorage at pit floor must be made without puncturing the water proofing. The expansion joints in the guide rails shall be so designed as to avoid jerks in the lift car.

4.3 LIFT CAR

4.3.1 Car Frame

- a) The car frame, which supports the car platform and enclosure, shall be in accordance with clause-4 of IS 14665 (Part 4 - Sec 3): 2001. It shall be made of rigid construction to withstand, without permanent deformation, the operation of safety gear. The car shall be so mounted on the frame that vibration and noise transmitted to the passengers inside is minimized. It shall be equipped with suitable guides and car safety device mounted underneath the car platform.

4.3.2 Car Platform

- a) The car platform shall be structural steel framed construction and designed on the basis of rated load evenly distributed. The dimensions shall conform to IS: 14665 (part 1) 2000, unless otherwise specified. The flooring shall be smooth and of anti-skid surface. The flooring for Passenger cum Service lift shall be strong enough to take the rated load without any deformation or damage.
- b) A load plate along with overload alarm, giving the rated load and permissible maximum number of passengers should be fitted in each lift car in a conspicuous position. The details of the floor, ceiling and panelling shall be furnished by the tenderer.

4.3.3 Car Body

- a) The car shall be enclosed on all sides by a metallic enclosure. The enclosure including the door shall withstand without deformation a thrust of 35kg applied normally at any point and as per IS 14665 (Part 4/ Sec 3) – 2001. Ventilation openings, if specified, shall be as per IS 14665 (Part 4/ Sec 3) – 2001.

4.3.4 Car roof

- a) The roof of the car shall be of sufficiently robust construction and designed to withstand, without deformation, weight of two persons with tools in addition to other stuff fixed on the top and as per IS 14665 (Part – 4 – Sec 3): 2001.

4.3.5 Car Thresholds

- a) Car entrance shall be provided with metal thresholds having a grooved surface. Thresholds for lifts having horizontally sliding car doors or gates shall have machined or extruded guide grooves.

4.3.6 Toe Guard Aprons

a) The toe guard apron of gauge not less than 1.6 mm sheet steel may be provided extending at least 15mm beyond entrance jambs at each side. The guards shall have a straight vertical face extending below the level of the finished car floor and not less than the depth of the leveling zone plus 7.5mm. The bottom of guard shall extend 700 mm for lifts up to speed of 1.5 mps & 1000 mm for lifts above speed of 1.5 mps below vertical face and beveled at 15° angle from the vertical. It shall be seamed to car platform construction and be reinforced and braced.

4.3.7 Clearance

a) The clearance between the top of the car and the soffit of the lift shaft roof, bottom of the car and the pit floor, the buffers, etc., and the clearance between the car and the lift well, between the car and the landing sill, between two lift cars in the same shaft etc., shall be provided as per IS 14665 (Part 1, 2 & 4).

4.3.8 Car Apron, Landing Thresholds and Sills

a) An apron shall be fitted to the car platform such that no dangerous gap exists at any time when the landing door is opening. Thresholds and sill plates shall be provided at the landings also. The distance between landing sill and the sill on car platform shall not be more than 30mm.

4.3.9 Emergency Power Supply for lift car

a) This shall include suitable secondary battery with trickle/ boost charge arrangement and inverter power pack with necessary contactors for supplying the LED light fixtures in the lift car. The same battery shall also feed the alarm bell and communication equipment. Battery shall be SMF type and capacity shall be as per IS.

4.3.10 Ratings and Instructions

a) Inside the lift car, the lift contractor shall also provide a stainless steel metallic plate indicating the rated load and detailed instructions for the passengers. This shall be mounted at a suitable place.

4.3.11 Lift Car Interior Finish

a) The side, rear and fascia panel shall be of stainless steel (SS 304) with good finish. The flooring shall be with 3mm thick vinyl tiles for passenger lifts. The False ceiling in the lift car shall be crafted from Stainless steel in hairline finish with LED lamps and fan diffuser(s) in suitable colours.

4.3.12 Operating Panel inside the car

a) The car operating panel shall be of SS 304 hairline finish, flush mounted and duly finished to match the car interior decor and shall contain all the devices, as may be specified, depending upon the type of operation required. In addition, separate illuminated panel for indication & the floor and direction may be provided on the top of the door way. All switches shall be fade proof, vandal resistant and the devices shall be of suitable quality.

b) Each device and its operating position shall be legible, fade proof, vandal resistant and marked.

4.3.13 Car and Landing Entrances

a) The car and landing doors shall be of flush type, centre opening stainless steel (hairline), only for power operation. Power operated car and landing doors shall be so designed, as not to injure any person during their closure by means of provision of a safety pressure switch, which shall cause the doors to reopen on the slightest pressure. In case of power operated doors, it shall be possible on power failure, to open them from the car side. All the openings for passenger lifts shall be min 2000 mm clear in height. For Passenger as well as Passenger cum Service lift, power operated doors shall be used. However, attendant switch with key lock shall be provided for Passenger cum Service lift. The door opening and closing shall be accomplished, smoothly and quickly, without undue noise, vibration and shock and their movements shall be cushioned and checked at both limits.

4.3.14 Car doors

a) The car door shall be hung from the top fabricated track and means shall be provided to prevent the door from jumping off the track. The doors shall be provided with two-point suspension sheave type hangers suitable for the type of door operation specified. The hangers shall be provided for vertical and lateral adjustment of car door. The sheaves shall move on a fabricated track so shaped as to permit free movement of sheaves with regard to vertical adjustment of sheave bracket or hosting.

b) The hoistway door as well as the car door for passenger and passenger cum service lift shall be centre opening, horizontal sliding, stainless steel, hairline finish.

c) In order to ensure that the trapped passenger does not attempt opening the landing door, the electromechanical latch should be so designed that it is inaccessible or invisible to the passengers in the car.

d) In order to avoid accidental closure of doors while boarding or alighting the car, a tamper proof infra-red curtain covering almost the entire height of the door should be provided in the lift doors.

e) Selector switch shall be provided for locking the closure of automatic doors of Passenger cum Service lifts.

4.3.15 Landing doors

a) Stainless steel centrally opening landing doors shall be provided with door hangers at all floors, suitable for clear opening with stainless steel side guards and unlocking device bushing for passenger lifts and passenger cum service lifts.

b) Each landing door shall be complete with locks, header, sills, frames, rims, hanger supports with cover plates, fascia plates etc. The finished work shall be strong, rigid, and neat in appearance. Plain surfaces shall be smooth and free from warp or buckle. Moulded surfaces shall be clean, straight and true. Fastenings shall be concealed from the face side of the material. Steel Sills shall be provided with a suitable nosing of approximately 25 mm depth on the shaft side.

c) The opening for the landing gates or doors shall not be wider than that of the lift car. In the case of bi-parting type steel doors, the locking of the two leafs of the doors should be positive.

4.3.16 Car landing

- a) The entire lift car landing shall be well lit to an illumination level of 150 lux and shall be free from obstructions. The control for landing lights and the sign lights shall be tamper proof. Wherever standby power supply is available, these lights shall be connected to standby circuits also.
- b) For the purpose of identification, the lift number should be displayed outside the landing door, inside the car and in the machine room. The numbering may be used as reference for the purpose of routine/ preventive maintenance, for operating from machine rooms and reporting of any incidents etc. Please note that floor designation will be 1, 2, 3.
- c) Instructions: Detailed instructions, as specified for guidance of passengers, shall be prominently displayed inside the car and outside the car at all landings by the contractor.
- d) It is seen generally, that though the instruction on Do's and Don'ts, as per provision of the relevant IS, are displayed in lift cars but the same are either displayed in inconspicuous location, or are very small in size or are in one language only. To make these instructions serve the intended purpose and not a mere compliance of relevant IS clause, these instructions should be displayed at a conspicuous location with larger and understandable script and should be written in Hindi, English and regional language (where official regional language is notified).

4.4 Levelling

- a) The elevator shall be provided with a micro-self-levelling feature that will automatically bring the car to the floor landings. This micro-levelling shall, within its zone, be entirely automatic and independent of the operating device and shall correct for over-travel or under-travel and belt/ rope stretch.
- b) The Lift shall be provided with a two-way automatic levelling device. The levelling device shall take care of overrun and under run of the car and belt/ rope stretch, such that car floor leveling accuracy is + 5 mm/ - 0.0 mm from the landing level at all floors while in operation. Aprons of sufficient depth shall be fitted to the car floor to ensure that no space is permitted between the threshold and the landing while the car is being levelled to floor.

4.5 Counter Weight

- a) Suitable guided structural steel frame with appropriate filter weights shall be furnished to promote smooth and economical operation. The counter weight for lift car shall be in accordance with clause 6 of IS 14665 (Part 4, Sec - 3): 2001 and shall be designed to balance the weight of empty lift car plus approximately 50 per cent of the rated load. It shall consist of cast sections firmly secured in relative movement by at least two numbers steel tie rods, having lock nuts/ split pins at each end passing through each section and housed in a rigid steel frame work. Cracked and broken sub weight shall not be accepted.

4.6 Guide Shoes

- a) Types of shoes

For passenger lifts & passenger cum service lifts

- i) For speed up to 1.5 mps, sliding guide shoes shall be used. Sliding guide shoes for car shall be always flexible and for counterweight, solid guide shoes can be used up to 1.0 mps.
- ii) The roller guide shall be used for car and counter weight.

Flexible/ solid type sliding guide shoes

The car shall be provided with spring loaded guide shoes with renewable liners or the guide shoes shall be of roller type.

4.7 Lift Belts/ Ropes

- a) The elevator shall be provided with traction steel hoist belts/ ropes. The hoist belts/ ropes shall include adjustable self-aligning hitches. Round strand steel wire ropes made from steel wires having a tensile strength not less than 12.5 tonnes/ cm² and of good flexibility shall be used for lift. Lubrications between the strands shall be achieved by providing impregnated hemp core. The lift belts/ ropes shall conform to IS 14665 – (Part - 4/ Sec - 8): 2001 and the following factor of safety shall be adhered to. The minimum diameter of rope for cars and counter weight of Passenger and Passenger cum Service lift shall be 8 mm.
- b) Main belts/ ropes shall be provided with accessories.

Belt/ Rope Speed of Passenger & Passenger cum Service Lifts (m/s)	Factor of Safeties
Speed < 0.5	8
0.5 ≤ Speed < 1.0	8.6
1.0 ≤ Speed < 2.0	10
2.0 ≤ Speed < 3.5	11
3.5 ≤ Speed	12

4.8 Belt/ Rope fastenings

- a) The ends of lift belts/ ropes shall be properly secured to the car and counter weight hitch plates, as the case may be, with adjustable belt/ rope shackles having individual taper babbitt sockets, or any other suitable arrangement. Each lift belt/ rope shackle shall be fitted with a suitable shackle spring, seat washer, shackle nut & lock and shackle nut split pin.

4.9 Guards for lift belts/ ropes

- a) Where lift belts/ ropes run around a sheave or sheaves on the car and/ or counter weight of geared or gearless machine, suitable guards shall be provided for preventing injury to maintenance personnel.

4.10 Number & Size of belts/ ropes

- a) The contractor must indicate the number and size of lift belts/ ropes and governor belts/ ropes proposed to be used, their origin, type, ultimate strength and factor of safety. The contractor should furnish certificate of belts/ ropes from the belt/ rope manufacturers, issued by competent authority.

b) In case of flexible coated steel belt, pulse belt monitoring system to check belt condition shall also be provided.

4.11 Safety Equipment

a) The car safety shall be provided to stop the car whenever excessively descending speed is attained. Every lift installation shall necessarily be provided with the following safety features:

b) The safety gear shall be provided in accordance with IS 14665 (Part - 4 - Sec - 4): 2001, to limit the car speed & protection for overspeed.

c) Governor – The car safety shall be operated by speed governor located overhead and driven by governor belt/ rope suitably connected to the car and mounted on its own pulleys. Governors shall be provided with tension free belts/ ropes and pit wheel. Suitable means shall be supplied to cut off power from the motor and apply the brake on application of safety. The belt/ rope shall be maintained in tension by means of weighted or spring-loaded tension sheaves located in the pit. Governor shall be provided for lifts with a travel of more than 5.5 meters. The governor rope shall be not less than 6 mm in dia. and shall be made of steel or phosphor bronze. These shall be in accordance with IS 14665 (part - 4 / sec – 4): 2001. Governor for car safety gears shall be adjusted to actuate the safety gear at the following speeds:-

i) For rated speeds upto 1 m/s, maximum governor tripping speed shall be either 140 percent of rated speed or 0.88 m/s, whichever is higher.

ii) For rated speed above 1 m/s, the maximum governor tripping speed shall be 115 per cent of the rated speed plus 0.25 m/s.

iii) Minimum governor tripping speed shall be 115 per cent of the rated speed.

d) The governor shall be of “V” groove wheel design and only wheel is stopped to actuate the car safety upon a pre-determined over speed downward travel without damaging the belt/ rope.

e) The governor, belt/ rope and sheave shall be so located as to minimize danger of accidental injury to the equipment.

f) The governor sheave & tension sheave and the sheave bearing shall be according to this technical specification.

4.12 Terminal switches

a) Every electric lift shall be provided with upper and lower normal terminal limit switches arranged to stop the car automatically within the limits of top car clearance and bottom run by over travel from any speed attained in normal operation. Such limit switches shall act independently of the operating device, the ultimate or final limit switches and the buffers. They shall be in accordance with clause 8 of IS: 14665 (part 3 –Sec 1): 2000.

b) Terminal stopping devices located in shaft or in the car and operated by cams shall be fitted with rollers having a rubber or other approved composition to provide silent operation when actuated by the cam. When the lift car cross head is 60 cm from the nearest obstruction above it, no projection on the car shall strike any part of overhead structure.

c) Lifts with speeds over 1.25 meters/ second shall have the normal terminal stopping device located on the car or on the guide rails or in the machine room.

Ultimate Terminal Switches

- a) Ultimate or final limit switches shall act to prevent movement of the lift car under power in both directions of travel and shall, after operating, remain open until the lift car has been moved by a hand winding to a position within the limits of normal travel.
- b) These shall be provided in accordance with the statutory requirements and standing practices. When provided, these shall arrange to stop the car automatically within top and bottom clearances independently of the normal terminal switches but with the buffers operative. These shall be in accordance with clause 8 of IS: 14665 (Part - 3 / Sec - 1) – 2000.

4.13 Buffers

- a) Buffers shall be installed as a means of stopping the car and counterweight at the bottom extreme limit of travel. Buffers in the pit shall be mounted on steel channels, which extend between both the car and counterweight guide rails.
- b) Buffers shall be oil resistant rubber pad type for speeds up to 0.25 mps and spring/ oil type for speed up to 1.5 mps and only oil type for speeds higher than 1.5 mps.
- c) Buffers shall be suitable for installation in the space available. Buffer anchorage at pit floors shall be installed avoiding puncturing of water proofing.
- d) Oil buffers of the car and counter weight shall be of the spring return type or of gravity type.
- e) The partial compression of spring return oil buffers when the car is in level with terminal landing will not be acceptable.
- f) All buffers shall be tested at manufacturer's works and a copy of the test report shall be submitted.
- g) When the lift car rests on fully compressed buffers, there shall be at least 60cm clearance between the lowest point in its car frame and any obstruction in the pit exclusive of buffers and their supports. Similarly, when the lift car cross head is 60 cm from the nearest obstruction above it, no projection on the car shall strike any part of the overhead structure.
- h) The contractor must indicate the name of buffer manufacturer, buffer stroke & certified maximum loads.

4.14 Door Locks

- a) Electro-mechanical door lock shall be provided for all the landing doors and they shall be such that the doors cannot open unless the car is at rest at the particular landing. It shall not be possible to move the car unless all the landing doors and the car door are closed and locked. This requirement however does not apply when the lift car is provided with automatic leveling devices and in such cases, it shall be permitted to move the car with both the doors open in the leveling zone for the purpose of leveling.
- b) All the locks and contacts shall conform to IS: 14665 (Part 4/ Sec 6) – 2001 and shall be positive and pass the prescribed endurance and reliability test from a recognized testing laboratory. They shall be so located as to be inaccessible to un-authorized personnel. The electromechanical latch should be so designed that it is inaccessible or invisible to the passengers in the car.

4.15 Other safeties

- a) Besides these safety devices mentioned above, motor operated electro-mechanical brake, counter-weight guards, alarm bell, emergency door lock release operating key and associated safety and other safety requirements shall also be included.
- b) A manually operated mains disconnecting switch shall be installed in the main circuit cables of each electric lift machines. This switch shall be placed close to and visible from the machine it controls.
- c) It shall not be possible to start the lift car under normal operation unless every landing door and car door is in the closed position.
- d) The landing push buttons shall remain inoperative until the person or persons, using the lift, have vacated the lift car and the landing door has been again closed, except that with the collective control, the push button may be utilized for this purpose provided they do not in any way interfere with the direction of current journey and that provision shall be made for a reasonable time lag between the stopping of the lift car and it being restarted.
- e) An emergency stop switch may also be fitted on top of every lift car for use by persons working thereon.
- f) Every lift car under automatic attendant control shall stop at landing with car sill fairly in level with the landing sill. The difference in levels shall not exceed the distances mentioned in IS: 14665 - 2000.

4.16 Lift Operations

- a) The operation of the Lift shall be simplex, selective, collective and automatic, with or without operator. The Lift operation shall conform to the following requirements.
- b) The operation of the Lift shall be through a push button station located inside the car.
- c) The Lift shall not move unless the car door, landing door and all other protected openings connected with the control circuit are closed.
- d) Two push buttons, one for upward and the other for downward movement at each intermediate landing and one push button at each terminal landing shall be provided in the landing floors in order to call the car.
- e) The landing doors shall be interlocked so that the landing door at any floor shall not open when the Lift is not on that floor.
- f) Push button/ knob shall be fixed in the car for holding the doors open for any length of time required.

4.17 Controlling Equipment

- a) The movement of the car shall be electrically controlled by means of a controller located in the machine room. A Microprocessor based controller shall be provided to control starting, stopping and the speed of the elevator motor and shall automatically apply the brake if any of the safety devices operates or the power fails due to any cause.

4.18 Control circuits

- a) The control circuit shall be designed for the type of lift specified for safety operation. It shall not be possible to start the car unless all the car and landing doors are fully closed and landing doors locked. The circuit shall have an independent fuse protection for fault

and overloads and be arranged so that earth fault or an open circuit shall not create unsafe condition. The circuit shall be so arranged that for the stoppage of the car at specified landing or for actuation of a contactor by emergency switches or operation of safety gears, the system shall not depend upon the completion of an electrical circuit to cut off power supply and apply the brakes. This requirement is not applicable to dynamic braking and speed control devices.

4.19 Terminal Boards

- a) All wiring for external control circuits shall be brought to a terminal board with means of identification of each wire. Metallic/ plastic identification tags shall invariably be provided. All connections of wires to terminal boards shall be adequately clamped or screwed.

4.20 Auxiliary Switches

4.20.1 Emergency stop switches

- a) On top of the lift car, an emergency stop switch shall be provided for use by maintenance personnel. Stop switch shall also be provided in the machine room. Operation of these switches/ buttons shall cancel all the registered calls and landing calls for that particular lift.

4.20.2 Maintenance switch on top of the car

- a) For purpose of inspection and maintenance, maintenance switch shall be provided on top of the car. The control circuitry shall be so arranged that in the event of the operation of this switch:
 - i) The car speed shall be less than the rated speed, not exceeding 0.85 meters/sec.
 - ii) The car movement shall be possible only on the application of the continuous pressure on a button. It shall be so mounted to prevent any inadvertent operation.

4.20.3 Fireman Switch

- a) Fireman switch, with glass to break for access, shall be provided at ground or main floor for all the lifts. The operation of this switch shall isolate or cancel all calls to all the lifts and the lifts will stop at the next nearest landing if travelling upward. The doors will not open at this landing and the lifts will start travelling to ground floor. If these were already travelling down, they will go straight to ground floor without stopping enroute.

