

## PART A - TECHNICAL BID

### TENDER DOCUMENTS FOR ELECTRICAL WORK

### FOR UBI - DAHEJ BRANCH (EXISTING PREMISES), UBI - VADODARA REGION.

1	<b>TENDER ISSUED TO</b> (Name & Address of the Contractor)	M/S..... ..... ..... .....
2	<b>EMD COST</b>	<b>Rs. 6,000/- (Six Thousand Only)</b>
3	<b>TENDER FEES</b>	<b>Rs. 600/- (Six Hundred Only)</b>
4	<b>PROJECT ARCHITECTS</b>	M/S. SHAW ARCHITECTS, SF-218, SAMANVAY SILICON, NR. DAIRY DEN CIRCLE, SAYAJIGUNJ, VADODARA – 390005, GUJARAT.
5	<b>ARCHITECT'S CONTACT DETAIL</b>	M: +91-9898213973 E-MAIL: shawvijendra@gmail.com
6	<b>OWNER</b>	UNION BANK OF INDIA - VADODARA REGIONAL OFFICE, 2 <sup>ND</sup> FLOOR, UBI BHAVAN, STATION ROAD, SAYAJIGUNJ, VADODARA-390005, GUJARAT.

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## NOTICE INVITING TENDER (NIT)

**UNION BANK OF INDIA - REGIONAL OFFICE VADODARA** Invites sealed tenders from the **ELECTRICAL WORK CONTRACTORS ON UNION BANK'S APPROVED PANEL OF VADODARA REGIONAL OFFICE ONLY UNDER APPROPRIATE CATEGORY** for the work mentioned below.

1	Name of work	<b>ELECTRICAL WORKS AT EXISTING PREMISES OF UBI-DAHEJ BRANCH UNDER UBI - VADODARA REGION.</b>
2	Date of Issue of tender documents	<b>02 / 04 / 2022 at 11:00 a.m.</b>
3	Last date of tender collection/submission	<b>12 / 04 / 2022 at 12:00 p.m.</b>
4	Date & Time of opening of tender	<b>12 / 04 / 2022 at 02:30 p.m.</b>
5	Mode & Place of submission of bids	By RPAD or Speed Post or courier or by hand delivery only addressed to: <b>THE REGIONAL MANAGER, UNION BANK OF INDIA - VADODARA REGIONAL OFFICE, 2<sup>ND</sup> FLOOR, UBI BHAVAN, STATION ROAD, SAYAJIGUNJ, VADODARA-390005, GUJARAT.</b>
6	Date of commencement	<b>02</b> days from the date of issue of work order.
7	Date of completion of work	<b>30</b> days from the date of issue of work order.
8	Period for settlement of final bill	30 days from date of issue of completion certificate by the Architect.
9	Initial Security Deposit (ISD)	The amount of Initial Security Deposit shall be 2% of the accepted value of the tender including the Earnest Money Deposit.
10	Total Security Deposit	TSD shall be 5% of contract value which will be deducted from the final bill of the contractor by way of retention amount. TSD will be refunded to the contractor on successful completion of defect liability period.
11	Tender Cost (To be submitted in Envelope-1)	<b>Rs. 600/- (Six Hundred Only)</b> to be submitted in the form of D.D. ( o n l y ) in favour of Union Bank of India, Payable at VADODARA valid for 90 days. <i>(Exempted for NSIC/MSME for valid certificate. Certificate to be attached.)</i>
12	Earnest money deposit (To be submitted in Envelope-1)	<b>Rs. 6,000/- (Six Thousand Only)</b> to be submitted in the form of D.D. ( o n l y ) in favor of Union Bank of India, Payable at VADODARA valid for 90 days. <i>(Exempted for NSIC/MSME for valid certificate. Certificate to be attached.)</i>
13	Release of Retention Money/ Earnest money	The Earnest money deposited shall not carry any interest and will be refunded to unsuccessful tenderers after allocation of work order. The Earnest money of successful tenderer will be release after completion of work and certification of final bill. Retention & Security money after 14 days from defect liability period without any interest.
14	Sign and Stamp	<u>All the pages</u> are to be stamped and signed by the contractors.
15	Approved Brands	Only <u>approved brands</u> of materials should be used for work.
16	Specification of Materials	<u>Specification of Materials</u> is as per Tender Technical Bid.
17	Articles of Agreement	To be prepared in consultation with the Legal Department of the Bank. The Central Agreement is composite summary of all the tender which reflects extracts of all tender conditions. The form and conditions in the Article of Agreement should be in line with the terms and conditions accepted in tender Document / Addendum / Work order etc. The same shall be verified before execution of the

		Agreement. No conditions to be added in contract unless and otherwise accepted by both parties during tendering process.
18	Liquidated damages for non-completion of work within the date of completion	1% per week subject to maximum of 10% of contract value inclusive of Sundays and Holidays.
19	Defect liability period	12 months from the date of completion certificate issued by the Bank Architect.
20	Validity of Tender	90 days from the date of Price Part of Tender.
21	Tender can be Downloaded from	UBI website <a href="http://unionbankofindia.com">http://unionbankofindia.com</a> under Tender Section.
22	<u>Bank reserves the right</u> to ask for bills/invoices of the material purchased by the Contractor along with the payment details.	
23	Bank may accept the tender either in complete or in parts. Bank also reserves the right to split the tender.	
24	Interested bidder may obtain further information from the office of consultant / Bank Architect.	
25	Bank reserves the right to reject wholly or part of any or all tenders received without Assigning any reason whatsoever, Also Bank reserves the right to split the work and place the order to more than one party.	
26	Any Freak Rate of Individual Item on Higher Side Are Liable for Negotiation	
27	Any Contractor which is empanelled in more than one category (i.e, Furniture/Electrical/Air Conditioning) <u>can only compete only in one category</u> . If applied for more than one category, then tender will be rejected.	
28	Rates quoted & agreed by the tenderer shall remain firm throughout the contract period (Including authorized extension). Rates quoted shall be inclusive of all taxes, duties, levies, royalties & other incidental / other Industrial charges etc. <b>However, GST Tax shall be paid by the bank extra as applicable to work contract tax as per actual.</b>	
29	Running bills each not more than 4.0 lacs shall be paid. Final Bill will be paid against the final payment certificate on submission detailed final bills submitted by the contractor to the Architect on successful Completion of the work.	
30	All pages of Tender Documents and attachments by Bidder will duly signed and stamped or else it will be subjected for rejection.	

**UBI has right to accept/ reject any/ all tenders without assigning any reasons.**

(For and on behalf of Union Bank of India)

**THE REGIONAL MANAGER,**

UNION BANK OF INDIA - VADODARA REGIONAL OFFICE,  
2<sup>ND</sup> FLOOR, UBI BHAVAN, STATION ROAD,  
SAYAJIGUNJ, VADODARA-390005, GUJARAT.

Date: 02/ 04/ 2022

**IMPORTANT POINTS:**

1. Technical prequalification will be based on the mandatory information and supporting documents submitted along with the tender documents as well as Architect/Bank's scrutiny of the same or inspection of work carried out by the tenderer.
2. The Union Bank of India, reserves the right that without assigning any reason there of:
  - (a) To accept or reject any tender in whole or in part.
  - (b) To increase or decrease the quantities of any item and tendered has to execute the same at the rate quoted.
3. Tenderer are requested to read the tender documents, general conditions, special conditions, drawing, specifications, schedule of quantities, etc. carefully and offer most competitive rate after visiting site. The clause of Notice Inviting tender prevails over general terms and special terms of contract.
4. The date of completion of job is the essence to this contract. The contractors are therefore requested to complete the job in the stipulated time. Any deviation with respect to time or specification Bank prejudice has right to:
  - (a) Cancel / Revoke the order.
  - (b) Impose penalty up to 10 % of the total value of job.
5. Contractor in their own interest are advised to visit the site & get themselves familiarize in the prevailing situations before submitting their rates. No claim whatsoever for ignorance, misunderstanding shall be entertained later.
6. The proposed work is to be done in the working branch on ground floor, hence contractor has to plan his work so as to general working of the branch is not affected. He has to work after business hours & also during the night.
7. The contractor shall be responsible for making good in expeditions & workman like manner. Any defects, which may be found within one years of the handing over the premises, put to beneficial use. In case contractor fails to do so, the same would be got done at his cost & risk. The cost incurred by the bank shall be deducted from the retention money or any other dues.
8. Rates quoted shall be inclusive of all taxes, levies, duties & all charges such as freight, insurance, octroi, loading/unloading, unpacking & moving the position in site, etc. for complete item.
9. The schedule of quantities is only approximate & all the work executed shall be paid for in accordance with the actual measurements as per relevant part of IS : 1200 : 1974 or otherwise provided.
10. In case of any dispute, the same shall be referred to court at VADODARA and its decision shall be final & binding on both the parties.
11. An item rate tender containing percentage below / above will be summarily rejected. However, if the Tender voluntarily offers rebate for payment with in stipulated period, this may be considered.
12. The tender documents shall be duly filled in and signed by the tenderer and shall be addressed (in sealed cover) to the office of: **THE REGIONAL MANAGER, UNION BANK OF INDIA - VADODARA REGIONAL OFFICE, 2ND FLOOR, UBI BHAVAN, STATION ROAD, SAYAJIGUNJ, VADODARA-390005, GUJARAT.** The full name and address of the tenderer and name of the work shall be written on the cover.
13. Unit rates shall be quoted in English in figures as well as in words with reference to each item and for all items shown in the attached schedule of quantities. The amount of each item should be worked out.
14. All entries in the documents shall be clearly written and shall be in ink. corrections if any shall be clearly made any duly signed and dated by the tenderer erasing and over writings and shall not be permitted and the tender liable for rejection.
15. The tender shall sign and every page of the tender documents including the layout drawings.
16. Each tender shall be signed by the tenderer with his usual signature. Tender by Partnership of Hindu joint family firm may be signed in the firm's name by one of the partners of the Karta or Manager as the case may be or any other duly authorized representative followed by the name and designation of the person so signing. An attested copy of the partnership firm shall also be attached. Tender by a shall be signed with the name of the company by persons authorized in

this behalf and power of attorney or other satisfactory proof showing the person signing the tender as the authorized person to do such documents on behalf of the company is duly authorized to do so shall accompany the tender.

17. Unless otherwise specified all the rates and prices in the tender shall cover sales taxes, octroi, vat, other taxes and duties, and transportation, sales tax on work contract etc.
18. Tender not containing the full particulars as mentioned above or as called for in the special conditions is liable to summarily rejection.
19. With their quotations the tenderer shall sign all the schedules specifications, special conditions, etc. in taken of acceptance hereof. The signature on the tender schedule alone shall also be deemed to be taken as acceptance of all these.
20. The unsealed tenders, tenders not super scribed as the prescribed tender documents, conditional and unsigned tenders, tenders containing absurd rates and amounts, tenders that are incomplete or otherwise considered defective are liable to be rejected.
21. In the event, there are two or more parties between whom the work has been split, the contractor carrying out relevant work entrusted to him shall work in close coordination without causing any delay or hindrance to other agencies. Bank has the right to omit at his discretion one or more items of work when placing the order.
22. The work shall be deemed to have commenced from the date on which the contractor takes over the site or issue of work orders whichever is earlier. The site will be handed over to the contractor only on submission of initial security deposit.
23. The contractor shall give a program for the execution of the work during the total contract period and get it approved by the Bank and the Architect. In case of delay in progress of work at any stage, the Bank shall issue the contractor a memo in writing pointing out the delay in progress and asking the contractor to explain the causes for the delay within 3 days of receipt of the above. The Bank reserves the right to terminate the contract and forfeit the security deposit if satisfactory explanation is not offered by the contractor for delay in execution of work.
24. It will be obligatory on the part of the tenderer to sign on each & every page of the tender & all components of the tender. Conditional tender shall be summarily rejected.
25. The samples of all the material & work item shall be got approved from the Architect or his representative before proceeding further on the work.
26. The drawing contains sketches showing salient features details at the various scales indicating extent of work & specifications to be followed. These can be modified by the bank from time to time in accordance with technical requirements at the site.
27. Any damage done to the property of the bank during execution of the work shall be responsibility of the contractor & it shall be made good by him, at his cost to the entire satisfaction of Architect/Bank.
28. The Architects shall have full power to get the material or workmanship etc. inspected & tested by an independent agency for its soundness & adequacy at the cost of contractor.
29. The contractor shall examine all drawings before quoting & commencing of actual work & report to the Architect/Bank any discrepancies for omission & shortcomings in the drawings.
30. The work shall be of highest standard both as regard to material & workmanship. Modern tools & first-class latest techniques shall be employed for its execution.
31. The work shall be done as per accordance with the IBA guidelines.

