



**NOTICE INVITATING TENDER (NIT)**

Sealed tenders from short listed suppliers/contractors are invited for the works mentioned below:

**1) WORK** :: Supply, Installation ,Testing and Commissioning of 1 number of 6-passenger capacity lift by dismantling the existing passenger lift, at Canara Bank RO North, Kohinoor building, Opp. Siddhivinayak Mandir, Prabhadevi, Mumbai- 25.

**2) EMD** :: Rs.11000.00 by way of Demand Draft of a Scheduled Bank drawn in favour of Canara Bank - payable at Mumbai.

**3) TIME OF COMPLETION** :: 180 days from the 14<sup>th</sup> day of award of work by the Bank.

**4) THE DOCUMENT CONTENTS OF**

PART -1. TECHNICAL BID containing

- (a) Notice Inviting Tender.
- (b) General rules & instructions to Bidders/Tenderers
- (c) General Conditions of Contract
- (d) Technical Specifications.

PART-II PRICE BID

**5). PRE-BID MEETING** ::22.03.2018 at 16:00 hrs at site

**6) SUBMISSION OF TENDER** :: Both the bids should be submitted on or before 27.03.2018 up to 15.00 hrs but in separate envelopes, sealed and superscribing the details on the envelope as “ Technical Bid” and “Price Bid” .

**7).DATE OF OPENING**:: Technical bid will be opened on 27.03.2018 at 15.30 hrs.

TENDER DOCUMENT ISSUED TO :::

SIGNATURE OF ISSUING AUTHORITY :::

**ELIGIBILITY CRITERIA**

Canara Bank is having an office building complex comprising of Ground + 3 Floors at Kohinoor building, Opp. Siddhivinayak Mandir, Prabhadevi, Mumbai- 25. Bank invites tenders from reputed agencies/ service providers for **Supply, Installation ,Testing and Commissioning of 1 number of 6-passenger capacity lift by dismantling the existing passenger lift, at Canara Bank RO North, Kohinoor building, Opp. Siddhivinayak Mandir, Prabhadevi, Mumbai- 25.**

**Eligibility Criteria**

No	Criteria	Documents Required
01	The vendor should have minimum of five years of experience in supply, installation, testing and commissioning of elevators as on 28-02-2018.	Copy of work orders/client certificates older than 5 years as on 28-02-2018.
02	The vendor should have undertaken at least one work of supply, installation, testing and commissioning of elevators in Public Sector Undertakings/ Public Sector Banks during the last 5 years.	Work order copies along with the completion certificates from the PSUs/PSBs.
03	The applicant should be an assessee of Income Tax and must possess GST No.	Should submit copy of the income tax, PAN, GST registration certificate.
04	The vendor shall have the average annual financial turnover of at least Rs 30 lakhs during last 3 years ending with 31.03.2017 and should be a profit making organisation.	1) Audited Balance Sheet and P & L Account for the three years mentioned. 2) Certificate from Chartered Accountant certifying the turnover of last three financial years i.e. 2014-15, 2015-16, 2016-17
05	The Bidders desirous of quoting should have a permanent office at Mumbai/ Navi Mumbai /Thane/ Palghar/ Panvel and service backup for maintenance of lifts	Copy of address proof for office at Mumbai/Navi Mumbai /Thane/ Palghar/ Panvel

Vendors who meet the Eligibility criteria as specified above at 01 to 05 may download the tender documents from Bank's website [www.canarabank.com](http://www.canarabank.com). Issue of Tender Documents does not mean that vendor is prequalified.

**GENERAL RULES AND INSTRUCTIONS FOR THE GUIDANCE OF BIDDERS/TENDERERS:**

1. Sealed Tenders are invited from suppliers, on behalf of the Canara Bank, Circle Office, Mumbai-5, hereinafter known as the Employer and also as Bank, for the work of **Supply, Installation, Testing and Commissioning of 1 number of 6 passenger capacity lift at Canara Bank RO North, Kohinoor building, Opp. Siddhivinayak Mandir, Prabhadevi, Mumbai- 25.**

Scope of work involves undertaking the design based on the parameters furnished & site conditions, and manufacture, testing at shop, supply, Installation, testing at site and commissioning the specified Elevator System, along with its allied works etc., which are fully described in the technical specification.

2. The site for the works is available for immediate commencement of work or shall be made available at the date of commencement of work. The time period stipulated is for the entire work.
3. The tender concept is "TWO ENVELOPE CONCEPT" and it has to be submitted as such. It should be placed in sealed cover, with the name of the project written on the envelope mentioning "Technical Bid" and "Price Bid" as the case may be and submitted in two different sealed envelopes simultaneously on the prescribed date and time as detailed in Notice Inviting Tender.

**The sealed tenders should be addressed to The Divisional Manager, Estate & Maintenance Section, Canara Bank, Circle Office, 2<sup>nd</sup> Floor, Bandra Kurla Complex, Mumbai and to be dropped in the tender box before the stipulated time.**

The Technical bid will be opened in the above mentioned office on the date stipulated in the Notice Inviting Tender. The date for opening the price bid will be intimated subsequently only to such firms whose technical bids are found acceptable. The tenderer is requested to participate during the opening of the tender.

- 3.1. The first envelope superscribed as " Technical Bid" should be submitted in a sealed envelope containing all the following details:
  - i). All the schedules of the tender document, tender drawings if any, plant layout & technical & commercial details of the proposed plant with its components & all other attachments other than the Bill of Quantity (Price Bid).
  - ii). The technical features/ brochures of the Elevator system, and such other details / data required for the technical evaluation of the entire system offered. (It is essential that any technical information considered useful should be furnished at the first instance itself in this envelope and at later date any additional or supplementary information shall not be entertained unless it is found necessary

and sought by the Employer / Consultant in form of written clarification to clear any pertinent doubts.)

iii). EARNEST MONEY DEPOSIT (EMD) : The tender,(i.e. in the envelope containing the technical Bid) shall be accompanied by earnest money as detailed in the NIT. No interest shall be allowed on the Earnest Money. Tenders without Earnest Money shall be liable for rejection. **Non submission of the EMD in the price bid envelope shall render the tender being rejected on the grounds of non submission of the EMD.**

4. The second envelope superscribed as “ Price Bid” should be sealed and submitted on the same given date and time simultaneously along with technical & commercial bid. Non submission of the same along with the technical bid shall automatically render the entire tender being rejected. This envelope should contain duly filled in Bill of quantities (enclosed in the tender document) with values written in words and figures, and as detailed elsewhere in the tender documents.
5. Tender shall be on prescribed Form only.
6. The contractors should quote in figures as well as in words the rate, and amount tendered by them. The amount for each item should be worked out and the requisite totals given. The rates quoted shall be all inclusive rates for the item of work described, including materials, labour, tools & plant, carriage & transport, supervision, overheads & profits, mobilising and other charges whatsoever including any anticipated or un-anticipated difficulties etc. complete for proper execution of the work as per drawings and specifications and no claim whatsoever for any extra payment shall be maintainable.
7. When a contractor signs a tender in an Indian language, the tendered amount and the total amount tendered should also be written in the same language. In the case of illiterate contractors the rates or the amounts tendered should be attested by a witness.
8. The contractor whose tender is accepted will be required to furnish by way of security deposit for the due fulfillment of his contract. The security Deposit shall be collected and repayable as detailed in clause No.12 of the General Conditions of the Contract.
9. The EMD of the contractor, whose tender is accepted, shall be forfeited in full in case he does not remit the Initial Security Deposit within the stipulated period or start the work by the stipulated date mentioned in the award letter. The successful tenderer to whom the contract is awarded will have to deposit as initial security deposit a further sum to make up 2% of the value of accepted tender including the Earnest Money as detailed in clause No. 12 of the General Conditions of the Contract.

10. The acceptance of a tender will rest with the Employer which does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all of the tenders received without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected. The employer reserves the right to accept the tender in full or in part and the tenderer shall have no claim for revision of rates/other conditions if his tender is accepted in part.
11. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.
12. All rates shall be quoted on the proper form of the tender alone. Quoted rates and units different from prescribed in the tender schedule will be liable for rejection.

Special care should be taken to write the rates in figures as well as in words and the amounts in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the words 'Rs.' should be written before the figure of rupees and words 'P' after the decimal figures, e.g. Rs.2.15 "P" and in case of words, the word 'Rupees' should precede and the word 'Paise' should be written at the end, unless the rate is in whole rupees and followed by the words 'only' it should be invariably be up to two decimal places. While quoting the rate is in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line. However, if a discrepancy is found;

- i). the rates which correspond with the amount worked out by the tenderer shall unless otherwise proved be taken as correct. (OR)
  - ii). if the amount of an item is not worked out by the tenderer or it does not correspond with the rates written either in figures or in words then the rate quoted by the tenderer in words shall be taken as correct. (OR)
  - iii). where the rates quoted by the tenderer in figures and in words tally but the amount is not worked out correctly, the rates quoted by the tenderer will unless otherwise prove be taken as correct and not the amount.
- 13.1 In the case of any errors or omissions in the quoted rates, and if the tender is issued in duplicate, the rates quoted in the tender marked "Original" shall be taken as correct rates.
  - 13.2 All corrections such as cuttings, interpolations, omissions and over-writings shall be number as 'c','i','o' and 'ow' and initialed and total of such c, i, o and ow on each page certified at the end of the page with grand total at the end of the bill/schedule of quantities.
  14. An item rate tender containing percentage below / above will be summarily rejected. However, where a tenderer voluntarily offers a rebate for payment within a stipulated period, this may be considered.
  15. ~~Sales tax, work contract tax, or any other tax, any royalties, duties, levies, cess, entry tax, Octroi, profession tax, Sales Tax, purchase tax, turnover tax, VAT or any other tax~~ on material or finished work in respect of this contract shall be payable by the

tenderer and the Employer will not entertain any claim whatsoever in respect of the same, and nothing extra shall be paid/reimbursed for the same subsequently. **However, GST on contract shall be payable extra by the bank.**

16. The contractor shall give a list of his relatives, if any, working with the Employer along with their designations and addresses.
17. No employee of the employer is allowed to work as a contractor for a period of two years of his/her retirement from the employer services, without the previous permission of the employer. This contract is liable to be canceled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the employer as aforesaid before submission of the tender or engagement in the contractor's service.
18. The tender for the works shall remain open for acceptance for a period of 90 days from the date of opening of tenders. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to the Employer, then the Employer shall, without prejudice to any other right or remedy, be at liberty to forfeit full value of the earnest money as aforesaid.
19. The tender for the work shall not be witnessed by a contractor or contractors who himself / themselves has / have tendered or who may and had/have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summary rejection.
20. It will be obligatory on the part of the tenderer to tender and sign the tendered documents for all the component parts and that, after the work is awarded, he / they will have to enter into an agreement for each component with the competent authority of the Employer.
- 20.1 Further the tenderer shall agree that until a formal agreement on stamp paper is prepared and signed, this tender shall constitute a binding contract between the tenderer and the Employer.
21. The tenderer, apart from being a competent contractor must associate himself with agencies of appropriate class who are eligible to tender for other related works connected directly or indirectly with the contract and employed by the employer.
- 22.1 The Employer does not bind itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 22.2 Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and dimensions, the means of access to the site, and obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender.