4.21 Inspection facility

- a) An Inspector's changeover switch and set of test buttons shall be provided in the controller. Operation of the Inspector's changeover switch shall make both the car and landing buttons inoperative and permit the lift to be worked in either direction from machine room for test purposes by pressing corresponding test buttons in the controller. It shall not however interfere with the emergency stop switches inside the car or on the top of the car.

4.22 Safety line indicators

- a) If specified, visual tell-tale lights may be provided to monitor the conditions of faults in the safety line of the lift for easier fault finding. These indicators will remain lit when safety circuits are normal.

b) One indicator shall be provided for each safety on the controller. If any indicators fail to light up as the lift proceeds in its sequence of operation, there shall be visual indication of the safety line open circuit and also its location for easier fault finding.

4.23 Control wiring

4.23.1 Wiring in Machine room

a) Power wiring between the controller and main board controller to various landings shall be done in heavy gauge conduit or metal duct & shall conform to I.E. Rules 1956 and CPWD Specifications for electrical works. Following general principles shall be followed in wiring:

a) (i) Control cables carrying DC and power cable carrying AC shall not be run in the same conduit or metal duct and they shall be laid as per I.E. rules.

(ii) Metal duct with removable inspection cover shall be preferred.

(iii) In case of control cables also, the harness shall be separate as far as feasible for separate functions and laid separately in suitably dimensioned metal duct or in a separate conduit for different functions such as the signaling, locking, lamp indication and safeties. Control cables for different voltages in the lift installation works should be laid as per IE Rules.

b) At least 5 percent with a minimum of 5 unconnected spare wires shall be available out of all the lines, to be provided in the wiring harness from the midway junction box to the machine room.

c) There shall be a master isolating switch fuse associated with the controller, heavy duty, load break, quick make quick break type, TP & N preferably interlocked with controller cabinet door. Isolator handle shall have provision for external locking in off position.

d) All relays shall be suitable for lift service and shall incorporate adequate contact wipe for reliable operation. Relays shall operate satisfactorily between 80% to 110% of their voltage.

e) Reverse phase relay: A reverse phase relay shall be provided on the controller, which is designed to protect the lift equipment against phase reversal and phase failure.

f) Main motor contactors shall be suitable for A.C. duty. Tenderer shall be required to furnish full details of make, type, applicable standard, voltage and current rating, duty class, type and routine tests done etc., on contactors and relays. Copies of type test certificates shall also be furnished by the successful Tenderer.

g) All cables shall be with copper conductors and XLPE insulated & FRLS PVC sheathed of appropriate size. The cables feeding motor and in heavy current flow paths shall be so selected that the size matches the protecting fuses and will not result in more than 2 percent voltage drop from the main board to the terminals of motor. All power and control cables shall have adequate conductor size as per codal requirement. Ferrules shall be slipped at the ends of all cables as per standard control wiring practice. All terminal blocks shall be suitably marked.

Wiring shall be done as required to interconnect all Elevator electrical equipment including all power wiring from the main supply source in the machine room. 1100 V grade Power cables shall be multi core, stranded Cu conductor with XLPE insulation, FRLS type. All fixed power cables shall be provided as armoured cable.

The trailing cables shall conform to IS 4289. All other cables shall conform to latest edition of IS: 7098, IS: 1554 & IS: 5831.

4.24 Trailing Cables

- a) A single trailing cable for lighting control and signal circuit is permitted, if all the conductors of this trailing cable are insulated for maximum voltage running through any one conductor of this cable. The lengths of the cables shall be adequate to prevent any strain due to movement of the car. All cables shall be properly tagged by metallic/ plastic tags for identification.
- b) Trailing cables shall run from a junction box on the car to a junction box located in the shaft near mid-point of travel and from these junction boxes, conductors shall be run to the various locations.
- c) Trailing cables exceeding 30 meters in length shall run so that the strain on individual cable conductors will be reduced to a minimum and the cables are free from contact with the car counter-weight, shaft walls or other equipment.
- d) Trailing cables exceeding 30 meters in length shall have steel supporting fillers and shall be suspended directly by them without rubbing over other supports.
- e) Cables less than 30 meters in length shall have no metallic fillers and shall be suspended by looping cables around supports of porcelain spools type or equivalent.
- f) 5 percent of the total capacity subject to a minimum of 5 wires shall be available unutilized in the trailing cable everywhere, suitably distributed between various functions.
- g) Trailing cables shall be FRLS/ Zero Halogen type.

4.25 Earthing

- a) Earthing shall be carried out as per IS 3043 and Indian Electricity Rules. The Lift structures, motor, frames, metal cases and all electrical equipment including conduit, cable armouring and guards shall be properly bonded and earthed by two separate and distinct connections. The earth bus conductor shall be selected as per codal requirement, preferably of copper flats.

4.26 Miscellaneous

- a) Principle of function wise segregation shall be accepted as far as possible in the general arrangement of components. All terminal blocks shall be of 650 V grade.

4.27 Controller casing

- a) The controller unit, comprising of the main circuit breaker, adjustable overload and phase reversal and phase failure protection, all the circuit elements viz. transformer, rectifier for D.C. control supply, inverter power pack, terminal blocks etc., shall be enclosed in an insect proof, sheet steel floor or wall mounted cabinet with hinged doors at front or at both front and rear. Proper warning boards and danger plates shall be provided on both sides of the controller casing. Sheet steel thickness used for controller cabinet shall not be less than 16 SWG and shall be properly braced, where necessary. Suitable gland plate shall be provided for cable entry. The battery for the charger unit shall be suitably placed in the machine room. The sheet steel enclosure shall conform to IP 42 protection.
- b) All sheet steel work shall be painted with two coats of synthetic enamel paint of purchaser's approved shade, both inside and outside, over two coats of zinc primer.

4.28 Lift Belt/ Rope Compensation

a) The lift belt/ rope compensation for lift travel shall be provided for lift travels beyond 40 m in all cases.

4.29 Distribution Board

a) 240V, 1-phase, 2 wire, double door, IP-54, 4-way MCB Distribution Board having 1 no. main incomer of 25A DP MCB and 4 nos. outgoing of 16A SPN MCB shall be supplied and installed in the Lift Machine Room for each lift by the Contractor.

b) DB shall be fabricated out of 2 mm thick CRCA sheet steel, duly epoxy painted/ powder coated, suitable for surface/ recessed mounting complete with appropriate rating aluminum busbar, earth bar, DIN bar for MCB mounting, 2 mm thick removable gland plate on both top and bottom side with required number of knock out holes, neoprene gasket etc. as required.

4.30 Automatic Rescue Devices (ARD)

- a) Automatic Rescue Device (ARD) including batteries shall be provided.
- b) Vendor shall provide a modern advanced electronic drive system of “RESCUING Passengers trapped in an ELEVATOR” in case of power failure.
- c) In addition to the above, bell and cranking device shall be provided with hand wheel connected with motor shaft for manual lowering of elevator to the nearest landing level.
- d) The ARD shall have the following specifications:
- e) ARD should move the elevator to the nearest landing in case of power failure during normal operation of elevator.
- f) ARD should monitor the normal power supply in the main controller and shall activate rescue operation within 10 seconds of normal power supply failure. It should bring the elevator to the nearest floor at a slower speed than the normal run. While proceeding to the nearest floor, the elevator shall detect the zone and stop. After the elevator has stopped, it shall automatically open the doors and shall park with door open. After the operation is completed by the ARD, the elevator is automatically switched over to normal operation as soon as normal power supply resumes.
- g) An audio and visual indicator shall be provided inside the lift car to alert the passenger trapped inside that they are being rescued.
- h) In case the normal supply resumes during ARD in operation, the elevator will continue to run in ARD mode until it reaches the nearest landing and the doors are fully opened. If normal power supply resumes when the elevator is at the landing, it will automatically be switched to normal power operation.
- i) All the lift safeties shall remain active during the ARD mode of operation.
- j) The battery capacity should be adequate so as to operate the ARD at least seven times a day, provided the duration between usage is at least 30 minutes.

2. DRAWINGS AND DOCUMENTS

Information required with the bid (1 copy each)

- a. Technical datasheet.
- b. Deviation list (If any).

- c. Bill of materials/ bought out components and their makes.
- d. Technical write-ups/ leaflets on various pieces of equipment offered viz. motor, VVVF drive, infra-red detector, car operating panel etc.

Data/ drawings after the order (3 copy each) for purchaser's approval prior to manufacturing:

- a. Guaranteed Technical Particulars/ datasheet.
- b. Quality assurance plan (QAP).
- c. Field quality plan.
- d. Detailed dimensional drawing of the lifts and sectional views clearly indicating the sizes of car well clearances, lift supports, construction details, details of accessories, embedment details etc.
- e. Car internal arrangement showing details of flooring, ceiling, paneling etc.
- f. GA drawing for machine room including foundation details & ventilation requirement.
- g. General arrangement, single line diagram, mounting arrangement etc. for panels.
- h. Design document consisting of calculations for selection of mechanical & electrical components.
- i. Descriptive literature and catalogues on various pieces of equipment offered.
- j. Detailed Bill of Materials/ Quantities.
- k. Installation, operation and maintenance manual with troubleshooting.
- l. Certified Test Certificates and Type Test reports (not older than 5 years).
- m. Guarantee Certificates.
- a. Recommended erection sequence in detail.

Data/ drawings after completion of job (3 copy each)

- a. Field test report.
- b. As-built drawings.

Bidder may note that the drawings, manuals listed herein are indicative. Bidder shall ensure that other necessary write-ups and information required to fully describe the equipment and its safety features shall be submitted along with QA documents during order execution.

Bidder shall also give brief write-up specifying safety features, technical specifications of components and its make along with the bid. Bidder shall not start manufacturing unless manufacturing clearance is provided by Purchaser in writing.

Before starting manufacture of the lifts, the contractor must take approval of fabrication drawings from the purchaser. Any manufacturing done prior to the approval of drawings shall be rectified by the contractor at his own cost, if any discrepancy arises.

3. INSPECTION & TESTING

All works covered by this document shall be subject to quality surveillance by the purchaser or his authorized representative, for which purpose, the contractor shall allow access at all reasonable times during manufacture and assembly to:

- (a) the premises in which the work is being carried out.
- (b) the drawings and/or tooling involved.
- (c) gauges, instruments etc. required for inspecting the work.

Prints of drawings shall be made available for inspection and retention, if so desired.

The tenderer shall give at least 15 days advance notice prior to the commencement of testing, so that the purchaser's representative can plan to witness the test. Inspection and testing shall be carried out as per this tender document. Two hard copies and one soft copy of test reports shall be submitted after receiving the approval of a preliminary copy from the purchaser.

Parts found unsatisfactory as to workmanship or materials, shall be removed by the contractor and replaced by parts, which are satisfactory, at no extra cost.

Waiving of quality surveillance or acceptance of materials or equipment by the quality surveyor shall not relieve the contractor from the responsibility of furnishing material and workmanship in accordance with this tender document.

Two-stage inspection & testing will be carried out. This includes inspection & testing at manufacturer's works prior to delivery at site and inspection and testing after erection at site during commissioning. After assembly and erection at site, the lift shall be tested at site before it is put into normal service.

The following tests are recommended to be carried out at manufacturer's works as per mutual agreement between the contractor and the purchaser.

- a) Testing of main AC drive (motor): As per IS/IEC: 60034-1
 - (i) High voltage & insulation resistance tests.
 - (ii) Winding resistance measurement.
 - (iii) No-load & locked rotor tests.
 - (v) Reduced voltage starting test.
 - (vi) Starting torque & Pull-out torque measurement.
 - (viii) Overspeed test.
 - (ix) Test reports shall be provided by the contractor for Load test & Efficiency measurement as well as Temperature rise test for review by the purchaser.
- b) Variable voltage and variable speed controller
 - (i) I.R value between all the live parts and metallic panel.
 - (ii) HV test at 2 KV, AC for 1 minute.
 - (iii) Performance tests with the main drive motor.

- c) Control panel
 - (i) I.R. test at 500 volt DC.
 - (ii) HV test at 2 KV for 1 minute.
 - (iii) Workmanship.
 - (iv) Continuity test.
 - (v) Functional test under simulated fault conditions.
- d) Hoist belt/ rope
 - (i) Visual inspection
 - (ii) Load test as per IS: 2365.
- e) Physical inspection of other components.

The contractor shall be fully responsible for carrying out all the tests including following as prescribed by relevant Indian standards/ lift act at site after installation.

- a) Insulation resistance, earth resistance and polarity test of the electrical wiring carried out at site and of equipment after installation at site.
- b) Performance test including load test.
- c) Functional tests for motor, brake, control equipment and door locking devices.
- d) Leveling test.
- e) Safety gear test.
- f) Checking of Elevator speed.
- g) Overspeed test.
- h) Lift balance.
- i) Operation of Car and landing doors.
- j) Controller performance test.
- k) Functional check of Normal terminal stopping switches.
- l) Functional check of Final terminal stopping switches.
- m) Testing & checking of earthing.
- n) Checking of Belts/ ropes.
- o) Checking of Buffers.
- p) All other test required for safe operation of elevator.

The reports of these tests shall be submitted to the purchaser before issue of installation completion certificate.

The contractor shall have to obtain necessary clearance from the concerned statutory government authorities after the completion of installation. As already mentioned, it will be the responsibility of the lift contractor to get the installation inspected and passed by the government inspector for lifts. The lift contractor shall attend any modifications suggested by inspector of lift at no extra cost.

4. PACKING, MARKING & DESPATCH

The successful bidder shall note that packing for shipment shall be in accordance with the following instructions:

7.1 All the materials shall be suitably packed (in sea worthy packing) and protected, so as not to suffer deterioration, damage or breakage during transit from contractor's works to site. Contractor shall make good at his own expenses, any and all damage due to improper packing.

7.2 The equipment may be stored outdoors for long periods before installation. The packing shall be completely suitable for outdoor storage in areas with heavy rains and high ambient temperature, unless otherwise agreed.

7.3 All the equipment shall be divided into several sections for protection and ease of handling during transportation. The equipment shall be properly packed for transportation by ship/ rail or trailer. It shall be wrapped in polythene sheets before being placed in crates/ cases to prevent damage to finish. The crates/ cases shall have anti-skid bottoms for handling. Special notations such as 'Fragile', 'This side up', 'Center of gravity', 'Weight', 'Purchaser's particulars', 'PO no.' etc., shall be clearly and indelibly marked on the packages together with other details as per purchase order.

7.4 Each package shall be stenciled in bold character with indelible paint, protected with shellac to indicate shipping marks, package numbers, kind of packages, contents, dimensions, legal and gross weights in kg and purchase order no. and other necessary dates to identify the particular components shall be given.

7.5 If different items are in a package, the net weight for each item and all necessary information to identify the particular components shall be given.

7.6 The batteries shall be shipped to site in dry uncharged state and an appropriate quantity of acid of proper specific gravity shall be shipped separately. Initial charging of the battery, on completion of the installation, will be carried out using purchaser's equipment.

7.7 The contractor should, at his responsibility check and ascertain the existing rail/ road limitation for transport of the material to the site and indicate the route along which the material will be transported.

7.8 Each package shall be limited to size and weight that are permissible under the existing rail and road limitations. All lifting points shall be marked.

7.9 The contractor shall not ship the material without the prior approval of the Purchaser's inspector and subsequent written instruction to do so. Packing of the materials shall be done as per this tender document.

5. INSTALLATION, SITE COMMISSIONING & TRAINING

8.1 Scope

i) The scope of this specification includes delivery of material covered under the tender at site, transportation to warehouse, transportation to lift well's erection, commissioning and conducting acceptance tests on the lift's auxiliaries as per the specifications to the satisfaction of the purchaser. The scope of installation shall include:

- a) Installation of Lift, lift machine and associated equipment in lift well and lift machine room.
- b) The arrangement of scaffolding required in the lift well for the installation of the equipment.
- c) Information on all structural openings, such as landing entrances (including structural dimensions), ventilation openings etc. shall be provided by contractor.
- d) All bases, plinths, channels, holes, grouting-in of fixings etc.
- e) Lifting beams or other facilities for supporting lifting tackle in the machine room and lift well shall be provided by purchaser. Location of the same shall be specified by Vendor.
- f) Installation of guard rails in the machine room;
- g) Arrangement of hoisting facilities and access required for delivery of equipment to the machine room etc., showing the loading and size of the largest single piece of equipment;
- h) Structural steel work for lift machinery in the lift machine room;
- i) Shaft dividing steel work for supporting guard brackets etc., and inter-well screens for multiple wells; and
- j) Fixing of guide rails.

8.2 Standards

a) Material/ equipment covered under the specification shall be erected, commissioned conforming to manufacturer's recommendations and best engineering practices. The layout of equipment shall be as per the approved layout drawings. Erection, commissioning programme shall conform to the recommendations of IS: 14665 (Part-II) - 2001.

8.3 Items included in the Scope of Work

a) The scope of work includes all works required from the receipt of material at site up to final handing over to purchaser of complete equipment after acceptance testing. However a few details of scope are as follows:

- i) Delivery at site of material/ equipment and transportation to the work place or stores.
- ii) Installation, alignment etc. for lift machines and auxiliaries, power and control cabling, necessary anchoring as per approved drawings and manufacturer's recommendations for lift

and auxiliaries. Grouting of base frames for machines, springs, foundation bolts, supportstructure etc. as required.

iii) Conducting pre-commissioning and commissioning checks and tests on all systems of the lifts.

iv) Conducting acceptance tests on the lifts and auxiliaries, proving the performance guaranteed in the offer, as per manufacturer's recommendations.

v) Preparation of commissioning reports and submission of the same for purchaser's approval. Reports shall contain record of all activities, data, checks, tests carried out during installation and commissioning. Four copies of such reports shall be submitted in bound volumes before the completion of the job.

vi) Supply of consumables like suitable welding electrodes, packing plates, hardware, grouting cement etc. wherever required, approved lubricants, cotton waste etc. as required for installation and commissioning.

vii) Final finish painting of all structural members which need painting.

8.4 Items not included in the Scope of Work

Following items are not included in the scope of erection and commissioning:-

i) Construction of lift room, machine foundations, (however alignment, levelling etc. of base frames is included in the scope of work), finish flooring of the lift rooms.

ii) Power cabling up to the lift machine room. However, cabling from machine room to control panel, lift machine, lift and auxiliaries, is included in the scope of work.

iii) Lighting and ventilation of lift machine room. However, lighting, ventilation inside the lift cars shall be done by the contractor.

8.5 Foundations

a) The machine shall be placed directly above the hoistway upon machine room slab.

8.6 Safety

i) Contractor shall be responsible for safety of the equipment at all times during the period of contract. Contractor shall replace/ repair all components or equipment which, in the purchaser's view, are damaged by the contractor during the contract period.

ii) Contractor shall ensure safety of crew employed for erection/ commissioning of the lifts by providing workmen with adequate protective gears required, by employing skilled and trained labour for these kind of jobs, by enforcing safety norms to be followed by his workmen.

iii) Purchaser reserves the right to enforce additional safety measures as required from

time to time in the interest of equipment and work force.

8.7 Approval of Erection/ Commissioning procedures

i) Contractor shall, before the commencement of work, submit detailed procedure for erection, commissioning of lifts, auxiliaries and control panels. Actual erection/ commissioning of equipment shall start only after the approval of the procedures/ methods submitted by the contractor.

ii) Purchaser's site engineers shall have the access to inspect erection/ commissioning procedures being followed by contractor and contractor shall provide all necessary instruments required for inspection.

iii) When informed by the purchaser's inspector about non-conformance of erection/ commissioning procedures, standards, tolerances etc. as the case may be, contractor shall rectify the error and damage to the equipment if any, due to contractor's mistakes during erection/ commissioning to the full satisfaction of purchaser.

8.8 Inspection of site

a) The contractor or his representative shall be deemed to have inspected the site and surroundings before taking up manufacturing and installation of the lifts.