Signature of contractor with seal

### SPECIAL TERMS AND CONDITIONS

1	Limit of variation	100% without any change in price if work is done within six months of the contract and with prior consent of Architect / Consultant.
2	Additional items	For items where unit rates are not available, contractor shall provide proper cost break-up and proceed only after approval/consent. Any sample to be made for approval shall be at the Contractor's cost.
3	Validity of tender	Three months after the opening of the tender.
4	Rules/ Regulations	The contractor shall have their responsibility of complying with the local shops/establishments Act and other labor / minimum wages Act and shall keep all such records/ accounts on payment of wages / attendance as deemed necessary.
5	Arbitration	As per the standard arbitration clause under the jurisdiction of VADODARA.
6	Organization	The contractor shall employ competent / qualified supervisor /Engineer-in-charge who shall be responsible for the day to day work and coordinate as necessary with the Architect's supervisor. Any workman found guilty of misconduct/theft shall remove from the site.
7	Damage to property	Any damage to the Bank's property during the work period will be recovered from the contractor as per the valuation submitted by Architect.
8	Deduction	Tax at source as per Act.
9	Terms of payment	Payment after completion of Project.
10	Billing Procedure	All measurements shall be recorded in Duplicate on standard measurement sheets Prepared jointly by the Architect's Site Engineer & the Contractor's Representatives duly signed by them. All Bills shall be submitted along with this Checked Measurement sheets.
11	Time schedule of work	The Contractor must submit before the Commencement of work, a Bar chart showing the date of commencement & the date of completion of each item of Work as mentioned in the Schedule of Quantities.
12	Release of TSD	100% after the Defect liability period. Retention money will not bear any interest.
13	General	The rates should be quoted considering necessary Scaffolding & staging work, Removal of debris as & when necessary, In view of restriction of Local concern Authority & all type of Lab test.
14	Site Location	The aforesaid work needs to carry out at DAHEJ in Gujarat State.
15	Workmen Insurance	Contractor shall submit workmen compensation policy of each individual workmen.

## FORM OF TENDER

(On the Letterhead of Tenderer)

THE REGIONAL MANAGER,  
UNION BANK OF INDIA - VADODARA REGIONAL OFFICE,  
2<sup>ND</sup> FLOOR, UBI BHAVAN, STATION ROAD,  
SAYAJIGUNJ, VADODARA-390005, GUJARAT.

Dear Sirs Ref:

Having examined the drawings, specifications, design and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender. I/We hereby offer to execute the works specified in the said memorandum at the rates mentioned in the attached schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in condition of tender, the Articles of Agreement special conditions, schedule of quantities and conditions of contract and with such material as are provided for, by and in all other respects in accordance with such conditions so far as they may be applicable.

### MEMORANDUM

1.	
A Description work:	<b>ELECTRICAL WORKS IN UNION BANK OF INDIA DAHEJ BRANCH, VADODARA REGION.</b>
B Earnest money:	<b>Rs. 6,000/-</b>
C Security Deposit:	2 % of the accepted tender amount less earnest money
D Percentage if any to be deducted from bills:	5% (Five percent) from the bills of the contractors excluding earnest money and initial security Deposit.
E Time allowed for completion of the work:	<b>30</b> days. From the date of commencement of work
F. Liquidated damage:	1 % of contract value per week. Maximum 10 % of the contract value.

2. We undertake to complete and deliver the whole of the works comprised in the contract with in the time stated in the schedule A to the general conditions of the contract.
3. We have independently considered the amount of liquidated damages in the schedule A to the conditions of the conditions of the contract and agree that it represents fair estimated the loss likely to be suffered by you in the event of the works not being completed in time.
4. If our tender is accepted, we will be required to furnish the security deposit of the contract for the due performance of the contract as specified in the general conditions of the contract & NIT.
5. We agree to abide by this tender for the period of 90 days from the date fixed for opening the second cover (i.e. price bid) and it shall remain binding upon and may be accepted at time before expiry of period.
6. Unless and until a formal agreement is prepared and executed this tender together with your written acceptance there of shall constitute a binding contract between us.
7. We understand that you are not bound to accept the lowest or any tender you may receive.
8. Should this tender be accepted, I/We hereby agree to abide by and fulfill the terms and provisions of the said conditions of contract annexed to so far as they may be applicable or in default thereof to forfeit and pay to the Union Bank of India, Vadodara the amount mentioned in the said conditions.



9. We are enclosing the Bank Draft for a sum of **Rs. 6,000/-** as Earnest money in favor of Union Bank of India, payable at VADODARA Which amount will not bear any interest. Should we fail to execute the contract when called upon to do so, I/We do hereby agree that the Union Bank of India shall forfeit this sum.

10. The details of plant, machinery, major tools, equipment employees list of such major works executed technical personal along with the copies of last **3** years I.T. assessment orders are enclosed for your perusal and consideration.

11. Our Bankers are:

12. The names of the partners of our firm are:

Name of the Partner of the firm authorized to sign

**OR**

Name of person having power of attorney to sign the contract.

(Certified true copy of the power of attorney should be attached.)

(Signatures and address of Witnesses.)

Yours faithfully,

Signature of contractor.

(1)

(2)

List of enclosures:

(1) PERT CHART

(2) Please enclose separate sheets if required.

Signature of the Contractor with Seal

## ARTICLES OF AGREEMENT

Articles of Agreement made this \_\_\_\_\_ day of \_\_\_\_\_ between **THE REGIONAL MANAGER, UNION BANK OF INDIA - VADODARA REGIONAL OFFICE, 2ND FLOOR, UBI BHAVAN, STATION ROAD, SAYAJIGUNJ, VADODARA-390005, GUJARAT.** Hereinafter called the Bank which expressions shall include its successors and assigns of the one part and \_\_\_\_\_ (name & address of contractor) hereinafter called the "Contractor" which expression shall include the successors and assigns of the other part.

WHEREAS the Bank is desirous of the work of **ELECTRICAL WORK AT UBI-DAHEJ BRANCH, VADODARA REGION** and has caused drawings, specifications and schedule of quantities etc. describing the works to be prepared by ARCHITECT: **SHAW ARCHITECTS** AND WHEREAS for the said interior of UBI-DAHEJ Branch under local regional office of Union Bank of India at VADODARA. Terms & Conditions, Specifications and the Schedule of items quantities etc., have been signed by and on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute upon, subject to the conditions set forth herein and Schedule of Items and quantities, General & Special Conditions of Contract, specifications etc. contained in the tendered documents including all correspondences exchanged by or between the parties from the submission of tender till the award of work, both letters inclusive, (all of which are collectively hereinafter referred to as "the said conditions"), details of which are described in the schedule attached hereto, the works shown upon the said drawings and/or described in the said specification and included in the schedule of items and quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum shall become payable there under arrived at or such other sum as shall become payable there under (hereinafter referred to as "the said contract amount").

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of the said contract amount to be paid at the time and in the manner set forth in the said conditions, the contractor shall upon and subject to the said conditions execute and complete the work shown in the said drawings and described in the said specifications and the schedule of items and quantities, as per the terms and conditions contained in the said conditions.
2. The Bank shall pay the Contractor said contract amount, or such other sum as shall become payable, at the time and in the manner specified in the said conditions.
3. The Architects in the said condition shall mean the said ARCHITECTS M/s SHAW ARCHITECTS, SF-218, SAMANVAY SILICON, OPP. KALYAN HOTEL, NR. DAIRY DEN CIRCLE, SAYAJIGANJ, VADODARA. In the event of their ceasing to be the Architects for the purpose of this contract for whatever reason, such other person or persons as shall be nominated for that purpose by the Bank, provided always that no person subsequently appointed as Architects under this contract shall be entitled to disregard or over rule any previous decisions or approvals or directions given or expressed in writing by the Architects for the time being.
4. The said general condition, Special condition, technical drawings, Notice Inviting Tender, specifications, Guarantee, Instruction to Tenderers Price Bid (Schedule of Quantities), Correspondences, Letter of Acceptance, Agreements and Appendices there to, contained in the tendered documents/said conditions shall be read and considered as forming part of this Agreement and the parties hereto shall respectively abide by, submit themselves to the said conditions and perform the agreements on their part respectively in the said conditions contained therein.
5. The plans, agreements and documents mentioned herein shall form the basis of this contract. This contract is neither a fixed Lump Sum contract but is a contract to carry out the work in respect of the **ELECTRICALWORK AT UBI - DAHEJ BRANCH, VADODARA REGION** as per the scope described and to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and/or negotiated rates and Probable quantities or as provided in the said conditions.

6. The Bank reserves to itself the rights of altering the specifications and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract.

7. (a) The Contractors represent that they have experience and competent staff which will enable them to ensure proper quality check on the materials, whether brought by the contractors or supplied by the Bank to the contractors, and which will ensure that the contractor will carry out proper tests as required by the specifications and will supervise the day to day working and execution of the contract work.

(b) If the contractors have any doubt about the quality of the materials or any difficulty in supervision of the day to day work it shall be duty of the contractors to report the matter in writing forthwith to the Bank and for the time being suspend that portion of the work about which difficulty is experienced, and the contractors will abide by the directions given by the Bank.

(c) The contractors are aware that the Bank will not give day to day supervision but will periodically supervise and the contractor has to perform their obligations under the instructions given to him periodically and under sub clauses (a) and (b) above.

(d) The contractors covenant and warrant that completed items of work as well as the entire work on completion will be in conformity with the specifications and the terms and conditions contained in the said conditions and will be of contract quality and description.

8. Time shall be considered as the essence of this contract and the contractor hereby agrees to commence the work on the day on which he is instructed to take possession of the site or from the fourteenth day after the day of issue of formal Work Order as provided for in the said conditions whichever is later and to complete the entire work within **30 days** subject nevertheless to the provisions for the extension of time.

9. All payments by the Bank under this contract will be made only at **UBI, VADODARA REGION**. Any dispute arising under this Agreement shall be referred to arbitration in accordance with the stipulation laid down in the general conditions of contract.

10. The contents of this agreement have been read by the contractor.

IN WITNESS WHEREOF the Bank and the Contractor have set their respective hands to these Presents and two duplicates hereof the day and year first herein above written (If the Contractor is a Partnership Firm or an Individual).

IN WITNESS WHEREOF the Bank has set its hands to these presents through its duly authorized official and the contractor has caused its common seal to be affixed hereunto and the said duplicates have/has caused these presents and the said two duplicates hereof to be executed on its behalf, the day and year first herein above written (If contractor is a Company).

Signature Clause:

Signature clause:

SIGNED AND DELIVERED

By the hand of Shri \_\_\_\_\_ (Name and Designation)

In presence of \_\_\_\_\_

1. \_\_\_\_\_

Address \_\_\_\_\_

2. \_\_\_\_\_

Address \_\_\_\_\_

(Witness)

SIGNED AND DELIVERED by \_\_\_\_\_ (If the Contractor is a Partnership Firm or an individual , should be signed by all partners or by duly authorized person on behalf of all partners)

(1) \_\_\_\_\_



Address \_\_\_\_\_  
(2) \_\_\_\_\_  
Address \_\_\_\_\_  
(Witness)

THE COMMON SEAL OF \_\_\_\_\_ was here into affixed pursuant to the resolution By Board of Directors at the Meeting held on \_\_\_\_\_ ( If the Contractor signs under its common seal, the Signature Clause should tally with the sealing clause in the Articles of Association)

SIGNED AND DELIVERED by

(1) \_\_\_\_\_  
(2) \_\_\_\_\_

1) \_\_\_\_\_  
Address \_\_\_\_\_  
(2) \_\_\_\_\_  
Address \_\_\_\_\_

(Witness)

SIGNED AND DELIVERED by \_\_\_\_\_ (If the Contractor has signed by the hand of Power of Attorney , whether a Company or Individual)

(1) \_\_\_\_\_  
Address \_\_\_\_\_

(2) \_\_\_\_\_  
Address \_\_\_\_\_

(Witness)

## GENERAL CONDITIONS OF CONTRACT

### 1.0 DEFINITIONS

“Contract” means the documents forming the tender and the acceptance thereof and the formal agreement executed between Union Bank of India (client) and the Contractor, together with the documents referred therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architects/Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.

1.1.1 ‘UBI shall mean Union Bank of India (client) having its Regional Office at 2<sup>ND</sup> Floor, UBI Bhavan, Station Road, Sayajigunj, Vadodara-390005, Gujarat. and includes the Client’s representatives, successors and assigns.

‘Architect/consultants’ shall mean APPOINTED ARCHITECTS: Shaw Architects having its Head Office at SF-218, Samanvay Silicon, Sayajigunj, Vadodara-3900 05 and it shall include its representative, successors and assigns.

1.1.2 ‘Site Engineer’ shall mean an Engineer appointed by the Bank or the Architect or by the Bank through Architect.

1.1.3 As their representative to give instructions to the contractor.

1.1.4 ‘The Contractor’ shall mean the individual or firm or company whether Incorporated or not, undertaking the works and shall include legal personal representative of such individual or the composing the firm or company and the permitted assignees of such individual or firm or company.

The expression ‘Works’ or ‘Works’ shall mean the permanent or temporary work described in the ‘Scope of Work’ and/or to be executed in accordance with the contract and includes materials, apparatus, equipment’s, temporary supports, fittings and things of all kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.

1.1.5 ‘Engineer’ shall mean the representative of the Architect/Consultant.

1.1.6 ‘Drawings’ shall mean the drawings prepared by the Architects and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time ‘Contract value shall mean the value of the entire work as stipulated in the letter of acceptance of tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.

1.1.7 ‘Specifications’ shall mean the specifications referred to in the tender and any modifications thereof as may time to time be furnished or approved by the Architects/consultant. “Month” mean calendar month.

1.1.8 ‘Week’ means seven consecutive days.

1.1.9 ‘Day’ means a calendar day beginning and ending at 00 hr and 24 hrs respectively.

### CLAUSE

#### 1.0 TOTAL SECURITY DEPOSIT

Total Security Deposit shall be as defined in “NIT”.