- 22.3 A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the work.
- 23 On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Employer shall be communicated to the Employer.
- 24. Method of Evaluation of tender:** All the competitive tenders will be received on the specified date and time. On the same day or on specified date & time in event of any compelling circumstances, the tenders will be opened in the presence of the available tenderers.
- 24.1 Both the envelope superscribed as “ Technical Bid” and “Price Bid “ will be simultaneously accepted, but the envelope superscribed as “Technical Bid” alone will be opened and details of EMD etc., shall be recorded, while the Price Bid shall be maintained in the safe custody of the Employer.
- 24.2 After the technical evaluation, if necessary after discussions with the tenderers, such of those tenderer found technically acceptable will be short listed and their envelope containing “ Price Bid “ shall be opened on a given date and time in presence of the short listed tenderers with prior notice to them. The tenderers are expected to attend the tender opening and their inability in participating will not in any way prevent the employer undertaking the opening of the bids.
- 24.3 During the course of technical evaluation if found necessary the Employer / Consultant may seek supplementary price bids to bring the evaluation at par and any such price bids shall be prepared as stated in the tender and submitted in sealed envelopes superscribing “Supplementary Price Bid for the project of.....”. Such supplementary price bid shall be opened simultaneously with the original price bid on the prescribed date and taken into consideration in its evaluation.
- 24.4 Voluntary submission of the supplementary price bid by the contractor/ tendered shall not be accepted and supplementary bids shall be limited to the details sought for by the Employer/ consultant only. Any other un-related price variations furnished in supplementary price bids shall not be recognised and might be liable for rejections if undue information is furnished.
- 24.5 Being a techno - economical project, besides the capital cost of the equipment the Annual Maintenance Charges for 4 years (after 1 year D.L.P) will be evaluated. Therefore the tenderers/ contractors shall necessarily furnish the AMC charges in the price bid for 4 years after warranty period and terms of AMC shall be furnished in the technical bid clearly indicating the details regarding the scope of AMC, details of spares, consumables & equipments covered and also details of exclusions under AMC shall be furnished. Other than details furnished under exclusions all other related expenditure towards trouble free maintenance and its normal functioning

shall be considered as part of AMC. Hence, the cost of AMC is also considered for price comparison (to decide L1) along with the cost of lift and buy-back charges for existing lift.

- 24.6 In case of other un-successful tenderers, the sealed Price bid along with EMD shall be returned treating it individually. The Employer reserves the right to accept or reject any of the offer's without assigning any reason and no dispute or negotiation will be entertained in this regard. The Employer's decision will be final in the matter.
25. The notice inviting tender, general rules & instructions for the guidance of tenderers shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 14 days from the stipulated date of start of the work sign on a stamp paper the contract consisting of :-
- (a) Standard form of Agreement on stamp paper.
  - (b) Notice inviting tender, all the documents including tender, drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto. General conditions, Schedules leading to Technical Specification, Special Conditions, Technical Brochures in schedules submitted by the tenderer etc., Price Bid / Schedule Bill of Quantities.

For & on behalf of the Employer.

Signature of the Authorised / Accepting Authority.

Signature of the Tenderer  
with Name, Constitution & Seal.



**TENDER - OFFER**

I/We have read and examined the Notice Inviting Tender. Schedules, Specifications Applicable, Drawings and Designs, General Rules and Instructions, General Conditions of Contract, Special conditions, Schedule (Bill) of quantities in Price Bid, and all other documents referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Employer within the time specified at the rates specified in the attached Price Bid viz., schedule of quantities and in accordance in all respects with the specifications, designs drawings and instructions in writing referred to in the General Rules and Instructions, General Conditions of Contract and in all respects in accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for ninety days from the due date of submission thereof and not to make any modifications in its terms and conditions. A sum of Rs. \_\_\_\_\_ lakhs is hereby forwarded as earnest money in form of Demand Draft of ..... (Name of the issuing Schedule Bank) bearing no ..... and date .....

In the event of my / our failure to commence the work on the specified date after award I/We agree that the Bank shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely otherwise the said earnest money shall be retained by it towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein.

I/We agree that should I/We fail to deposit the full amount of initial security deposit and/or fail to commence the work specified in the above memorandum, an amount equal to the amount of the earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the Employer and the same may at the option of the Employer be recovered without prejudice to any other right or remedy available in law, out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/us under this contract or otherwise.

I/We hereby declare that I/We treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any persons other than a person to whom I/We am /are authorised to communicate the same or use the information in any manner prejudiced to the safety of the State / the Employer.

I/We fully understand that you are not bound to accept the lowest or any tender you may receive. Shri. \_\_\_\_\_, Partner / Proprietor / Authorised representative of the Company, is the person authorised to negotiate commercial, technical terms & conditions & sign on behalf of the firm any Agreement, Bills & receipts for this work.

I/We agree that until a formal agreement on stamp paper is prepared and signed, this tender with your written acceptance thereof shall constitute a binding contract between us.

***Dated the: .....day of 2018***

Signature of Contractor

Witness, Name & address:  
Full Postal Address including  
Pin Code No. & Telephone No.

1.

2

*ACCEPTANCE*

The above tender (as modified by us or negotiations as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Employer for a sum of

Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_)

The letters referred to below shall also form part of this contract agreement:

- a)
- b)
- c)

***Dated this \_\_\_\_\_ day of 2018***

For & on behalf of the Employer

Signature : \_\_\_\_\_

Designation: \_\_\_\_\_

### FORM OF AGREEMENT

This agreement made on the \_\_\_\_\_ day of the month of \_\_\_\_\_ in the year 2018 BETWEEN, Canara Bank a body corporate constituted under the Banking Companies (Acquisition and Transfer of undertakings Act, 1970, having its Head Office, at 112 J.C.Road, Bangalore - 560002 amongst others a Office / Branch at \_\_\_\_\_ represented by its duly constituted attorney (hereinafter referred to as the Employer / Bank) on the ONE PART; and

Shri \_\_\_\_\_ S/D/o \_\_\_\_\_

Resident of \_\_\_\_\_ the sole proprietor of M/s \_\_\_\_\_ having office at the following address \_\_\_\_\_

M/s. \_\_\_\_\_ the partnership firm having an administrative/principal office at \_\_\_\_\_ represented by its Managing/duly authorised partner.

M/s. \_\_\_\_\_ company/body corporate incorporated under the provisions of the Companies Act 1956 having its registered office at the following address \_\_\_\_\_, duly represented at \_\_\_\_\_ duly represented by its constituted and authorised Managing Director, Shri \_\_\_\_\_ and (hereinafter called the Tenderer which term shall also be called the Supplier or the Contractor ) on the other part

WHEREAS THE Employer / Bank is desirous that certain works should be designed, supplied, installed, tested & commissioned (viz., replacement of 1 No. of 6 passenger capacity lifts by dismantling the existing one of similar capacity) at their Canara Bank RO North, Kohinoor Building, Prabhadevi, Mumbai - 400 025 as mentioned and called for invitation to tender and the tender dated ----- furnished by the tenderer for the supply, installation and performance of such works has been accepted by the Employer on the terms and conditions as set out therein and interalia others.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this agreement words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to.
2. The following documents not inconsistent with these presents shall be deemed to form and be read and construed as part of this agreement viz;
  - a) Notice inviting Tender
  - b) General Rules and Instructions for the guidance of tenderers.
  - c) The Tender, Letter of Acceptance, Letters from & to the tenderer, if any, leading to and prior to acceptance letter.
  - d) General Conditions of contract and clauses of contract along with Annexures thereto.
  - e) Schedules A to C consisting of Technical Specifications, Special Conditions, Questionnaire, tender drawings if any, etc.  
[Note : \* Strike off whichever is not applicable ]
  - f) Schedule of quantities including Prices and tendered amount known as Price - Bid.
  - g) The details submitted in technical bid, design, and such other commitments like Annual Maintenance Charges for the period mentioned shall be part of the agreement.

3. In consideration of the payments to be made by the Employer to the tenderer, the tenderer hereby covenants and agrees with the Employer to construct, complete and perform the works in conformity in all respects and subject to all terms and conditions/rules as mentioned in the General Conditions as also in the aforesaid documents which shall form part of this agreement.

In witness whereof the parties hereto have hereunto set their respective hands and seals the day and year first above written.

***Signed, sealed and delivered by the said tenderer,*** \_\_\_\_\_

\_\_\_\_\_ to the  
Employer \_\_\_\_\_ in the presence of:

Signature of Tenderer (with seal)

Signature of Authorised representative of the Employer / Accepting Authority.

Witness (Signature, Name & Address ):

1).

2).

## GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down hereinafter and in the Drawings, the work shall be carried out as per standard specifications and under the direction of the Employer.

### 1. DEFINITIONS / INTERPRETATIONS:-

i). The 'Contract' means the documents forming the tender and acceptance thereof and the agreement duly executed between the Employer and the Tenderer, together with the documents referred to therein including those conditions, the specifications, schedule of quantities, tender agreement, designs, drawings and instructions issued from time to time by the Engineer-in-Charge. All these documents taken together shall be deemed to form one contract and shall be complementary to one another.

ii). In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-

- a) The 'Tenderer' or 'Supplier' or 'Contractor' shall mean the individual Kartha, or Manager of HUF, firm or Company, whether incorporated or not, undertaking the works and shall include the legal heirs/representatives of such individual or the partners composing firm and their legal heirs and successors, or company's authorised and constituted attorneys/agents and permitted assignees of such firm or company.
- b) The 'Employer' or 'Bank' means any officer of the Canara Bank, who is specifically authorised to enter into contracts in respect of the above works.
- c) The 'Engineer-in-Charge' means the Senior Manager / Manager, or Officer, / Engineer and/or Site Engineer who shall supervise and be in-charge of the work or any other authorised representative or person specifically deputed by the Employer and / or the Consultants wherever they are employed from time to time by the Employer.
- d) 'Contract Price' shall mean the final accepted rates in the Price Bid hereto.
- e) 'Date of Contract' means the 'Calendar date on which the Employer and Contractor have signed the Agreement on the Stamp Paper.
- f) "Accepting Authority" shall mean The Divisional Manager/Assistant General Manager of the Canara Bank (the Employer).
- g) 'Approval' wherever used in the specifications or schedule of Quantities shall mean, respectively, approved by or approval of the 'Accepting Authority' in writing.

- h) 'Appellate Authority' shall mean The Deputy General Manager, of the Bank (the Employer). Who shall also be the authority to consider any extension of time or compensation as defined in clause hereunder.
- i) 'Notice in writing' or 'written notice' shall mean a notice in writing typed or printed characters delivered to or sent by registered post to the last known address private or business address or registered office address, and shall be deemed to have been received when in ordinary course of post it would have been delivered, and/or delivered personally, or otherwise proved to have been received.
- j) 'Virtual completion' shall mean that the work/installation is complete in all respects in the opinion of the Employer and for which the completion/clearance certificate has been issued by the Engineer -in-charge / Consultant and the installation is fit for usage.
- k) 'Drawings' shall mean all drawings and/or design drawings furnished by the tenderer / sketches duly signed by the authorised Engineer-in-charge or the Consultant on behalf of the Employer before commencement or during the progress of the work
- l) 'Letter of Acceptance' shall mean intimation by a letter issued by the Accepting Authority of the Employer to tenderers that his tender has been accepted in accordance with the provisions in the said letter.
- m) "Defect Liability Period" shall mean a period of twelve months from the certified date of virtual completion issued by the Consultant/Engineer-in-charge and accepted by the Employer. However in cases where completion gets delayed abnormally due to unavoidable reason(s) defect liability period shall be reckoned 12 months from the date of completion or 18 months from the date of supply which ever is earlier.

## 2. SCOPE OF WORKS TO BE CARRIED OUT ::

- 2.1 The work consists of the contractor's own design based on technical specifications furnished. The contractor / supplier shall be responsible for its functioning according to the design criteria and its parameters. Notwithstanding the details furnished, any discrepancies shall be brought out in the technical bid highlighting the shortcomings and suggest modifications.
- 2.2 The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works.
- 2.3 The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include wastage on material, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary and for the full and entire execution and completion as

aforsaid in accordance with good engineering practice and recognised principles.

2.4 Several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawing being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

2.5 In the case of discrepancy between the schedule of quantities, the specifications and/or the Drawings, the following order of preference be observed ::-

- a) Description in Schedule of Quantities.
- b) Particular Specifications and Special condition, if any
- c) Drawings prepared for the design.
- d) BIS Specifications.