8.9 Superintendence and Labour

i) The contractor shall provide supervision and work force for erection which shall include, but not limited to the following:

a) The employment of a competent erection superintendent, who shall be constantly at the site and shall give his whole time to the superintendence of the erection of the equipment and whose duties shall include the supervision of the unloading, assembly and installation, repair, replacement of any damaged components and any operating adjustments.

b) The employment of a sufficient number of assistants to the erection superintendent for supervision and work force for the number of working shifts per day and days per week to complete the work within the time specified.

c) The contractor shall employ only such persons, who are careful, skilled and experienced in their specific trades.

8.10 Notices

a) Any notice, order, direction or other communication to be given to the contractor under any of the provision of the contract shall, without limitation be conclusively deemed to have been received by the contractor, if delivered or mailed to the contractor

at the address mentioned in the contract or to the contractor's last known place of business or residence or to his superintendent or foreman.

Sub-contracts

a) The contractor shall not sublet any part of the erection work without the written consent of the purchaser. The contractor shall be responsible to the purchaser for all the work of the sub-contractor. Any sub-contractor shall be bound to the contractor by the terms of drawings and specification and shall assume towards the contractor all the obligations and responsibilities that the contractor assumes towards the purchaser.

8.11 Co-ordination Work

a) The contractor shall plan his operations so as to avoid interference with the operation of the purchaser's other contractors or sub-contractors at the site. The contractor shall organize his work to suit the timings shown on the construction schedule or revisions thereto, issued by the purchaser. The work shall also be coordinated with other running units.

8.12 Planning

a) Before commencement of the job, contractor shall provide detailed schedule for the completion of job indicating target for the completion of major events, manpower requirement during various stages of erection and commissioning.

8.13 Layout and Measurements

a) The purchaser will layout basic building lines and establish datum but such layout shall not relieve the contractor of his responsibility for the proper performance of the works. The contractor shall provide equipment for and he shall carry out and check all precision and detailed layout including setting and alignment of the equipment and machinery. The contractor shall protect all survey reference points established by the purchaser and he shall provide sufficient, safe and proper facilities at all times for layout and measurement of the work.

8.14 Clean-up

a) The contractor shall at all times keep the site free from the accumulation of waste materials and debris and upon completion of the job, shall clean and dispose of all surplus materials, rubbish and temporary works of whatsoever nature and kind as directed by the purchaser and shall leave the works and site clean and tidy.

8.15 Services to be provided by the Purchaser

a) During the execution of the works, the purchaser shall provide for the contractor 'temporary electric power' at 415 volts, 3 phase, 50 Hz. and 230 volt, single phase, 50 Hz, subject to the following conditions:

- i) The electric power will not be used for heating purposes.
- ii) The contractor shall make his own arrangements for the supply, erection and dismantling on completion of the works of his temporary distribution system, distribution panels and other equipment he may require to take the power from the purchaser's supply points.
- iii) The purchaser will supply his power to the contractor at a point which will be within 100 metres of the location of the works.
- iv) The contractor's temporary distribution system including metering shall be subject in every respect to the approval of the purchaser and shall be so arranged as to avoid any interference with the operations of the other contractors on the site.
- v) The contractor will not hold the purchaser responsible for the consequences of any unintentional interruptions to the continuity of the power supply or power system voltage and frequency fluctuations.
- vi) Water and electrical power supply will be provided free of cost to the contractor.

8.16 Transportation of Erection Equipment and Material to the Site:

- a) The contractor shall be responsible for all transportation of erection equipment and materials to and from the site.
- b) **Access Roads and Temporary Buildings:** The contractor shall have the reasonable use of existing roads at the site. The contractor may use the main roads into the plant for vehicle storage provided that it does not interfere with access by other contractors to the plant. The purchaser will regulate the entry of vehicles into the plant.
- c) **Access to Site:** Parts, which cannot be moved directly and stored inside the plant building, will have to be placed temporarily in the site storage yards and uplifted at the time of installation. Storage areas will be located within 1000 ft. of the lift rooms.

8.17 Site Welding

- a) The contractor shall have all welding procedure, qualified welder and welding equipment in accordance with the ASME Boiler and Pressure Vessels Code Section IX, prior to commencing of any welding at site. All welding shall be carried out in accordance with relevant standards/ codes (listed under clause 3) by qualified and experienced welders.
- b) Faulty welds caused by poor workmanship or lack of supervision on the part of contractor shall be cut out and rewelded at the contractor's expenses. The procedure for the repair of defective welds shall be approved by the purchaser prior to any repair being made.

8.18 Security Rules

a) The contractor shall follow at site all security rules as may be framed by the purchaser from time to time regarding removal of material from site, issue of identity cards, control of entry of personnel and all similar matters. The contractor and his personnel shall abide by all security measures imposed by the purchaser or his duly authorized representative from time to time. Commissioning Checks

- a. On completion of installation work, the Contractor shall request the Engineer-in-charge for inspection and test with minimum of fourteen (14) days advance notice.
- b. The Engineer-in-charge shall arrange for joint inspection of the installation for completeness and correctness of the work. Any defect pointed out during such inspection shall be promptly rectified by the Contractor.
- c. The installation shall be then tested and commissioned in presence of the Engineer-in-charge.
- d. The contractor shall provide all, men, material and equipment required to carry out the tests.
- e. All rectifications/ repair or adjustment work found necessary during inspection, testing and commissioning shall be carried out by the Contractor without any extra cost. The handing over of Passenger/ Passenger cum Service Lift system installation shall be affected only after the receipt of written instruction from the purchaser/ his authorized representative.
- f. The testing shall be done in accordance with the applicable Indian Standards and codes of practices.
- g. All the required commissioning checks mentioned below, but not limited to following, should be carried out
 - i. Visual workmanship check.
 - ii. Lift earthing continuity.
 - iii. Insulation resistance test.
 - iv. Functional and interlock test by simulation.
 - v. Open circuit test for 24 hours.

8.19 Training

The scope of tender shall include training of purchaser's engineers and technicians for operation and maintenance of all the equipment included in the tender.

8.20 Statutory Approvals

The Contractor shall submit the required applications, drawings, etc., to the corporation/lift inspector/ electrical inspector/ factory inspector and/ or any other statutory authority and obtain their approval, licenses and/ or sanctions. Completion certificate shall be submitted by the Contractor to statutory authorities to enable the elevators to be commissioned for utilization. The Contractor shall be responsible for Liaisoning. All the forms/ letters to be submitted to lift inspector will be issued by the department & all the admissible fees to be paid to the various authorities in this respect will be paid by the department. The following permissions shall be obtained by the contractor from lift inspector:

- i) Obtaining all necessary permits/ approvals to commence work at site from concerned authorities.

- ii) Obtaining all statutory and mandatory permission/ clearances/ approvals from concerned authorities for erection & commissioning of elevators.
- iii) Obtaining approval & license from Lift Inspector for working of the elevators.

The work shall not be deemed to have been completed until the above approvals, lift license for working of lifts etc. have been issued by the lift inspector.

6. MAINTENANCE, DELIVERY & GUARANTEE

a) Maintenance: 12 months free maintenance shall be provided. The period of maintenance should start from the date of completion of installation and acceptance testing and inspection. Maintenance shall consist of regular examination and any necessary adjustment and lubrication of the equipment by the contractor. The required supplies and parts shall be furnished except such parts as needed due to negligence, misuse or accidents not caused by the contractor. Special examination shall also be made. All work shall be made in working hours on working days, except for emergency.

b) Dispatch & Delivery:

- i) Materials shall be dispatched only after obtaining a shipping release from the purchaser or his authorized representative. No material shall be dispatched without prior written consent of the purchaser or his representative.
- ii) The contractor shall be fully responsible for protective measures to ensure the safe delivery of the materials. The contractor shall insure the item at his own cost for its damage/ loss during transportation.

iii) Place of delivery: The lifts shall be delivered to the following

address:

Rajasthan Information
Commission

VR87+QFV, Suchna Bhavan,
Jhalana Link Road, Jawahar
Lal Nehru Marg, behind OTS
Campus, Jaipur, Rajasthan
302017

c) Guarantee: The vendor shall warrant the equipment and installation shall satisfy the requirements of the intended use and is free from latent defects. Vendor shall assume responsibility for obtaining manufacturer's performance guarantee for all equipment purchased by him. Vendor shall then assume this warranty is his guarantee to the purchaser. All the equipment supplied under this contract shall be guaranteed for satisfactory performance and against manufacturing and material defects for a period of 12 months after being put in operation, after obtaining clearance for lift operation. Material damaged in transit or during guarantee period shall be replaced immediately and such replacement shall also be governed by similar guarantee.

7. ANNEXURE-I

**FORMAT FOR SUBMISSION OF TENDER -
TECHNICAL**

1. Technical particulars

The tenderer shall furnish following technical particulars for the lifts offered, without which the offer shall be considered as incomplete.

Passenger Lift

Sl. No.	PARTICULAR	UNIT	REQUIRED	TENDERER
1.0	General			
1.1	Whether bidder is manufacturer or authorized dealer of lifts		Vendor to furnish certificate that they are original manufacturer or authorization certificate from OEM.	
1.2	Country of origin		Vendor to furnish	
1.3	Province of establishment		Vendor to furnish	
1.4	Standard followed		As per specification	
2.0	Input power supply			
2.1	Voltage	V	415 ± 10%, 3 phase, 4 wire	
2.2	Frequency	Hz	50 ± 5%	
2.3	Combined variation (voltage and frequency)		± 10%	
3.0	Technical Requirement			
3.1	Location		As per Specification	
3.2	Type of Service		Passenger Type	
3.3	Type of machine		Geared or Gearless machine	
3.4	Rated Load on Lift	Persons	As per Specification	
3.5	Rated Speed of Lift	Mtr / Sec	As per Specification	
3.6	Total Travel	Mtr	As per Specification	
3.7	No. of floors to be served (Including Ground Floor)		As per Specification	
3.8	Method of Control		AC VVVF control with Automatic Level Adjustment	

3.9	Position of Machineroom		Directly above Lift Shaft	
3.10	Car Enclosure Construction Design and Finish		As per specification.	
3.11	Design, Construction & Installation Code s including Car Size, Door Size, Shaft Size, Size of Platform, Car Entrance etc.		As per Standards listed in Technical Specification	
3.12	Car & landing Doors		Bi-Parting center opening door	
3.13	Flooring		Vinyl flooring	
3.14	Operation		Automatic Simplex with & without attendant with Provision for locking control in “Auto” or “Attendant” Position. Selector switch shall be provided for locking the closure of automatic door.	
3.15	Method of Operation of Car & Landing Doors		Power operated with Automatic Door opening and Closing Devices	
3.16	Other Requirements		<ul style="list-style-type: none"> a. Car position indicator in car b. Car position indicator at all floors c. Call registered Tell-tale lights in COP (under attendant mode) d. Battery operated alarm bell e. Emergency light with suitable battery and battery charger f. Remote alarm g. One blower h. Two Recessed Mounted LED lamp fittings for min 100 Lux illumination level. i. Internal Telephone wiring with Telephone Hand Set j. Automatic Rescue Device k. Interface for CCTV 	
3.17	Order of guaranteed accuracy for the ‘self levelling’		As per specification.	

4.0	Additional Requirements			
4.1	Isolating Cushion between Car & CarFrame		PU/ Rubber pad/ Spring	
4.2	Three Pin Plug Socket onCar Top		5/ 15A, 3 Pin Plug Socket withMCB on Top of Lift car	
4.3	Car Frame material andtype of construction		MS Construction	
4.4	Landing Door		Fire rated Minimum 1 Hour	
4.5	Door Hanger Tracks along with accessories		Required	
4.6	Safety Shoes completewith Accessories		Required	
4.7	Safety Device for DoorOperation		Required	
4.8	False Ceiling		Required	
4.9	Emergency Stop Switch		Required	
5.0	Control & Operation			
5.1	Type of Control		Simplex	
5.2	Type of Drive		Variable Voltage Variable Frequency Drive	
6.0	Car Operating Panel(COP)			
6.1	Type of Construction		Partial Height COP, Removable type from Car withSS Face Plate	
6.2	Push Buttons		Luminous Push Buttons	
7.0	Car Position Indicator			
7.1	Type of Construction		With stainless steel faceplate	
7.2	Type of Display		LED Display	
8.0	Push Button Station and Call registered tell- tale light at each landing			
8.1	Type of Construction		With stainless steel faceplate	
8.2	Push Buttons		Luminous Push Buttons	
9.0	Apron/ Facia Plate provided		As per IS 14665	
10.0	Buffers			
10.1	Type		Spring buffer as per IS 14665	
10.2	Number of buffers		As per IS 14665	
11.0	Load Plate			
12.0	Counter weight frame		Fabricated Steel Construction	

13.0	Counter weight Fillers		To be furnished by vendor	
14.0	No. of Limit Switch/Sensor			
14.1	Location		Bottom & Top Terminal	
14.2	Type		As per technical specifications.	
14.3	Operation		Cam operated	
15.0	Controller & Type		Selective Controller with VVVF drive and Microprocessor Based Software Controlled Logic system	
16.0	Reverse Phase Relay and other protective device		Required	
17.0	Car Safety & Governor			
17.1	Stopping Distance		As per IS 14665	
17.2	Type & Mode of Operation of Over Speed Governor Device		Centrifugal Action	
17.3	Tripping Speed & Design Code Conforming to		IS 14665	
18.0	Motor Details			
18.1	Make		To be furnished by vendor	
18.2	Type		3 Phase, AC Squirrel Cage Induction Motor/ Permanent Magnet Synchronous Motor (PMSM)	
18.3	Type of Duty		Lift Duty	
18.4	Motor Duty		S4	
18.5	Rated kW		To be furnished by vendor	
18.6	Duty Cycle of Motor		As per specification.	
18.7	Applicable Standard		IS/ IEC 60034-1	
18.8	No of Starts Per Hour		Minimum of 150 Starts per Hour	
18.9	Direction of Rotation		Both Clockwise & Anticlockwise	
18.10	Class of Insulation		Class F with Temp Rise limited to Class B	
18.11	Method of Starting		AC Variable Voltage Variable Frequency Drive	
19.0	Door Motor			
19.1	Equipment Driven by Motor		Door	
19.2	Direction of Rotation		Both Clockwise & Anticlockwise	
19.3	Type of Enclosures		IP 44 or higher	

20.0	Metallic Wire Mesh between Car & Counter Weight		Required	
21.0	Fireman Switch		Required	
22.0	Sound Reducing Material		Required - Isolation Rubber/Other arrangement in Machine	
23.0	Automatic Rescu eDevice		Required	
24.0	Trailing Cables		FRLS/ Zero Halogen type	
25.0	Design Seismi cCoefficient		According to IS 1893.	

Passenger cum Service Lift

S NO	PARTICULAR	UNIT	REQUIRED	TENDERE D
1.0	General			
1.1	Whether bidder is manufacturer or authorized dealer of lifts		Vendor to furnish certificate that they are original manufacturer or authorization certificate from OEM.	
1.2	Country of origin		Vendor to furnish.	
1.3	Province of establishment		Vendor to furnish.	
1.4	Standard followed		As per specification.	
2.0	Input power supply			
2.1	Voltage		415V ± 10%, 3 phase, 4 wire	
2.2	Frequency	Hz	50 ± 5%	
2.3	Combined variation (voltage and frequency)		± 10%	
3.0	Technical Requirement			
3.1	Location		As per Specification	
3.2	Type of Service		Passenger cum Service Type	
3.3	Type of machine		Geared or Gearless machine	
3.4	Rated Load on Lift	kg	As per Specification	
3.5	Rated Speed of Lift	Mtr / Sec	As per Specification	
3.6	Total Travel	Mtr	As per Specification	
3.7	No. of Floors to be Served(Including Ground Floor)		As per Specification	

3.8	Method of Control		AC VVVF control with Automatic Level Adjustment	
3.9	Position of Machine room		Directly above Lift Shaft	
3.10	Car Enclosure Construction Design and Finish		As per specification.	
3.11	Design, Construction & Installation Codes including Car Size, Door Size, Shaft Size, Size of Platform, Car Entrance etc.		As per Standards listed in Technical Specification	
3.12	Car & landing Doors		Bi-Parting center opening Door	
3.13	Flooring		As per technical specifications.	
3.14	Operation		Automatic Simplex with & without attendant with provision for locking control in "Auto" or "Attendant" Position. Selector switch shall be provided for locking the closure of automatic door.	
3.15	Method of Operation of Car & Landing Doors		Power operated with Automatic Door opening and Closing Devices	
3.16	Other Requirements		a. Car position indicator in car b. Car position indicator at all floors	
			c. Call registered Tell-tale lights in COP (under attendant mode) d. Battery operated alarm bell e. Emergency light with suitable battery and battery charger f. Remote alarm g. One blower h. Two Recessed Mounted LED lamp fittings for min 100 Lux illumination level. i. Internal Telephone wiring with Telephone Hand Set j. Interface for CCTV	

			k. Automatic Rescue Device	
3.17	Order of guaranteed accuracy for the 'self levelling'		As per specification.	
4.0	Additional Requirements			
4.1	Isolating Cushion between Car & Car Frame		PU/ Rubber Pad/ Spring.	
4.2	Three Pin Plug Socket on Car Top		5/ 15A, 3 Pin Plug Socket with MCB on Top of Lift car	
4.3	Car Frame material and type of construction		MS Construction	
4.4	Landing Door		Fire rated Minimum 1 Hour	
4.5	Door Hanger Tracks along with accessories		Required	
4.6	Safety Shoes complete with Accessories		Required	
4.7	Safety Device for Door Operation		Required	
4.8	False Ceiling		Required	
4.9	Emergency Stop Switch		Required	
5.0	Control & Operation			
5.1	Type of Control		Simplex	
5.2	Type of Drive		Variable Voltage Variable Frequency Drive	
6.0	Car Operating Panel (COP)			
6.1	Type of Construction		Partial Height COP, Removable type from Car with SS Face Plate	
6.2	Push Buttons		Luminous Push Buttons	

7.0	Car Position Indicator			
7.1	Type of Construction		With stainless steel faceplate	
7.2	Type of Display		LED Display	
8.0	Push Button Station and Call registered tell-tale light at each landing			
8.1	Type of Construction		With stainless steel faceplate	
8.2	Push Buttons		Luminous Push Buttons	
9.0	Apron/ Facia Plate provided as per IS 14665			
10.0	Buffers			
10.1	Type		Spring buffer as per IS 14665	
10.2	Number of buffers		As per IS 14665	
11.0	Load Plate			
12.0	Counter weight frame		Concrete and cast iron mixed	
13.0	Counter weight Fillers		To be furnished by vendor	
14.0	No. of Limit Switch/Sensors			
14.1	Location		Bottom & Top Terminal	
14.2	Type		As per technical specifications	
14.3	Operation		Cam operated	
15.0	Controller & Type		Selective Controller with VVVF Drive and Microprocessor Based Software Controlled Logic system	
16.0	Reverse Phase Relay and other protective device		Required	
17.0	Car Safety & Governor			
17.1	Stopping Distance		As per IS 14665	
17.2	Type & Mode of Operation of Over Speed Governor Device		Centrifugal Action	
17.3	Tripping Speed & Design Code Conforming to		IS 14665	
18.0	Motor Details			
18.1	Make		To be furnished by vendor	
18.2	Type		3 Phase, AC Squirrel Cage Induction Motor/ Permanent Magnet Synchronous Motor(PMSM)	
18.3	Type of Duty		Lift Duty	
18.4	Motor Duty		S4	
18.5	Rated kW		To be furnished by vendor	

18.6	Duty Cycle of Motor		As per specification.	
18.7	Applicable Standard		IS/ IEC 60034-1	
18.8	No. of Starts Per Hour		Minimum of 150 Starts per Hour	
18.9	Direction of Rotation		Both Clockwise & Anticlockwise	
18.10	Class of Insulation		Class F with Temp Rise limited to Class B	
18.11	Method of Starting		AC Variable Voltage Variable Frequency Drive	
19.0	Door Motor			
19.1	Equipment Driven by Motor		Door	
19.2	Direction of Rotation		Both Clockwise & Anticlockwise	
19.3	Type of Enclosures		IP 44 or higher	
20.0	Metallic Wire Mesh between Car & Counter Weight		Required	
21.0	Fireman Switch		Required	
22.0	Sound Reducing Material		Required - Isolation Rubber/Other arrangement in Machine	
23.0	Automatic Rescue Device		Required	
24.0	Trailing Cables		FRLS/ Zero Halogen type	
25.0	Design Seismic Coefficient		According to IS 1893	

Note: Vendor shall furnish data sheet for all the equipment individually by copying required data sheet format for each type of equipment.