##### a) EARNEST MONEY DEPOSIT

The tenderer shall furnish EMD as specified in the NIT in the form of Demand draft drawn in favor of the Union Bank of India on any Scheduled Bank. No tender shall be considered unless the EMD is so deposited in the required format. No interest shall be paid on this EMD. The EMD of the unsuccessful tenderer shall be refunded soon after the decision to award the contract is taken without interest. The EMD shall stand absolutely forfeited if the tenderer revokes his tender at any time during the period when he is required to keep his tender open for acceptance by the UBI or after it is accepted by the UBI the contractor fails to enter into a formal agreement or fails to pay the initial security deposit as stipulated or fails to commence the work within the stipulated time.

##### b) INITIAL SECURITY DEPOSIT (ISD)

The amount of ISD shall be 2% of accepted value of tender including the EMD. Balance of ISD (i.e. excluding EMD) is to be submitted in the form of D/D drawn on any scheduled Bank and shall be deposited within 15 days from the date of letter of acceptance of tender.

##### c) RETENTION MONEY

The retention percentage (i.e. deduction from interim bill) shall be 8% of the gross value of each interim bill. The maximum amount of retention money shall be the balance amount of the Total Security Deposit.

50% of the retention amount is refunded to the contractor on completion subject to the following:

- i. Issue of Virtual Completion Certificate by the Architect / Premises Department.
- ii. Contractor's removal of his materials, equipment, labour force, temporary sheds / stores etc. from the site, (excepting for a small presence required if any for the Defect Liability Period and approved by the Bank).

The remaining 50% of the amount may be refunded 14 (fourteen) days after the end of defects liability period provided, he has satisfactorily carried out all the works and attended to all defects in accordance with the conditions of the Contract, including site clearance.

## 2.0 LANGUAGE

The language in which the contract documents shall be drawn shall be in English.

## 3.0 ERRORS, OMISSIONS AND DISCREPANCIES

In case of errors, omissions and/or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc., the following order shall apply:

- i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
- ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.
- iii) Between written description of items in the specifications and description in bills of quantities of the same former shall be adopted.
  - a) In case of difference between rates written in figures and words, the rate in word shall prevail.
  - b) Between the duplicate/subsequent copies of the tender, the original tender shall be taken as correct.

## SCOPE OF WORK

The contractor shall carryout complete and maintain the said work in every respect strictly in accordance with this contract and with the directions of and to the satisfaction of the Bank to be communicated through the Architect/Consultant. The Architect/Consultant at the directions of the Bank from time to time, issue further drawings and/or written instructions, detail directions and explanations which are hereafter collectively referred to as the Architect/Consultant's instructions in regard to the variation or modification of the design, quality or quantity of work or the addition or omission or submission of any work. Any discrepancy in the drawings or between the BOQ and/or drawings and/or specifications, the removal from the site of any material brought thereon by the Contractor and any submission of any other materials thereof the removal and or re-execution of any work executed by him, the dismissal from the work of any person employed/engaged there upon.

## 5.0

### (I) LETTER OF ACCEPTANCE:

Within the validity period of the tender, the Bank shall issue a letter of acceptance either directly or through the Architect/Consultant by registered post or otherwise depositing at the address of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a binding contract between the UBI and the contractor.

### (II) CONTRACT AGREEMENT:

On receipt of intimation of the acceptance of tender from the UBI/Architect the successful tenderer shall be bound to implement the contract and within fifteen days thereof. He shall sign an agreement on a non- judicial stamp paper of appropriate value. The successful contractor may be required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, incidental thereto.

## 6.0 OWNERSHIP OF DRAWINGS:

All drawings, specifications and copies thereof furnished by the UBI through its Architect/Consultants are the properties of the UBI. They are not to be used on other work.

## 7.0 DETAILED DRAWINGS AND INSTRUCTIONS:

The UBI through its Architect/Consultants shall furnish with reasonable promptness additional instructions by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the contract document, true developments thereof and reasonably inferable there from.

The work shall be executed in conformity therewith and the contractor will prepare a detailed program schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the UBI through its Architect/Consultant.

**8.0 COPIES OF AGREEMENT:**

Two copies of agreement duly signed by both the parties with the drawings shall be handed over to the contractors.

**9.0 LIQUIDATED DAMAGES:**

If the contractor fail to maintain the required progress or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the UBI on account of such breach to pay a liquidated damages as mentioned in NIT.

**10.0 MATERIALS, APPLIANCES AND EMPLOYEES:**

Unless or otherwise specified the contractor shall provide and pay for all materials, labor, water, power, tools, equipment, transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be of best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or any one not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by the UBI/Architect/Consultant shall be removed from the site immediately.

**11.0 PERMITS, LAWS AND REGULATIONS:**

Permits and licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notice and comply with the regulations, laws and ordinances, rules applicable to the contract. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify the UBI in writing under intimation of the Architect/Consultant. If the contractor performs any act which is against the law, rules and regulations he shall meet all the costs arising there from and shall indemnify the UBI any legal actions arising there from.

**12.0 SETTING OUT WORK:**

The contractor shall set out the work and shall be responsible for the true and perfect setting out the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof and got it approved by the Architect/Consultant before proceeding with the work at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the Architect/Consultant the contractor shall be responsible for the same and shall at his own expenses rectify such error, if so, required to satisfaction of the UBI.

**13.0 PROTECTION OF WORKS AND PROPERTY:**

The contractor shall continuously maintain adequate protection, of all his work from damage and shall protect the UBI's properties from the injury or loss arising in connection with contract. He shall make good any such damage, injury, loss, except due to causes beyond his control and not due to his fault or negligence.

He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protections of his employees on the works and shall comply with all applicable provisions of Govt. and local body's safety laws and building codes to prevent accidents or injuries to persons or property on about or adjacent to his place of works. The contractor shall take insurance cover as per clause at his own cost. The policy may be taken in joint names of the contractor and the UBI and the original policy may be lodged with the UBI.

**14.0 INSPECTIONS OF WORK:**

The UBI/Architect/Consultant or their representatives shall at all reasonable times have free access to the work site and/or to the workshop, factories, or other places where materials are laying or from where they are obtained and the contractor shall give every facility to the UBI/Architect/Consultant and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the UBI/Architect/Consultant except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's organization a wing of Central Vigilance commission.

**15.0 ASSIGNMENT AND SUBLETTING:**

The whole of work included in the contract shall be executed by the contractor and he shall not directly entrust and engaged or indirectly transfer, assign or underlet the contract or any part or share thereof or interest therein without the written consent of the UBI though the Architect and no undertaking shall relieve the contractor from the responsibility of the contractor form active superintendence of the work during its progress.

**16.0 QUALITY OF MATERIALS, WORKMANSHIP & TEST**

i) All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with the Architect/Consultant's instruction and shall be subject from time to time to such test as the Architect/Consultant may direct at the place of manufacture of fabrication or on the site or in an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labor and materials as are normally required for examining, measuring, sampling and testing any material or part of work before incorporation in the work for testing a may be selected and required by the Architect/Consultant.

**ii) Samples**

All samples of adequate numbers, size, shades & pattern as per specifications shall be supplied by the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature/test certificate of the same shall be provided to the satisfaction of the Architect/Consultant. Before submitting the sample/literature the contractor shall satisfy himself that the material/equipment for which he is submitting the sample/literature meet with the requirement of tender specification. Only when the samples are approved in writing by the Architect/Consultant the contractor shall proceed with the procurement and installation of the particular material/equipment. The approved samples shall be signed by the Architect/Consultant for the identification and shall be kept on record at site office until the completion of the work for inspection/comparison at any time. The Architect/Consultant shall take responsibility time to approve the sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies, inadequacy, delay in furnishing samples of best qualities from various manufactures and such other aspects causing delay on the approval of the material/equipment etc. shall be to the account of the contractor.

**iii) Costs of Test**

The cost of making any test shall be borne by the contractor if such test is intended by or provided for in the specifications or BOQ.

**iv) Cost of test not provided for**

If any test is ordered by the Architect/Consultant which is either

a) If so intended by or provide for or (in the cases above mentioned) is not so particularized, or though so intended or provided for but ordered by the Architect/Consultant to be carried out by an independent person at any place other than the site of the place of manufacture or fabrication of the materials tested or any Government approved laboratory, then the cost of such test shall be borne by the contractor.

**17.0 OBTAINING INFORMATION RELATED TO EXECUTION OF WORK:**

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work or any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

**18.0 CONTRACTOR'S SUPERINTENDENCE**

The contractor shall give necessary personal superintendence during the execution of the works and as long, thereafter, as the Architect/Consultant may consider necessary until the expiry of the defect's liability period, hereto.

**19.0 QUANTITIES:**

i) The bill of quantities (BOQ) unless or otherwise shall be deemed to have been prepared in accordance with the Indian Standard method of Measurements and quantities. The rate quoted shall remain valid for variation of quantity against individual item to any extent.

**20.0 WORKS TO BE MEASURED**

The Architect/Consultant may from time to time intimate to the contractor that he requires the work to be measured and the contractor shall forthwith attend or send a qualified representative to assist the Architect in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the mode of Measurements detailed in the specifications. The representative of the Architect/Consultant shall take the joint measurements with the contractor's representative and the measurements shall be entered in the measurement book. The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance. All the corrections shall be duly attested by both representatives. No over writings shall be made in the measurement book. Should the contractor no attend or neglect or omit to depute his representative to take measurements then the measurements recorded by the representative of the

Architect/Consultant shall be final. All authorized extra work, omissions and all variations made shall be included in such measurement,

#### **21.0 VARIATIONS**

No alteration, omission or variation ordered in writing by the Architect/Consultant shall vitiate the contract. In case the UBI/Architect/Consultant thinks proper at any time during the progress of works to make any alteration in, or additions to or omissions from the works or any alteration in the kind or quality of the materials to be used therein, the Architect/Consultant shall give notice thereof in writing to the contractor or shall confirm in writing within seven days of giving such oral instructions, the contractor shall alter to, add to, or omit from as the case may be in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulations, specifications or contract drawings without previous consent in writing of the Architect/Consultant and the value of such extras, alternations, additions or omissions shall in all cases be determined by the Architect/Consultant and the same shall be added to or deducted from the contract value, as the case may be.

#### **22.0 VALUATION OF VARIATIONS:**

a) No claim for an extra shall be allowed unless it shall have been executed under the authority of the Architect/Consultant with the concurrence of the UBI s herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

i) The net rates or prices in the contract shall be determine in the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.

ii) Rates for all items, wherever possible should be derived out of the rates given in the priced BOQ.

b) The net price of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of works are carried out, otherwise the prices for the same shall be valued under sub-clause (c) hereunder.

c) Where the extra works are not of similar character and/or executed under similar conditions are aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the Architect/Consultant of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the Architect/Consultant shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper based on the market rate.

d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates Union in the tender of the BOQ or, if not, so Union then in accordance with the local day work rates and wedges for the district; provided that in either case, vouchers specifying the daily time (and if required by the Architect/Consultant) the workman's name and materials employed be delivered for verifications to the Architect/Consultant at or before the end of the week following that in which the work has been executed.

e) It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the Contractor shall submit rates duly supported by rate analysis worked on the "market rate basis" for material, labor, hire/running charges of equipment's and wastage etc. plus 15% toward establishment charges, contractor's overheads and profits. Such items shall not be eligible for escalation.

#### **23.0 FINAL MEASUREMENTS:**

The measurements and the valuation in respect of the contract shall be completed within six months of the virtual completion of the work.

#### **24.0 VIRTUAL COMPLETION CERTIFICATE (VCC)**

On successful completion of the entire works covered by the contract to the full satisfaction of the UBI, the contractor shall ensure that the following works has been completed to the satisfaction of the UBI.

a) Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labor, equipment and machinery.

b) Demolish, dismantle and remove the contractor's site office, temporary works, structure including labor sheds/camps and construction of other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the UBI and not incorporated in the permanent works.

- c) Remove all rubbish, debris etc. from the site and the land allotted to the contractor by the UBI and shall clear, level and dress, compact the site as required by the UBI.
- d) Shall put the UBI in undisputed custody and possession of the site and all land allotted by the UBI.
- e) The contractor shall hand over the work in a peaceful manner to the UBI.
- f) All defects/imperfection have been attended and rectified as pointed out by the UBI to the full satisfaction of the UBI.

Upon the satisfactory fulfillment by the contractor as Union above, the contractor shall be entitled to apply to the Architect/Consultant is satisfied of the completion of the work. Relative to which the completion certificate has been sought, the Architect/Consultant shall within fourteen (14) days of the receipt of the applicant for virtual completion certificate, issue a VCC in respect of the work for which the VCC has been applied.

This issuance of a VCC shall be without prejudice to the UBI's rights and contractors liabilities under the contract including the contractor's liability for defect liability period nor shall the issuance of VCC in respect of the works or work at any site be construed as a waiver of any right or claim of the UBI against the contractor in respect of works or works at the site and in respect of which the VCC has been issued.

#### **25.0 WORK BY OTHER AGENCIES:**

The UBI/the Architect/Consultant reserve the rights to use premises and any portion of the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with the UBI. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract.