2.6 If there are varying or conflicting provisions made in any one or more document(s) forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on contractor.

2.7 Any error in description or quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the Contract.

2.8 The contractor shall forthwith comply with and duly execute any work comprised in such Employer's / Consultant's instruction, provided always that verbal instructions, directions and explanations given to the contractor's or his representative upon the works by the Employer / Consultants shall if involving a variation be confirmed in writing to the contractor/s within 7 days.

2.8.1 No work for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer / Consultant. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the Employer in consultation with the Consultant as provided in clause "Variation".

2.8.2 Regarding all factory made products, they shall be manufactured as per their respective IS code updated and all test undertaken at factory.

### 3. TENDERER SHALL VISIT THE SITE ::

Intending tenderer shall visit the site and make himself thoroughly acquainted with the local site conditions, nature and requirements of works, facilities of transport condition, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in his tender cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport etc. for proper execution of work as indicated. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition



which existed before the commencement of the work or which in the opinion of the Employer / Consultant might be deemed to have reasonably been inferred to be so existing before commencement of work.

#### 4. TENDERS ::

4.1 The entire set of tender paper issued to the tenderer should be submitted fully priced and also signed on the last page of respective chapter (this shall be acceptance of all the pages of the tender and its stipulations) together with initials on every page. Notwithstanding this, Initials / signature in every page will indicate the acceptance of the tender papers by the tenderer. (Also refer point no.15 of General Rules & Instruction for guidance of tenderers)

4.2 No modifications, writing or corrections can be made in the tender papers by the tenderer, but he may at his option offer his comments or modifications in a separate sheet of paper attached to original tender papers.

4.3 The tenderers should note that the tender is strictly on item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self-supporting. If called upon by the Employer / Consultant, detailed analysis of any or all the rates shall be submitted. The Employer / Consultant shall not be bound to recognise the contractor's analysis.

4.4 The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract.

4.5 All items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump-sum contracts, the payment of such items of work will be made for the actual work done on the basis of lump-sum charges as will be assessed to be payable by the Employer / Consultant.

4.6 The Employer has power to add to, omit from any work as shown in the drawings or described in the specifications or included in schedule of quantities and intimate the same in writing but no addition, omission or variation shall be made by the contractor without authorisation from the Employer. No variation shall vitiate the contract.

4.7 The Tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

## 5. SIGNING OF CONTRACT & AGREEMENT ::

5.1 The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 14 days from the stipulated date of start of the work sign the contract consisting of :-

- a) Standard form of agreement on stamp paper, the notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- b) Standard tender Form consisting of ::
  - i) General Rules and Instructions.
  - ii) General Conditions of contract and clauses of contract alongwith Annexures thereto, like specification, special conditions etc.
  - iii) Bill of Quantity and Price Bid.
  - iv) List of Approved Brands/manufacturers appended, if any.

5.2 The contractor shall pay for all stamps and legal expenses, incidental thereto.

## 6. PERMITS AND LICENSES ::

6.1 Permits and licenses for the release of materials or its purchases which are under Government control will be arranged by the contractor. It may be clearly understood that no compensation or additional charges can be claimed by the contractor for non-availability of such materials in due time on this account or according to his own requirements.

6.2 The contractor may, however, be eligible to a proportionate extension of time on this account which in the opinion of the Employer / Consultant is reasonable.

## 7. GOVERNMENT AND LOCAL RULES ::

The contractor shall conform to the provisions of all local bye-laws and acts relating to the work and to the regulations etc. of the Government and Local Authorities and of any Company whose system and design is proposed to be connected / utilised. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities and shall indemnify the Employer against such liabilities and shall defend all actions arising from such claims or liabilities.

## 8. TAXES AND DUTIES ::

The tendered cost must include all duties royalties, cess and sales tax or any other taxes or local charges if applicable. No extra claim will be entertained with exception herein specified.

i). The tenderers must include in their tendered cost all duties royalties, cess and ~~sales tax or any other taxes or local charges like octroi etc.~~ if applicable. No extra claim on this account will in any case be entertained. However, pursuant to the Constitution (Forty Sixth Amendment) Act, 1982, ~~if any further new tax, royalties cess or levy is imposed by Statute, and any Central Excise Duty~~ by the Central Government on the Main Equipment and not on any type of sub-components or material involved in its manufacture or on installation materials like ducting,

insulations, piping or electrical cabling, its switch gears etc., after the date of receipt of tenders, and the contractor there upon necessarily and properly pays such taxes / levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Employer ( whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor. On account of any downward revision of such taxes / levies, the benefit shall be passed on to the Employer and shall be binding on the contractor even without the claim by the Employer. **However, GST shall be payable extra by the bank.**

ii). The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorised representative of the Employer and / or the Engineer-in-charge and further shall furnish such other information / document as the Employer may require from time to time.

iii). The contractor shall, within a period of 30 days of the imposition of any such further tax / levies, described above, give a written notice to the Employer that the same is given to pursuant to this condition, together with all necessary information relating thereto.

#### 9. OPTIONAL ITEMS ::

All Optional items described in the schedule of quantities shall be separately included in the contract price as described in the schedule of quantities including all cost and profits but not totaled in the final value. These items shall be exercisable by the Employer any time during the course of execution of work and shall be binding on the contractor similar to the other items furnished in the tender.

#### 10. QUANTITY OF WORK TO BE EXECUTED ::

The quantities shown in the schedule of quantities are intended to cover the entire works as per the drawings / scope of work, and therefore the contractor is bound to complete the works at the same quoted rates in the event of quantity exceeding the specified bill of quantity, but the Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefor.

#### 11. OTHER PERSONS OR AGENCIES ENGAGED BY THE EMPLOYER ::

The Employer reserves the right to execute any part of the work included in this contract by other agency or persons and contractor shall allow reasonable facilities and use of his facilities for the execution of such work. The main contractor shall extend all co-operation in this regard.

Wherever the work is proposed in co-ordination with other agencies, the contractor shall co-operate with the schedule of works in such a manner as worked out by the Consultant / Architects / Engineer-in-charge of the Employer.

1. EARNEST MONEY, INITIAL SECURITY DEPOSIT, RETENTION MONEY & TOTAL SECURITY DEPOSIT ::

i). Earnest Money Deposit : The tenderer will have to deposit the specified amount of earnest money as detailed in the notice inviting tender at the time of submission of tender. No interest will be paid on the earnest money. The earnest money of unsuccessful tenderers will be refunded without any interest soon after the decision to award the work is taken or after the expiry of the validity period of the tender.

ii). Initial Security Deposit : The successful tenderer whose tender is accepted shall be required to furnish by way of Initial security a sum which shall be equal to 2% (two percent) of the accepted value of the tender including the Earnest Money Deposit , within 14 (fourteen) days of the date of issue of the letter of acceptance of his tender, in cash, Demand Draft payable to the Employer or by way of Fixed Deposit or by way of Bank guarantee of any schedule Bank, for the duration of the contract period and defect liability period.

iii). Total Security Deposit & Retention Money : A further sum of 8% (eight percent) of the Gross value of each interim/final bill shall be deducted as retention money to make up, together with the Initial Security Deposit, a total Security Deposit equal to 10% of the of the accepted value of the tender

12.1 The Security deposit amount will also be accepted in Fixed Deposit Receipt for the full period of contract or by way of Bank Guarantee of any Scheduled Bank. The format of the guarantee shall be as approved by the Employer.

12.2 Repayment of Retention Money (Total Security Deposit) : The retention amount will be refunded to the contractor as detailed below;

50% of the retention amount will be refunded to the contractor / tenderer subject to following conditions:

- i). Issue of Virtual Completion Certificate by the Consultant/ Employer's engineer-in-charge or department-in-charge.
- ii). Contractor should remove all their materials, equipments, labour force, temporary sheds/stores etc. from the site.
- (iii) Contractor Should have completed all the necessary testings, compiled with the inspection remarks & its rectifications if any, submission of all the required particulars, completion drawings, manual of operation & maintenance, test certificates and such other particulars.

The remaining 50 % of the retention money may be refunded 14 days (fourteen days) after the end of Defect Liability Period provided the contractor has satisfactorily carried out all the works and attended to all defects in accordance with conditions of the contract. No interest is allowed on retention money.

13. CONTRACTOR TO PROVIDE EVERY THING NECESSARY ::

- i). The contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the design parameters,

technical specifications, drawings and schedule of quantities. Based on the details furnished in the N.I.T. the contractors should undertake their own assessment and design the plant and system required. If the contractor finds any discrepancies furnished it shall immediately brought to the notice of the Employer.

ii). The tenderer shall take full responsibility for adequacy, suitability and safety of all the design, works and methods of design / installation.

iii). The employer shall on no account be responsible for the expenses incurred by the contractor during the progress of work at site, towards any incidental expenditure like medical amenities to the workers at site, security arrangement etc. The employer shall not be responsible for the safety of the workers at site either on account of the works executed by the contractor or on account of the works executed by any other agency involved at that time.

iv). The Employer on no account shall be responsible for storage of materials or loss or pilferage or theft either in respect of the material stored or material already built and paid for by the Employer.

v). The contractor shall at all times give access to workers employed by the Employer.

vi). All tools, equipments and other required facilities for execution of work shall be provided by the contractor.

vii). Any facilities available at site shall be utilised only with prior permission of the Employer or the in-charge of the site / building owner and cannot be taken as granted and for such services utilities the Employer is entitled to charge at his discretion.

No extra charges shall be paid over and above what has been quoted for any of the above or for similar such services.

#### 14. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART ::

##### i). TIME OF COMPLETION :

The entire work is to be completed in all respects within the stipulated period. The work shall be deemed to commence within 14 days from the date of acceptance letter or date of handing over site, whichever is earlier. Time is the essence of the contract and shall be strictly observed by the contractor.

The work shall not be considered as complete until the Employer / Consultant have certified in writing that the work has been virtually completed and defect liability period shall commence from the date of such certificate.

##### ii). EXTENSION OF TIME ::

(a) The time allowed for execution of the Works by the Contractor as specified or the extended time in accordance with these conditions shall be the essence of the Contract. If the contractor commits default in the execution of the work as aforesaid, the Employer shall without prejudice to any other right or remedy available in law be at liberty to forfeit the earnest money absolutely.

(b) Request for extension of time, to be eligible for consideration, shall be made by the contractor to the accepting authority in writing within fourteen days of the happening of the event causing delay. The contractor shall also, if practicable, indicate in such a request the total period for which extension is desired, overlapping period, if any, with earlier events causing delays.

(c) In such case the authority may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the contractor by the Employer in writing, within 3 weeks of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Employer and this shall be binding on the contractor.

(d) The decision of the Employer for an extension of time for completion hereunder ( which decision shall be final and binding on the contractor) shall be promulgated on completion of the work or at the conclusion of such events based on which the extension of time was sought by the contractor, and the Employer shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause with respect to payment of Liquidated Damages shall, in such case, be read and construed as if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

iii). PROGRESS OF WORK:

During the period of work, the contractor shall maintain proportionate progress on the basis of a program chart submitted by the contractor or prepared by the consultant or by the Architect whoever is responsible for such program of work. Contractor shall plan for procurement of materials, equipments well in advance and reflect the same in a progress chart so that there is no delay on the part of the contractor in completion of the project. Maintenance and production of such records as and when required shall be the responsibilities of the contractor.

15. LIQUIDATED DAMAGES ::

15.1 If the contractor fails to maintain the required progress in terms of the contract or to complete the work and clear the site on or before the contract or approved extended date of completion, he shall, without prejudice to any other right or remedy of the Employer on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below or such smaller amount as may be fixed by the employer on the contract value of the work for every completed week that the progress remains incomplete.

15.2 For this purpose the term 'Contract Value' shall be value at the contract rates of the work as ordered / accepted.

a) Deleted

b) For contracts exceeding 6 months but not exceeding 24 months as above @ 0.5 percent per week

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed the under noted percentage of the Contract Value.

a) Deleted

b) Completion Period 6 to 24 months 7.5 percent

15.3 The Employer shall have the right to adjust, / set-off against any sum payable to the contractor under this or any other contract with the Employer anywhere in India/outside India.

16. TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS::

16.1 The contractor shall provide, fix up and maintain his establishment in an approved position at site and clear away on completion of the works and make good all works disturbed. The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any hoarding, gantry, building structure other than those approved by the Employer. No fixtures or materials to be placed in such a manner that can be considered dangerous to the installation and to the persons working or passing by or visiting the site.

16.2 Storage of materials :The contractors shall make use of existing facilities with due permission of the Employer for storage of materials at site, but watch & ward arrangements for the safety of materials shall be the responsibility of the contractor.

17. NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS::

17.1 The contractor shall conform to the provisions of any Acts of the Legislature relating to the work, and to the regulations and bye-laws of any authorities, and or other Companies ( Indian or International), and / or Statutory Authorities, with whose system and design or technical knowhow are/were proposed to have connection with this work. So also the contractor shall before making any variations from the drawings or specification that may be associated to so conform, give the Employer / Consultant written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer / Consultant on receipt of such intimation, shall give a decision within a reasonable time.

17.2 The contractor shall arrange to give all notices required for by the said Acts, regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

17.3 The contractor shall indemnify the Employer against all claims in respect of patent rights, royalties, and damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Employer indemnified in all respects from such actions, cost and expenses.

18. CLEARING SITE AND SETTING OUT WORKS ::

The site of work shown shall be cleared of all obstructions, waste materials, and rubbish of all kinds. All material damages on the place of work on the walls,

ceiling or flooring or any other connected equipments, materials or installations shall be re-done to maintain the originality and leveled at the contractors own cost.

The contractors shall set out the works and shall be responsible for the true and perfect setting out the works and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer.

#### 19. FIXING, FASTENING OF EQUIPMENTS ::

19.1 The contractor is to fix the equipments on the floor by means of appropriate method so that such equipments fixed on to the floor shall not fall by its own or by natural movements of wind, air normal human operations and shall adopt the best engineering traditions and use appropriate tools in such operations.

19.2 The contractor while fixing any material or equipment to be suspended from the ceiling, shall use fasteners of suitable strength to hold the weight of the suspended system/equipment or material and such fasteners shall be fixed by means of power drills. The contractor shall not chip the ceiling unless ordered & approved by the engineer-in-charge.

19.3 The contractor shall not puncture the existing civil structures like beams, columns and shall not undertake any type of activity which could affect the structural stability. He shall be responsible for any damages and costs in its rectification.

#### 20. CONTRACTOR IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS ::

All waste materials and other matters of any offensive nature shall be taken out once the works are completed. The contractor shall keep the works free from dangerous materials like industrial gases, welding machines and any such devices or material of toxic and poisonous nature shall not carry within the site or building any material which are explosive in nature. Any such offensive materials which are essentially required in course of work shall be undertaken with due written permission of the Employer provided such materials are permissible under Law.

#### 21. ACCESS ::

Any authorised representatives of the Employer shall at all reasonable times have free access to the works and / or to the workshops, factories or other places where materials or equipments are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall extend necessary facility to the Employer or their representatives for inspection examination and testing of the quality & workmanship of the materials.

#### 22. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS ::

22.1 All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds



in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Employer / Consultant during the execution of the work, and to his entire satisfaction.

22.2 If required by the Employer / Consultant the contractor shall have to carry out tests on materials and workmanship in approved material testing laboratories or as prescribed by the Employer / Consultant at his own cost to prove that the materials etc. under test conform to relevant I.S. standards or as specified in the specifications. The necessary charges for sample material, transporting, testing etc. shall have to be borne by the contractor.

22.3 All material must be the best of their kind available and the contractors must be entirely responsible for the proper and efficient carrying out of the work. Samples of all the materials to be used must be submitted to the Employer / Consultant when so directed by the Employer.

22.4 Should the work be suspended by any reason, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damages arising from any of these causes.

### 23. REMOVAL OF IMPROPER WORK ::

23.1 The Employer shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer / Consultant are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanship not in accordance with drawings and specifications or instructions.

23.2 In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer / Consultant shall be borne by the contractor or may be deducted from any money due to or that may become due to the contractor. No certificate which may be given by the Engineer in charge/consultant shall relieve the contractor from his liability in respect of unsound work or bad materials or design.

### 24. CONTRACTOR'S EMPLOYEES ::

24.1 The contractor shall employ technically qualified and competent supervisors for the work who shall be available (By turn) throughout the work and shall participate during site meetings and be available to take and comply with instructions of the Employer / Consultant. In case of electrical works as per statutory Acts & Rules of Electricity Board, the persons so employed shall have the requisite supervisory permit or wireman permit for appropriate nature of work undertaken.

#### 24.2 No Child Labour :

No labour below the age of eighteen years shall be employed on the work. In case of electrical works, the labour employed by the tenderer or their sub-contractor should be authorised person as permitted by the Chief Electrical Inspectorate office of the respective State Government. The Employer shall not be responsible for any deviation and the tenderers shall indemnify the Employer from any legal action or in any way directly or indirectly.

#### 24.3 Labour Legislation :

The tenderer shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractors Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.

24.4 The tenderer shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

24.5 The tenderer shall indemnify and keep indemnified the Employer against payments to be made under and for the observance of the laws aforesaid and the Contractors' Labour Regulations without prejudice to his right to claim indemnify from his sub-contractors. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

#### 24.6 COMPLIANCE OF LABOUR REGULATIONS :

i) The Tenderer shall at his own expense arrange for all the safety provisions for the safety of all workers and employees directly or indirectly employed on the work by the tenderer or his sub-contractors.

ii) The Tenderer shall be fully responsible for compliance at his own expense all the labour regulations and rules to be observed by him and his sub-contractors and by the Employer as Principal Employer of workers. The Tenderer shall fully indemnify the Employer against any action by the state and/or Central Government for any default or alleged default by the Tenderer, Sub-contractor or Employer of any of such rules and regulations. If, due to any default of the tenderer or his sub-contractors, the Employer has to incur any expenditure for compliance of the rules and regulations or for any other reason connected with such default, the Employer shall be entitled to recover from the tenderer all such expenditure in full from any payment due to the tenderer.

## 25. DISMISSAL OF WORKMEN ::

The contractor shall on request of the Employer immediately dismiss or take of from the works any person employed thereon by him, who may in the opinion of the Employer be unsuitable or incompetent or who may misconduct himself. Such discharge shall not be the basis of any claim for compensation or damages against the Employer or any of their officers or employee.

## 26. ASSIGNMENT ::

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, change in constitution and no subletting shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

## 27. DAMAGE TO PERSONS AND PROPERTY INSURANCE ETC. ::

27.1 Damages to persons : The Tenderer shall be responsible for all injury to the work or workmen to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-contractor or of any of his or a sub-contractors employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract.

27.2 The clause shall be held to include interalia, any damages to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, footpaths or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind or other inclemency of the weather.

The tenderer shall indemnify the employer and hold harmless in respect of all and any expenses arising from such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.

Damages to property: The Tenderer shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property or third parties.

The tenderer shall effect the insurance necessary and indemnify the employer entirely from all responsibility in this respect. The insurance must be placed with a company approved by the employer and must be effected jointly in the name of the contractor and the employer and the policy lodged with the latter. The scope of insurance is to include loss or damage

to the work and workmen due to carelessness, accident including fire, earthquake, floods, etc., damage or loss to the contract itself till this is made over a complete state. Insurance is compulsory and must be effected from the very initial stage. The contractor shall also be responsible for anything which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this contract.

The employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or occurring from or in respect of any such claim or damages from any sums due or to become due to the contractor.

If the tenderer or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electrical cables or telephone post or wires, trees, grass or grass land, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, or other faults appear in the work within twelve months after a certificate final or otherwise or its virtual completion shall have been given by the Employer as aforesaid arising out of defect or improper materials or workmanship the tenderer shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Employer/Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be then or at any time thereafter may become due to the tenderer, or from his security deposit, or the proceeds of sale thereof or of a sufficient portion thereof.

**INSURANCE ::** In his own interest the contractor shall insure the works and keep them insured until the virtual completion of the contract against loss or damages by fire and/or earthquake, flood. The insurance must be placed with a company approved by the Employer, in the joint names of the employer and the contractor for such amount and for any further sum if called to do so by the employer and lodge receipts of premiums paid with the employer within 21 days from the date of issue of letter of acceptance unless otherwise instructed.

The contractor in case of rebuilding or reinstatement after fire shall be entitled to extension of time for completion as the employer/consultant may deem fit.

## **28. ACCOUNTS RECEIPTS & VOUCHERS ::**

The contractor shall, upon the request of the Employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract. If the contractor shall use materials less than what is required under the contract, the value of the difference in the quantity of the materials that was required to use and that actually used shall be deducted from his dues. The decision of the Employer

shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

## 29. MEASUREMENT::

29.1 Before taking any measurement of any work the contractor shall give reasonable notice to the consultant or the representatives of the Employer or the site engineer if any, and measurements particularly concealable in nature shall be jointly taken and recorded and such statement of measurement shall be enclosed alongwith the bill or running bills. In the event of such measurement taken directly by the contractor the details shall be recorded and routes be marked for inspection of the consultant or engineer-in-charge.

29.2 Any deviation or discrepancies observed by the engineer-in-charge or the consultant shall be brought to the notice of the contractor or their representatives and during such inspection and measurement if the contractor fails to be present the certification of the engineer-in-charge or the consultant shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

## 30. PAYMENT TERMS, ADVANCE PAYMENT & ITS RECOVERY ::

### 30.1 Payment Terms:

i). All bills shall be prepared by the contractor in the form agreed or furnished by the Employer. Normally "No payment" shall be made for a work, estimated to cost Rs. Fifty thousand or less but for the final bill after the whole of the work has been completed and certificate of completion recorded.

ii). Payments to the contractor will be regulated as below:

a). Initial advance to the extent of 25% of the contract value shall be paid within 15 days of the order to commence the work against contractor executing an acceptable Bank Guarantee for the amount in favour of Canara Bank, Valid for the contract period.

b). Further 65% pro-rata payment shall be made upon supply and installation at site duly supported by documents / vouchers. In case of delay in installation due to any reason not attributable to the contractor, payment will be made for supply and restricted to 50% of the quoted rate and the balance 15% shall be paid after installation.

c). The balance 10% shall be released after successful commissioning and testing as per stipulated norms and to the satisfaction of the engineer-in-charge / consultant. i.e. after virtual completion.

(iii) All such interim payments accepted by the Contractor shall be regarded as payments by way of advances against final payment only. These shall not preclude bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected.

- 30.2 Any certificate given by the Engineer-in-charge / consultant relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications.
- 30.3 Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-charge/employer under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.
- 30.4 Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided.
- 30.5 All the payments, interim or otherwise other than the initial advance, are subject to statutory deductions of Income Tax & its Surcharge, Sales tax deductions as notified by respective Local State Government/Authority and any such instructions conveyed from time to time. From the interim bills, the retention money as detailed elsewhere in this tender shall also be deducted.
- 30.6 The final bill shall be submitted by the contractor within 1 (one) month from the date of completion of work or from the date of certification of virtual completion certified by the engineer-in-charge / consultant.

### 30.7 FINAL PAYMENT :

- (1) The Tenderer shall submit the final bill in the same manner as specified in interim bills within one month of physical completion of the work or within 15 days of the date of the final certificate of completion furnished by the Engineer-in-Charge / consultant whichever is earlier. No further claims shall be made by the tenderer after submission of the final bill or on acceptance of the final payment and these shall be deemed to have been waived and extinguished.
- (2) In the event of any dispute, payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge / consultant, shall be made by the employer within the period specified hereinunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge / consultant.

a) If the gross amount of the work done :: 30 days

under the contract items, plus that  
of additional deviated items is upto  
Rs.2 lakhs.

b) - do - exceeds Rs. 2 lakhs &  
is upto Rs.20 lakhs :: 45 days

- c) - do - exceeds Rs.20 lakhs  
but is upto Rs.30 lakhs :: 60 days

- (3) The final payment is subject to deduction of Total Security Deposit to be retained during the defect liability period as described in the condition of contract under clause 12.