2. Tender Drawings

The tenderer shall submit drawings showing plan, front & side elevation of the lifts, lift well details and machine room details as requested in Part-II of tender along with the quotation itself.

Schedule - I

FINANCIAL RESOURCES AND CAPABILITY

[Reference clause 3 (a)]

1. Name of Bidder

2. Total financial turnover achieved by the bidder in the last five financial years:

S.no.	Year	Turnover
(1)		
(2)		
(3)		
(4)		
(5)		

Note: Balance Sheets and Profit & Loss Accounts is to be enclosed by the bidder which is considered by him as per criteria 2 (a).

3. Total financial Turnover projected in the current financial year
4. Has the bidder ever been debarred from tendering for Central Government / State Government / any Government undertaking?
Yes / No, if yes give details.
5. Has bidder ever been declared insolvent?
Yes/No, if yes give details.
6. Name(s) and Address of Branch/(s) for bidder's Bankers.

I/We hereby certify that the above information is correct to the best of my/our knowledge and belief.

SCHEDULE - II

(Reference Clause 3b)

Detail of quantities of work executed during last five financial years

S. No.	Name of Work (with Agreement No. & Date)	Place (District/State)	Financial Year	Principal item of work	

Note: Certificate from concerned Engineer-in-charge should be enclosed in support and verification of the above statement.

To be given on Non-Judicial stamp
Paper of Rs. 10/- only, duly attested by
Notary Public

SCHEDULE - V
(Reference Clause 3f)

DETAILS OF EXISTING COMMITMENTS & ON-GOING WORKS TO BE COMPLETED IN NEXT ONE YEAR FROM DATE OF SUBMISSION OF BID

S. No.	Name of Work	Place and State	Ongoing work			Existing Commitments	
			Cost of work	Cost of work Remaining to be executed	Value of remaining work at present price level as on updated @10% per year	Estimated cost (Rs. In lacs)	Value of present price level as on updated @10% per year

Remark: If it is found at any stage that the bidder hides his existing commitments than proper action will be taken as per RTPP act and Rules.

SCHEDULE -VI
(Reference clause 3g)

DETAILS OF LITIGATION OR ARBITRATION CONTRACTS

S.No.	Name of works (with agreement no. & date)	Client	Work order amount	Disputed amount claimed in litigation/ Arbitration	Date of raising disputed amount	Actual award amount, if the case is decided	Cause of litigation & Matter in dispute

Remark: If schedule-VI is found blank then it will be treated as NIL.

SCHEDULE-VII
(Reference Clause 3 h)
BID CAPACITY

Name of bidder :-----

<u>1.</u>	A = Maximum value of Electrical Engineering work executed in any one year during the last five finance years (Updated to present price level)	----- Lacs	Certified details enclosed at Page no.....
<u>2</u>	<u>N = Number of years prescribed for completion of the work, for which bids are invited</u>	-----Year	
<u>3</u>	<u>B= Value, at present price level of existing commitments and on going work to be completed during the N period</u>	-----Lacs	Certified details enclosed at Page no.....

Bid capacity = $A \times N \times 3 - B$
= -----Lacs

ANNEXURE- I

[Reference Clause 3(i)]

To be given on Non-Judicial stamp
Paper of Rs. 10/- only, duly attested by
Notary Public

AFFIDAVIT

I/We..... Proprietor/ Partner/
Authorized signatory of M/s under take the
oath that the information furnished by me/us in schedule I to VII of the
assessment Bid for
..... is correct to the best of my/our
knowledge. If any information is found to be incorrect JDA has right to reject the
Bid and to take action against me/us as per rules.

.....
Proprietor/ Partner/ Authorized signatory
M/s
.....



JAIPUR DEVELOPMENT AUTHORITY

**Name of Work:- SITC and operation maintenance (05 Yr) of Lift
elevators at RIC near OTS Jaipur.**

Financial Bid

**EXECUTIVE ENGINEER (Elect.-VI)
JAIPUR DEVELOPMENT AUTHORITY,
JAIPUR**

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

**Name of Work:- SITC and operation maintenance (05 Yr) of Lift
elevators at RIC near OTS Jaipur.**

CONTENTS OF BIDDING DOCUMENT

S.No.	Details	Page No.
1.	General Instructions to contractors	3-6
2.	Special Condition for post qualification	7-10
3.	Special condition of contract	11-14
4.	Inspection and testing	15-17
5.	Minimum Safety rules	18-22
6.	Guarantee	23-24
7.	Erection testing and commissioning	25-34
8.	GTP to RMU	35

1-GENERAL INSTRUCTIONS TO CONTRACTOR

- 1.1 The Bidder is expected to examine carefully all instructions, conditions, forms, terms, and performance specification and drawing in the bid Documents. Failure to comply with the requirements of Bid submission shall be at the Bidder's own risk, Bids which are not substantially responsive to the requirements of the bid documents shall be summarily rejected.
- 1.2 At any time prior to the last date for submission of bids, the Employer may, for any reason whether at his own initiative or in response to a clarification requested by a prospective bids, modify the bid Documents but the issuance of an Addendum.
- 1.3 The Addendum will be sent in writing or by Fax prospective Bidder who have received Documents, and will be binding unto them, whether the prospective Bidders acknowledge same or not.

2. DOCUMENTS AND INFORMATION TO BE FURNISHED AT THE TIME OF BID SUBMISSION

- 2.1 The bid to be prepared and submitted by the Bidder to the Employer for consideration shall comprise the following.
 - a Form of bid duly signed along with the complete set of bid Documents. All documents issued for the purpose of bidding as described shall be deemed to have been incorporated in the bid for the work.
 - b Bid security, Bid fee and processing fee as applicable in form of demand draft of any Nationalised Bank of India in favour of the Secretary Jaipur Development Authority Jaipur', payable at Jaipur.
 - c GST/ Tax Certificate from the concerned departments
 - d Bill of Quantities with the rates (both in figures as well as in words) and amounts for, all items of work duly filled in.

3. BIDDING PRICES

- 3.1 Unless explicitly stated otherwise in the Bid Documents, the contract shall be for whole based on the departmental design, Bill of Quantities, rates and prices submitted by the Bidder.
- 3.2 The Bid shall fill in percentage rate (above/below) for the scheduled rates items and rates and rates and prices for all items in Non scheduled category of works describe in the Bill of Quantities in both figures and words, In case, there is any discrepancy in the rates

quoted in figures and words, the rates, quoted in words shall be taken as correct. Item against which no rate of price is entered by the Bidder will not be paid for the employer when executed and shall be deemed to have been covered by the rates and prices in the Bill of Quantities.

- 3.3 All duties, taxes, fees and other levies (present and future) payable by the contractor under the Contract, or for any other cause, as on the date thirty days prior to the closing date for submission of bids, shall be included in the total Contract Price submitted by the Bidder and the evaluation and comparison of bids by the Employer shall be made accordingly.

4. BID SECURITY

- 4.1 The Bidder shall furnish as part of his bid security for the respective amounts as mentioned in the NIT (Annexure 1 and 2). The amount is to be deposited online by bidder. In case the amount exceeds the online payment limit, the payment may be made through RTGS/NEFT in ICICI BANK LTD Bank Account Number 675401700586 IFSC Code ICIC0006754. After successful payment, update the UTR/Instrument number on JDA Tender portal against the tender you want to participate. The amount deposited will be confirmed by JDA and will be updated online.
- 4.2 Any bid not accompanied by bid security, bid fee and processing fee will be summarily rejected by the employer as non-responsive.
- 4.3 The bid security of the unsuccessful Bidder will be discharged/returned without interest as promptly as possible as but not later than 60 days after expiry of the bid validity prescribed by the employer.
- 4.4 The bid security of the successful Bidder will be discharged without interest upon the Bidder signing the agreement and furnishing the Bank Guarantee/ Surety Bond for the performance of the Contract.
- 4.5 There will be no liability on the part of the department towards interest on the Earnest Money paid by the Bidder.
- 4.6 The bid security shall be forfeited:
- a If a Bidder withdraws his bid during the period of bid validity, or
 - b In the case of a successful Bidder, if he fails or refuses within the specified time limit, to:
 - i Sign the agreement, or
 - ii Furnish the required performance security.

5. VARIATIONS OR DEVIATIONS IN BID DOCUMENTS

- 5.1 The bid shall submit an offer which complies fully with the basic requirements of the bid Documents as indicated in Drawing and Specifications.

5.2 All Bidders are cautioned that no conditional offers, variations or deviations by the Bidders in respect of any items proposed by the Bidder shall be entertained or considered further in the process of bid evaluation. Furthermore, any deviation from contract conditions, specification, or other requirements stipulated in these Bid Documents shall be summarily rejected as non-responsive.

6. VALIDITY OF BID

6.1 The Bid shall remain valid and open for acceptance for a period of 4 (four) months after the date of opening of bid.

6.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request the Bidder for a specified extension in the period of validity. The request and the responses thereto shall be made in writing through post, fax etc. A Bidder may refuse the request without forfeiting his bid security. A Bidder agreeing to the request will neither be required nor permitted to modify his bid, but will be required to extend the validity of his bid security correspondingly. The provision of Clause D regarding discharge and forfeiture of earnest money shall continue to apply during the extended period of bid validity.

7. FORMAT AND SIGNING OF BIDS

The complete bid shall be without alterations, interlineations or erasure, except those to accord with instructions issued by the Employer or as necessary to correct errors made by the Bidder, in which case such corrections shall be initiated by person or persons signing the bid.

8. EMPLOYER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

Notwithstanding, Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject one or all bids, at any time prior to the award of contract, without thereby incurring any liability to the affected or tenderer's or any obligation to inform the affected Bidder or Bidders of the grounds of the Employer's action.

9. NOTIFICATION OF AWARD OF CONTRACT

Prior to the expiry of the period of bid validity prescribed by the Employer, the Employer will notify the successful Bidder by telegram / cable or fax (and subsequently confirm in writing by Registered Letter) that his bid has been accepted. This letter called "Letter of Acceptance" shall name the sum which the Employer will pay to the Contractor in consideration of the execution, completion and maintenance of the work by the Contractor as prescribed by the Contract (called the "Contract Price").

10. The Letter of Acceptance will form part of the Contract and agreement executed between the parties in accordance with the Form of agreement provided in the bid.
11. Upon furnishing by the successful Bidder of a Performance Security in accordance with the provisions of the special conditions of contract, the Employer will promptly notify the unsuccessful Bidder that their bids have been unsuccessful and will discharge / return without interest their bid security deposits in pursuance with Clause.

12. **SIGNING OF AGREEMENT**

At the same time as he notifies the successful Bidder that his bid has been accepted, the Employer will instruct the successful Bidder to sign and execute the agreement within seven (7) days of issue of the Letter of Acceptance.

Signature of Contractor/Bidder

Executive Engineer (Elect-IV)

J.D.A., Jaipur

2-SPECIAL CONDITION FOR POTENTIAL ASSESSMENT

1. The financial bid shall be opened only of those successful Bidders who qualify the technical Bid criteria.

Documents to be submitted with financial bid are as follows:

Percentage Rates on G-Schedule both in figures and in words duly filled in.

The financial bid will be evaluated on the basis of basic rates of the System (SITC of the Job).

On bid scrutiny, if differences are found in rates given by the bidder in words and figures in individual rates or in sub-total or in grand totals the procedure for deriving the final value shall be as follows:

Before submission of the bids, the bidders are advised to visit the site and get acquainted with site conditions, availability of materials & labour. All clarifications must be sought by the bidders well in time and no extension of time shall be given on this account.

The bidders are advised to account for any fluctuations in market rates of material, equipment cost, labour rates etc. Any claim on these accounts shall not be entertained after the award of work unless specifically agreed to.

Bids not submitted on prescribed form are liable to be rejected.

Bidders are advised to quote original offer as per bill of quantities.

In case drawing and details are not enclosed with bid documents, these can be seen in the office of the department during office hours. Failure to avail of this shall not relieve the bidder of his responsibility of correct interpretation of work involved. Bidders who resort to canvassing in any form shall be liable to rejection.

Printed Conditions of contract: Any printed conditions and conditions contrary to these conditions of contract in contractors offer shall be excluded from the contract and not applicable to this contract.

The bid shall be valid for acceptance for a period of four months from the date of submission of the bid.

2. EXECUTION DRAWINGS

The successful bidder shall have to submit execution drawing to the department within a total period of 1 week from the date of issue of work order for approval by the department

3. TERMS OF PAYMENTS

As given in general Condition of contract in the approved standard agreement amended up to date.

No escalation charges shall be payable to the contractor over and above the rates as agreed to by the department in the detailed bill of quantities.

No advance shall be payable to the contractor.

The department does not bind themselves to accept the lowest or any bid and reserves the right to accept or reject any or all the bids in whole or in part without assigning any reasons for doing so.

The contractor must acquaint, acquire themselves with the site conditions, means to access the work, local conditions and all matters pertaining there to. I shall be the contractors, responsibility to obtain all necessary information required for quoting the above bid and for entering into a contract. The detailed drawing and specifications available with the documents must be studied and examined carefully by the bidder before submitting their offers.

The successful bidder shall sign the agreement on non judicial stamp paper of requisite value within 10 day from the issue of work order. If the contractor selected fails to sign the agreement with ten days of the issue of work order his bid security shall be forfeited.

The following documents shall form part of the contract agreement:
Invitation to bid.

All sections of financial and technical bid, contract (agreement), Bill of Quantities & drawings.

All correspondence between the successful bidder and the department. Any other documents necessary for completion of contract agreement.

The rates quoted in the bid shall include all charges for scaffolding, water, electricity charges, hiring charges for any tools/ equipments etc. required for completion of jobs. The rates shall be inclusive of excise duty, sales tax, octroi duty or any other duties or fees levies by Government or by public or local bodies from time to time.

Necessary documents for import shall be done by the contractor under his own arrangements for equipments of foreign origin. Proof of legal imports! purchase from manufacturer should be submitted at the time of supply, failing which the award may be terminated.

The works contract price quoted shall remain firm till completion of job and handing over the same in working condition to the department. The price should not be subject to exchange rate variations. No foreign exchange and license shall be arranged by Clint and it shall be contractor's responsibility to do so, if required.

It shall be contractor's responsibility to check and ascertain the correct quantities and only these assessed quantities in accordance with the requirement and as per the tentative schedule of work after approval of the Engineer-in-charge shall be brought at site after award of work order.

The contractor shall carry out additional! Reduce work or supply material/ equipments at the same quoted rates up to any increased or decreased quantities specified in detailed bill of quantities. The department shall also be at liberty to ask the contractor to supply, erect and commission rates within four months of stipulated date of commencement of the work order without any price variation.

4 BAR CHART & CASH FLOW CHART

The contractor shall prepare & submit a bar chart & cash flow chart in consultation with the department and shall strictly adhere to the same. The progress and the completion of the work shall be in accordance of the bar chart will form part of this contract agreement. The said schedule of work/ bar-chart will be subject to general conditions of contract related to the extension of time. A weekly progress of site shall be submitted in writing to the department.

5 PERFORMANCE BOUND CONTRACT

The contract shall be a performance bound contract and therefore the contractor shall makes his independent checks for Mounting, selection of equipment, etc. The drawings enclosed with the bid documents are only tentative and for guidance for bidding purposes. The details or execution drawings shall be prepared and submitted for approval to the department by the successful contractor to suit the requirement pertaining to site conditions.

6 TRAINING OF PERSONNEL

The contractor shall impart training to the departmental staff free of cost during erection and commissioning of the plant

7 GUARNTEE

The contractor shall guarantee the complete system & equipments for a period of 5 Year from the date of satisfactory handing over of the plant as certified by the department for fault/ bad workmanship, manufacturing defects in equipments etc. The Bidder shall guarantee the System to maintain the sound quality on the basis of Design/ Scheme. They shall also guarantee that the performance of the various equipments individually and jointly and shall not be less than the specified rating when working under operating conditions for the complete installation.

8 The commissioning of system shall be done by the contractor and all tests at site shall be conducted to confirm the bided specification should be submitted to the department for record.

9 REPAIR/ REPLACEMENT OF PARTS DURING GUARENTEE

Any defects or other faults which may appear within defect liability/guarantee period of twelve months from the date of handing over the system in a satisfactory working conditions to the department arising in the system due to material or workmanship should be corrected and replace with parts of original specifications and makes by the contractor at his own cost.

- 10 Security deposit will be returned to the contractor after 5 Year from the date of finalization of work and successful operation of the system as judged by the department.

11 POWER SUPPLY FOR ERECTION PURPOSES

The contractor shall make his own necessary arrangements for power supply required for erection purposes by applying to JVVNL for a separate connection at his own cost or through his own DG set.

- 12 The contractor shall have to submit original voucher/ bills of various items to be used in execution of work.

- 13 The Octagonal Poles will be dispatch after issuance of certificate from JDA Engineer that the material is fit for dispatch, even after receiving the ornamental poles at site JDA reserve the right to send the material to any Govt. / Semi Govt. / Private lab for testing and if the pole is not found as per specification, the bidder will require to replace the complete material at his own cost.

- 14 All the materials to be used for electrification work must be inspected by Engineer-in-charge or any nominated Engineer of J.D.A. at Factory/ Laboratory before dispatch to the site at the cost of contractor. The contractor shall have to inform seven days in advance for the inspection.

Signature of Contractor/Bidder

Executive Engineer (Elect-IV)
J.D.A.,Jaipur

3. SPECIAL CONDITIONS

SCHEDULE 'H'

1. If there is any typographical error or otherwise in the 'G' Schedule the rate given in the relevant BSR on which Schedule 'G' has been prepared, shall prevail.
2. The contractor shall follow the contractor labour regulation and abolition Act 1970 & Rule 1971.
3. The JDA shall have right to cause an audit technical examination of the work and the final bills of the contractor including all supporting vouchers, abstract etc. to be made within two years after payment of the final bills and if as a result such audit any amount is found to have been over paid / excess in respect of any work done by the contractor under the contract or any work claimed by him to have been done under this contract and found not to have been executed the contractor shall be liable to refund such amount and it shall be lawful for the JDA to recover such sum from him in the manner prescribed in special condition no. 8 or any other manner legally permissible and if it is found that the contractor was paid less than that was due to him under the contract in respect of work executed by him under it, the amount of such under payment shall be paid by the JDA to the contractor.
4. The contractor shall not work after the sunset and before sunrise without specific permission of the authority Engineer.
5. Wherever any claim against the contractor for the payment of a sum of money arises out of under the contracts, the JDA shall be entitled to recover the sum by appropriating in part or whole of the security deposit of the contractor, In the event of the security being insufficient or if no security has been taken from the contractor then the balance of the total sum recoverable as the case may be shall be deducted from any sum then due or which at any time there contract with the JDA should this sum be sufficient to recover the full amount recoverable. The contractor shall pay to JDA on demand the balance remaining due. The JDA shall further have the right to affect such recoveries under P.D.R. Act.
6. The rate quoted by the contractor shall remain valid for a period of 4 (Four) months from the date of opening of the bids.
7. By submission of this bid the contractor agree to abide with all printed conditions provided in the PWD manual from 64 (Chapter 3-para 36) and subsequent modification.
8. No conditions are to be added by the contractor and conditional bid is liable to be rejected.