#### **26.0 INSURANCE OF WORKS:**

Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the UBI and the contractor against all loss or damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the UBI and contractor are covered for the period stipulated in clause 28 of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

- a) The works for the time being executed to the estimated current contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.
- b) The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.
- c) Such insurance shall be affected with an insurer and in terms approved by the UBI which approval shall not be unreasonably withheld and the contractor shall whenever required produce to the Architect/Consultant the policy of insurance and the receipts for payments of the current premiums.

#### **26.1 DAMAGE TO PERSONS AND PROPERTY**

The contractor shall, except if and so far as the contact provides otherwise indemnify the UBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to:

- a) The permanent use or occupation of land by or any part thereof.
- b) The right of UBI to execute the works or any part thereof, over, under, in or through any lands.
- c) Injuries or damages to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contact.
- d) Injuries or damages to persons or properties resulting from any act or neglect of the UBI, their agents, employees or other contractors not being employed by the contractor or for or in respect of any claim, proceedings damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents. Such part of the compensation as may be just and equitable having regard to the extent of the

responsibility of the UBI, their employees, or agents or other employees, or agents or other contractors for the damage or injury.

#### **26.2 CONTRACTOR TO INDEMNIFY UBI**

The contractor shall indemnify the UBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision of this sub-clause 26.2.

#### **26.3 CONTRACTOR'S SUPERINTENDENCE**

The contractor shall fully indemnify and keep indemnified the UBI against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made under or action brought against UBI in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the UBI if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Architect/Consultant in this behalf.

#### **26.4 THIRD PARTY INSURANCE**

**26.4.1** Before commencing the execution of the work the contractor but without limiting obligations and responsibilities under clause 26.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of UBI, or to any person, including any employee of the UBI, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 26.0 thereof.

#### **26.4.2 MINIMUM AMOUNT OF THIRD-PARTY INSURANCE**

Such insurance shall be effected with an insurer and in terms approved by the UBI which approval shall not be reasonably withheld and for at least the amount Union below. The contractor shall, whenever required produce to the Architect/Consultant the policy or policies of insurance cover and receipts for payment of the current premiums.

The minimum insurance cover for physical property, injury and death is Rs. 2.0 lacs per occurrence with the number of occurrences limited to four. After each occurrence contractor will pay additional premium necessary to make insurance valid for four occurrences always.

#### **26.5 ACCIDENT OR INJURY TO WORKMAN:**

**26.5.1** The UBI shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of the UBI or their agents or employees. The contractor shall fully indemnify and keep indemnified the UBI against all such damages and compensations, save and except as aforesaid and against all claim's proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

#### **26.5.2 INSURANCE AGAINST ACCIDENTS ETC. TO WORKMEN:**

The contractor shall insure against such liability with an insurer approved by the UBI during the whole of the time that any person is employed by him on the works and shall, when required, produce to the Architect/Consultant such policy of insurance and receipt for payments of the current premium. Provide always that, in respect of any persons employed by any sub-contractor, the contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that UBI is indemnified under the policy but the contractor shall require such sub-contractor to produce to the Architect/Consultant when such policy of insurance and the receipt for the payment of the current premium.

#### **26.5.3 REMEDY ON CONTRACTOR'S FAILURE TO INSURE:**

If the contractor fails to effect and keep in force the insurance to above referred to above or any other insurance which he may be required to effect under the terms of contract, then and in any such case the UBI may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the UBI as aforesaid from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

**26.5.4** Without prejudice to the other rights of the UBI against the contractor, in respect of such default, the Bank shall be entitled to deduct from any sums payable to the contractor the amount of any damages, costs, charges and other expenses paid by the UBI and which are payable by the contractor under this clause. The contractor shall upon settlement by the insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the insurer in respect of such

damage shall be paid to the contractor and the contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or good destroyed or damaged.

**27.0 COMMENCEMENT OF WORKS:**

The date of commencement of the work will be reckoned as the date of handing over site or fifteen days from the date of issue of letter of acceptance of the tender by the UBI whichever is later.

**28.0 TIME OF COMPLETION:**

Time is essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within as specified in the NIT from the date of commencement. If required in the contract or as directed by the Architect/Consultant, the contractor shall complete certain portions of work before completion of the entire work. However, the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.

**29.0 EXTENSION OF TIME:**

If, in the opinion of the Architect/Consultant, the work be delayed for reasons beyond the control of the contractor, the Architect/Consultant may submit a recommendation to the UBI to grant a fair and reasonable extension of time for completion of work as per the terms for contract. If the contractor needs and extension of the time for completion of the work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the UBI through the Architect/Consultant in writing at least 30 days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reasons in detail and his justification if any, for the delays. The Architect/Consultant shall submit their recommendations to the UBI in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended times, which will quality for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the UBI. The provision of liquidated damages as Union under clause 9 GCC shall become applicable. Further the correct shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

**30.0 RATE OF PROGRESS:**

Whole of the materials, plant and labor to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works to be of a kind and conducted in a manner to the satisfaction of the Architect/Consultant should the rate of progress of the work or any part thereof be at any time be in the opinion of the Architect/Consultant too slow to ensure the completion the whole of the work by the prescribed time or extended time for completion the Architect/Consultant shall thereupon take such steps as considered necessary by the Architect/Consultant to expedite progress so as to complete the works by the prescribed time extended time. Such communications from the Architect/Consultant neither shall relieve the contractor from fulfilling obligations under the contract nor will he be entitled to raise any claims arising out of such directions.

**31.0 WORK DURING NIGHTS AND HOLIDAYS:**

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the Architect/Consultant, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the Architect/Consultant. However, the provisions of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order to achieve the progress and quality of the part of the work being technically required/continued with the prior approval of the Architect/Consultant at no extra cost to the UBI.

All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

**32.0 NO COMPENSATION FOR RESTRICTIONS OF WORK:**

If at any time after acceptance of the tender UBI shall deduct to abandon or reduce the scope of work for any reason whatsoever and hence not required the whole or any part of the work to be carried out, the Architect/Consultant shall give notice in writing to that effect to the contactor and the contactor shall acct accordingly. In the matter the contactor shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the execution of the work fully but which he did not derive in consequences of the foreclosure of the whole or part of the work.

Provided that the contactor shall be paid the charges on the cartage only of materials actually and bonafide brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any position thereof and taken back by the contactor, provided however that the Architect/Consultant shall have in such cases the

opinion of taking over all or any such material at their purchase price or at local current rate whichever is less. "In case such stores having been issued from UBI stores and returned by the contractor to stores, credits shall be given to him at the less rate not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of the Architect/Consultant shall be final.

### 33.0 SUSPENSION OF WORK:

- i) The contractor shall, on receipt of the order in writing of the Architect/Consultant (whose decision shall be final and binding on the contractor) suspended the progress of work or any part thereof for such time and in such manner as the Architect/Consultant may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
  - a) On account any default on the part of the contractor, or
  - b) For proper execution of the works or part thereof for reasons other than the default the contractor or
  - c) The contractor shall during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Architect/Consultant.
- ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above: The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

### 34.0 ACTION WHEN THE WHOLE SECURITY DEPOSIT IS FORFEITED

In any case in which under any clause or clauses of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the Architect/Consultant shall have the power to adopt any of the following course as they may deem best suited to the interest of the UBI.

- a) To rescind the contact (of which rescission notice in writing to the contractor by the Architect/Consultant shall be conclusive evidence) and in which case the security deposit of the contractor shall be forfeited and be absolutely at the disposal of UBI.
- b) To employ labor paid by the UBI and to supply materials to carry out the work, or any part of the work, debiting the contractor with the cost of the labor and materials (the cost of such labor and materials as worked out by the Architect/Consultant shall be final and conclusive against the contractor.) and crediting him with the value of the work done, in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract, the certificate of the Architect/Consultant as to the value of work done shall be final and conclusive against the contractor.
- c) To measure up the work of the contractor, and to take such part thereof as shall be unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess the certificates in writing of the Architect/Consultant shall be final and conclusive) shall be borne by original contractor and may be deducted from any money due to him by the UBI under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by the UBI the contractor shall have no claim for compensation for any loss sustained by him by reasons of his having purchased or procured any material or entered into any engagements or make any advances on account of, or with a view to the execution of the work or the performance of the contract and in case the contract shall rescind under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the Architect/Consultant will have 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.

### 35.0 OWNER'S RIGHT TO TERMINATE THE CONTRACT:

If the contractor being an individual or a firm commit any 'Act of Insolvency' or shall be adjusted an Insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Govt. and of the Official Assignee of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to

him to do so, to show to the reasonable satisfaction of the Architect/Consultant that he is able to carry out and fulfill the contract and to give security therefore if so required by the Architect/Consultant.

Or if the contractor (whether an individual firm or incorporated company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor. Or shall assign or sublet this contract without the consent in writing of the UBI through the Architect/Consultant or shall charge or encumber this contract or any payment due to which may become due to the contractor there under:

- a) has abandoned the contract; or
- b) has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the UBI through the Architect/Consultant written notice to proceed, or
- c) has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the UBI through the Architect/Consultant that the said materials were condemned and rejected by the Architect/Consultant under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the contractor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance to the UBI's or the Architect/Consultant's instructions to the contrary subject any part of the contract. Then and in any of said cases the UBI and or the Architect/Consultant, may not withstanding any previous waiver, after giving seven days' notice in writing to the contractor, determine the contract, but without thereby affecting the power the UBI or the Architect/Consultant or the obligation and liabilities of the contractor the whole of which shall continue in force as fully as if the contract had not been so determined and as if the works subsequently had been executed by or on behalf of the contractor. And further the UBI through the Architect/Consultant their agents or employees may enter upon and take possession of the work and all plants, tools, scaffoldings, materials, sheds, machineries lying upon the premises or on the adjoining lands or roads use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to complete the work and the contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for completing and finishing or using the materials and plant for the works.

When the works shall be completed as soon thereafter as convenient the UBI or the Architect/Consultant shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receipt thereof by him the UBI sell the same by public auction. The contractor shall have no right to question any of the act of the UBI incidental to the sale of the materials etc.

### **36.0 CERTIFICATE OF PAYMENT:**

The contractor shall be entitled under the certificates to be issued by the Architect/Consultant to the contractor within 10 working days from the date of receipt of certificate to the payment from UBI from time to time. The UBI shall recover the statutory recoveries other dues including the retention amount from the certificates of payments.

They shall provide always that the issue of any certificate by the Architect/Consultant during the progress of works or completion shall not have effect as certificate of satisfaction or relive the contractor from his liability under clause.

The Architect/Consultant shall have power to withhold the certificate if the work or any part thereof is not carried out to their satisfaction.

The Architect/Consultant may by any certificate make any corrections required in previous certificate.

The UBI shall modify the certificate of payments as issued by the Architect/Consultant from time to time while making the payment. The contractor shall submit interim bills only after taking actual measurements and properly recorded in the M books.

The contractor shall not submit interim bills when the approximate value of work done by him is less than Rs 6 lacs and the minimum interval between two such bills shall be one month.

The final bill may be submitted by the contractor within a period of one month from the date of virtual completion and the Architect/Consultant shall issue the certificate of payment within a period of two months. The UBI shall pay the amount within a period of three months from the date of issue of certificate provided there is no dispute in respect of rates and quantities etc.

The contractor shall submit the interim bills in the prescribed format with all details.

### 37.0 SETTLEMENT OF DISPUTES AND ARBITRATION:

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instruction, orders or these conditions or otherwise concerning the work or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

i) If the contractor consider that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the Architect or in case the contractor wants to dispute the validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the contractors shall forthwith give notice in writing of his claim, or dispute to **REGIONAL OFFICE, VADODARA** and endorse a copy of the same to the Architect, within 30 days from the date of disallowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the Bank be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to the **REGIONAL OFFICE, UBI VADODARA**. in the manner and within the time as aforesaid. The contractor shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to the Chief Manager (P&E) in writing in the manner and within the time aforesaid.

ii) The Chief Manager (P&E) shall give his decision in writing on the claims notified by the contractor. The contractor may within 30 days of the receipt of the decision of the Chief Manager (P&E) submit his claims to the conciliating authority namely the for conciliation along with all detail and copies of correspondence exchanged between him and the Deputy General Manager.

iii) If the conciliation proceedings are terminated without settlement of the disputes, the contractors shall, within a period of 30 days of termination thereof shall give a notice to the concerned CHIEF GENERAL MANAGER of the Bank for appointment of an arbitrator to adjudicate the notified claims failing which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.

iv) Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the CHIEF GENERAL MANAGER. It will so be no objection to any such appointment that the Arbitrator so appointed is a Bank Officer and that he had to deal with the matters to which the contract relates in the course of his duties as Bank Officer. 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 by the said Chief General Manager. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

It is also a term of this contract that no person other than a person appointed by such Chief General Manager as aforesaid should act as arbitrator.

The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or reenactment thereof and the rules made there under.

It is also a term of this contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a Bank Officer.

It is also a term of this contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their Union of claims and counter Union of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of 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 any 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.

### 38.0 WATER SUPPLY

The contractor shall make his own arrangement for water required for the work and nothing extra will be paid for the same. This will be subjected to the following conditions:

- i) That the water used by the contractor shall be fit for construction purposes to the satisfaction of the Architect/Consultant.
- ii) The contractor shall make alternative arrangement for the supply of water if the arrangement made by the contractor for procurement of water in the opinion the Architect/Consultant is unsatisfactory.