### 31. VARIATION / DEVIATION ::

The Engineer-in-Charge / Consultant with the specific approval of the Employer shall have power to make alteration in, omissions from, additions to or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and the tenderer shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge / Consultant. Such alterations, omissions, additions or substitution shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the tenderer may be directed to do in the manner specified above as part of the works, shall be carried out by the tenderer on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

- (a) No work which radically changes the original nature of the contract shall be ordered by the Engineer-in-Charge as a deviation.
- (b) In the event of any deviation being ordered which in the opinion of the tenderer changes the original nature of the Contract, he shall within fifteen days of having been so ordered bring this to the notice of the Employer with the reasons but nevertheless carry it out and the disagreement as to the nature of work and the rate to be paid therefore shall be resolved in accordance with Clause under caption "SETTLEMENT OF DISPUTES AND ARBITRATION".
- c). The tendered rates, shall hold good for any increase or decrease in the tendered quantities up to variation of 25% and as stipulated elsewhere for legitimate completion of works as per original design or scope of work and on account of any modification or alteration suggested and where the variation is for the respective item is beyond 25%, the rate for the respective item may be reviewed on mutually agreed terms.

### 32. SUBSTITUTION ::

Should the contractor desire to substitute any materials and workmanship, He must obtain the approval of the Employer / Consultant in writing for any such substitution well in advance. In respect of Materials whose makes are not specified in the tender, specific approval of the Employer / Consultant has to be obtained in writing before their usage.

### 33. PREPARATORY WORK FOR UTILISATION OF THE FACILITY AFTER COMPLETION:

- 33.1 The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects set right. On completion of such inspection the contractor shall inform the Employer / Consultant that they have completed the work and it is ready for inspection.
- 33.2 On completion the contractor shall clean all the area and its surroundings, equipments etc. and will leave the entire area clean and ready for immediate usage to the satisfaction of the Employer.

### 34. CLEARING SITE ON COMPLETION ::

- 34.1 On completion of the works the contractor shall clear away and remove from the site all constructional materials, plant & equipments, tools, surplus materials, scraps, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workmanlike condition to the satisfaction of the Employer.
- 34.2 In the event of failure to clear the site as required the Employer have the right to undertake the same engaging other agency and the same shall be at the cost of the contractor and liable for deductions in the payments due to the contractor and the contractor shall not dispute such payments.

### 35. DEFECT AFTER COMPLETION ::

- 35.1 The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, or other faults which may appear during the defect liability period.
- 35.2 In case of specialised work based on the contractors own design and their standard manufacturing product incorporated in the works and in the event of the design of the system being defective or any components used found to be defective on account of manufacturing defects or otherwise forcing, any improvement thereof to be implemented or undertaken to rectify such inherent defects, notwithstanding additional cost of components or design modification, they shall be undertaken at contractor's own cost.
- 35.2 In default, the Employer may employ and pay other agency or persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto such expenses shall be made good and borne by the contractor failing which the same shall be recoverable from the payment due to the contractor and in the event of amount retained being insufficient, recover the balance from the contractor from the amount retained under clause no 12. together with any expenses the Employer may have incurred in connection therewith.



### 36. CONCEALED WORKS ::

The contractor shall give due notice to the Employer / Consultant wherever any work is to be buried or concealed in the building in the earth, flooring, walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions or measurements taken before such burial. In default whereof the same shall, in the opinion of the Employer / Consultant be either opened up for measurement at the contractors expenses or no payment may be made for such materials. Should any dispute or difference arise after the execution of any work as to measurements etc. or other matter which cannot be conveniently tested or checked, the notes / certification of the Engineer-in-charge / Consultant shall be accepted as correct and binding on the contractor.

### 37. ESCALATION ::

The rate quoted shall be firm throughout the tenure of the contract ( including extension of time, if any granted) and will not be subject to any fluctuation due to increase in cost of materials, labour, taxes etc. unless specifically provided in these documents.

38. IDLE LABOUR :: Whatever the reasons may be, no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

### 39. SUSPENSION OF WORKS ::

39.1. Subject to other provisions contained, the Employer may without prejudice to his any other rights or remedy against the tenderer in respect of any delay in commencing, completing or during the progress of work or inferior workmanship, may serve notice in writing absolutely determine and cancel the contract in any of the following cases;

i) If the contractor having been given by the Employer / Consultant a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un-workman like manner shall comply with the requirement of such notice for a period of seven days thereafter.

ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.

(ii) If the contractor has without reasonable cause failed to commence the work or has suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Employer (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from Employer.

iv) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date (s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-charge/ Consultant.

v) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-charge/ Consultant.

vi) If the contractor commits any acts mentioned in terms of tender hereof: And when the contractor has made himself liable for action under any of the cases aforesaid, the Employer shall have powers ::

a) To determine or rescind the contract of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence. Upon such determination or rescission, the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of Employer.

b) In any such event the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereto or actually performed under this contract unless and until the Engineer-in-charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified; Provided further that any of the recoveries to be made when the excess cost incurred by the Employer is more than the Security Deposit to be forfeited, such recoveries shall be limited to the amount by which the excess cost incurred exceeds the Security deposit so forfeited.

39.2 In any case in which any of the powers conferred upon the Employer hereof, shall have become exercisable & the same shall not be exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected.

#### 40. TERMINATION OF CONTRACT BY EMPLOYER ::

40.1 If the contractor ::

(a) at any time makes default in proceeding with the works or any part of the work with due diligence and continues to do so after a notice in writing of 7 days from the Engineer-in- Charge;

or

(b) commits default in complying with any of the terms and conditions of the Contract and does not remedy it or take effective steps to remedy it

within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or

- (c) fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice in writing is given to him in that behalf by the Engineer-in-Charge/ Consultant; or
- (d) shall offer or give or agree to give to any person in Bank service or to any other person on his behalf any gift or consideration as an inducement or reward for favouring him in relation to the obtaining or execution of this or any other Contract for the Employer or;
- (e) shall enter into a Contract with the Bank in connection with which commission has been paid or agreed to be paid by him or his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/Engineer-in-Charge; or
- (f) shall obtain a Contract with the Employer as a result of wrong tendering or other unethical methods of competitive tendering; or
- (g) being an individual, or in a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose or amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- (h) being a company, shall pass a resolution or the Court shall make an order for the winding up of the company or a receiver or manager on behalf of the debenture holders or others shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- (i) shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- (j) assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Accepting Authority;

40.1.2 The Accepting Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to the Employer, by a notice

in writing cancel the contract as a whole or only such of items in default from the tenderer.

40.1.3 The Engineer-in-Charge / Consultant shall on such cancellation by the accepting authority have powers to, for which the contractor shall hereby unconditionally agree ::

- (a) to take possession of the Site and any materials, constructional plant, implements, stores, etc., thereon; and/or
- (b) to carry out the incomplete work by any means at the risk and cost of the Tenderer.

40.2 On cancellation of the Contract in full or in part, the Engineer-in-Charge / Consultant shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the Works or in case the Works or part of the Works is not to be completed, the loss or damage suffered by the Employer. In determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of contractor's materials taken over and incorporated in the work.

40.3 Any excess expenditure incurred or to be incurred by the Employer in completing the Works or part of the Work or the excess, loss or damages suffered or may be suffered by the Employer as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Employer in law be recovered from any money due to the Tenderer on any account, and if such moneys are not sufficient the Tenderer shall be called upon in writing and shall be liable to pay the same within 30 days.

40.4 If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge / Consultant with the approval of the Employer shall have the right to sell any or all of the Contractor's unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the Contract and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the Contract.

40.5 Any sums in excess of the amounts due to the Employer and unsold materials, constructional plant, etc., shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by the Employer of the Works or part of the Works is less than the amount which the Contractor would have been paid had he completed the Works or part of the Works, such benefit shall not accrue to the Contractor.

#### 41. SETTLEMENT OF DISPUTES AND ARBITRATION ::

41.1 It shall be an inseparable part of the contract that in matters regarding quality of materials, workmanship, removal or rejection of improper work, interpretation of the drawings and specifications, measurements of materials and/or items of work, mode of procedure and carrying out of the work, the decision of the

Engineer-in-Charge/ Consultant which shall be given in writing, shall be final, conclusive and binding on the tenderer.

41.2 (A). If the tenderer considers any work demanded of him to be outside the requirements of the contract, or considers any drawings record or decision given in writing by the Engineer-in-Charge / Consultant on any matter in connection with or arising out of the contract or carrying out of work, to be unacceptable, he shall promptly within 15 days request the Employer in writing for written instruction or decision. Thereon, the Employer shall give his written instructions or decision within a period of two months from the receipt of the tenderer's letter.

(B) Upon receipt of such written instructions or decision the tenderer shall promptly proceed without delay to comply with such instructions or decisions. If the Employer fails to give his instructions or decision in writing within a period of two months after being requested or if the tenderer is dissatisfied with the instructions or decision of the Employer, the Contractor may within 30 days appeal to the designated Appellant Authority of the Employer who shall afford an opportunity to the tenderer to be heard and to offer evidence in support of his appeal. If he is dissatisfied with this decision, the tenderer shall within a period of thirty days from receipt of the Appellant Authority of the decision shall indicate his intention to refer the dispute to Arbitration, failing which the said decision shall be final and conclusive and not referable to adjudication by the Arbitrator.

41.3 All disputes or differences in respect of which decisions have not been final, binding and conclusive as above shall be referred for adjudication by the arbitration by a Sole Arbitrator appointed as follows :

41.4 Within one month of receipt of notice from any party to the contract for appointment of the Arbitrator the Appellant Authority, in charge of the work at the time of such appointment shall send to the tenderer a panel of three names of persons who shall not presently be connected with the work. The tenderer shall within fifteen days of receipt of this list select and communicate to the Appellant Authority the name of one person from the list who shall then be appointed as the sole arbitrator by the Appellant Authority.

41.5 If tenderer fails to communicate his selection of name, within the stipulated period, the Appellant Authority shall without delay select one person from the list and appoint him as Sole Arbitrator. If the Appellant Authority fails to send such a list within one month as stipulated, the tenderer shall send a similar list to the Appellant Authority within 15 days. The Appellant Authority shall then select one person from the list and appoint him as the Sole Arbitrator within 30 days of the receipt of the list. If the Appellant Authority fails to do so the tenderer shall communicate to the Appellant Authority the name of one officer from the list who shall then be the Sole Arbitrator.