9. All transaction in this execution of this work and this bid will be liable to Sale-Tax vide section. 2(B) read with sub-clause (4) Sale-tax Rule, 1954.
10. If any bidder withdraws his bid prior to expiry of said validity period given at S.No. 7 or mutually extended period or makes modifications in the rate, terms and conditions of the bid within the said period which are not acceptable to the department or fails to commence the work in the specified period, fails to execute the agreement and fails to furnish performance guarantee the department shall without prejudice to any, other right or remedy, be at liberty to forfeit the amount of earnest money given in any form absolutely. If any contractor, who having submitted a bid does not execute the agreement or start the work or does not complete the work and the work has to be put to rebidding he will stand debarred for 6 Months from participating of bidding in JDA in addition to forfeiture of Earnest Money / Security Deposit and other action under agreement.
11. The contractor shall arrange his own machinery required for the work such as Bitumen Mixer, Hot Mix plants and paver, road roller, Tar boiler, sprayer etc.
12. The contractor shall arrange his own storage tanks up to 10 Tones capacity for storage of bulk bitumen wherever supplied by the department.
13. Rules regarding enlistment of contractor provide that work up to the times limit for which they are qualified for bidding can be allotted to them, Therefore, before bidding the contractor will keep this in mind, and submit the details of the work. Bids with incomplete or incorrect information are liable to be rejected.
14. Any material not conforming to the specifications collected at site have to be removed by the contractor within a period of 3 days of the instruction, issued by do Engineer -In charge in writing failing which, such material shall be removed by the Engineer-In charge at risk and cost of the contractor after expiry of 3 days period.
15. The material collected at site and paid provisionally shall remain under and ward of the contractor till it is consumed, fully on the work.
16. The rates provided in bid documents are inclusive of all Taxes and royalty.
17. For paver work at least 3 road rollers shall be simultaneously deployed.
18. No extra lead of earth/material shall be paid over and above as specified in 'G' Schedule Source/borrow pit area for earth shall have to be arranged by the Contractor at his own cost.
19. Undersigned has full right to reject any or all bids without given any reasons.
20. Mortar of Masonry work and lean concrete will be permitted mixer with hopper.
21. As per Supreme Court decision "All contracts with Governments shall require registration of workers under the building and other construction workers (Regulation of

Employment and Conditions of Service) Act, 1996 and extension of benefits to such workers under the act.

22. Defect liability period in this work will be 5 years. It means at any defect occurs within 05 years from the date of completion of the work contractor has to repair maintenance on his own expenditure.
23. The bidders are required to submit copy of their enlistment as contractor.
24. Conditions of RPWA-100 will be mandatory & acceptable to the contractor.
25. Any bid received with unattested cutting/ overwriting in rates shall be rejected and such bidder will be debarred from bidding for three months in JDA.
26. All the **provision of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT 2012 and Rules, 2013 will be applicable. If there is any contradictions in existing special conditions and provisions of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT 2012 and Rules 2013 provision of THE RAJASTHAN TRANSPARENCY IN PUBLIC PROCUREMENT ACT 2012 and Rules 2013 shall be applicable.**

**SIGNATURE OF CONTRACTOR
WITH FULL ADDRESS:**

**EXECUTIVE ENGINEER (Elect.-IV)
JDA JAIPUR**

JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Special Terms & Conditions for Electrification work.

1. The Contractor has to give the performance guarantee of the following materials for the period mentioned against them from the date of completion of work:

(a)	Transformers	30 Months
(b)	All types of Insulators	18 Months
(c)	ACSR Conductors	6 Months
(d)	Isolators	6 Months
(e)	Horn gap fuse set	6 Months
(f)	LT Pillar Box	6 Months
(g)	All types of HT/LT cables	18 Months
2. The Contractor has to arrange for the permission for the charging of electrical system from the Electrical Inspector Govt. of Rajasthan. He will have to deposit the necessary fees, which shall be reimbursed by Jaipur Development Authority.
3. The contractor will coordinate for the system handing over and charging process and if any defects, is pointed out by the RSEB/JVVNL, then he will have to rectify the same.
4. The final bill shall be paid after the lines and substations are handed over to RSEB/JVVNL and system is charged.
5. Inspection shall be bear by the contractor it self.
6. The material shall be purchased from the firms, which are also supplying the material to RSEB/JVVNL.
7. All HT/LT cables should be sequentially marked with cable size, IS Code, grade, manufacturer name & length at every per meter duly embossed.
8. The contractor shall return unused material issued to him by the deptt. If desired by the Engineer in-charge and in case, of failure to do so he shall be charged for such unreturned material at double the issue rate including storage and supervision charges or the market rate whichever is higher. The basis of the theoretical consumption and allowing for wastage @ 5% at double the issue rate including storage and supervision charges or market rate which ever is higher.
9. **The contractor shall be fully responsible to follow safety code as per IS 3764:1992 (upto date). The work should be executed without damaging existing water pipe line, LI/HT electric under ground cable, poles, existing surface drain, water connections, Telephone cables etc. In case of any damages the penalty/ liability imposed for such work shall be borne by the contractor and shall be got repaired immediately by arranging material/ labour/ assistance etc. In case of delay JDA reserve right to execute/ get executed the work at the cost and risk of the contractor.**
10. It is a mandatory condition that contractor will get all insulated material tested from CTL of JVVNL or other specified NABL accredited agency by JDA before using it at site.
11. The contractor or his authorized representative shall intimate in advance along-with complete programme of erection & commissioning where ever shunt down of existing line is required, to the Nodal officer / Engineer In-charge of the site for arranging shut downs. The contractor shall have to plan the work in such a way that in minimum duration of shut down maximum work is carried out to avoid repeated and / or longer duration shut downs.

Executive Engineer (Elect-IV)

JDA, Jaipur.

I carefully study & do agree for above terms & conditions.

Signature & Seal of the Contractor

4-INSPECTION AND TESTING AT MANUFACTURER'S PREMISES

1. The test of the material and workmanship shall be conducted by the JDA/JVVNL Engineers as necessary. The result of such tests should confirm to be standard laid down in the Indian standards and or the standards laid down in the detailed specification of the JVVNL/ .Public Works.
2. Proper quality control is required to be maintained by the contractor. Qualified personnel's having a degree in engineering or as required under the contractor enlistments rules duly approved by the Deptt. Shall have to be engaged at site by the contractor. The Deptt. Reserves the right to engage such staff and recover the expenses from the contractor on such account in case of his failure to do so.
3. The GTP of the material to be used be used by the contractor shall be submitted 21 days in advance with the Engineer In charge and be got approved by him before use.
4. All inspection and testing shall be carried out in accordance with the Specification and in absence of Specification relevant Indian Standard or internationally approved equivalent standard. After award of contract, Bidder shall furnish QA plan which will be mutually discussed with the Owner and finalized QA plan shall include test and incoming supply of raw materials and bought out items, stage inspections and tests on finished products at manufacturer's works / appropriate testing station. QA plan shall clearly indicate tests which are intended to be witnessed by the Bidder alone and those by both Bidder and Owner.
5. The Contractor shall carry out wherever practical, at the place of manufacture tests of the Plant / Equipment.
6. The Owner shall be entitled to attend the aforesaid inspection and / or tests by his own duly authorized and designated representatives.
7. The Owner and his duly authorized representative shall have access to the Contractor's premises at all suitable times to inspect and examine the material and workmanship of the mechanical and electrical plant and equipment during its manufacture there. If part of the plant and equipment is being manufactured on other premises, the Contractor shall obtain permission for the Owner or his duly authorized representative, to inspect as if the plant and equipment was manufactured on the Contractors own premises. Testing (including testing for chemical analysis and physical properties) shall be carried out by the Contractor and certificates submitted to the Owner who will have the right to witness or inspect the above mentioned inspection / testing at any stage desired by him. Where inspection or testing is to be carried out at a subcontractor's works, a representative of the Contractor shall be present.
8. The procedure for the testing and inspection to be carried out during or following the manufacture of the materials to ensure the quality and workmanship of the materials and to further ensure that they conform to the Contract is whatever place they are specified shall be as described below.
 - (a) The Contractor shall give the Owner at least 21 clear days notice in writing of the date and the place at which any plant or equipment will be ready for inspection/ testing as provided in the Contract. The Owner or his duly authorized representative shall thereupon at his discretion

notify the Contractor of his intention either to release such part of the plant and equipment upon receipt of works test certificates or of his intention to inspect. The Owner shall then give notice in writing to the Contractor, and attend at the place so named the said plant and equipment which will be ready for inspection and/or testing. As and when any plant shall have passed the tests referred to in this section, the Owner shall issue to the Contractor a notification to that effect.

- (b) The Contractor shall forward to the Owner duly certified copies of the test certificates and characteristics performance curves for all equipment.
- (c) If the Owner fails to attend the inspection and/or test, or if it is agreed between the parties that the Owner shall not do so, then the Contractor may proceed with the inspection and/or test in the absence of the Owner and provide the Owner with a certified report of the results thereof as per (b) above.
- (d) If any materials or any part of the works fails to pass any inspection / test, the Contractor shall either rectify or replace such materials or part of the works and shall repeat the inspection and/or test upon giving a notice as per (a) above. Any fault or shortcoming found during any inspection or test shall be rectified to the satisfaction of the Owner before proceeding with further inspection.
- (e) Where the plant and equipment is a composite unit of several individual pieces manufactured in different places, it shall be assembled and tested as one complete working unit, at the maker's works or at site as mutually agreed by the Owner and Contractor.
- (f) Neither the execution of a inspection test of materials or any part of the works, nor the attendance by the Owner, nor the issue of any test certificate pursuant to (c) above shall release the Contractor from any other responsibilities under the Contract.
- (g) The test equipment, meters, instruments etc., used for testing shall be calibrated at recognized test laboratories at regular intervals and valid certificates shall be made available to the Owner's at the time of testing. The calibrating instrument used as standards shall be traceable to National/International standards. Calibration certificates or test instruments shall be produced from a recognized Laboratory for the Owner's consent in advance of testing and if necessary instruments shall be recalibrated or substituted before the commencement of the test.
- (h) Items of plant or control systems not covered by standards shall be tested in accordance with the details and program agreed between the Owner and Contractor.
- (i) Tests shall also be carried out such that due consideration is given to the Site conditions under which the equipment is required to function. The test certificates shall give all details of such tests.
- (j) The Contractor shall establish and submit a detailed procedure for the Inspection of materials or any part of the works to the Owner for approval within the date indicated in the Programme Details. The detailed procedure shall indicate or specify, without limitation, the following:
 - (i) Applicable code, standard and regulations
 - (ii) Fabrication sequence flow chart indicating tests and inspection points
 - (iii) Detailed tests and inspection method, indicating tests and inspection points

- (iv) All routine tests shall be carried out as per relevant Indian Standard specifications and will be witnessed by the Owner,
- (v) Acceptance criteria
- (vi) Test report forms and required code certificates and data records
- (vii) Method of sampling, if any sampling test to be conducted
- (viii) Contractor's or Owners witness points.
- (k) The Contractor shall not pack for shipment any part of the Plant until he has obtained from the Owner or his authorized representative his written approval to the release of such part for shipment after any tests required by the Contract have been completed to the Owner's satisfaction.
- (l) The contractor shall be liable to bear all the expenses to carry out the inspection at the manufacture works.

Signature of Contractor/Bidder

Executive Engineer (Elect-IV)

J.D.A., Jaipur

5-MINIMUM SAFETY RULES

The following are Minimum Safety Rules that apply to all contractors and subcontractors associated with this project. All project personnel have a duty and responsibility to ensure familiarization with project safety requirements and to comply with all requirements established by their employer.

1. **REPORTING HAZARDS:** It is part of each employee's job to report all unsafe conditions/practices to his immediate supervisor for corrective action.
2. **BASIC PERSONAL PROTECTION** for this project includes:
 - a) Safety Hats of the approved type which meet Indian Standard shall be worn while on construction sites (hats shall not be Pressed or altered in any way as to make them defective). Hard hats shall be worn the way they are intended to be worn. Metal hard hats are prohibited.
 - b) Industrial grade safety glasses with side shields meeting ANSI standards Z-87 or equivalent Indian Standards will be worn by all personnel. This also applies to all persons wearing prescription glasses. Additional eye protection may be necessary for various work activities such as grinding, chipping, drilling, chemical handling, etc.
 - c) Hearing protection will be worn at posted high-noise areas or work activities generating high-noise levels.
 - d) Shirts are required when working on a construction site. All shirts will have sleeves. Sleeveless shirts are not permitted.
 - e) Full length trousers are required and must fit properly. Loosely fitting clothing will not be worn.
 - f) Safety shoes or safety boots will be worn in the construction area at all times. No sneakers, open-toed shoes or tennis shoes are allowed. All shoes will be suitable to the construction environment.
 - g) Gloves will be worn when handling materials that may cut, tear or burn hands. Gloves will be in good condition and free of excessive oil or grime.
3. **RESPIRATORS:** Persons engaged in work activities requiring breathing apparatus or respirators will be test-fitted to ensure a proper seal and fitting.
4. **FALL PROTECTION:** Safety Belts/Harnesses shall be worn and used when working at two meter heights (or greater), where approved platforms, ladders, or scaffolds are not provided. Lanyards will be no more than six feet in length. Horizontal or vertical lifelines will be provided and used where no tie-off points are provided. Belts/Harnesses shall be

worn properly. All fall protection equipment will be inspected for defects by the user before each use. Defective or questionable protection equipments shall not be used.

5. **INJURIES:** All persons must report all injuries to their supervisors and obtain first aid (regardless of degree of severity) at the contractor's first aid facility. Each accident must be documented on the Accident Notification Report.
6. **SMOKING:** Smoking within an establish NO SMOKING AREA is strictly prohibited and is sufficient cause for immediate removal of the person found smoking from the site.
7. **ELECTRICAL EQUIPMENT :** Personnel (except electricians), assigned to work on or around specific electrical jobs, will stay clear of all electrical equipment until it is proven safe by qualified electrical personnel.
8. **UNAUTHORIZED USE:** The unauthorized operation of any tool, equipment, switch, vehicles, valves, etc. is strictly prohibited.
9. **MAKESHIFT DEVICES:** Personnel will not fabricate or use makeshift devices such as lifting devices, tools, etc. Specialized tools/equipment are often necessary, but will be properly designed and tested by authorized engineering personnel before use. The modification of tools/equipment or the overriding of safety devices will not be tolerated.
10. **TRUCK RIDING:** Riding in the bed of trucks is prohibited unless seating arrangements conform to client requirements. Personnel are forbidden to ride on loaded trucks, fenders, running boards, sideboards, tailgates, etc.
11. **SEAT BELTS:** All personnel riding in vehicles will fasten seat belts before the vehicle is placed in motion.
12. **HORSEPLAY:** Running, practical jokes, etc. prohibited. Fighting is sufficient cause for immediate dismissal. "Short cutting" of established safe practices or deliberate chance-taking is strictly prohibited.
13. **WORK PERMITS:** If work to be carried out requires a permit, the permit must be obtained before work commences.
14. **EMERGENCY PROCEDURES:** It is part of everyone's job to thoroughly know plant emergency procedures, emergency alarms, location of assembly areas, etc.
15. **WORKING POSITION:** Personnel must always ensure safe working positions. Any person to position himself between a fixed object and a moving piece of equipment is extremely hazardous. Never place yourself between objects which could roll, shift, fall or be displaced. Stay alert to conditions around you at all times.
16. **SAFE & PRESCRIBED METHODS:** All tools and equipment, including motor vehicles will be operated in a safe and prescribed manner at all times. If any person is not sure of

the proper method of tool/equipment use, he must immediately inform his supervisor for the person to receive proper direction.

17. **INSTRUCTIONS FROM SUPERVISORS:** Supervisors are responsible for strict compliance and enforcement of project and client safety rules and regulations, and to ensure that workers are made knowledgeable of requirements. All personnel are required to follow instructions from their immediate supervisors. If instructions are not clear or are confusing, the employee has a responsibility to question the supervisor and obtain clear instructions before commencement of work.
18. **CO-OPERATION AND TEAMWORK:** It takes co-operation and teamwork to complete construction projects in a safe, efficient and timely manner. All project personnel are expected to render complete co-operation in the administration and enforcement of the project Safety Program.
19. **CAMERAS:** Employees must not, under any circumstances, bring cameras onto the work site or use a camera on the work site without written approval of Engineer-In-Charge.
20. **DRUGS/ALCOHOL:** The use of illegal drugs and alcohol is strictly prohibited and is cause for immediate removal of the person who is found to be under influence of such drugs / alcohol from the site.
21. **DISCIPLINARY ACTION:** Disciplinary action will be taken against persons violating the stipulations. Serious infractions and/or repeat offenders will be dealt with severely, up to and including permanent removal from the project.
22. **RESPONSIBILITIES;** All persons have a responsibility to themselves and their co-workers to be physically fit and mentally alert at all times. Conditions on a construction site are always in a state of change. Personnel must be able to react accordingly.
23. **LADDERS AND SCAFFOLDS:** All ladders and scaffolding shall be of the approved type. Ladders and scaffolding not meeting standards shall be removed from service. Ladders and scaffolding shall meet Indian Safety Standards or British Standards whichever is more stringent.

LADDERS:

- a) Ladders shall be inspected prior to use. Defective ladders shall be removed from service.
- b) Ladders used near energized lines or equipment shall be made of non- conductive materials (wood, fiberglass, etc.)
- c) Ladders shall be placed on solid footing. They shall not be placed on unstable objects such as loose bricks.

- d) Employees shall not carry tools, materials, or objects while climbing ladders. Employees shall face the ladder while climbing and avoid leaning from side to side and away from the ladder.
- e) Employees working from ladders shall wear and utilize proper fall protection equipment.
- f) Straight and extension ladders must be secured at the top when in use. Ladders not in use should be removed from the vertical position.
- g) Ladders must be placed at an angle not to exceed one foot of run for every four feet of rise.
- h) Ladders must extend above their upper support or landing by at least 3 feet.
- i) Step ladders must be secured or held when in use.
- j) Employees shall not work from the top step or next to the top step of step ladders.

SCAFFOLDS:

- a) Employees shall not erect, alter or dismantle scaffolds unless directed by a competent person.
- b) Scaffolds shall be erected, should be in plumb, and on sound foundation. Loose bricks, unstable stacks of lumber, etc. shall not be used to level or support scaffolds.
- c) Scaffold materials shall be free of defects.
- d) Work platforms shall be completely decked. (The decking should overhang its end supports at least 6 inches but not more than 12 inches. The decking shall be secured in place).
- e) Work platforms shall be equipped with standard handrails, midrails, and toe boards when 2 meters or more in height.

24. EXCAVATIONS:

- a) When deeper than 5 feet, excavations shall be sloped or shored to prevent caving-in.
- b) Excavations must be barricaded and barricades shall be maintained till back filling is completed.
- c) Excavated earth and any equipment shall be kept at least 2 feet from the edge of excavations.
- d) Access ladders shall be placed within a distance of 25 feet of location of working in excavations of 4 feet deep or deeper.

25. CONFINED SPACE OR VESSEL ENTRY:

- a) Employees shall not enter any confined space unless it has been tested for oxygen contents, absence of flammable gases and/or substances, or any other hazardous materials, and a written permission has been issued.
- b) A man *way* watch trained in his duties shall be present at any time when personnel are inside confined spaces or vessels.
- c) Portable or hand-held lighting should not exceed 12 volts power source.
- d) Positive ventilation (air movers or fans) shall be used to provide exchange of fresh air in confined spaces and vessels.

26. TAG-OUT, LOCK-OUT PROCEDURES:

- a) Employees shall not perform any work including repair, changes, attachments on electrical circuits, equipment, or mechanical equipment unless the power supply or source of said equipment is positively disconnected or shut off and the concerned electrical department employee places his lock and tag on the disconnect.
- b) Only electrical personnel shall be involved in energizing & de-energizing electrical circuits and equipment.

Signature of Contractor/Bidder

Executive Engineer (Elect-IV)

J.D.A., Jaipur

6-Guarantee

1. **General**

The guarantee is applicable for the performance of individual equipment as well as overall performance of the Project.

In case of any contradiction given in this section with respect to those mentioned elsewhere in this document the below mentioned clauses shall prevail.