**38.1** The contractor shall construct temporary well/tube well in UBI land for taking water for construction purpose only after obtaining permission in writing for the UBI. The contractor has to make his own arrangements for drawing and distributing the water at his own cost. He has to make necessary arrangements, to avoid any accidents or damage caused due to construction and subsequent maintenance of the well. He has to obtain necessary approvals from the local authorities, if required, at his own cost. He shall restore the ground to its original condition after wells are dismantled on completion of the work or hand over the well to the UBI without any compensation as directed by the Architect/Consultant.

### 39.0 POWER SUPPLY:

The contractor shall make his own arrangement for power and supply/distribution system for driving plant or machinery for the work and for lighting purpose at his own cost. The cost of running and maintenance of the plants are too included in his tender prices. He shall pay all fees and charges required for the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approvals from the appropriate authorities, if required.

### 40.0 TREASURE TROVE ETC.:

Any treasure trove, coin or object antique which may be found on the site shall be the property of the UBI and shall be handed over to the bank immediately.

### 41.0 METHOD OF MEASUREMENTS:

Unless otherwise mentioned in the schedule of quantities or in mode of measurement or elsewhere in these documents the measurement will be on the net quantities or work produced in accordance with up to date as per rules laid down by the Bureau of Indian Standards. In the event any dispute/disagreement the decision of the Architect/Consultant shall be final and binding on the contractor.

### 42.0 MAINTENANCE OF REGISTERS:

The contractor shall maintain the registers as directed/instructed by the Bank/Architects as per the approved Performa at site of work and should produce the same for inspection of the UBI/the Architect/Consultant whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities/Govt. from time to time.

- (1) Register for secured advance
- (2) Register for Hindrance to work
- (3) Register for Running Account Bill
- (4) Register for Labor

### 43.0 FORCE MAJEURE:

43.1 Neither contractor nor UBI shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as but not to war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storm, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable

control of the party affected or prevented or delayed. However, a notice is required to be given within 30 days from the happening of the event with complete details to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.

43.2 As soon as the clause of force majeure has been removed the party whose ability to perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.

43.3 From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With the cause it and inability resulting their form having been removed, the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.

43.4 Should one or both parties be prevented from fulfilling the contractual obligations by a Union of force major lasting to a period of 6 months or more the two parties shall each other to decide Regarding the future execution of this agreement?

**44.0 LOCAL LAWS, ACTS, REGULATIONS:**

The contractor shall strictly adhere to all prevailing labor laws inclusive of contract labor (regulation and abolition act of 1970) and other safety regulation. The contractor shall comply with the provision of all labor legislation including the latest requirements of all the Acts, Laws, any other regulations that are applicable to the execution of the project.

- i) Minimum Wages Act 1948 (Amended)
- ii) Payment of Wages Act 1936 (Amended)
- iii) Workmen's Compensation Act 1923 (Amended)
- iv) Contract labor regulation and abolition act 1970 and central rules 1971 (Amended)
- v) Apprentice act 1961 (Amended)
- vi) Industrial employment (standing order) Act 1946 (Amended)
- vii) Personal injuries (compensation insurance) act 1963 and any other modifications
- viii) Employees' provident fund and miscellaneous provisions Act 1952 and amendment thereof
- ix) Shop and establishment Act
- x) Any other act or enactment relating thereto and rules framed there under from time to time.

**46.0 ACCIDENTS:**

The contractor shall immediately on occurrence of any accident at or about the site or in connection with in execution of the work report such accident to the Architect/Consultant. The contractor shall also such report immediately to the competent authority wherever such report is required to be lodged by the law and take appropriate actions thereof.

**47.0 REMOVAL OF IMPROPER WORK:**

The Bank / Architect shall during the progress of the work have power to order in writing form time to time the removal from the work within such reasonable time to time as any be specified in the order of any materials which in the opinion of the Bank / Architects 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 the drawings and specifications or instruction. In case the contractor refuses to comply with the order the Bank shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereof as certified by the Bank /Architects 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 Architects, shall relieve the contractor from his liability in respect of unsound work or bad materials. The decision of the Banks in this regard shall be final and binding on the contractor.

**48.0 DISMISSAL OF WORKMEN:**

The contractor shall on the request of the Bank / Architect immediately dismiss from works any person employed thereon by him. Who may in opinion of the Bank / Architect is unsuitable or incompetent or who may misconduct? Such discharge shall not be the basis of any claim for compensation or damages against the Bank or any of their chief officer or employee.

**49.0 CONTRACTOR'S EMPLOYEES:**

The contractor shall employ technically qualified and competent supervisors for the work shall be available (by turn) throughout the working hours to receive and comply with instructions of the Bank /Architects. The contractor shall engage at least one experienced engineer as site in charge for execution of the work. The contractor shall employ in connection with the work persons having the appropriate skill or ability to perform their job efficiently. The contractor shall employ local laborers on the work as far as possible. No laborer below the age of sixteen years and who is not an Indian shall be employed on the work. Any laborer supplied by the contractor to be engaged on the work on day-work basis either wholly or partly under the direct order on control of the Bank or his representative shall be a person employed by the contractor. The contractor shall comply with the provisions of all labor legislation including the requirements of

- (a) The payment of wages act.
- (b) Bank 's liability act.
- (c) Workmen's compensation act.
- (d) Contract labor (regulation & abolition) act, 1970 and central rules 1971.
- (e) Apprentices act. 1961.
- (f) Any other act or enactment relating thereto and rules framed hereunder from time to time.

The contractor shall keep the Bank saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Bank in connection with any claim that may be made by any workmen. The contractor shall comply at his own cost with the order of requirement of any health officer of the State or any local authority or the Bank regarding the maintenance of proper environmental sanitation of the area where the contractor's laborers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The contractor shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind on the works or the lands adjoining the same. The contractor shall arrange to provide first-aid treatment to the laborer's engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Bank and also to the competent authority where such report is required by law.

**50.0 ASSIGNMENT:**

The contractor shall execute the whole of the works included in the contract and the contractor shall not directly or indirectly transfer, assign or underwrite the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Bank 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.

**51.0 CLEARING SITE ON COMPLETION:**

On completion of the works the contractor shall clear away and remove from the site all construction plant, surplus material, 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 Bank / Architects.

**52.0 DEFECTS AFTER COMPLETION:**

The contractor shall make good at his own cost and to the satisfaction of the Bank / Architects all defects, shrinkage, settlements or other faults which may appear within 12 months after completion of the work- In default the Bank may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Bank or may be deducted by the Bank, in lieu of such amending and making good by the contractor, deduct from any money due to the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that balance from the contractor from the amount retained together with any expenses the Bank may have incurred in connection therewith.

**53.0 CONCEALED WORK:**

The contractor shall give due notice to the Bank / Architects whenever any work is to be buried in the earth, enclosed or in the bodies of walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default where of the same shall, at the opinion of the Bank / Architect be either opened up for measurement at the contractor's expenses or no payment may be made for such materials Should any dispute or differences arise after the execution of any work as to measurements etc. or other matters which cannot be conveniently tested or checked the notes of the Bank / Architects shall be accepted as correct and binding on the contractor.

**54.0 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 or materials, labor, sales tax, octroi, etc. (EXCLUDING GST).

**55.0 SIGNING OF TENDER:**

The tender shall contain the name residence and place of business of person or person making the tender and shall be signed by the contractor with his usual signature. Partnership firms shall furnish the full name of all partners in the tender. It should be signed in the partnership name by all partners or by duly authorized representative followed by corporation shall be signed by an authorized representative, and in power of Attorney in that behalf shall accompany the tender. A copy of constitution of the firm with names of all partners shall be furnished.

**56.0 TRANSFER OF TENDER DOCUMENTS:**

Transfer of tender documents purchased by one intending contractor to another is not permitted.

## **CONDITIONS OF THE CONTRACT**

### **NOTE:**

The requirements of these conditions shall be fulfilled by the Tenderer without extra charges, the item rates quoted shall be deemed to have taken these conditions into account.

3.1 If any additions and alterations are found necessary the Tenderer will have to do the same within the Tendered rates with the approval of the Bank.

3.2 The Contractor shall employ adequate labor to complete the work within the scheduled time and shall make his own arrangements for housing materials etc.

3.3 The Contractor shall have to make his own arrangements to house & food for his labor and staff, and for their services.

3.4 All Tendered rates shall include for the cost of materials, labor, supervision, tools, plant, transport, all taxes, contingencies duties, breakages, wastages, sundries, scaffolding etc., complete.

3.5 All instructions regarding the execution of works shall be received from the Bank only. Any other instructions issued directly to the contractor by anyone else shall not be binding on the Contractor.

3.6 The Bank, through the Consultants, shall have the power on omit or cancel; any item of work without assigning any reason whatsoever and no claim for compensation for damage will be entertained for such omissions and cancellations.

3.7 The Contractor shall maintain satisfactory progress of work as well as maintain a desired level of workmanship. If in the opinion of the Bank if the progress is unsatisfactory and/or the workmanship is unsatisfactory, the Bank shall take possession of the work with 7 days to that effect. The Bank shall then complete the entire work and rectify all the defects at the Contractors cost and consequences.

3.8 The case the Bank is not satisfied with the quality of materials used by the Contractors, Bank reserves the right to direct the Contractor to procure such supplies from the agencies suggested by the Bank and the Contractor is bound by this instruction for purchase of materials.

3.9 The Contractor is to be responsible for clearing any or all dirt, rubbish, and superfluous materials as they accumulate and to leave the premises in a clean and orderly condition on completion. No extra payment shall be made for doing this work.

3.10 Any work which is not approved by the Bank shall have to be removed within 24 hours from the time of order and shall have to be redone by the Contractor at his own cost and this cost will be borne by the Contractor.

3.11 No deviation whatsoever for any reason will be permitted. However, if any deviation becomes necessary, the same should be brought to the immediate notice of the Bank and written approval must be obtained for such deviation before proceeding with the execution of work.

3.12 The Bank has got the right to supply any materials required for the work and the cost of the materials so supplied will deducted from the bills of the successful Contractor.

3.13 The Contractor shall be responsible for the safe custody of the materials issued to him by the Bank till they are used for the work. He shall make his own arrangements for the safe custody and proper storage and preservation in sound conditions till the same are actually used in the work.

3.14 For any new item the rate will be fixed by the Bank as per prevailing fair market rate, labor and overheads which will be binding on the Contractor.

3.15 The Contractor shall have a competent supervisor on the site all the times.

3.16 In case the brand of materials mentioned in the Tender is not available in the market, the alternate materials to be used shall be approved by the Bank.

3.17 The Contractor should strictly adhere to the specifications and make of the materials.

3.18 Any clarification on the specifications or further details needed, the Contractor has to contact the Bank.

3.19 Contractor should ensure the safety of his staff / Technicians/ Labor working at the work site. He should provide all necessary safety equipment to his personnel working at the site.

3.20 Contractor should obtain necessary Group Insurance for his personnel working at the site to provide medical treatment / compensation etc. to any of his staff/worker in case of any accident. Bank is not bound to provide any assistance of any form in this matter.

### ACCEPTANCE OF CONTRACTOR FOR LABOR LAWS

1. The successful Tenderer / Contractor shall carefully and diligently implement the provisions of the Contract Labor Act & Contract Labor Rules.
2. The Bank shall be entitled to deduct from the Contract Consideration, any such amount which the Bank has to pay in accordance with the Contract Labor (Regulation & Abolition) Act 1971 and Workmen's Compensation Act, in the event of the Bank have to disburse compensation / effect any payment under the Contract Labor Acts / Rules.
3. Please note that as per rule 81(1) of Contract Labor (R&A) Rules, 1971, it is mandatory on the part of the Contractor to display the notice containing the following details at prominent place at the work site.
  - (a) Rates of wages.
  - (b) Hours of work.
  - (c) Wage periods.
  - (d) Dates of payment of wages.
  - (e) Names & addresses of the Labor Inspectors having jurisdiction &
  - (f) Date of payment of unpaid wages. The notice containing the above details shall be displayed without fail at the work site.
4. The Contractor shall not engage any workmen for wages, less than the minimum wages prescribed under the notification issued by the Central Government.
5. The contractor should follow all labor laws/guidelines laid down by central /state government from time to time.

#### CERTIFICATE

I / WE HAVE READ, FULLY UNDERSTOOD THE ABOVE-MENTIONED REGULATIONS OF LABOR LAWS/GUIDELINES AND ACCEPT THE SAME IN TOTO. I ALSO UNDERTAKE TO FOLLOW ALL LABOR LAWS/GUIDELINES LAID DOWN BY CENTRAL /STATE GOVERNMENT FROM TIME TO TIME & INDEMNIFY THE BANK AUTHORITIES.

SIGNATURE OF THE CONTRACTOR  
WITH SEAL & DATE

### **SAFETY CODES: GENERAL SAFETY CODES:**

1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
2. An injured shall be taken to a Public Hospital without loss of time, in cases where the injury necessitates hospitalization.
3. Suitable and strong scaffolds should be provided for workman for all works that cannot safely be done from the ground.
4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. clear. And the distance between two adjacent rungs shall not be more than 30 cm When a ladder is used an extra mazdoor shall be engaged for holding ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the trench or half of the depth of trenches whichever is more. All trenches and excavation shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
7. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
8. Workers employed on mixing & handling material such as asphalt, cement mortar or concrete & lime mortar shall be provided with protective footwear & rubber hand-gloves.
9. Those engaged in welding work shall be provided with welder's protective eye-shields and gloves.
10. (i) No paint containing lead or lead products shall be used except in the form of paste and readymade paint.  
(ii) Suitable facemasks should be supplied for use by the workers when the paint applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overalls shall be supplied by the contractor to the painters and the adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of works.
12. Hoisting machine and tackle used in the works, including their attachments, anchors and supports shall be in perfect condition.  
The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength free from defect.