41.6 If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole Arbitrator shall be appointed in the manner aforesaid. Such person shall be

- entitled to proceed with the reference from the stage at which it was left by his predecessor.
- 41.7 It is term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Appellant Authority of the appeal and a copy of his notice(s) of intention to refer the dispute to arbitration of such disputes as mentioned in Part (ii) above failing which the notice for appointment of the Arbitrator shall not be treated as notice for appointing the arbitrator.
- 41.8 It is also a term of this contract that no person other than a person appointed by Appellant Authority, in charge of the work as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.
- 41.9 It is also a term of the contract that if the tenderer does not make any demand for appointment of arbitration in respect of any claims in writing as aforesaid within 90 days of receiving the intimation from the Employer that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Employer shall be discharged and released of all liabilities under the contact in respect of these claims. No party shall be entitled to bring any claim to arbitration if the arbitrator has not been appointed before the expiry of sixty days after defect liability period.
- 41.10 The arbitration shall be conducted in accordance with the provisions of the Indian Arbitration Act, 1940, or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.
- 41.11 The arbitrator may from time to time with the consent of the parties enlarge the time for making and publishing the award.
- 41.12 It is also a term of the contract that any fees TA, DA and other charges are payable to the Arbitrator shall be paid by both the parties equally.
- 41.13 It is also a term of the contract that the Arbitrator shall be deemed to have entered on the reference on the date of first hearing. The venue of the arbitration shall be such a place as may be fixed by the Arbitrator in his sole discretion. The fees, and charges of the Arbitrator shall, if required to be paid before the award is made and published, be paid equally by each of the parties. The cost of the reference and of the award (including the fees, if any, of the Arbitrator) shall be in the discretion of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.
- 41.14 The award of the Arbitrator shall be final and binding on both the parties

#### 42 RIGHT TO AUDIT/TECHNICAL EXAMINATION ::

The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made even after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the tenderer under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the tenderer shall be liable to refund the amount of over-payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in clause 47 or in any other manner legally permissible and if it is found that the tenderer was paid less than what 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 duly paid by the Employer to the tenderer, without any interest thereon; Provided that the tenderer shall not be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand and the tenderer on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge/ Consultant.

#### 43 LIEN ::

- (a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the tenderer and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Employer pending finalisation or adjudication of any such claim.
- (b) Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Employer or any other contracting person or persons through Engineer-in-Charge against any claim of the Employer or such person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or with such other person or persons.
- (c) It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the arbitrator (if the contracts governed by the arbitration clause) or by the competent court, as the case may be and that the tenderer will have no claim for interest or damages whatsoever on any

account in respect of such withholding or retention under the lien referred to above and duly notified as such to the tenderer. For the purpose of this clause, where the tenderer is a partnership firm or a limited company, the Employer shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

#### 44. EXTERNAL INSPECTION & AUDIT :-

- i. All works under or in course of execution or executed in pursuance of the Contract shall at all times be open and accessible to the inspection of the Quality Control Organisation of the Employer or any designated auditor / officials of the Employer and of the Chief Technical Examiner's Office under Central Vigilance Commission.
- ii. If it shall appear to the Engineer-in-Charge / consultant or to the Engineer in charge of Quality Control or any designated auditors / officials of the Employer or to the Chief Technical Examiner, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand made in writing within the defect liability period from the Engineer-in-Charge / consultant specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for earlier, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require and provide other proper and suitable materials or articles at his own charge and cost.
- iii. In the event of the contractor failing to do so within a period specified by the Engineer in-Charge / Consultant in his demand aforesaid, the contractor shall be liable to pay compensation at the same rate as under the clause of defects after completion for this default.
- iv. In such case the Engineer-in-Charge / consultant may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Employer or the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and without substantially affecting the utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same shall be final and binding on the tenderer.

Signature of the Tenderer/ Contractor  
(With Seal)



Supply, Installation ,Testing and Commissioning of 1 number of 6-passenger capacity lift by dismantling the existing passenger lift, at Canara Bank RO North, Kohinoor building, Opp. Siddhivinayak Mandir, Prabhadevi, Mumbai- 25.

**SUB: REPLACEMENT OF ONE NO. OF 6 PASSENGER LIFT AT CANARA BANK RO NORTH, KOHINOOR BUILDING, OPP. SIDDHIVINAYAK MANDIR, PRABHADEVI, MUMBAI - 25.**

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**TECHNICAL SPECIFICATIONS**

**A) SCOPE OF WORK:**

1. The scope of work covers:

- a) Dismantling the entire lift machinery including all accessories in respect of existing one number of OLYMPUS 6 passenger lift, shifting of dismantled materials from the site immediately.
- b) Design, manufacture, supply, installation, testing and commissioning of one number of 6 passengers capacity lift in lieu of Dismantled lift. The works shall also include all the auxiliary civil works and electrical works required. The lift should be comprising of the following.

CAPACITY : 6 PASSENGER CAR BODY : STAINLESS STEEL IN HAIRLINE FINISH CONTROL SYSTEM: VVVF INFRARED CURTAIN	SPEED : 1.0 METRE PER SEC STOPS : 4 (G + 3 FLOORS) AUTOMATIC RESCUE DEVICE AUTOMATIC OPENING DOOR
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The elevators shall be complete in all respects.

2. The scope of work shall include the following:

- i. Supply of machine beams hitch beams and connected cleats bolts, plates etc., that are required in the machine room and other places for the lift, landing door frames and doors.
- ii. All preparatory work such as scaffolding, builder's work, hoist way wiring, buffer support channels and pit ladder landing door frames etc.
- iii. All necessary, Mechanical and electrical works connected with the Design, manufacture, supply at site, painting, testing and commissioning of the elevator inclusive of statutory approvals.
- iv. Floor of the car shall be covered with Antiskid PVC flooring.
- v. Interior of the car including doors shall be of **stainless steel with Hairline finish** panels with proper ventilation and illumination level to the extent of a min of 200 lux.
- vi. All fixtures shall be stainless steel.

- vii. Combined luminous hall buttons with luminous digital hall position indicators at all floors.
- viii. Battery operated alarm bell emergency light alongwith battery charger.
- ix. Overload warning indicator in the car in audio-visual mode.
- x. It will be Contractors responsibility to display adequate sign boards at respective places during Dismantlement and erection process.
- xi. Contractor shall also take adequate steps to block the entrances to the lift shaft at various levels/ floors to prevent possible accidents.
- xii. Dismantled material shall be removed from site of work at regular intervals after notifying the owner so as to preserve sufficient working space for erection of new elevators.
- xiii. Electric power for welding, drilling, and any other work related to erection of the lifts will be provided by the purchaser.

**1. SPECIAL INSTRUCTIONS TO THE TENDERER:**

- 1.1. This specification shall be read in conjunction with General conditions of contract as applicable for this project.
- 1.2. The tenderer shall design the equipment considering the site conditions. After award of contract no claim for extra payment will be entertained.
- 1.3. The existing lift shaft will have to be made use of and as such major Civil alteration work will not be possible. Required entrance modification to suit the lift door frame to be installed shall be carried out by the bank on giving necessary layout in this regard. The connections between elevator frame and the respective building / columns shall be provided by the Contractor. The equipment shall be designed keeping in view the provisions of the statutory regulations and safety codes in force in the locality of installation. All such minor civil works like chipping, grouting, drilling, etc for fixing guide-rails and other accessories are to be executed by the supplier only.
- 1.4. Within two weeks of placement of order, the Contractor shall furnish the details/ information as are necessary to carry out the alterations of entrance by purchaser.
- 1.5. Deleted
- 1.6. The following drawing/ documents shall be submitted for approval before commencement of manufacture.

1. A general arrangement drawing indicating various dimensions, parameters, illumination and ventilation requirement, power requirement and characteristic of the elevator to be installed including load diagram and loadings to be taken into consideration in the machine room, elevator shaft and the elevator pit shall be submitted for approval of the purchaser within 2 weeks of placement of order.
2. The electrical scheme drawings, single line control circuit diagram, technical plan diagram, cable schedule, bill of materials etc., for approval.
- 1.7 The following drawings/ documents shall be submitted for records before handing over the elevator.
  - i. One copy of reproducible (polyester film) along with prints of approved drawings.
  - ii. The copies of all operating manuals, maintenance schedules, lubrication charts, electrical power/ control circuit diagram, specification of the equipment, oils, lubricants and other consumables.  
  
Regarding number of copies etc., refer to relevant articles.
  - iii. The copies of erection schedule and manuals, assembly erection sequence, special precautions to be followed (3months prior to delivery).
- 1.8 The supplier shall submit test Certificates for all electrical equipment, cables, and all parts used in handling loads, wire ropes, pulleys etc.
- 1.9 The supplier shall submit relevant material test Certificates for structural steel and mechanical components such as gear boxes, couplings, pulleys, shafts, gears etc.
- 1.10 List of preferred make of electrical and mechanical components as per list furnished in this specification shall be adhered to for bought out items.
- 1.11 The tenderer shall satisfy the purchaser/ his consultant that he possesses necessary technical knowhow and facilities to execute the order. Necessary particulars to establish the same shall be furnished alongwith the tender.
- 1.12 A write -up on testing facilities available in the works of tenderer shall be furnished.
- 1.13 Contractor shall ensure that minimum amount of assembly is necessary at site. Site assembly shall be avoided as far as possible.
- 1.14 The quotation shall also be given for all comprehensive maintenance Contract with full responsibility to carryout repair and supply of required original spare parts to keep the elevator in fully operational condition for minimum period of 4 years after expiry of one year of free servicing and guarantee/warranty period.

- 1.15 The quotation shall indicate price for supply, Installation, testing, erection and commissioning of the elevator. The quoted price shall include charges on account of taxes, duties, backing, forwarding, transport, insurance etc. The quoted price shall remain firm and binding and shall not be subjected to any escalation whatsoever on any account during entire period of supply, installation, testing & commissioning.
- 1.16 Elevator shall be guaranteed for a minimum period of one year of trouble free operation after commencement of regular operation and shall include free servicing, repair and replacement of parts by the Contractor.
- 1.17 Workmanship and performance warranty:
- i. The materials used shall be new and best of its kind available and shall conform to standards as mentioned in the technical specification.
  - ii. The supplier shall guarantee satisfactory performance of equipment/ system as per relevant guidelines.
  - iii. The guarantee shall also cover faulty design/ materials/ workmanship. All rectification or replacement under guarantee shall be done by the supplier free of cost.
  - iv. The conditions regarding guarantee of equipment shall also be governed by the relevant clauses of general commercial conditions.
- 1.18 Permanent, non-rusting metal tag shall be affixed to the equipment with tag number.
- 1.19 The tenderer shall furnish the questionnaire as asked for in this document, alongwith the tender.
- 1.20 The tenderer shall fill up the price data sheet and submit in a separate cover alongwith the tender.
- 1.21 The tenderer shall furnish a Time Bar Chart showing breakup of time required for various activities viz., submission and approval of drawings, raw material procurement, engineering, various shop activities, order placement for bought out items and their delivery to shop, assembly, testing, inspection, dispatch, erection and commissioning.
- 1.22 The tenderer shall submit an exclusion list indicating the items excluded from the scope of his supply but are required to complete the plant/ equipment.
- 1.23 The tenderer shall furnish the procedure proposed for conducting performance guarantee test; for review by purchaser.
- 1.24 The tenderer shall ensure installation of all electrical equipment by purchaser's approved licensed electrical Contractors and subsequent approval by electrical inspector and other competent authority.
- 2.0 **2.1 MECHANICAL:**

- 2.1.1 The passenger elevator shall be of latest design having directional group collective control with or without attendant. Digital indicators and illuminated buttons shall be provided in the car and at the landings, as per technical specification. The car should be accommodated in the elevator shaft and elevator pit within the dimensions recommended by relevant standards and enclosed drawing. **(in the present case, within the dimension of the existing lift well)**
- 2.1.2 The elevator shall be designed in accordance with the latest edition of IS 1860-1980 and IS:4666-1980 and other relevant specifications and subject to any modifications and recruitments specified hereinafter.
- 2.1.3 Safe access for maintenance and removal of all mechanical and electrical parts shall be ensured.
- 2.1.4 All parts requiring replacement or inspection or lubrication shall be easily accessible without the need for Dismantling of other parts/ equipment. All electrical cables shall be laid such that they are not liable to damage and can be easily inspected and maintained.
- 2.1.5 All machinery or equipment included under this specification shall be equipped with safety devices and clearance to comply with recognized standards and purchaser's requirement.
- 2.1.6 Difference in levels of the car floor and landing, shall be within + or -5 mm.
- 2.1.7 Welding shall be carried out as per relevant IS.
- 2.1.8 To relieve the load on the hoisting mechanism, the weight of the cage shall be balanced with a suitable counter weight connected by ropes with the drum of the hoisting machine and the cage.
- 2.1.9 Suitable lubrication system shall be provided for guide rails as well as for other items.
- 2.1.10 The hoist shall have adjustable self-aligning hitches.
- 2.1.11 Steel T- Guards shall be provided for the car and the counterweight. The weight shall be guarded/ protected by means of wire mesh cage for safe operation.
- 2.1.12 Spring buffers shall be provided as a means of stopping the car and counter weight at the extreme limits of travel. Buffers in the pit shall be mounted on steel channels which extend between both the car and the counter weight guide rails.