2. **Manufacturer's Guarantees**

The manufacturer's guarantee for design, workmanship and performance for all bought out items shall be made available to the owner and shall be valid at least for the entire defects liability period. In the event of failure of any particular equipment which fails more than three times during the guarantee period as mentioned in clause below, the contractor shall replace at his own cost that equipment. Manufacturer's / Contractor's guarantee, for such replaced equipment shall also be made available to the Owner and should be kept at least for one year from the date of last replacement.

3. **Performance Guarantee for Electrical Systems**

The Contractor shall give guarantee for a period of one year from the date of successful commissioning of the Electrical system against design, defective materials, workmanship and performance. **The contractor shall give guaranteed for HV and MV Panel and performance, quality of cables, luminaries, DB's, Utility sockets as indicated in the bid and as agreed between the owner and contractor before award of contract.** Any defects found in the workmanship, materials or performance of the unit shall be made good by the Contractor at his own expense within the time specified by Engineer-In-Charge.

In case the parameters vary from what is required, the Contractor shall rectify the equipment at no extra cost so as to achieve the requisite performance guarantee and satisfy commissioning of the equipment to the Engineer-In-Charge. In case the Contractor fails to achieve any of the aforesaid guarantees he will be penalized by an amount as per rule up to 10% (ten percent) of the total contract value. For this purpose any money due to the Contractor shall be forfeited and adjusted against such penalty.

4. **Equipment Guarantee**

The Contractor shall guarantee for the period of one year from the date of successful commissioning of the Electrical System against defective performance of all equipment / instruments / mechanical or electrical parts under Contractor's scope of supply. Any

defects found either in materials or workmanship shall be made good by the Contractor at his own expense within the time specified by the Engineer-In-Charge.

5. Testing and Trial Run

The contractor shall have to try test each process equipment used for the Electrical System for about 48 hours continuous running to the full satisfaction of the Engineer-In-Charge. After satisfactory testing of the individual equipment, the Contractor shall run the whole Electrical System at no extra cost to the owner for at least 30 days as directed by the Engineer-In-Charge and ensure the treated waste water quality. Necessary instruments, gauges, supervisory personnel etc. shall be furnished / provided by the Contractor free of cost for conducting the trial runs.

6. Commissioning and Handing Over

During trial runs as described above, the Contractor shall satisfy the Engineer-In-Charge in all respects regarding the satisfactory quality of materials; equipment and workmanship used in the Electrical System and guaranteed parameters. Only after satisfying himself, regarding the above points, the Engineer-In-Charge will issue the completion certificate and take over the Electrical System and such date of taking over shall be deemed as date of commissioning. The Defects Liability Period described above will start from this date.

Signature of Contractor/Bidder

Executive Engineer (Elect-IV)

J.D.A., Jaipur

7-ERECTION, TESTING AND COMMISSIONING

1. ERECTION - GENERAL

- 1.1 The Contractor's staff shall include adequate and competent erection Engineer with proven, suitable, previous experience on similar contracts to supervise the erection of the Works and sufficient skilled, semi-skilled and unskilled labour to ensure completion of Works in time. The Contractor shall not remove any representative, erector or skilled labour from the Site without prior approval of the Owner.
- 1.2 The Contractor shall ensure that no installation or erection work shall commence until full and unconditionally approved working drawings, signed and stamped by the Owner are available at Site.
- 1.3 The Contractor's erection staff shall arrive on the Site on dates to be agreed by the Owner. Before they proceed to the Site, however, the Contractor shall first satisfy himself, as necessary, that sufficient Electrical System of his (or his sub-contractor's) supply has arrived on Site so that there will be no delay on this account.
- 1.4 One erection engineer who shall be required to be the Contractor's representative shall be conversant with the erection and commissioning of the complete Works. Should there be more than one erector, one shall be in charge and the Contractor shall inform the Owner in writing which erector is designated as his representative and is in charge. Erection engineer is to report to Project Manager.
- 1.5 The Contractor shall be responsible for setting up and erecting the Electrical System to the line and levels of reference and of the positions, levels dimensions and alignment, appliances and labour in connection therewith. The checking of setting out of any line or level by the Owner shall not in any way relieve the Contractor of his responsibility for the correctness thereof.
- 1.6 Erection of Electrical System shall be phased in such a manner so as not to obstruct the work being done by other contractors or operating staff who may be present at the time. Before commencing any erection work, the Contractor shall check the dimension of structures where the various items of Electrical Systems are to be installed and shall bring any deviations from the required position, lines or dimensions to the notice of the Owner. Electrical System shall be erected in a neat and workmanlike manner on the foundations and at the locations shown on the approved drawings. Unless otherwise directed by the Owner, the Contractor shall adhere strictly to the aforesaid approved drawings. If any damage is caused by the Contractor during the course of erection to new or existing

Electrical System or buildings or any part thereof, the Contractor shall, at no additional cost to the Owner, make good, repair or replace the damage, promptly and effectively as directed by the Owner and to the Owners satisfaction.

- 1.7 The Contractor shall align all equipment and holding down bolts and shall inform the Owner before proceeding with grouting-in. the items concerned. The Contractor shall ensure that all equipment is securely held and remains in correct alignment before, during and after grouting-in.
- 1.8 The approval by the Owner of the Contractors proposals for rigging and hoisting any items of the Electrical System into final positions shall not relieve the Contractor from his responsibility for damage to completed structures, parts or members thereof or other installed equipment. He shall at his own cost make good, repair or replace any damaged or injured items, whether structural, electrical, architectural, or of any other description, promptly and effectively to the satisfaction of the Owner.
- 1.9 No Electrical Systems or other loads shall be moved across the floors of structures without first covering the floors with timber of sufficient size so that applied loads will be transferred to floor beams and girders of steel or concrete. If it is required to reduce bending stresses and deflection, the beams and girders shall be provided with temporary supports. Any movement of Electrical System and other loads over the floor structures shall be subjected to the prior approval of the Owner.
- 1.10 During erection of the Electrical System, the Owner will inspect the installation from time to time in the presence of the Contractor's Site representative to establish conformity with the requirements of the Specification. Any deviations and deficiencies found or evidence of unsatisfactory workmanship shall be corrected as instructed by the Owner.

2 LEVELING AND GROUTING OF MACHINERY

- 2.1 Contractor shall check the civil works, where the Electrical System is to be installed sufficiently in advance, for their conformity to the approved drawings for installing the Electrical System with respect to lines, levels and accuracies of positions embedment, anchorage pockets, cut-outs etc. He shall record all measurements and deviations in prescribed control formats. He shall proceed with the work, with the Owners consent to such preparatory inspection of works.
- 2.2 Contractor shall mark precisely the centre lines and datum reference on the civil works, where the Electrical System is to be installed with reference to bench marks, using indelible means of marking.
- 2.3 He shall undertake sufficiently in advance chipping of any unevenness of concrete on foundations, anchor bolt pockets, cut-outs etc., to achieve uniform level of reference for

erection. All concrete surfaces receiving grout shall be hacked as required to ensure better bonding with grouting.

- 2.4 Contractor shall undertake the inspection of all components to be erected sufficiently in advance to check their soundness and conformity to drawings and the inspection records shall be signed by the Owner as approval for undertaking the installation of the components. Any damage, shortfalls etc. shall be made good to the satisfaction of the Owner.
- 2.5 All grout for equipment shall be carried out using non-shrinkable continuous grout materials with suitable framework of at least 12 mm thickness. Surfaces to receive the grout shall be hacked and roughened and laitance shall be removed by wire brushing or blast of air. Concrete surface shall be blown off by compressed air before commencing grouting. Grouting shall be done in one continuous operation from one side such that grout flows in a single wave until grout reaches all confined spaces with no air pockets and air from all confined spaces is expelled. A hydrostatic head of 150 mm shall be maintained during grouting operations hydrostatic head of 150 mm shall be maintained during grouting operations. All grouting shall be carried out in the presence of the Owner. All lines and levels shall be checked up after grout is set. Block outs shall be closed using cement concrete of the same grade as that of the parent structure.

3. RECORDS, PROCEDURES AND REPORTS

- 3.1 The Contractor shall maintain records pertaining to the quality of installation/erection work and inspection, testing, compliance with all technical requirements in respect of all his works as described in the previous paragraphs. The reporting formats shall be in the approved formats. The Contractor shall submit such records to the Owner after the completion of any particular work before submitting the bill of supply/progress of work. Such report shall comprise shop inspection reports, shop testing reports, material test reports, based on which dispatch clearances are provided, all the quality control reports of welding, erection and alignment records.
- 3.2 All the above mentioned records shall be submitted in the final form duly countersigned by the Owner attesting conformity to specifications and his approval of installation, and duly incorporating all the additions, alterations, and information as required by the Owner, on the basis of preliminary reports giving the progress of the work. Such records notwithstanding, any records submitted earlier with bill of supply/progress etc., shall be duly bound and submitted to the Owner in six copies by the Contractor on his notification of the Electrical completion of erection.

4. GENERAL PREPARATIONS BEFORE COMPLETION OF THE ELECTRICAL SYSTEM

4.1 The following documents should be completed in accordance with the Contract schedule before completion of erection. The Owner and the Contractor shall preserve and control these documents in a safe and appropriate place on Site in order that both parties' personnel can make use of them at any time.

(a) Technical Documents

- (i) Operation and Maintenance manual
- (ii) Design documents including the Contractor's design data, drawings and Specifications.
- (iii) Tools and test equipment list
- (iv) Spare parts list

(b) Procedures

- (i) Mechanical testing procedure
- (ii) Electrical testing procedure
- (iii) Instrumentation testing procedure
- (iv) Detailed Pre-commissioning and Commissioning procedure
- (v) Detailed Performance Test procedure

5. COMPLETION OF ERECTION

5.1 The completion of Electrical System under erection by the Contractor shall be deemed to occur, if all the units of the Electrical System are structurally and electrically complete and will include among other such responsibilities the following:

- (a) Electrical System in the Scope of the Contract has been erected, installed and grouted as per specifications.
- (b) Installation checks are completed and approved by the Owner
- (c) The erected Electrical Systems are totally ready for commissioning checks.

5.2 At the stage of completion of erection, the Contractor shall ensure that all the physical, aesthetic and workmanship aspects are totally complete and the Electrical System is fit and sound to undergo tests on completion and subsequent pre-commissioning checks.

5.3 Upon achieving the completion as described above, the Contractor shall notify the Owner by a written notice intimating completion of erection and notify the Owner for inspection. The Owner shall proceed with the inspection of such units within 14 days of such a notice.

- (a) The Owner shall certify completion when there are no defaults in the Works or
- (b) The Owner shall inform the Contractor list of deficiencies for rectification hereinafter referred as Punch list and the Contractor shall complete the rectification work within a

jointly agreed period before pre-commissioning activities and obtain the Owner's acceptance or approval of the same before proceeding with the same.

- (c) The Owner may inform the Contractor that the works are accepted with the 'Punch' list (items which do not hamper operability safety or maintainability) and allow the Contractors to proceed with the pre-commissioning checks when the Contractor undertakes to complete such outstanding works within an agreed time during defects liability period. Taking over shall be based on rectification of all deficiencies as advised by Punch lists.

5.4 The erection period indicated by the Contractor would be deemed to cover all the activities up to Completion as stipulated in previous paragraphs, notice of completion by the Contractor, inspection by the Owner for Completion, and Contractor rectification of all deficiencies as noticed by the deficiency/Punch list, and acceptance by the Owner of such rectifications, prior to Tests on Completion.

5.5 Minor defects, which in the opinion of the Owner which do not hamper operability and maintainability will nor be taken into account for deciding Electrical Completion. Such defects shall be rectified concurrent to commissioning checks before Tests on Completion. However, the Owner's decision in this regard is final.

5.6 The commissioning period as notified by the Contractor shall be deemed to occur beyond the date of Completion and shall include all periods of pre-commissioning, trials and Tests on completion.

5.7 It is in the Contractor's interest to offer the section/units/systems, progressively under the identified milestones within overall erection period, duly completed for rectification of any deficiencies pointed out by the Owner and to achieve Electrical Completion before undertaking the tests on Completion within the specified erection period. The Owner also reserves the right to withhold the cost as estimated to be equivalent to the rectification of deficiencies pointed out to the Contractor until such a time such deficiencies are rectified to the satisfaction to the satisfaction of the Owner.

6. PRE-COMMISSIONING

6.1 After the Completion of erection, Pre-commissioning activities listed below shall be carried out to make the Electrical System ready for Commissioning.

6.2 Upon completion of erection of each piece of equipment, facility or discrete part of the Electrical System, Electrical checks and tests shall be carried out according to the Contractor's checklist. The Electrical checks and tests shall be to establish that.

- (a) The Electrical System is erected in accordance with the Contractor's construction drawings, pipe work drawings, instrument diagrams, etc. issued for the Electrical System.

- (b) The materials are installed and electrically function in accordance with the Contract and
- (c) Applicable codes as listed in the Contract are followed for materials and workmanship.
- 6.3 Items such as painting, thermal insulation and final clean up which do not materially affect the operation or safety of the Electrical System will be excluded. All these items shall be listed and completed after the Pre-commissioning or Commissioning at the discretion of the Contractor, but before acceptance.
- 6.4 The Contractor shall prepare and maintain at Site test forms and records that shall include:
 - (a) Description of type of test or check
 - (b) Date and time of test or check
 - (c) Identification of equipment and facilities
 - (d) Test pressure, test data and results, including remarks, if any
 - (e) Signature of the Contractor's personnel attesting to data recorded, if any.The Contractor's construction forces thereof shall carry out checks, tests and recording.
- 6.5 Wherever the Owner's witness or attesting of the check or test is required, the Owner's personnel shall attend such check and test. For this purpose, the Contractor shall keep the Owner informed of a day-to-day test plan schedule. The test plan schedule may be revised from time to time to reflect the actual progress of the work and test.
- 6.6 Any items found incomplete or requiring repair or adjustment shall be marked as such on the test records and then reported by the Contractor to the Owner and the Contractor's personnel in charge of the relevant construction area.
- 6.7 Checking procedures shall be repeated until all the items on the checklist are cleared
- 6.8 A complete set of test records shall be handed over to the Owner on completion.
- 6.9 The tests on the different Mechanical and Electrical equipment shall include but not limited to:
 - (a) Pump motors
Condition of winding insulation be tested and insulation values shall be restored to required level by suitable heating arrangements locally.
 - (b) MV Switch board / Power Distribution Boards
 - (i) Checking of all internal wiring for correctness as per supplier's drawings.
 - (ii) Insulation resistance test.
 - (iii) CT Polarity Test / PT Ratio Test.
 - (iv) Operational check of instruments and testing of relays by primary / secondary injection.

- (v) Phase sequence test.
- (vi) Functional simulation test.
- (vii) Local & Remote Operation.
- (c) Power and Control Cables
 - (i) All cores of cables shall be tested individually for continuity and insulation resistance with earth/sheath/armour as well as between the cores, before as well as after installation.
 - (ii) Pressure test as per relevant IS will be carried out on all 11 kV cables together with joints.
- (d) Distribution Boards / Switch Socket Outlets
 - (i) Checking of wiring as per drawing.
 - (ii) Insulation resistance.
 - (iii) Functional test.
- (e) Tests for Earthing System
 - (i) The resistance of each earth pit shall be measured and recorded.
 - (ii) The resistance of the complete earthing system shall be less than 1.0 ohm or values specified by the local Electrical Inspector whichever is less.
 - (iii) Earthing continuity tests shall be carried out for all the equipment.

7. COMMISSIONING

- 7.1 After the completion of Pre-commissioning activities the final checks and preparations necessary for start-up of the Electrical System shall be carried out. The Contractor shall submit to the Owner a written Notice of Electrical Completion that shall include:
- (a) Identity of a part of the Electrical System considered electrically complete
 - (b) A copy of relevant completed test reports
 - (c) The date on which the completion of the tests was achieved
 - (d) Check list and
 - (e) A request for issuance of a Electrical Completion Certificate in respect of that part.
- 7.2 Within fourteen (14) days from the date of receipt of the Contractor's written Notice, the Owner shall:
- (a) In the case of acceptance, issue a Electrical Completion Certificate
 - (b) In the case of Objection, submit a rejection Statement setting forth remaining items to be completed or defects of deficiencies to be corrected before Electrical Completion status can be accepted. When the Owner rejects the Contractor's Notice the Contractor shall take any necessary action to complete or correct the items marked and give the Owner a second Notice of Electrical Completion.

7.3 After the issuance by the Owner of a Electrical Completion Certificate, Commissioning activities listed below shall be carried out to enable the start-up and operation of the Electrical System Procedures are described as below:

- (a) Commissioning Procedure shall be carried out in a methodical sequence as follows
 - (i) Warming up
 - (ii) Start-up
 - (iii) Initial rearming –
 - (iv) Operability adjustment
 - (v) Stable operation
 - (vi) Final adjustment
- (b) At all stages of commissioning sequence, the Electrical System shall be operated at optimum Electrical System conditions. To ensure this, the Contractor may make minor adjustment to the conditions indicated in the Operation and Maintenance Manual as necessary.
- (c) The Contractor shall check the operating conditions of the Electrical System by constantly monitoring operating data.
- (d) The Contractor shall specify for each discrete part of the Electrical System the operational data to be recorded and the manner in which the data is to be taken.
- (e) All the operating data shall be recorded by the Owner on the forms to be mutually agreed. The Owner shall make a copy of the operating log and analytical data from initial operation through to the completion of Performance Test available to the Contractor for evaluation.

8. PERFORMANCE TEST

8.1 After the final operation of the Electrical System, a Performance Test shall be carried out to demonstrate the Contractor's Performance Guarantee.

8.2 Prior to conducting Performance Test, the Contractor shall furnish the detailed Performance Test Procedure for approval.

- 8.3 Performance test shall be carried out by the Contractor's personnel according to the instructions set forth in the Contractor's Operation and Maintenance Manual and under the supervision of Owner's operating personnel.
- 8.4 Operating and analytical data recorded during Performance test shall be taken down by the Owner and made available to the Contractor for evaluation.

9. ACCEPTANCE

9.1 Acceptance will occur in any of the three following possible ways:

(a) Fulfillment of Guarantees

When Performance Test has been successfully completed and the Performance Guarantees are met.

(b) Deemed Acceptance

When Performance Test has not been completed or has not been carried out for reasons not attributable to the Contractor within specified date or other mutually agreed period.

10. The material to be utilized in execution of work shall confirm to the following Indian Standards (IS) which shall mean latest revisions, Amendments / changes and published unless otherwise specified herein before.

Sr. No.	Indian Standard s	Titles
1.	IS-226	Structural Steel Standard quality
2	IS-2062	Structural steel (fusion welding quality).
3.	IS-802	Code of practice for use of structural steel in over head transmission line towers and part-I loads & permissible stresses.(first revision)
4.	IS-808	Rolled steel beam, channel and angle sections and Part-I Dimensions for hot rolled steel beam Part-I MB series (second revision).
5.	IS-4759	Hot dip zinc coating on structural steel and other allied products.
6.	IS-6639	Hexagonal Bolts for steel Structure.
7.	IS-10238	Step Bolts for steel structures.
8.	IS-1367	Technical supply conditions for threaded fasteners.
9.	IS-2016	Plain washers.
10.	IS-4072	Steel for Spring washers
11.	IS-3063	Single coil rectangular section spring washers for bolts, nuts and screws.(first revision)
12.	IS-6821	Methods for sampling non threaded fasteners.
13.	IS-1573	Electroplated coatings of zinc on iron and steel.