#### **FIRST AID**

- (a) At every work place, there shall be maintained in readily accessible place first aid appliance including an adequate supply of sterilized dressing and sterilized cotton wool. The appliance shall be kept in good order and in large work place they shall be placed under the charge of a responsible person who shall be readily available during working hours.
- (b) At large work places, where hospital facilities are not available within easy distance of the works, first aid posts shall be established and be run by a trained compounder.
- (c) Where large work places are remote from regular hospitals, an indoor ward shall be provided with one bed for every 250 employees.
- (d) Where large work places are situated in cities, towns in their suburbs and no beds are considered necessary owing to the proximity of city or town hospital, suitable transport shall be provided to facilitate removal or urgent cases to the hospitals. At other work places some conveyance facilities such as a car, shall be kept readily available to take injured person or persons suddenly taken ill to the nearest hospital.

#### **DRINKING WATER**

- (a) In every work place, there shall be provided and maintained at suitable places easily accessible to labor sufficient supply of cold water fit for drinking.
- (b) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- (c) Every water supply of storage shall be at a distance of not less than 15m. from any latrines, drain or other source of pollution. Where water has to be drawn from an existing well which the proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door, which shall be dust and waterproof.
- (d) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

## PREAMBLE AND SPECIFICATIONS

The quantities given in this schedule of quantities are approximate and subject to variations without vitiating the contract.

### **Pricing:**

The rate for each item of work shall, unless expressly stated otherwise, include the following (but not limited to the list given below) for the completion of works in all respects as per conditions of Contract, technical specifications, drawing etc.:

All taxes such as Octroi, Sales tax, Work Contract Tax, Royalties, Transportation, Freights, Packing and forwarding charges Insurance etc.,

All requirements and expenses for completion of work as per Rules and Regulations of Local Bodies, State Government and Central Government of India.

All materials, equipment's, accessories, consumable, controls and instruments, tools, tackles, plants, scaffolding/double scaffolding labor, maintenance, fixing, cleaning, making good hauling, hoisting etc.,

Waste on material and labor.

Loading, Unloading, handling/double handling, setting out protection from weather, temporary supports, platforms etc., and the maintenance, of the same, dismantling of temporary works, disposal of debris and all other labor necessary for the execution of works.

Testing the installation as often as necessary, Contractors to arrange for all special instruments and tools required for such testing.

Painting of all equipment, pipes, supports etc., as per color codes to be decided for various systems.

Apportion of costs for general facilities to be used by the Contractor's staff such as lifts, electricity, telephones etc. during execution if such facilities are provided by other contractors and who arrange for such facilities in the first instance.

Fees for testing the materials, equipment or overall installation by appropriate authorities.

Supervising Civil/ Masonry / Carpentry Works done by other agencies on behalf of the **Bank** for electrical contractor.

All requirements of specification and drawings. Description of work given in the schedule of quantities is a brief description and shall be read in conjunction with specifications and drawings.

Removal of POP covering and carting away all unwanted material including POP.

The rates quoted by the Tenderer will be deemed to be for the finished work complete in all respects with accessories, fitting, mounting arrangements normally provided with such equipment and/or needed for execution, completion, safe operation of equipment as required through they may not have been specifically mentioned in technical specifications, drawings and/or schedule of equipment.

All minor Masonry, Carpentry and Civil works such as cutting opening in Masonry Walls, Internal Partitions, chasing on walls, etc. and making good the same to match existing works shall be provided by the contractor, whenever asked for by the

**Architect.**

### **SCHEDULE OF QUANTITIES**

All items of work contracted for shall be executed strictly in accordance with the description of the item in the Schedule of Quantities, relevant drawings and specifications read in conjunction with the appropriate Indian Standard specifications and conditions of the contract and established Engineering practices.

The rate for each item of work included in the schedule of quantities shall unless expressly stated otherwise include cost of:

All materials, fixing materials, accessories sequence of operations, appliances, tools, plant equipment, transport labor and incidentals required and completion of the work called for in the item and as per specifications and drawings completely

Wastage on materials and labor

Loading transporting, unloading, handling as necessary, hoisting to all levels, and setting, fitting and fixing the position, protecting, disposal of debris as directed and all other labor necessary and to fully complete the job in accordance with contract documents, good practice and recognized principles of trade laid down in codes of practice.

Liabilities, obligations and risks arising out of conditions of contract.

All requirements of specifications, whether such requirements are mentioned in the item or not shall be provided for the specifications and drawings where available are to be read as complimentary to any part of the schedule of quantities and any work called for in one shall be taken as required for all similar items.

In the event of conflict between Schedule of Quantities and other documents including the specifications the most stringent among them shall apply and the interpretations of the **Architects** / owner shall be final and binding.

The Contractor shall be paid for the actual quantity of work executed by him in accordance with the drawings at the accepted rates.

This schedule shall be fully priced and the extensions and totals duly checked. The rates for all items shall be filled in INK. The entries under amount column shall be rounded off to the nearest Rupee.

No alterations whatsoever is to be made either to the description of items in the Schedule of quantities or specifications unless such alterations, is clarified in writing by the **Architect** / owner. Any such alterations, notes or additions shall unless clarified in writing be disregarded when tender documents are considered. Any observation on BOQ should be made in the letter accompanying technical bid for proper consideration and on disfiguring or overwriting in the documents is permitted.

In event of an error occurring in the amount column of the schedule, as a result of wrong extension of unit rate and quantity, the unit rate quoted by the Tenderer shall be regarded as firm and the extensions shall be amended on the basis of rates.

All errors in totaling in the amount column and in carrying forward totals shall be corrected.

Unless otherwise stated, all measurements shall be taken in accordance with Indian standard for building of Measurements IS 1200 latest revision effective on the date of measurement for interior items as applicable.

Any errors in quantity of items from the contract schedule shall not vitiate this contract but shall be corrected and deemed to be a variation by the **Architect** / Owner.

#### **DRAWINGS AND DATA**

Within two weeks of placement of order/letter of intent contractor shall furnish the following data in triplicate for approval by **Architect** / Owner.

General arrangement drawing of the equipment on orders showing plan, elevations, and sectional views, mounting details.

Bill of materials.

Descriptive catalogues, characteristic curves, duty point efficiency factor and technical particulars of all the various equipment's offered.

#### **SPARE PARTS AND MAINTENANCE FOR MATERIALS SUPPLIED**

Tenderer shall offer along with the bid, duly recommended by manufacturer set of spare parts required for a period of 1 year's continuous operation. Itemized unit prices with exact quantities recommended for these spares shall be separately indicated for consideration of the Owner / **Architect**.

#### **DOCUMENTS MUTUALLY COMPLIMENTARY**

The several documents forming the contract are to be read as mutually complementary to each other and in case of ambiguities/ discrepancies, the same shall be explained and clarified by the **Architect** / Owner to the Contractor in what manner the work is expected to be carried out to meet the end requirements.

#### **INSTRUCTIONS DURING EXECUTION**

On the advice of the Owner, the **Architect** may issue further drawings and written instructions, details, directions and explanations collectively referred to as "Site instruction" in regard to:

Variations for modification of the design, quality or quantity of works as addition or omission or substitution of any works therein.

Any discrepancies in the drawings or between the schedule of quantities and/or specifications and/or drawings.

Removal from the site any material brought by the contractor and substitution of any other materials therefore.

The dismissal or removal from work of any person employed thereupon.

Removal/re-examination of any works executed in case of doubt of any nature.

Opening up for inspection of any work covered up without proper tests by the **Architect**.

Oversight on the part of the **Architect** / his assistant to disapprove any defective work or material shall not prejudice the Owner / **Architect**, thereafter to disapprove such work or materials and to order pulling down, replacement, removal breaking up or reconstruction.

The Contractor shall make his own arrangement for the engagement of all labor and shall be responsible for regulating their service conditions, work conditions in conformity with all Acts, Regulations, Rules or order of competent authority under relevant laws in force during the pendency of the contract.

Contractor shall indemnify the Owner from all claims relating to the workers/ staff/ sub-contractors, Salaries, Wages, Overtime, Leave, Provident Fund, Medical facilities, gratuity, Bonus or any other claim as applicable and stipulated in any statutory provisions, rules or order of competent authority.

All materials so far as procurable shall be of the reputed make in the category of manufacture and bear the stamp of quality of the Bureau Standards wherever applicable. The contractor shall furnish documentary proof, test certificates and guarantees as relevant to such materials from manufacturers, which shall match with the date of procurement.

## SPECIFICATIONS GENERAL

These specifications are for work to be done, items to be supplied and materials to be used in the works as shown and defined on the drawings and described herein all under supervision and to the entire satisfaction of the **Architect** / owner.

The workmanship is to be the best available and of a very high standard, use must be made of specialist tradesmen in all types of work and necessary allowance must be made for the same in the rates quoted.

The materials and items to be provided by the contractor shall be the best of their respective kinds as specified in the tender and in accordance with the samples approved, where materials or products are specified in these specifications and/or Bill of Quantities by the name of the manufacturer of the brand name, trade name or catalogue reference, the contractor will require to obtain prior approval of the **Architect** / owner for using substitute material or product. The contractor shall produce all invoices, vouchers or receipted accounts for any materials if called upon to do so by the **Architect** / owner.

Samples of all materials are to be submitted to the **Architect** / owner for his approval before the contractor orders or delivers in bulk in the site. Samples together with their packing are to be provided by the Contractor free of charge and approved samples will be retained by the owner and designer for comparison with the materials which will be delivered to the site.

Should any materials be rejected by the **Architect** / owner, they will be removed from the site at the Contractor's expense. Also, the contractor will be required to submit specimen finishes of colors, fabrics, etc. for approval of **Architect** / owner before proceeding with the works. Should it be necessary to prepare shop drawings, and then four copies of such drawings shall be submitted for approval of the **Architect** who will retain two copies, all at the Contractor's expenses.

## ELECTRICAL INSTALLATION:

The whole of the electrical installation shall be carried out by a major registered licensed Electrical Contractor's firm.

The electrical installation shall include for the supply of the whole of the materials and the work of fixing, necessary for the complete installation. The work shall be carried out in strict accordance with the latest edition of the Regulations for the Electrical Equipment of Buildings issued by the Institute of Electrical Engineers I.E. rules and to the satisfaction of and in accordance with rules, regulations, and requirements of the supply company and the Fire department all to the entire satisfaction of the **Architect** / owner.

The positions of all points and equipment shown on the drawings shall be assumed to be correct for the purposes of tendering, but it is the main contractor's responsibility to check the exact positions on the site before commencing the works.

**NOTE:** This specification is of the general type only and must be used in conjunction with the drawing of the particular item being made. Anything shown on the drawing and not in the specification must be compiled with, and vice versa.

### **SPECIAL CONDITIONS OF THE CONTRACT**

1. Contractor shall Be going through all documents before quoting rates, and provide for necessary coats as may be included in either bill or material or specifications.
2. Contractor shall give prices in blank column. Entries in English made in ink. Arrive also the grand total must also fill in all \* Rate only columns \* and sign all corrections.
3. Contract shall be invalid unless all rates are filled and no extra conditions shall be submitted. Contractor shall sign by all the legal partners of the firm.
4. Each of the tender documents shall sign by the Contractor.
5. The Contractor whose tender is accepted shall be bound to implement the contract within eight days of intimation from Architect.
6. Work shall be dome night and day without extra charge, if necessary.
7. Contractor shall provide for stacking materials in such a way as to facilitate rapid checking of quantities.
8. Materials supplied by owner shall be used only in owner's site.
9. Contractors shall pay any local charges relating to execution of work.
10. Contractor shall arrange for all wastage.
11. Contractors shall arrange for all temporary connections.
12. No extra shall be paid, quantity sheets and drawings both to be considered jointly and Architect is the final authority for the interpretation.
13. Site instruction shall be deemed for proper execution and shall be carried out without extra charge.
14. Order book with numbered pages shall be kept on site. Contractor shall carry out all instruction's properly.
15. Contractor shall insure whole work against fore, PIC and third-party insurance.
16. The contractor shall submit and get approval of the samples of all the materials and work item from the Architect or his authorized representative well in advance before commencing the bulk of work. The rest of the work shall be completed only on the express approval of the Architect.
17. Work shall be carried out as per specifications in tender schedules / C.P.W.D specification 1977 Volume I & II & along with the latest correction slips and the relevant Indian Standard Codes of practice & of as specified by the Architect. In case of doubts the decision of the Bank. Shall be final and binding on the contractor.
18. The General conditions of contract and standard contract form of the work will be followed as per Circular No. ADV/ © /Gen-53/71/CIR/ 103-73 dated 6<sup>th</sup> February 1973 issued by the Bureau of Public Enterprises, Ministry of Finance with latest modifications and as amended by bank. In their Paint Work procedure to suit their requirement.
19. Contractor must make arrangement for storage of cement at his cost.
20. structure injury to personnel during the progress of the work and he shall be liable to pay such compensation or may be decided by the Engineer-in charge in respect of such damages/ injuries. The contractor should rectify the damages at his cost of entire satisfaction of the Architect / bank engineer.
21. The serviceable materials out of the dismantled materials will be property of Bank and shall be properly streaked by the Contractors as directed by the Engineer-in-charge on the serviceability on the contractor.
22. All labor employed by the Contractor shall be covered by works men's compensation Act. Any death, injury of mishap to the workman of the Contractor will entirely be at the Contractor's responsibility and Bank shall not be liable to pay any damages for the same.
23. The Contractor shall give his permanent account number (from the income tax department).
24. Guarantee of minimum 10 years will have to be given by the Tenders for the water proofing treatment and indemnity bound for the purpose to be executed before release of the final payment / Security Deposit.
25. The work shall be carried out as per Indian Electricity Rules.
26. Appointed Architect by Union Bank of India will be Project Architect for the subject work.
27. The contractor may be required to make his own arrangement for water and electricity for the work.
28. The drawing contains the sketches showing salient details at various scales indicating the ascent of work & specifications must be followed, these can be modified from time to time in accordance with technical requirement at the site.
29. The prospective contractor, on intimation on acceptance of tender must submit progress net- work of the complete work based on bar-chart within four days as such of modified with the consent of the contractor shall form a part of the agreement.
30. The work shall be of highest standard, both as regard its design & workmanship. Modern tools & first-class latest techniques

shall be employed for its execution.