## **2.2 ELECTRICAL:**

### **GENERAL:**

2.2.1 The scope of supply shall include all the electrical equipment/ items required for smooth and efficient operation of elevator.

The scope includes the following:

- a) The elevator electrics such as protective switch gear, motors, drive control panels, car operating panels, brakes, limit switches, cables, lighting of car/ cage, push buttons, emergency switch, signaling devices and other necessary equipment required for efficient operation of the elevator.
- b) Complete lighting of elevator shaft, car and well etc.
- c) Earthing point.
- d) All sundry erection materials required for installation and wiring of electrical equipment and for cable laying.
- e) All Statutory clearances.

2.2.2 The equipment offered shall be suitable for trouble free and efficient service in the following site conditions:

Ambient temperature: 40 degree C (max).

Humidity: 100%; both not occurring simultaneously.

2.2.3 The electrical equipment shall comply with the latest revision of relevant standards and wherever such Indian Standard is not available, International codes and practices shall be followed. The equipment shall be dust and water proof.

2.2.4 Electrical equipment shall conform to latest Indian electricity rules and regulations and the statutory requirement of Government of India and the Government of State as regards to the safety requirement, earthing and other essential provisions specified therein.

2.2.5 The materials used and the equipment supplied shall be new, reliable and of the class most suitable for the purpose for which they are intended. The equipment designed and the installation shall allow easy access to facilitate inspection, maintenance and repairs.

2.2.6 Test Certificates of each equipment shall be submitted before installation of each equipment.

2.2.7 The power shall be made available by the owner on the incoming side of the switch board in the machine room at 415V + 10%, 50 HZ ( as per Electricity board voltage), 3 phases for each elevator. The short circuit level of the power supply system shall be taken as 35 KA symmetrical at 415 volts, 50 HZ and the equipment shall be designed for this condition. For lighting, supply will be made available in elevator machine room at 230 V Single phase.

- 2.2.8 The operating voltage for control supply shall be indicated by the tenderer
- 2.2.9 The control panels to be provided in the machine room shall be suitable for floor/wall mounting. This shall be fabricated from steel sheet of 2mm thickness. The bottom most equipment shall be mounted at least 380 mm above the floor level of the panel.( Any alteration in the level of pit will be carried out by the purchaser.)

The layout of components in control panel shall be so as to provide adequate safety clearances and ease of operation and maintenance. Panel shall have IP :21 degree of enclosure.

- 2.2.10 The minimum rating of the isolating switch and contactor shall be 63A and 32 A or 125% of the full load current of the drive, whichever is higher. The switches shall be suitable for AC 23 duty. The contactor shall be suitable for AC3 or AC4 duty as applicable. The overload relay shall have in built single phasing protecting.

- 2.2.11 Squirrel cage induction motors of min class 'B' insulation shall be provided. They shall be suitable for heavy duty reversible, frequent starting, elevator service. The elevator manufacturer shall ensure that the motor selected has adequate thermal capability to meet the most onerous operating cycle likely to be encountered in the actual operation. Motors shall be VVVF system controlled and shall be capable of achieving desired speed and smooth running and stopping of elevators.

- 2.2.12 The motors offered, shall be in IEC frame size with pull-out torque of not less than 275% of the full load torque. The motor shall conform to latest revision of BIS 325. The enclosure class for motor shall be of Min IF 21. There shall be an earthing terminal inside the terminal box.

- 2.2.13 The starting of the motor shall be smooth irrespective of the load/ direction of movement. Suitable control scheme incorporating Thyristors/VVVF system shall be incorporated to achieve smooth acceleration/ deceleration.

- 2.2.14 The elevator control shall be Microprocessor based to ensure high performance with maximum efficiency of operation. The control shall be site programmable with all safety interlocks/ features. The control panel shall be with Min IF21 degree of protection. Plug in type PCBs shall be provided for ease of maintenance.

- 2.2.15 a) Suitable braking system shall be provided to hold the drive when it is switched off.
- b) All limit switches and other safety cum control equipment shall be heavy duty type/ suitable for elevator duty.

- 2.2.16 It shall be possible to control the elevator from inside the cabin as well as from the shaft car.

- 2.2.17 Controller shall be state of the art controller to control starting/ stopping and arrest the speed of the elevator motor and also to automatically apply brake if any of the safety devices operate or the power fails due to any cause. Door operation shall be automatic with safety interlocks.
- 2.2.18 Provision shall be made for a safety gear which shall operate in the event of free fall or over speeding of elevator car. This safety gear, while freezing the cabin mechanically to the guides, shall also interrupt the control supply through a limit switch.
- 2.2.19 The over speeding governor shall have a governor switch to interrupt the control supply in the event of over speeding.
- 2.2.20 In addition to the terminal limit switches for the final landings, pack up emergency limit switches shall be provided and shall be connected in the power circuit of the driving motor. In the event of these switches operating due to over travel, it shall be possible to operate elevator only after manually resetting the back up limit switches. For this purpose, these switches shall be installed in accessible locations for easy manual resetting.
- 2.2.21 Additional provision shall be made for opening of the landing door in case of emergency by means of a special key. The landing doors shall be so designed that their closing and opening is not likely to injure a person.

Provision shall be made to prevent the opening of any landing door when the car is passing that zone in response to a call from another landing.

An automatic floor leveling device shall be incorporated in the elevator control to ensure leveling accuracy within the specified limits.

A reverse phase relay shall be provided in the elevator control in order to protect the elevator equipment from danger against inadvertent phase reversal in course of elevator maintenance or repair. Control supply shall be made off in case of any single phasing in the system.

There shall be a provision of initiating audible and visible signals from inside the cabin in the event of elevators getting stuck between the landings due to break down or power failure. The source of supply for these signaling devices shall be through a suitable battery source with its own charger unit. A push button and a bell in the cage and a bell in the control station shall be provided alongwith battery. Emergency lighting fed from battery source shall also be provided in the cage.

The lift shall be provided with battery operated automatic rescue device to land at the nearest floor and the doors open during the power failure.

Call indicators to inform the attendant, under attendant mode that the elevator car is required at a certain floor shall be provided.



Indicators to show the position of elevator car and the direction in which it is travelling shall be provided both inside the cabin and at each landing.

Tenderer shall furnish typical control schemes and details of controls offered.

2.2.22 The elevator cars, elevator shafts and elevator well shall be adequately illuminated by electric light. Elevator cars shall also be provided with ventilating fan.

2.2.23 The cables used in the elevators installation shall conform to latest revision of IS 4289.

2.2.24 The circuit which supplies current to the motor shall not be included in any multi-core cable used in connection with the control/ safety devices/ signaling equipment.

There shall be a provision for initiating audible and visible signals including telephone cable.

2.2.25 A trailing cable which incorporates conductors for the control circuit shall be separate and distinct from that which incorporates lighting and signaling circuits. All control and signaling cables shall have stranded copper conductor of minimum size 2.5 sq.mm. 20% spare cores shall be provided in each control/ signaling cable. All power cable shall be of 650/ 1100 V grade PVC insulated unarmored with aluminium conductor of appropriate size.

2.2.26 Earthing of all electric equipment shall be done as per relevant BIS, latest IE rules and statutory regulation of the concerned department/ unit of Government of Maharashtra

**2.2.27 All statutory approvals from commencement to commissioning of elevators shall be obtained by the contractor from Inspector of Lift and any other concerned statutory authorities.**

2.2.28 List of approved makes

LIST OF COMPONENTS	APPROVED MAKE
MOTORS	KIRLOSKAR/ CROMPTON/ OTIS/KONE
CONTROL TRANSFORMER	VOLTAGE SIEMENS/L&T/SOUTHERN ELECTRIC
SFU	SIEMENS/ EE/L&T
CONTACTORS	SIEMENS/ MDS/STD/ INDO ASIAN/ HAUGER
CONTROL CIRCUIT BREAKERS	SIEMENS/ L&T /VAISHNO/ CONCORD/ TEKNIC/ BCH
PUSH BUTTONS & INDICATING LAMPS	SIEMENS/ ABB/L&T/AEG/EE
POWER DISTRIBUTION BOARD	SIEMENS/ ABB/L&T/AEG/EE
CABLES	CCI/FORT GLOSTER/ UNIVERSAL/ FINOLEX
OVERLOAD RELAYS WITH SPP	SIEMENS/L&T/TELE-MECHANIQUE
BRAKES	BCK/PETHE
BATTERY	EXIDE/PRESTOLITE / (NICKEL CADMIUM)/SMF

BATTERY CHARGER	USHA RECTIFIER/ ADVANI ORLIKON/ CADLYNE AUTOMATIC
LIMIT SWITCHES	SIEMENS/BCH /TELE-MECHANIQUE
THYRISTOR CONTROL/ VVVF CONTROLS	SIEMENS/ ABB /KIRLOSKAR/ MITSUBISHI

### 03. PAINTING

- 3.1 General service painting - This includes structures, plate works, piping, ducting and machinery of mechanical nature (except motors, resistors, panels, switch gears etc.).

All parts of the elevator shall be thoroughly cleaned of all mild scale, rust and foreign materials by appropriate method of cleaning such as solvent cleaning, hand tool and power tool cleaning, flame cleaning, blast cleaning etc. After that, all parts including frames, gear boxes etc., shall be sand blasted as per STANDARDS.

All parts inaccessible after assembly shall be painted before the assembled while paint is still wet.

All parts of the elevator shall be painted at shop with one primer coat of 75 micron thick inorganic zinc silicate primer.

After erection of the elevator at site, damaged areas shall be power tool cleaned and touched up with 30 microns thick of zinc rich epoxy primer.

Then the complete elevator shall be painted with 1 intermediate coat of 100 microns thick high build Iron Oxide paint.

Subsequently two final coats of 35 microns thick of aliphatic polyurethane finish Paint of approved colour shall be applied.

- 3.2 Interior of all gear housing shall be painted with oil resistant paint after sand blasting and acid cleaning.
- 3.3 All machine pads bearing surfaces on structure or housing shall be painted with white lead.
- 3.4 Switch Board/ Control panel painting- This includes fabricated sheet metal items namely electrical control panels, switch boards, control disk, cabinets etc.

Mild scale, rust etc., shall be removed by pickling in a bath of dilute Sulphuric, Hydrochloric or Phosphoric acid, with or without heating, followed by thorough rinsing by fresh water to remove acid traces. Pickling in Sulphuric acid may be followed by dipping in dilute Phosphoric acid containing iron phosphate. Prior to pickling heavy deposits of oil, grease, soil and other foreign matters shall be removed by solvent cleaning.

The cleaned surfaces shall be given a phosphate coating consisting of thin layer of zinc, iron or manganese phosphate deposited either by immersion or power spray. The coating weight shall not be less than 5 gm/sq mm.

The phosphate coated surfaces shall be finish painted with two coats of synthetic epoxy paint. The interior of panel shall be egg shell white in colour and outside colour shall be approved by owner/ consultant. The total dry film thickness of the finish coats shall not be less than 50 microns.

The equipment shall be power tool cleaned off dust, rust, grease, burrs, weld splatter and loose mill scale and sand blasted as per Swedish Standard SA 2 ½.

The equipment shall be painted with two primer coats and followed by two finish coats of epoxy paint. The minimum DFT of each primer and finish coat shall be 25 microns and 35 microns respectively. Colour scheme for finish coats shall be approved/ furnished later. The fasteners supplied with equipment shall not be painted. The same shall be sent with anti-rust compound applied.