14.	IS-2486	Insulator fittings for overhead power lines of 3.3 KV and above.
15.	IS-2633	Method of testing uniformity of coating on Zinc coated article.(first revision)
16.	IS-2121	Fittings for aluminium and steel cored aluminium conductor for overhead power lines (with amendments No 1 to 3)
17.	IS-731	Porcelain Insulators for overhead power lines with a nominal voltage greater than 1000V.(second revision)
18.	IS-2141	Galvanized Stay strand (first revision) (with amendments No 1 to 3)
19.	IS-398	Part-I Aluminium conductor for overhead Part-II Aluminium conductor, galvanized steel reinforced (second revision) Part-III Aluminium conductor, Aluminium steel reinforced (second revision)
20.	IS-4826	Galvanized coating on round steel wires.
21.	IS-2551	Danger notice plate (with amendments No 1)
22.	IS-2629	Recommended practice for hot dip galvanizing of Iron and steel.
23.	IS-5358	Hot dipped galvanised coating on fasteners.
24.	IS-5613	Code of practice for design, installation and maintenance of over-head power line. (Part-I Sec-I)- Lines upto and including 11 KV, section/design. (Part-I Sec-II)- Lines upto and including 11 KV, section installation and Maintenance.
25.	IS-6745	Method for determination of weight of zinc coating on zinc coated iron and Steel articles.
26.	IS-7215	Tolerance for fabrication of steel structures.
27.	IS-8577	Specification for weldable structures steel (medium and high tensile quality).
28.	IS-338	Varnish ,under coating, exterior, natural resin
29.	IS-800	Code of practice for use of structural steel in general building construction(Revised) with amendments No.1&2.
30.	IS-3034	Code of practice for fire safety of Industrial building. Electrical generating and Distributing stations.
31.	IS-269	Ordinary and low heat Portland cement.
32.	BS-16	Telegraph material (Insulator, pole fitting etc.)
33.	BS-729	Hot dipped Galvanisation
34.	IS-2427	Grading of continuous filament viscose rayon yarn and acetate yarn, bright And dull.

35.	IS-1363	Black Hexagonal bolts, nuts and lock nuts(dia meter 6 to 39mm) and black hexagon screws(dia 6 to 24 mm) first revision with Amendment No.1)
36.	IS-1852	Rolling & cutting tolerance for hot rolled steel products.
37.	IS-1778	Reels and drums for bare wire(with Amendment No. 1 & 2).
38.	IS-4218	ISO metric Screw Threads.(Part.I- Basic and design profiles, Part-II- Pitch diameter combinations, Part.III- Basic dia mensions for design profiles, Part.IV- Tolerancing system, Part. V- Tolerances, Part.VI- Limits of sizes for Commercial bolts and nuts (dia meter range 1 to 39 mm).
39.	IS-7887	Mild steel wire rod for general Engg. Purpose.
40.	IS-280	Mild steel wire for general engineering purpose (Second revision).
41.	IS-5300	Porcelain Guy Strain insulator
42.	IS-5561	Electric power connectors.
43.	IS-5	Colours for ready mixed paints (Second revision).
44.	IS-3972	Methods of Test for vitreous enamel wire.
45.	IS-4711	Methods for sampling of steel pipes, tubes and fittings.
46.	IS-1599	Method for bend test for steel products other than sheet, strip, wire and tube(first revision)
47.	IS-1678	Pre-stressed concrete poles for overhead power traction & Telecommunication lines.
48.	IS-8623	Methods for radio interference tests on high voltage insulators
49.	IS-13947	Specification for low voltage switchgear & controlgear.
50.	IS-14255	Aerial Bunched Cable for working voltages upto and including 400 V – specification.
51.	IS-8130	Conductor for insulated electric cables & flexible cords.
52.	IS-5561	Electric power connectors.
53.	IS-617	Aluminium and aluminium alloy ingots and casting for general engineering purpose (second revision).
54.	IS-2544	Porcelain post insulators for systems with nominal voltages greater than 1000 Volts (First revision) (with Amendment No.1).
55.	IS-7098	LT XLPE insulated (Heavy Duty) electric cables.

56.	IS-5831	PVC insulation and sheath of electric cables (with Amendments No. 1 to 3).
57.	IS-1239	Mild steel tubes, tubulars and other wrought steel fittings.
58.	IS-5039	Distribution pillar for voltages not exceeding 1000 volts.

For 12Kv RMUs:

IEC 62271-200/IS 12729:1988	General requirement for Metal Enclosed Switchgear
IEC62271-102/IS 9921	Alternating Current disconnectors (Load Break Isolators) and Earthing Switch.
IEC 62271-100 / IEC 62271-200	Specification for alternating current circuit breakers
IEC 62 271-1	Panel design, SF6/Vacuum Circuit Breakers
IEC60044-1/IS2705:1992	Current Transformer
IEC 60265/IS 9920:1981	High voltage switches
IEC 376	Filling of SF6 gas in RMU
IEC 60273/IS :2099	Dimension of Indoor & Outdoor post insulators with voltage > 1000 Volts
IEC 60529/IS 13947(Part-1)	Degree of protection provided by enclosures for low voltage switchgear and control gear.
IS 3043-1987	Code of Practice for earthing
Indian Electricity Rules/Bills	

For 33Kv VCBs

IEC56/IS:13118/IS-3427/IS:10118 (Part-III) – 1982/ IS:2165-1977/ IS:3716-1976/ IEC-62271-100/ IEC-62271-200	Circuit Breaker/ metal enclosed Switchgear and control gear.
IS: 3156	Voltage transformers.
IS: 2705	Current transformers.
IS: 3231	Electrical Relays for power system.
IS:1248	Meters and Instruments

IS:14697-1999	Specification for AC static transformer operated watt hour
	and VAR hour meters class 0.2 S & 0.5 S.
IEC-62053-22-2003	Specification for AC Static Watt hour Meters, class 0.2 S &
IEC-62052-11-2003	
CBIP Technical Report No.304	Specification for AC Static Electrical Energy Meter.

Signature of Contractor/Bidder

Executive Engineer (Elect-IV)

J.D.A., Jaipur

Annexure A : Compliance with the code of Integrity and No Conflict of Interest

Any person participating in a procurement process shall –

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit the misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of Interest :-

The Bidder participating in a bidding process must not have a Conflict of interest. A conflict of interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

- i. A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:
 - a. Have controlling partners/shareholders in common ; or
 - b. Receive or have received any direct or indirect subsidy from any of them; or
 - c. Have the same legal representative for purposes of the Bid; or
 - d. Have a relationship with each other; directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding the bidding process; or
 - e. The Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in more than one Bid; or
 - f. The Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
 - g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as engineer-in-charge/ consultant for the contract.

Annexure B : Declaration by the Bidder regarding Qualifications Declaration by the Bidder

In relation to my/our Bid submitted to for procurement of in response to their Notice inviting Bids No.Dated I/We hereby declare under Section 7 of Rajasthan Transparency in Public Procurement Act, 2012, that :

1. I/We possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
2. I/We have fulfilled my/our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
3. I/We are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended ant not the subject of legal proceeding for any of the foregoing reasons;
4. I/We do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement Contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
5. I/We do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

Date :

Signature of bidder

Place :

Name :

Designation :

Address :

Annexure C : Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority is **JDC, JDA, Jaipur**

The designation and address of the Second Appellate Authority EC, **ACS/PS, UDH, GOR, Jaipur.**

- **Filing an appeal**

If any Bidder or prospective bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued thereunder, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved: Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings: Provided further that in case a Procuring Entity evaluates the Technical Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.

(2) The officer to whom an appeal is filed under para (1) shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it of within thirty days from the date of the appeal.

(3) If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

(4) Appeal not to lie in certain cases

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely :-

- (a) Determination of need of procurement;
- (b) Provisions limiting participation of Bidders in the Bid process;
- (c) The decision of whether or not to enter into negotiations;
- (d) Cancellation of a procurement process;
- (e) Applicability of the provisions of confidentiality.

(5) Form of Appeal

(a) An appeal under para (1) or (3) above shall be in the annexed form along with as many copies as there are respondents in the appeal.

(b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.

(c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorized representative.

(6) Fee for filing appeal

(a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable.

(b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

(7) Procedure for disposal of appeal

(a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.

(b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-

(i) Hear all the parties to appeal present before him; and

(ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.

(c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.

(d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

FORM No. 1

[See Rule 83]

**Memorandum of Appeal under the Rajasthan
Transparency in Public Procurement Act, 2012**

Appeal No. of

Before the (First/Second Appellate Authority)

1. Particulars of appellant :

(i) Name of the appellant :

(ii) Official address, if any :

(iii) Residential address :

2. Name and address of the respondent (s) :

(i)

(ii)

(iii)

3. Number and date of the order appealed against and name and designation of the officer/authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:

4. If the Appellant proposes to be represented by a representative, the name and postal address of the representative:

5. Number of affidavits and documents enclosed with the appeal :

6. Grounds of appeal :

(Supported by an affidavit)

7. Prayer :

Place

Date

Appellant's Signature

Annexure D : Additional Conditions of Contract

- **Correction of arithmetical errors**

Provided that a Financial Bid is substantially responsive, the Procuring Entity will correct arithmetical errors during evaluation of Financial Bids on the following basis:

- i. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- ii. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- iii. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.

2. Procuring Entity's Right to Vary Quantities

(i) If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Conditions of Contract.

(ii) On repeat order for extra items for additional qtys may be placed if it is provided in the bidding documents on the rates and conditions given in the contract, if the original order was given after inviting open competitive bids. Delivery or completion period may also be proportionately increase. The limits of repeat order shall be as under.

(a) 50% of the qty of the individual items and 50% of the value of original contract in case of works and

(b) 50% of the value of goods or services of the original contract.

3. Dividing quantities among more than one Bidder at the time of award (In case of procurement of Goods)

As a general rule all the quantities of the subject matter of procurement shall be procured from the Bidder, whose Bid is accepted. However, when it is considered that the quantity of the subject matter of procurement to be procured is very large and it may not be in the capacity of the Bidder, whose Bid is accepted, to deliver the entire quantity or when it is considered that the subject matter of procurement to be procured is of critical and vital nature, in such cases, the quantity may be divided between the Bidder, whose Bid is accepted and the second lowest Bidder or even more Bidders in that order, in a fair, transparent and equitable manner at the rates of the Bidder, whose Bid is accepted.

SPECIAL CONDITIONS OF CONTRACT REGARDING

DEFECT LIABILITY PERIOD (DLP) FOR ROADS/ ELECTRICALS WORKS

As per the decision taken in the 201st meeting of Executive Committee held on 23.02.2016 w.r.t. agenda no. 201:22, DLP period of various natures of works amounting more than Rs. 25 lakhs has been revised as per following time periods based on nature of works.

This order will supersede the earlier orders issued in this regard i.e. order No. JDA/TA to D(E)/2010-11/D-317 dated 28.04.2011 including Special Condition No. 2.2.2 & 2.2.3 of Annexure-I related to SD refund & forfeiture (other Special Condition of annexure-I of this order will remain valid) and order No. JDA/Ex.En.(Pr.-5 & TA)/2013/D-43 dated 27.02.2013 and also all pertaining orders, in contract agreements or in PWF&AR having DLP period different than what is being enforced through this present order for concerned type of work.

Table-I

S.No.	Type of work	Existing DLP Period	As per approved in E.C. held on 23.02.2016
1.	Bridge Work	3 years	5 Years
2.	CD Work	3 years	5 Years
3.	CC Road. PQC Work	3 years	5 Years
4.	CC tiles/Kerbs/medians	3 years	5 Years
5.	Drains	6 Months	3 Years
6.	Roads		
	(i)Two layer WBM/GSB	3 years	6 months or one full rainy season which ever is later
	(ii)For Renewal/Strengthening		
	(a)BT upto 30 mm thickness	3 years	1 Years
	(b)BT above 30 mm to upto 40 mm	3 years	2 Years
	(c)BT above 40 mm to upto 90 mm	3 years	3 Years
	(d)BT above 90 mm thickness	3 years	5 Years
	(iii) New Roads		
	(a) BT upto 90 mm	3 years	3 Years
	(b) BT more than 90 mm	3 years	5 Years
7.	Compound wall	6 Months	3 Years
8.	Building Work		
	(i) Work pertaining to Sanitary work electrical works, Joinery works and painting works.	6 Months	2 Years

	(ii) Work pertaining to Building structure and other civil works	6 Months	5 Years
9.	Electric work except maintenance	6 Months	3 years
10.	Sewer/Water supply all including STP and water supply related work except maintenance works.	6 Months	3 Years

The release of SD amount shall be as per following table :-

Table-II

S.No.	DLP Period \ Released SD	1 Year	2 Years	3 Years	5 Years
1.	Upto 1 year	100%	40%	20%	10%
2.	Upto 2 year		60%	20%	10%
3.	Upto 3 year			60%	10%
4.	Upto 4 year				20%
5.	Upto 5 year				50%

Various condition for managing DLP are as under :-

- (i) At the time of completion of work, final componnt shall be worked out for each individual item like BT/CC/tiles/ drains etc (as per different categories in Table-I), DLP shall be operative based upon type of individual item ex:- CC-5 years, BT1/2/3/5 years, Drain-3 years etc.
- (ii) Similarly for all new works, these components should be calculated at the time of TS itself, which should be made part of BID document.
- (iii) If any work, amount is less than Rs. 25 lacs but later on due to extra/excess work, if amount of final work cresses more than Rs. 25 lacs, DLP shall be operative as per rule for each individual items.
- (iv) Similarly if any work is more than Rs. 25 lacs but after finalization amount or work is less than Rs. 25 lacs, DLP should be operative for six months or rainy season whichever is late.
- (v) During DLP period if contractor fails to repair any work even after issue of 7 days written notice, same work shall be got executed by respective Executive Engineer at the contractor's risk and cost. This process shall be applicable throughout the DLP period. After completion of DLP period in such works contractor should be debarred and blacklisted. From JDA for three years as per RTPP rule 2012 and 2013 where he defaults twice in a single agreement or in two different works.
- (vi) Quarterly Inspection as per rules shall be carried out and DLP registers shall be maintained by respective Executive Engineers to monitor the DLP repairs.
- (vii) Special and regular inspection shall also be carried out as per order no. JDA/Ex.En. & TA to DE-I/2014-15/D-223 dated 12.03.2015 and order no. SE (PMGSY) CIRULAR 2006/D-115 dated 04.05.2006 Point no. 3.
- (viii) In case JDA feels to take up work on any existing DLP road due to any reason, following procedure should be adopted:
 - (a) At the time of withdrawal total liability of repairs as per DLP conditions to be carried out and contractor shall be asked to complete the same. After completion of assessed repairs DLP period shall be released after deduction amt. as per table III

Table-III

% Recovery on withdrawal of DLP of work order	1 Year	2 Year	3 Year	4 Year	5 Year
DLP period					
1 Year	1.12	-	-	-	-
2 Year	2.55	1.43	-	-	-
3 Year	4.38	3.26	1.83	-	-
5 Year	9	7.88	6.45	4.62	2.47

Note :- Calculation is to be done on quarterly basis.

(b) In case Contractor fails to carry out these repairs, same shall be carried out at his risk and cost. If the total amt. of such repairs works out to be more than total retained amt. of SD same shall be recovered from other works and as per PDR rules. The amount as per Table III is also to be deducted in addition to this amount.

(ix) Based upon type of work, DLP conditions for works to be carried out during DLP period with their frequency of respective type of work shall be prepared by respective SE"s after approval of these periods.

This order shall come in force with immediate effect and will be applicable on all new works whose NIB is to be called.

Signature of contractor with

Executive Engineer – (Elect-IV)

Full address.

JDA, Jaipur.

Note:- Defect liability period of this work will be 05 Year means 10% SD will be detained for 05 year by JDA. SD will be refund after 05 year satisfactory operation of these lift and elevators lift men will be provided by JDA. If any lift remains "off" due to any technical error, bidder has to get it repair within 72 hrs, if bidder fails to do so JDA will get repair it with JDA sources and double of the repairing cost will be recovered from bidder.

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

Bidder Name :						
<u>PRICE SCHEDULE</u>						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	SITC and O&M (05 Yr) of 13 passengers lift at 'C' Block RIC Jaipur (Detailed specification describe below)	2.000	Job	2105229.34	4210458.68	INR Forty Two Lakh Ten Thousand Four Hundred & Fifty Eight and Paise Sixty Eight Only
	Supplying , installation , Testing and commissioning of the passenger/goods/Stretcher or Bed elevator having following main features:					
	a) MOTOR: Gearless lift drive comprising of high starting torque lift duty, 3 phase 440 Volts A.C. permanent magnetic synchronous motor of proper rating with high efficiency shall be used.					
	13 passengers/884 Kg, 2 stops, rated speed adjustable up to 1.0 mtr /sec with 5 years comprehensive maintenance / DLP.					
	Type of lift :- Gear less Machine Room Less Type Elevator					
	No. of lifts required:- 2 NOS.					
	No. of person & Load to be carried:- As per requirement					
	Hoistway Available:- as per site or Architects Drawing (enclosed)					
	Name of floors to be served :- 2 Stops Ground and First Floor (Audi Balcony Level)					
	Operation:- Microprocessor based duplex collective full collective Selective operation with or without attendant					
	Speed:- 1.00 Meter/ Sec					
	Drive:- Variable voltage variable frequency (V3F).					
	Entrance:- One at each floor level and same side only.					
	Doors:- Automatic Centre opening Door panel of 800 mm x 2100 mm of Stainless Steel Honey in Comb finish					
	Machine:- Eco Disc axial Machine shall be placed in the over head area directly above the lift well.					
	Location of machine :- In the overhead area directly above the hoist way as per Manufacturer design.					
	Size of car platform :- 1100 mm W x 2000 mm D x 2300 mm H / As per IS to suit the well sizes					
	Design of cars body:- Constructed out of Stainless Steel Honey in Comb finish Car and Car Doors with 2300 mm Car Height with Stainless Steel handrail.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR**Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur****Contract No: EE (Elect-IV)/03/2022-23**