31. The contractor should employ adequate labor to complete the work within the specified time. No claim for the labor shall be entertained. The contractor shall also make his own proper arrangement for welfare, housing & safety of his material & labor.
32. The Architect shall have full powers to get the material or workmanship etc. inspected & tested by an independent agency for its soundness & adequacy at the cost of contractor.
33. The contractor shall examine all drawings before commencing the actual work & report to the Architect any discrepancies for omission & shortcomings in the drawings or when they conflict with works, or with each other.
34. The contractor shall visit the site of the work & shall satisfy himself as to the conditions under which the work has to be performed. He shall also check & ascertain the location of the existing structure or equivalent or another, which may affect the work. No claim, made in ignorance or misunderstanding or the site conditions or a ground or insufficient description shall be entertained.

Union Bank of India

## **SPECIFICATIONS FOR ELECTRICAL WORKS**

### **General:**

The scope of work covers execution and completion of the electrical installation in accordance with drawings & specifications.

### **Rules & Regulations:**

The installation shall be generally carried out in conformity with the requirements of Indian Electricity Act 1910 (as amended up to date) and the latest Indian Electricity Rules and supplementary Regulations of the State Electricity Departments and Electricity Undertakings and where the installation is subject to inspection and approval of Fire Insurance and Explosives Authorities, such installation shall be planned and executed to conform to their special Rules.

### **1.0 Point Wiring:**

#### **1.1 Supply:**

The following material shall be included in a point wiring and accessories.

- a) Conduit - PVC rigid 2.0mm thick conduit and accessories.
- b) Wires - PVC insulated copper conductor multi-stranded flexible type wires ISI mark of 1.0, 1.5, 2.5, 4.0, 6.0, 10, 16sq.mm
- c) Switches - 5 Amp single pole, two-way switch, 5-amp socket, 15 Amp switch and socket, fan Regulators with flush metal boxes wherever concealed and front plates and boxes of company make for surface mounting all of approved make.
- d) Cover plates for outlet boxes - 3 mm thick formica / Hylam sheet specially for electrical purposes.
- e) Hardware's - screws and washers non rusting type brass type.  
Switch Boards and outlet Boxes - Factory made boxes of approved make for flush mounting for switches and accessories and 16 SWG m.s. sheet with GI boxes as outlet boxes with knock-outs for conduit entries and tapped holes for screws.  
Holders - Pendant holders / angle holders / ceiling rose etc. of approved make white in color.
- g) Industrial Sockets - Industrial type metal clad with metallic top.

#### **1.2 Installation:**

All conduit shall be concealed / surface mounted in / on walls, beam, column, slabs or concealed in false ceiling in all A/C areas etc. by necessary Charis or clamping with saddles, spacers of hot deep GI. made. Charis shall be made in walls to conceal the conduits and then refilling of the Charis with cement mortar All switch boards and outlet boxes (placed for bracket wall points) shall be concealed / surface in/on walls and should be kept in line and level with help of spirit level. Fan boxes shall be provided with nut welded on top with threaded hook and check nut. Wire drawing should be done with the help of draw wire. The conduits shall be cleaned of all foreign materials before inserting the wires Drawing of wires should be done such that the insulation of wires is not damaged.

All works shall be done as per instruction and satisfaction of the Consultant.

For surface conducting wiring, the conduit fitting switch/ceiling fan regulator boxes etc. shall be installed surface exposed. Flexible conduits shall not be used earth continuity conductors. Separate earth wire shall be provided either inside or outside the flexible conduits which shall be connected by means of earth clips to the earth system at one end and to the equipment at the other end as per IS 3043-1987.

Size of wire shall be chosen to limit Voltage drop within 5 %. Area of conductor shall be 1.0, 1.5, 2.5, 4.00 and 10.0 sq. mm copper. Generally, not more than 8 to 10 points shall be wired in one circuit.

#### **1.3 Testing:**

After completion of wiring, installation of switches etc., testing shall be done for insulation resistance as specified in the tender Notes: No Joints shall be allowed in any wires in the conduits, all wires shall only be joined or connected at termination points. All circuits shall have individual neutrals and one neutral shall riot complete the whole wiring system.

Circuit's mains shall start from Distribution board to switch board or from Meter board to Distribution. The circuits mains include supply and installation of two nos. of wires with earth wire for single phase mains and Four nos. of wires with earth wire for three phase mains.

#### **2.1 Supply:**

- a) Conduit - PVC rigid 2.0mm thick conduit and accessories.
- b) Wires - PVC insulated copper conductor multi-stranded flexible type wires ISI mark of 1.0, 1.5, 2.5, 4.0, 6.0, 10, 16 sq.mm

#### **2.2 Installation:**

- a) For conceal wiring system all conduits shall be laid in the slab before casting of slab and shall be concealed in walls by making charts in walls and refilling the same before the final plaster of wall is done. All the switch boards and outlet boxes also shall be installed concealed in line and level.
- b) For surface wiring system all conduits / PVC trunking shall be clamped with hotdeep GI. saddles / spacers on wall, ceiling, beam, column etc. in line align with the help of spirit level. All the switch boards and outlet boxes shall be surface mounted type and to be installed in line and level.
- c) Wires shall be drawn in conduit after cleaning of conduits and drawn with the help of draw wires. No damage to the insulation of wires should be done while drawing.

### **2.3 Testing:**

After completion of wiring, installation of switches etc.. testing shall be done for insulation resistance as specified in the tender.

### **3.0 Distribution Boards:**

#### **3.1 Supply:**

Distribution boards shall be of sheet metal with rated bus bars, factory made. They shall be for three-phase or single-phase distribution system as per the requirements or schedule of quantities.

#### **3.2 Installation:**

The distribution board shall be concealed in wall, flush mounted or surface mounted and should be in line and level. These shall be factory tested. Final MCBs on sub circuits shall be marked by permanent markers on the DB door

#### **3.3 Test:**

After installation of MCBs, it shall be tested.

### **4.0 M.C. B & ELMCB.**

#### **4.1 Supply:**

MCB: These shall be SP.SPN.TP or TPN as specified in drawings Rating of 2A, 6A, 16A, 25A, 30A, 63A, 10KA fault level, as per IS-8828--S978; BS 3871-part I.

ELMCB: These shall be of SPN. TPN and specified in drawings of rated value. ELMCB - BS-4293 neutral advance feature at closing neutral will be first to contact at the time of opening neutral breaks last after allowing the phases to open first Since the ELCB is to be used as main switch, it shall have safe interrupting clearance as per IEC 408/IS 4064. The ELCB shall have terminals to terminate aluminum conductor up to 25 mm<sup>2</sup>. The ELMCB shall have sensitivity of 30 - 300 mA as per requirements

#### **4.2 Installation:**

All ELMCB and MCBs shall be installed in the DB on din rail provided in the DB, spares shall be blocked by blank plates.

#### **4.3 Testing:**

All ELMCB should be tested for overloading, short circuit, earth leakage tripping and MCBs should be tested for overloading and short circuit tripping

### **5.0 Material:**

All materials, fittings and appliances used in the electrical installation shall be of the best quality of approved manufacturer and shall conform to the latest Indian Standard Specifications wherever these exist.

### **6.0 Workmanship:**

Good workmanship and neat appearance are the prerequisites for compliance with the various sections of these specifications. The work shall be carried out under direct supervision of a person holding Certificate of Competency issued by the State Government and in accordance with the statutory rules and regulations in force. The relevant ISI code of practice shall be followed wherever applicable.

### **7.0 Drawing:**

The set of all relevant electrical drawings, with specifications are furnished to the Contractor for his own use until the completion of the contract. However wherever required, detailed drawings shall be prepared and got approved.

On completion of the work, completion drawings shall be prepared and five copies of the same should be submitted to the Employer. The completion drawings shall indicate clearly the main switch board, the runs of various mains and sub-mains, position of points and their controls. All circuits shall be clearly indicated and numbered in the wiring diagrams and all points shall be given the same number as the circuit to which they are electrically connected.

### **8.0 Marking & Apparatus:**

When a board is connected to voltage higher than 250 volts, all the terminals or leads of the apparatus mounted on it shall be marked in the following colors to indicate the different poles or phases to which the apparatus or its different terminals may have been connected.

Three Phases -- Red, Blue & Yellow



- Neutral            --    Black
- Off wire            --    White or Grey
- Earth wire        --    Green

Where four wire three phase wiring is done, the neutral shall be in black color and the other three wire in another color. Where has more than one switch, each such switch shall be marked to indicate which section of the installation it controls. The main switch shall be marked as such and where there is more than one main switch in the building, each such switch shall be marked to indicate which section of the installation it controls.

All marking required under this clause shall be clear and permanent.

**9.0 Materials:**

All materials used in the construction of fittings shall be of such quality, design and construction that will provide adequate protection in normal use against mechanical and electrical failures and exposures to the risk of injury or electric shock and shall withstand the effects of exposure to atmosphere.

**10.0 Ceiling Rose:**

Ceiling rose and similar attachments - A ceiling rose or any other similar attachments shall not be used on a circuit, the voltage of which normally exceeds 250 Volts. Normally only one flexible cord shall be attached a ceiling rose. Specially designed ceiling roses shall be used for multiple pendants

**11.0 Socket Outlets & Plugs:**

A socket outlet shall not embody fuse terminals as an integral part of it. But the fuse may be embodied in plug in which case the plug shall be non-reversible and shall be so arranged and connected that the fuse is connected to an outer or phase conductor or the non-earthed conductor of the circuit. Every socket outlet shall be controlled by switch will be on the live side of the line. In an earthed system of supply, the outlet and plug shall be three pin type and the third terminal connected to earth.

Every lighting fitting shall be controlled by a switch and where control at more than point is necessary by as many as two ways and intermediate switches as there are control points. Lights, fans and socket outlets shall be so located as to provide maximum comfort to the occupant and to enable him to utilise the electricity in the most economical manner.

Where conductors are required to be drawn through tube or channel leading to the fittings, the tube or channel must be free from sharp angles or protecting edges and of such size as will enable them to be wired with the conductors used for the final sub-circuit without removing the braiding or taping. As far as possible all tubes or channels should be of sufficient size to permit looping back.

c) Where a light fitting is supported by one or more flexible cords, the maximum weight to which the twin flexible cords can be subjected shall be as follows:

**SIZE OF TWIN FLEXIBLE CORDS**

Nominal cross sectional		No. & diameter area of in wires		Maximum permissible weight	
Sq.Inch	Sq.mm.	Sq.Inch	Sq.mm.	Sq.Inch	Sq.mm.
0.006	0.5	14/0.0076	14/0.193	1.4	3
0.0010	-	23/0.0076	23/0.93	2.3	5
0.0017	1.5	40/0.0076	40/0.193	4.3	10

Where a weight is greater than 4.5 Kgs. (10 Lbs) then it has to be supported, two or three twin flexible cords shall be used so that the maximum weight to which any cord is subjected does not exceed the above values, or Alternatively other support viz. suitable metal pipe or suitable support shall be provided.

No inflammable shade shall form a part of a light fitting unless such shade is well protected against all risks of fire. Celluloid shade or light fitting shall not be used under any circumstances.

Enclosed type fittings shall be provided with a removable glass receptacle, arranged to enclose the lamp completely and of such size or construction as to prevent undue heating of the lamp or if the position of fitting be such that the glass receptacle is liable to mechanical damage the glass shall be protected by a suitable wire guard.

**12.0 Fittings Wire:**

The use of fitting wire shall be restricted to the internal wiring of the lighting fittings. Where fittings wire is used for wiring fittings, the sub-circuit leads shall terminate in a ceiling rose or connector from which they shall be carried into the fittings.

**13.0 Lamp Holders:**

Lamp holders for use on brackets and the like shall have not less than 1.3 cm (1/2") nipple and all those for use with flexible pendant shall be provided with cord grips. All lamp holders shall be provided with shade carriers. Where center contact Edison

screw lamp holders are used, the outer or screw contact shall be connected to the ' middle wire ' or the neutral or to the earthed conductor of the circuit.