- 3.5 The quality of paint and colour scheme of finish coats shall be as approved by the owner.

### C. INSPECTION & TESTING:

1. GENERAL: The bidder based on the broad outline inspection procedure indicated in this Section shall finalize with owner/ his consultant prior to the award of contract, the detailed procedure for inspection, testing (at factory/ site) alongwith the schedule of time and period of individual activities.
2. The Contractor shall submit relevant test Certificates for all electrical equipment, cables. Following are the guidelines for shop testing.
  - i. All motors to be routine tested as per IS 325-1978.
  - ii. All control panels/ MCCS shall be routine tested as per IS:8623 Part I & II- 1980.
  - iii. Thyristor/ Rectifier panels as per IEC 146.
  - iv. Dry type power transformer as per IS 1171-1985.
3. Similar test Certificates shall be submitted in respect of items like wire ropes, chains, couplings, gears, gear boxes, rope drums, pulleys, shafts etc.
4. Contractor shall give adequate notice to the owner in regard to shop testing of major items like motors, etc. in order to enable the owner/ his consultant to witness the tests if required by the owner.,
5. Work shall be carried out in accordance with prevalent/ relevant standards like Indian Electricity Act, IEE rules, Lift Act, etc. It will be the responsibility of the firm to arrange for inspection by the statutory authorities at the appropriate time, obtain necessary Certificates and handover the same to the owner for record. The statutory fees ( if any) will be borne by the employer or will be reimbursed against production of receipt.

### 04. INSPECTION AT SITE:

- 4.1 These tests after erection of the elevator in plant shall comprise of the following:
- a) The supplier's tests.
  - b) Acceptance tests/ performance guarantee tests.
- 4.2 After the elevators are erected all equipment and machinery shall be tested as required by the owner/ inspector in line with IS 4666. The elevator shall be run without load and the adjustments shall then be completed.
- 4.3 All tests shall be carried out in the presence of the owner/ Inspector and any corrections found necessary shall be approved by the owner/ inspector and shall be carried out with minimum of delay. The supplier shall be responsible for producing all necessary working sketches and drawings to the approval of the owner/ inspector.

4.4 The elevators after erection shall be treated as follows:

- i) Performance guarantee test:

The elevators after completion of erection shall be performance tested to meet the following acceptable limits of design parameters.

SPEED: 1.0m/sec (1.00 METRE PER SECOND) with LANDING ACCURACY within +or- 5mm

In case of unit capacities and design parameters guaranteed by the Contractor are not established during the performance guarantee testing, the owner at his discretion may reject or accept the elevator after assessing its technical suitability. The Contractor shall be given 2 months time after commissioning for rectification to achieve the necessary design parameters, beyond which the employer may reject.

#### **ELECTRICAL TESTS:**

- a) Visual check for adequacy & completeness of scope of supply.
- b) Insulation test on electrical equipment wiring.
- c) Satisfactory operation of controllers, limit switches, safety devices etc.
- d) Correctness of all circuits and interlocks.
- e) Satisfactory operation of electric lift for all motions/ stops.

#### **4.5 ACCEPTANCE TEST:**

After supplier's tests are completed, an acceptance test shall be carried out by the Owner's operator, and if accepted, the elevator shall be handed over to the owner.

Operation & capacity tests will be conducted as specified in IS 4666 and as specified above. Insulation and other tests applicable to the electric lift shall be done as per relevant IS.

The date(s) for operation and capacity tests shall be set by the owner/ inspector and the supplier shall be informed of the date (s) in advance. The supplier shall be represented at the tests by a qualified engineer or erection superintendent familiar with erection and commissioning of the elevator.

#### D, DESIGN CRITERIA:

( 1 )

i	Location	Canara Bank RO North, Kohinoor building, Opp. Siddhivinayak Mandir, Prabhadevi, Mumbai- 25.
ii	Type	Passenger elevator
iii	Quantity	One number
iv	Capacity	6 passenger / 408 kg
v	Speed	1.0 metre per second
vi	Travel	Vertical
vii	No. of landings	4 stops (Ground + 3 upper floors)
viii	Location of machine room	At top
ix	Power supply available at site	415 V AC 50 Hz.
x	Landing and car door operation	Automatic power operated stainless steel panel sliding doors.
xi	Signals	Landing calls registered indicators, up/ down (visual), digital position indicator in car and all landings
xii	Elevator operation	Microprocessor based selective collective automatic operation with or without attendant.
xiii	Machine	Gearless, placed directly above the hoist way
xiv	Allowable level difference between car floor and landing	+ OR - 5 mm
xv	Details of car body	Made out of stainless steel with hairline finish and relevant standards
xvi	Maximum temperature	40° C
xvii	Maximum humidity	100%
xviii	Auto rescue device	To enable the lift to land at the nearest floor and the doors open automatically during power cut.
xix	Infrared curtain	Sensors to avoid closure of doors during passenger movement.

**Note:-**All fittings, equipments, units. Assemblies and accessories, hardware, foundation bolts, terminal lugs for electrical connections, cable glands. Junction box and items which are useful and necessary for efficient assembly in operation and installation shall be deemed to have been included in the scope of work. CPWD General Specification for Electrical Works (Part I Internal ) 2005, CPWD General Specification for Electrical Works(Part II External ) , CPWD General Specification for Electrical Works (Part III LIFTS & ESCALATORS ) 2003 , amended till date or any other old manual will be taken for reference if anything will be found not written in the tender. The installation shall be complete in all details whether such details have been mentioned in the specifications or not.

**TECHNICAL DATA TO BE FILLED IN BY THE TENDERER:**

<b>SI NO.</b>	<b>Particular of Details</b>	
<b>A.</b>	<b>GENERAL:</b>	
1.	Name of Manufacturer.	
2.	Country of Manufacture	
3.	Capacities (Persons/ Weight).	
4.	Service	Floors-                  Entrance-
5.	Speed of Travel	
6.	Height of Travel.	
7.	No. of Floors served.	
8.	No. of openings.	
9.	Method of control	
10.	Position of M/c room	
11.	Size of M/c room	
12.	Size of elevator well	
13.	Position of counterweight	
14.	Type of Levelling method.	
<b>B.</b>	<b>MOTOR DETAILS:</b>	
1.	Make	
2.	Type of motor	
3.	KW rating	
4.	Power factor	
5.	Frame size	
6.	Degree of protection	
7.	Speed	
8.	Method of starting	
9.	Duty cycle	
10.	FL Amperes	
11.	Class of insulation	
12.	No. of permissible starts per hour	
<b>C.</b>	<b>BRAKE</b>	
1.	Type	
<b>D.</b>	<b>CAR AND DOORS:</b>	
1	Outside dimensions of car.	
2	Inside clear dimensions.	
3	Construction of car	
4	Design/ type of enclosure of car.	
5	Details of flooring	
6	Attachment and fitting inside the car	
7	Car Doors: (a) Size (b) Operation (c) Construction , Design & finish	
8	Landing Doors: (a) Size (b) Operation (c) Construction , Design & finish	

9	Car operation Panel	
10	a. Size (specify height, width and length of the car), mm x mm : b. Type and material of construction : c. Lighting inside the car provided: d. Type of lighting (fillament/fluorescent Act.): e. Number and wattage (total), watt:	
<b>E</b>	<b>ELECTRIC SUPPLY</b>	
1	Voltage	
2	Frequency	
3	Permissible variation in voltage and frequency	
4	Control voltage	
<b>F</b>	<b>CONTROL TRANSFORMER DETAILS</b>	
1	Make	
2	Type	
3	Rating	
<b>G</b>	<b>ISOLATING SWITCH</b>	
1	Make	
2	Rating	
3	Duty	
<b>H</b>	<b>INDICATOR DETAILS (OVERLOAD, ETC.)</b>	
<b>I</b>	<b>CONTACTOR</b>	
1	Make	
2	Rating	
3	Duty	
<b>J</b>	<b>ELECTRICAL PANEL</b>	
1	Make	
2	Typical control schemes and SL drawing	Enclosed/ not enclosed
3	Constructional features of panel	
4	Brief description of control features and safety interlocks provided	
5	If elevator complies with elevators Acts/ rules of Maharashtra	
<b>K</b>	<b>CONTROL PANEL</b>	
1	Make	
2	Technical details	
3	Specification of accessories	
4	Constructional features	
5	Fan and lighting	
6	Delivery period from placement of order	
7	Additional items proposed to be supplied, if any	
8	No. of copies of booklet giving complete details of maintenance schedule and circuit diagram to be supplied and the same included in the offer	
9	Arrangements of moving the lift car in case of power failure	

10	Details of lubrication	
11	Additional information, if any	
<b>L</b>	<b>OTHER SAFETIES INCLUDED IN THE OFFER: MISC.</b>	
	Shipping Weight A. Estimated Shipping Volume: B. Furnished All Required Foundation Plates, Bolts, Sleeves, Eye, Bolts, Etc.: C. Enclosed With Proposal A List Of The Shop Tests That Will Be Conducted On The Equipment	

E) TIME SCHEDULE AND COMPLETION MILESTONE:

**The entire work of Dismantlement of existing 1 Number of lift and supply, erection and commissioning of 1 Number of new passenger lift in lieu shall be completed in one hundred twenty days from the 14<sup>th</sup> day of award of work.**

Signature of the tenderer



**PART-II-PRICE BID****TERMS OF PRICE BID**

- 1) Prices quoted must be firm for the period /extended period of contract. No escalation shall be admissible in respect of any item of the contract.
- 2) No escalation due to IEEMA clause shall be admissible.
- 3) Price quoted must be inclusive of all items required for the entire job of design, manufacture, supply to site, erection, testing, commissioning, and handing over including ancillary items like scaffolding, minor civil works, all electrical items etc., and nothing extra shall be paid.
- 4) Price quoted shall cover the cost of dismantling the existing elevator of OLYMPUS make and removing them from site of work. No extra payment on this amount shall be entertained/ paid. No material of the dismantled elevator shall be used in erection of new elevators.
- 5) All materials shall be insured against theft, damage, etc., from the time they are transported from the factory upto the time of handing over to the owner. No claim in respect of any damage/ loss shall be entertained.
- 6) Watch and ward responsibility at site shall be the responsibility of the firm.
- 7) AMC RATES: WITH REGARD TO AMC, THE RATES SHOULD BE QUOTED **EXCLUDING GST**. APPLICABLE GST WILL BE PAID DURING THE COURSE OF AMC.
- 8) **THE ITEMS 1, 2 & 3 OF PRICE BID WILL BE CONSIDERED FOR ARRIVING L1 PRICE.**
- 9) THE SUPPLIER HAS TO EXECUTE AGREEMENT WITHIN 14 DAYS FROM THE DATE OF ORDER (AS PER THE FORMAT GIVEN BY THE BANK), CONFIRMING THAT THE LIFTS WILL BE MAINTAINED AT THE TENDERED RATE FOR FOUR YEARS AFTER WARRANTY PERIOD.

SIGNATURE OF THE TENDERER

**PRICE SCHEDULE:**  
(TO BE SUBMITTED IN A SEPARATE ENVELOPE)

SL. NO.	DESCRIPTION & SCOPE OF SUPPLY	Qty.	Rate per unit	Total Rs.	In words
1	Supply Installation Testing & Commissioning of 6 passengers capacity lift with 4 landings including electrical, controls as mentioned in technical bid and minor civil works as per clause 1.3 of Technical Specifications as required.	1 No.			
2	Comprehensive maintenance charges with full responsibility of carrying out repair and supply of required original spare parts to keep the elevator in fully operational condition for a period of 4 years, after expiry of 1 year free servicing and warranty period both the lifts.	1 No.			
	YEAR 1				
	YEAR 2				
	YEAR 3				
	YEAR 4				
3	Credit for dismantled materials in respect of existing lifts	1 No.			
	<b>GRAND TOTAL</b>				

SIGNATURE OF SUPPLIER WITH SEAL OF THE FIRM