Bidder Name :						
PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	Flooring:- Lift manufacturer will provide niche into the flooring area to accommodate Granite Flooring in the car. Granite will be provided by customer.					
	Car light and fan:- Florescent tube light fitting to have daylight effect inside the Car cabin. Fan/blower as per manufacturing enriched design.					
	Car position indicator:- Floor position indicator at all floors along with direction of travel indicator.					
	Power supply:- Power supply shall be provided as under:					
	A. 415 volts, 3 phase, 4 wires 50 Hz					
	B 230V, Single Phase, 50 Hz for lighting.					
	C. All electric cables, controls switchgears should be strictly as per ISL.					
	Foundation:- The machine will be placed directly above the Overhead area in the hoist way and machine resting arrangement will be provided by the tenderer.					
	Depth of lift pit:- 1600 mm.					
	Guide rails:- The guide rails should be steel dually toughened and ground section to ensure position tract and smooth runing of the elevator.					
	Over Head :- 4200 mm contracts surface of the correcting fishplates and back of the guide rails and sills should be accurately machined to form smooth joints and liding sills should be used for fastening guide rails.					
	Rope / belt fastening:- Main hoist rope / belt shall be self-lubricated of adequate section and shall be provided into the sockets of spring loaded self. Thumbles of spring permit adjustment of uniform rope tension for smooth operation of the elevator.					
	Signals					
	(A) Luminous hall buttons at all floors.					
	(B) Digital hall position indicators at all floors.					
	(C) Car operating panel with luminous floor buttons					
	(D) Digital car position & Direction indicator.					
	(E) DC VF Door Drive.					
	(F) Emergency light & emergency alarm through inverter (Rechargeable batteries).					
	Type of buffers:- Spring buffers or as per suppliers design					
	Specification:- IS: 4666. 1968 for electric passenger lifts and shall further Comply to IS : 1860:1960, IS: 63831,1971, IS: 732: 1963 and Bombay lift act 1943 amended up to date.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	a. Electronic door safety (infrared)					
	b. Automatic rescues device.					
	c. Over speed safety system with testing at site facility.					
	Defect Liability Period:- 5 year from date of handling over					
	The manufacturers would provide warrenty / gurranty of the entire Lift of Five years					
	Minor Building Work:- The lift suppliers include Cost of					
	Scaffolding inside the hoist way for erection					
	Cutting of walls with repair Including all of bolts members indicator and button boxes etc. in position.					
	Sill angles, fascia plates, machine Beams and rolled steel section with bearing plates for support of the nmachine if required.					
	Door frames.					
	Pit Ladder					
	Sanction and approvals:- The supplier shall obtain all the sanctions required for the operation of lifts from local authorities if applicable on behalf of the employer. The employer will be reimbursed the actual fees, If any.					
	Tests:- The supplier shall test the lift in the presence of lift inspector as well as department engineer/consultants as per ISI if required.					
	Inclusion					
	a) Cost of voltage stablizer (if required) and SMF Batteries.					
	b) Inclusive of GST and all other taxes.					
	c) Insurance transit and up to handling over of lift.					
	Car safety and Governor to control excessive descending speed.					
	Counter balance to promote smooth and economic operation.					
	Terminal and final limits.					
	Terminal buffer.					
	Controller to control starting speed of elevator motor and supply brake automatically in case of application of any of the safety device or power failure.					
	Steel glides for the car and counter weight.					
	The elevator should be equipped with the over speed governor safety system.					
	Inspection unit shall be provided at the top of car.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	Rechargeable battery based Emergency light & alarm.					
	Fireman's Switch					
	Door open & Door close button					
	Full Height Infrared Curtain					
	Auto On/Off for car light and fan					
	The measurements mentioned in the drawing are indicative only. The bidder is responsible for any deviation at site. He is advised to inspect the site before submitting the tender.					
	Bidder should clear all observations frpm JDA / Consultant in Pre Bid Meeting (Date to be notified separately)					
	SITC and O&M (05 Yr) of 13 passengers lift with machin room Five side glass full length vision panel type capsul elevator at RIC near OTS Jaipur (Detailed specificaiton describe below)	4.000	Job	2384297.34	9537189.36	INR Ninety Five Lakh Thirty Seven Thousand One Hundred & Eighty Nine and Paise Thirty Six Only
	Type of lift:- 13 Passenger with Machine Room Five Side Glass Full Length Vision Panel Type Capsule Elevator					
	No. of lifts required:- Four Nos. to feed 04 floors rise of 14 mtrs approximately					
	No. of person & Load to be carried:- 13 Passenger (884 Kgs)					
	Hoistway Available:- 2700 mm wide x 1200 mm depth & 2700 mm wide x 1300 mm depth					
	Contractor should check the site before submission of the tender.					
	Name of floors to be served:- LG, UG, 1 & 2.					
	Operation:- Microprocessor based simplex / duplex collective full collective Selective operation with or without attendant					
	Speed:- 1.50 Meter/ Sec					
	Drive:- Variable voltage variable frequency (V3F)					
	Entrance:- One at each floor level and same side only.					
	Doors:- Automatic Centre opening Glass Door panel of 900 mm x 2100 mm of Stainless Steel in Hairline finish Frame					
	Machine:- Eco Disc axial Gearless Machine shall be placed in the machine room directly above the hoist way.					
	Location of machine:- In the lift shaft as per Manufacturer design.					
	Size of car platform:- As per IS to suit the well sizes					
	Design of cars body:- Constructed out of Five Side Glass Full Vision Panel Capsule Type with Stainless Steel Hairline finish Car and Car Doors with 2300 mm Car Height with Stainless Steel handrail.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR**Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur****Contract No: EE (Elect-IV)/03/2022-23**

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	Flooring:- Lift manufacturer will provide niche into the flooring area to accommodate Granite Flooring in the car. Granite will be provided by customer.					
	Car light and fan:- Florescent tube light fitting to have daylight effect inside the Car cabin. Fan/blower as per manufacturing enriched design.					
	Car position indicator:- Floor position indicator at all floors along with direction of travel indicator.					
	Power supply shall be provided as under:					
	A. 415 volts, 3 phase, 4 wires 50 Hz					
	B 230V, Single Phase, 50 Hz for lighting.					
	C. All electric cables, controls switchgears should be strictly as per ISL.					
	Foundation:- The Gearless machine will be placed directly above the Overhead area in the hoist way and machine resting arrangement will be provided by the tenderer.					
	Depth of lift pit 2000 mm.					
	Guide rails :- The guide rails should be steel dually toughened and ground section to ensure position tract and smooth runing of the elevator.					
	Over Head:- 5000 mm contracts surface of the correcting fishplates and back of the guide rails and sills should be accurately machined to form smooth joints and liding sills should be used for fastening guide rails.					
	Rope / belt fastening:- Main hoist rope / belt shall be self-lubricated of adequate section and shall be provided into the sockets of spring loaded self. Thumbles of spring permit adjustment of uniform rope tension for smooth operation of the elevator.					
	Signals					
	(A) Luminous hall buttons at all floors.					
	(B) Digital hall position indicators at all floors.					
	(C) Car operating panel with luminous floor buttons					
	(D) Digital car position & Direction indicator.					
	(E) DC VF Door Drive.					
	(F) Emergency light & emergency alarm through inverter (Rechargeable batteries).					
	Type of buffers:- Spring buffers or as per suppliers design					
	Specification:- IS: 4666. 1968 for electric passenger lifts and shall further Comply to IS : 1860:1960, IS: 63831,1971, IS: 732: 1963 and Bombay lift act 1943 amended up to date.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR**Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur****Contract No: EE (Elect-IV)/03/2022-23**

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	a. Electronic door safety (infrared)					
	b. Automatic rescues device.					
	c. Over speed safety system with testing at site facility.					
	Defect Liability Period:- 5 year from date of handling over					
	The manufacturers would provide warrenty / gurranty of the entire Lift of Five years					
	Minor Building Work					
	The lift suppliers include Cost of					
	Scaffolding inside the hoist way for erection					
	Cutting of walls with repair Including all of bolts members indicator and button boxes etc. in position.					
	Sill angles, fascia plates, machine Beams and rolled steel section with bearing plates for support of the nmachine if required.					
	Door frames.					
	Pit Ladder					
	Sanction and approvals:- The supplier shall obtain all the sanctions required for the operation of lifts from local authorities if applicable on behalf of the employer. The employer will be reimbursed the actual fees, If any.					
	Tests:- The supplier shall test the lift in the presence of lift inspector as well as department engineer/consultants as per ISI if required.					
	Inclusion					
	a) Cost of voltage stablizer (if required) and SMF Batteries.					
	b) Inclusive of GST and all other taxes.					
	c) Insurance transit and up to handling over of lift.					
	Traction steel Hoist ropes as per relevant ISI code.					
	Car safety and Governor to control excessive descending speed.					
	Counter balance to promote smooth and economic operation.					
	Terminal and final limits.					
	Terminal buffer.					
	Controller to control starting speed of elevator motor and supply brake automatically in case of application of any of the safety device or power failure.					
	Steel glides for the car and counter weight.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	The elevator should be equipped with the over speed governor safety system.					
	Inspection unit shall be provided at the top of car.					
	Rechargeable battery based Emergency light & alarm.					
	Fireman's Switch					
	Door open & Door close button					
	Full Height Infrared Curtain					
	Auto On/Off for car light and fan					
	The elevator should be equipped with the over speed governor safety system.					
	Inspection unit shall be provided at the top of car.					
	Rechargeable battery based Emergency light & alarm.					
	Fireman's Switch					
	Door open & Door close button					
	Full Height Infrared Curtain					
	Auto On/Off for car light and fan					
	The measurements mentioned in the drawing are indicative only. The bidder is responsible for any deviation at site. He is advised to inspect the site before submitting the tender.					
	Bidder should clear all observations frpm JDA / Consultant in Pre Bid Meeting (Date to be notified separately)					
	SITC and O&M (05 Yr) of 20 passenger/1360 KG 6 stops rated speed adjustable upto 1.0 mtr/ sec (Detailed specification described below)	4.000	Job	2981801.84	11927207.36	INR One Crore Nineteen Lakh Twenty Seven Thousand Two Hundred & Seven and Paise Thirty Six Only
	20 passengers/1360 Kg, 6 stops, rated speed Adjustable up to 1.0 mtr /sec with 2 years comprehensive maintenance / DLP.					
	Type of lift:- 20 Passenger with Machine Room Type Elevator					
	No. of lifts required:- Four Nos. to feed 06 floors, rise of 20.00 mtrs approximately					
	Capacity:- 1360 Kg.					
	Hoistway Available:- 2700 mm wide x 2770 mm depth & 2600 mm wide x 2770 mm depth					
	Name of floors to be served:- LB, UB, LG, UG, 1, 2 (6 Stops)					
	Operation:- Microprocessor based duplex collective full collective Selective operation with or without attendant					
	Speed:- 1.50 Meter/ Sec					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR**Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur****Contract No: EE (Elect-IV)/03/2022-23**

Bidder Name :						
PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	Drive:- Variable voltage variable frequency (V3F)					
	Entrance:- One at each floor level and same side only.					
	Doors:- Automatic Centre opening Door panel of 1100 mm x 2200 mm of Stainless Steel Honey in Comb finish					
	Machine:- Eco Disc axial Gearless Machine shall be placed in the machine room directly above the hoist way.					
	Location of machine:- In the machine room as per Manufacturer design.					
	Size of car platform:- 1700 mm W x 2000 mm D x 2300 mm H / As per IS to suit the well sizes					
	Design of cars body:- Constructed out of Stainless Steel in Honey Comb finish Car and Car Doors with 2400 mm Car Height with Stainless Steel handrail.					
	Flooring:- Lift manufacturer will provide niche into the flooring area to accommodate Granite Flooring in the car. Granite will be provided by customer.					
	Car light and fan:- Florescent tube light fitting to have daylight effect inside the Car cabin. Fan/blower as per manufacturing enriched design.					
	Car position indicator:- Floor position indicator at all floors along with direction of travel indicator.					
	Power supply shall be provided as under:					
	A. 415 volts, 3 phase, 4 wires 50 Hz					
	B 230V, Single Phase, 50 Hz for lighting.					
	C. All electric cables, controls switchgears should be strictly as per ISL.					
	Foundation:- The Gearless Machine will be placed directly above the Overhead area in the machine room and machine resting arrangement will be provided by the tenderer.					
	Depth of lift pit:- 1600 mm.					
	Guide rails:- The guide rails should be steel dually toughened and ground section to ensure position tract and smooth runing of the elevator.					
	Over Head:- 4800 mm contracts surface of the correcting fishplates and back of the guide rails and sills should be accurately machined to form smooth joints and liding sills should be used for fastening guide rails.					
	Rope / belt fastening:- Main hoist rope / belt shall be self-lubricated of adequate section and shall be provided into the sockets of spring loaded self. Thumbles of spring permit adjustment of uniform rope tension for smooth operation of the elevator.					
	Signals					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	(A) Luminous hall buttons at all floors.					
	(B) Digital hall position indicators at all floors.					
	(C) Car operating panel with luminous floor buttons					
	(D) Digital car position & Direction indicator.					
	(E) DC VF Door Drive.					
	(F) Emergency light & emergency alarm through inverter (Rechargeable batteries).					
	Type of buffers:- Spring buffers or as per suppliers design					
	Specification:- IS: 4666. 1968 for electric passenger lifts and shall further Comply to IS : 1860:1960, IS: 63831,1971, IS: 732: 1963 and Bombay lift act 1943 amended up to date.					
	a. Electronic door safety (infrared)					
	b. Automatic rescues device.					
	c. Over speed safety system with testing at site facility.					
	Defect Liability Period:- 5 year from date of handing over					
	The manufacturers would provide warrenty / gurranty of the entire Lift of Five years					
	Minor Building Work					
	The lift suppliers include Cost of					
	Scaffolding inside the hoist way for erection					
	Cutting of walls with repair Including all of bolts members indicator and button boxes etc. in position.					
	Sill angles, fascia plates, machine Beams and rolled steel section with bearing plates for support of the nmachine if required.					
	Door frames.					
	Pit Ladder					
	Sanction and approvals:- The supplier shall obtain all the sanctions required for the operation of lifts from local authorities if applicable on behalf of the employer. The employer will be reimbursed the actual fees, If any.					
	Tests:- The supplier shall test the lift in the presence of lift inspector as well as department engineer/consultants as per ISI if required.					
	Inclusion					
	a) Cost of voltage stablizer (if required) and SMF Batteries.					
	b) Inclusive of GST and all other taxes.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR**Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur****Contract No: EE (Elect-IV)/03/2022-23**

Bidder Name :						
PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	c) Insurance transit and up to handling over of lift.					
	Traction steel Hoist ropes as per relevant ISI code.					
	Car safety and Governor to control excessive descending speed.					
	Counter balance to promote smooth and economic operation.					
	Terminal and final limits.					
	Terminal buffer.					
	Controller to control starting speed of elevator motor and supply brake automatically in case of application of any of the safety device or power failure.					
	Steel glides for the car and counter weight.					
	The elevator should be equipped with the over speed governor safety system.					
	Inspection unit shall be provided at the top of car.					
	Rechargeable battery based Emergency light & alarm.					
	Fireman's Switch					
	Door open & Door close button					
	Full Height Infrared Curtain					
	Auto On/Off for car light and fan					
	The measurements mentioned in the drawing are indicative only. The bidder is responsible for any deviation at site. He is advised to inspect the site before submitting the tender.					
	Bidder should clear all observations frpm JDA / Consultant in Pre Bid Meeting (Date to be notified separetly)					
	Type of Lift:- Gearless Machine Room Less Type Elevator					
	No. of lifts required:- 1 NOS.					
	No. of person & Load to be carried:- 680 kg. (equivalent to 10 passengers)					
	Hoistway Available:- 1800mm x 2000mm	1.000	Job	1846675.58	1846675.58	INR Eighteen Lakh Forty Six Thousand Six Hundred & Seventy Five and Paise Fifty Eight Only
	Name of floors to be served:- 3 Stops Lower Ground, Ground and First Floor					
	Operation:- Microprocessor based simplex collective full collective Selective operation with or without attendant					
	Speed:- 1.00 Meter/ Sec					
	Drive:- Variable voltage variable frequency (V3F).					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR**Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur****Contract No: EE (Elect-IV)/03/2022-23**

Bidder Name :						
PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	Entrance:- One at each floor level and same side only.					
	Doors:- Automatic Centre / side opening Door panel of 800 mm x 2000 mm of Stainless Steel Honey in Comb finish					
	Machine:- Eco Disc axial Machine shall be placed in the over head area directly above the lift well.					
	Location of machine:- In the overhead area directly above the hoist way as per Manufacturer design.					
	Size of car platform:- 1100 mm W x 1600 mm D x 2200 mm H / As per IS to suit the well sizes					
	Design of cars body:- Constructed out of Stainless Steel Honey in Comb finish Car and Car Doors with 2100 mm Car Height with Stainless Steel handrail.					
	Flooring:- Lift manufacturer will provide niche into the flooring area to accommodate Granite Flooring in the car. Granite will be provided by customer.					
	Car light and fan:- Florescent tube light fitting to have daylight effect inside the Car cabin. Fan/blower as per manufacturing enriched design.					
	Car position indicator:- Floor position indicator at all floors along with direction of travel indicator.					
	Power supply shall be provided as under:					
	A. 415 volts, 3 phase, 4 wires 50 Hz					
	B 230V, Single Phase, 50 Hz for lighting.					
	C. All electric cables, controls switchgears should be strictly as per ISI.					
	Foundation:- The machine will be placed directly above the Overhead area in the hoist way and machine resting arrangement will be provided by the tenderer.					
	Depth of lift pit:- 1600 mm.					
	Guide rails:- The guide rails should be steel dually toughened and ground section to ensure position tract and smooth runing of the elevator.					
	Over Head:- 4200 mm contracts surface of the correcting fishplates and back of the guide rails and sills should be accurately machined to form smooth joints and liding sills should be used for fastening guide rails.					
	Rope / belt fastening:- Main hoist rope / belt shall be self-lubricated of adequate section and shall be provided into the sockets of spring loaded self. Thumbles of spring permit adjustment of uniform rope tension for smooth operation of the elevator.					
	Signals					
	(A) Luminous hall buttons at all floors.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	(B) Digital hall position indicators at all floors.					
	(C) Car operating panel with luminous floor buttons					
	(D) Digital car position & Direction indicator.					
	(E) DC VF Door Drive.					
	(F) Emergency light & emergency alarm through inverter (Rechargeable batteries).					
	Type of buffers:- Spring buffers or as per suppliers design					
	Specification:- IS: 4666. 1968 for electric passenger lifts and shall further Comply to IS : 1860:1960, IS: 63831,1971, IS: 732: 1963 and Bombay lift act 1943 amended up to date.					
	a. Electronic door safety (infrared)					
	b. Automatic rescues device.					
	c. Over speed safety system with testing at site facility.					
	Defect Liability Period:- 5 year from date of handing over					
	The manufacturers would provide warrenty / gurranty of the entire Lift of Five years					
	Minor Building Work:- The lift suppliers include Cost of					
	Scaffolding inside the hoist way for erection					
	Cutting of walls with repair Including all of bolts members indicator and button boxes etc. in position.					
	Sill angles, fascia plates, machine Beams and rolled steel section with bearing plates for support of the nmachine if required.					
	Door frames.					
	Pit Ladder					
	Sanction and approvals:- The supplier shall obtain all the sanctions required for the operation of lifts from local authorities if applicable on behalf of the employer. The employer will be reimbursed the actual fees, If any.					
	Tests:- The supplier shall test the lift in the presence of lift inspector as well as department engineer/consultants as per ISI if required.					
	Inclusion					
	a) Cost of voltage stablizer (if required) and SMF Batteries.					
	b) Inclusive of GST and all other taxes.					
	c) Insurance transit and up to handling over of lift.					
	Car safety and Governor to control excessive descending speed.					

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	Counter balance to promote smooth and economic operation.					
	Terminal and final limits.					
	Terminal buffer.					
	Controller to control starting speed of elevator motor and supply brake automatically in case of application of any of the safety device or power failure.					
	Steel glides for the car and counter weight.					
	The elevator should be equipped with the over speed governor safety system.					
	Inspection unit shall be provided at the top of car.					
	Rechargeable battery based Emergency light & alarm.					
	Fireman's Switch					
	Door open & Door close button					
	Full Height Infrared Curtain					
	Auto On/Off for car light and fan					
	The measurements mentioned in the drawing are indicative only. The bidder is responsible for any deviation at site. He is advised to inspect the site before submitting the tender.					
	Bidder should clear all observations frpm JDA / Consultant in Pre Bid Meeting (Date to be notified separetly)					
	P & F of IP65 IK10 rated LED bulk head type light fixture made from CRCA sheet steel housing suitable for moutning LED tube system (integral driver), Power Consumption of 10-15W ~ 500-600 lumens, system lumen efficiency 70 lm/Watt output suitable for 1x100W GLS / 9W CFL bulk head fixtures, life time of 50,000 burning hours with 70% initial lumen maintained. CCT 3000°K, 4000°K & 6000°K. Fixture shall be in compliance with CE & KEMA standards. Approved Make:- Philips, CG, Bajaj, Wipro, Surya, Havell's, HPL, K-Lite, Lighting Science					
	LED BULK head luminaire 6/7W	10.000	Each	2720.00	27200.00	INR Twenty Seven Thousand Two Hundred Only

Tender Inviting Authority: JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

Name of Work : SITC and operation maintenance (05 Yr) of Lift elevators at RIC near OTS Jaipur

Contract No: EE (Elect-IV)/03/2022-23

PRICE SCHEDULE						
Sl. No.	Item Description	Quantity	Units	Estimated Rate	TOTAL AMOUNT	TOTAL AMOUNT In Words
	S&F following sizes (dia.) of ISI marked medium duty PVC conduit along with accessories in surface / recessed using saddles, clamps, fastener as required including cutting the wall, covering conduit and making good the same as required.					
	20 mm	30.000	R.Mtr.	25.60	768.00	INR Seven Hundred & Sixty Eight Only
	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor ISI marked (IS:694) of 1.1 kV grade and approved make in existing surface or recessed conduit/casing capping including making connections etc. as required.					
	1 x 1.5 sq.mm	80.000	Mtr	11.20	896.00	INR Eight Hundred & Ninety Six Only
Total in Figures					27550394.98	INR Two Crore Seventy Five Lakh Fifty Thousand Three Hundred & Ninety Four and Paise Ninety Eight Only
Quoted Rate in Figures			Select		0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				