**14.0 Lamps:**

All incandescent lamps, unless otherwise required, shall be hung at height of 2.5m (8 ft.), above the floor level They shall be provided with caps of the following patterns:

Up to and including 200 watt.	-	Standard Bayonet (B)
Above 200 watts and not exceeding 300 watts	-	Edison Screw (E.S.)
Above 300 watts	-	Golliath Screw (GS)

**15.0 Fans, Regulators and Clamps:**

Ceiling Fans: Ceiling fans including their suspension shall conform to IS : 374-1951 and to the following requirements :

All ceiling fans shall be wired to ceiling roses or to special connector boxes and suspended from hooks or shackles with insulators between hooks and suspension rods. There shall be no joint in the suspension rod but if joints are unavoidable then such joints (2") minimum length and both ends of the pipes shall touch together within couplers and shall in addition to, be secured by means of split pins; alternatively the two pipes may be welded.

Canopies on top of suspension rod shall effectively hide the suspension.

The leadings-in-wire shall be of nominal cross section area not less than 0.002 sq.inch (3.00.029") and shall be protected from abrasion.

ii) Exhaust fans shall be erected at the places indicated by the Architects. For fixing an exhaust fan, a circular hole shall be provided in the wall to suit the size of the frame, which shall be fixed by means of rag bolt embedded in the wall. The exhaust fan shall be aired as near to the hole as possible by means of a flexible cord, care being taken that the blades rotates in the proper direction.

**TESTING OF INSTALLATION**

**16.0 Insulation Resistance:**

The insulation resistance shall be measured by applying between earth and the whole system of conductors or any section thereof with all fuses in place and all switches closed and except in earthed concentric wiring all lamps in position or both poles of the installation otherwise electrically connected together, a direct current pressure of not less than twice the working pressure provided that it need not exceed 500 volts for medium voltage circuits. Where the supply is derived from the three wire (AC or DC) or a poly phase system, the neutral pole of which is connected to earth either direct 01 through added resistance, the working pressure shall be deemed to be that which is maintained between the outer or phase conductor and the neutral.

The insulation resistance measured as above shall not be less than 50, divided by the number of points on the circuits provided that the whole installation shall be required to have an insulation resistance greater than one megohm.

Control rheostats, heating and power appliances and electrical sings may, it required, be disconnected from the circuit during the test, but in that event the insulation resistance between the case of frame work and all live parts or each rheostat appliance and sign shall not be less than that specified in the relevant IS specifications shall not be less than half a megohm.

The insulation resistance shall also be measured between all conductors connected to one or phase conductor of the supply and all the conductors connected to the middle wire or the neutral or to the other pole or phase conductors of the supply and its value shall not be less than that specified in sub clause(b)

On completion of an electric installation (or an extension to an installation) a certificate shall be furnished by the contractor countersigned by the qualified supervisor the installation was carried out. The certificate shall be in the prescribed form as required by the local Electrical Supply Authorities. One such recommended form is given in Appendix-B.

Testing of earth continuity path: The earth continuity conductor including metal conduits and metallic envelopes of cables in all cases shall be tested for electric continuity and the electrical resistance of the same along with the earthing lead but excluding any added resistance or earth leakage circuit-breaker measured from the connection with the earth electrode to any point in the earth continuity conductor in the completed installation shall not exceed one ohm.

Testing of polarity of non-linked single pole switches:

In a two-wire installation a test shall be made to verify that all non-linked single pole switches have been fitted in the same conductor throughout and such conductor shall be labeled or marked for connection to an outer of phase conductor or to the non-earthed conductor of the supply.

In a three wire or a four-wire installation, a test shall be made to verify that every non-linked single pole switch is fitted in a conductor which is labeled or marked for connection to one of the outer or phase conductor of the supply.

**17.0 CONDUIT CAPACITY:**

Maximum number of PVC insulated cables conforming to IS: 694-1977 that can be drawn in one conduit shall be as follows:

Nominal cross-sectional area of conductor	SIZE OF CONDUIT															
	20 mm	25mm	32mm	38mm	51mm	64mm	S		B		S		B			
1.5							5	4	10	8	18	12	--	--	--	--
2.5							5	3	8	6	12	10	--	--	--	--
4							3	2	6	3	10	8	--	--	--	--
6							2	-	5	4	8	7	--	--	--	--
10							2	-	4	3	6	5	8	6	--	--
16							-	-	2	2	3	3	6	5	10	7
25							-	-	-	-	3	2	5	3	8	7
35							-	-	-	-	-	-	3	2	6	5
50							-	-	-	-	-	-	-	-	5	3
70							-	-	-	-	-	-	-	-	4	3

NOTE:

1. The above table shows the max. Capacity of conduits for a simultaneous drawing of cables.
2. The columns headed 'S' applies to runs of conduit which have distance not exceeding 4.25m between draw in boxes and which do not deflect from the straight by an angle of more than 15. The columns headed 'B' apply to runs of conduit which deflect from the straight by an angle of more than 15.

**18.0 CABLES**

**18.1** Cables shall be supplied by Electrical Contractor

**18.2 Cable Specifications:**

All cables shall be as per latest IS 1554 Part I PVC insulated heavy duty electric cables Part I for working Voltages up to and including 1100 V.

All power cables shall be PVC insulated, armored, inner sheathed, PVC insulated aluminum conductor. Control cables shall be of copper conductor.

The core insulation and inner sheath shall conform to the requirement of Type A IS 5831 STI IS respectively. Similarly, for outer sheath. Cables shall have armor of steel wire up to 0 D of 18 mm and flat steel strip for higher OD.

Cables shall be supplied in drums of 1000 mts. for and up to 6 sq mm and 10 sqmm and above in 500 mts.

**18.3 Cabling:**

Cabling shall be done with help of jack and rollers. Cable shall be passed through RCC Hume Pipe wherever road crossing or pathway crossing is there. All cables shall rise form cable trenches in GI Pipes. Cable shall be tagged as per cable schedule at every 30 mts. by Aluminum tags of minimum 2mm thick securely fastened. They shall also be identified near the terminations. Above the cable trenches cable route markers shall be installed as per rules and regulations at every 30 mts and at every turnings of the cables or branching of cables.

All cables shall be laid in trenches at a depth of 750mm and as shown in drawings. Before laying of cables sand shall be spread then the cable shall be laid which shall again be covered with sand minimum 150mm from the top of the largest dia of the cable. Then second class bricks shall be laid across the trench completely covering the trench, lastly excavated soil shall be back filled and compacted by watering intermittently.

All cables after laid shall be checked for insulation level and meagered before back filling. Cable entries in GI pipes or Hume pipes shall be sealed by cable compound or putty for smaller dia of pipes.

If required for the- cable- to run on cable trays then the cable shall be clamped by 16 SWG GI saddles and dampers all works should be done to the satisfaction of the Engg - in Charge.

**18.4 Terminations:**

Cable shall be terminated by means of single compression glands and terminated by solderless crimped type lugs. All should be done to the satisfaction of the Engg.-in-Charge. If the cores do not have any color identification, then they should be identified by insulation tape of various phases. Cable shall enter any termination point by means of double compression glands, using

reducers if required or drill of holes in gland plates. IF panel installed on a cable trench which does not have any bottom excess then holes shall be drilled in one line for the cables then the gland plates is cut into two halves from the centre of the hole. Cables inserted and sealed and the armour in the bottom should open and earthed to the earth bus. Crimping of lugs shall be done by hand crimping tool or hydraulic crimping tool with conducting jelly applied to conductors. Insulation shall be cut immediately after the lugs and care should be taken that the conductor is not left open. All jointing and crimping shall be carried out by licensed and experienced jointers approved E.I.C. and termination and straight joint shall be of 'Taped' or heat shrinkable type as specified.

#### 18.5 Testing:

Before energizing, the megger test shall be carried out for insulation resistance between phase to phase and phase to earth.

For cable up to 1.1 KV grade 1000 KV mugger shall be used.

D.C. High Voltage test shall be conducted after installation on the following and test results are recorded as per format furnished by the Engineer-in-charge.

a) All 1000 Volts grade cables in which straight through joints have been made.

b) All cables above 1100 V grade.

For record purposes test data shall include the measure values of leakage current verses time.

The DC High voltage test shall be performed as detailed below in the presence of the EIC or his authorized representative only.

Cables shall be installed in final position with the entire straight through joints complete. Termination shall be kept on unfinished so that the motors, switchgears, t transformers, etc.. Are not subjected to test Voltages

The Test Voltage shall be as under:

i) For cable 3.3 KV Grade 5.4 KV DC

ii) For cable 66 KV Grade 10.8 KV DC

iii) For cable 11 KV Grade 18 KV DC

Cable schedule and layout drawings must be marked for AS BUILT conditions during the installations work and shall be approved by the Site Engg.

#### **IDENTIFICATION OF EARTHED AND EARTHED NEUTRAL CONDUCTORS AND POSITION OF SWITCHES AND CUTOUTS THEREIN:**

Where the conductors include an earthed conductor of two-wire system or an earthed neutral conductor of a multi-wire system or a conductor which is to be connected thereto, the following conditions shall be compiled with

1. An indication of a permanent nature shall be provided by the owner of the earthed or earthed neutral conductor, or the conductor which is to be connected thereto, to enable such conductor to be distinguished from any live conductor. Such indication shall be provided.

a) Where the earthed or earthed neutral conductor is the property of the bidder, at or near the point of commencement of the supply.

b) Where a conductor forming part of a consumer's system is to be connected to the bidder's earthed or earthed neutral conductor, at the point where such connection is to be made.

c) In all other cases, at a point corresponding to the point of commencement of supply or at such other point as may be approved by an inspector.

2. No cut-out, link or switch other than a linked-switch arranged to operate simultaneously on the earthed or earthed neutral conductor and live conductor shall be inserted or remain inserted in any earthed or earthed neutral conductor of a two-wire system or in any earthed or earthed neutral conductor of a multi-wire system or in any conductor connected thereto with the following exceptions

a) A link for testing purposes - OR - b) A switch for use in controlling a generator or transformer.

**NOTE: The Electrical Contractor Shall Produce Copy of Valid License for Practicing Issued by Statutory Authority for This Purpose Before Commencing the Work.**

**INSTALLATION TESTS CERTIFICATE**  
**BY ELECTRICAL CONTRACTOR**

This contractor is to certify that the work is carried Out Work confirming to IE Rules and code of practice. He has to Give the test report is under.

(i) Insulation Resistance test is R - N M. Ohms  
Y - N M. Ohms  
B - N N. Ohms

(ii) Load test: -

5A - 1000 W Power Point - 15 Minutes

15A - 3000 W Power Point - 15 Minutes

(iii) Earth resistance for each electrode - 1 Ohm  
- 2 Ohm  
- 3 Ohm  
- 4 - N - E  
Volts

(iv) Certificate of makes of materials used in the work

(v) Circuit diagram

(vi) Certified that the electrification work has been carried out under the supervision of licensed Electrical supervision.

(vii) Certified that the earthing plate / pipe has been verified and Placed at correct depth confirming to IE Rules.

Signature of Electrical Supervision

Signature of Contractor

Name :

License No. :

**APPROVE MAKE LIST FOR ELECTRICAL WORK**

1	PVC rigid conduits & Accessories:	1.5 mm thick (MMS) ISI and FIA approved - Precision / Vraj / Nihir / BLP / PFI / Anchor / Polycab make. (Only white coloured pipes FRLS type to be used. ).
2	L.T. Cables:	Havells / KEI / Polycab / R. R. Kable / Finolex.
3	Wires (FRLS):	Havells / KEI / Polycab / R. R. Kable / Finolex.
4	Main Distribution Boards:	MDS Legrand (Lexic) / Hager / Crabtree XPOA / Schneider (Eazy 9 ) / L & T EXORA / C & S Wintrip / Siemens Bitaguard.
5	ELCB / RCCB / Miniature Circuit Breaker:	MDS Legrand (Lexic) / Hager / Crabtree XPOA / Schneider ( Eazy 9 ) / L & T EXORA / C & S Wintrip / Siemens Bitaguard.
6	Switch gears:	MDS Legrand (Lexic) / Hager / Crabtree XPOA / Schneider ( Eazy 9 ) / L & T EXORA / C & S Wintrip / Siemens Bitaguard.
7	Change Over Switch:	HPL Sonoma/ Havells / L & T / Hager.
8	Domestic fittings:	
	a) All Switching Modular Accessories.	MK Wrapped Wround Plus / Schneider Livia / L & T entis / Crabtree Verona / Salzer Elite / Legrand Myris / C & S Divino / SSK Ace.
	b) Holders / ceiling roses	Anchor or equivalent approved make.
	c) Adhesive Tape	Bhor (Steel Grip) or approved.
9	10 - 30 A Polycarbonate Socket & Top:	MDS Legrand (Lexic) / Hager / Crabtree XPOA / Schneider ( Eazy 9 ) / L & T EXORA / C & S Wintrip / Siemens Bitaguard.
10	Telephone Wires / Cable:	Finolex / R. R. Kable / Havells / L & T / Polycab.
11	Telephone tag block:	Krone makes.
12	Cable Lugs:	Dowell / Lotus / Jainson / 3 D.
13	Cable gland Single / Double Compression:	HMI / Comet / 3D.
14	Ammeter / Voltmeter:	AE / HPL/MECO/ Enercon make.
15	Selector switches:	L & T salzer / Kaycee make.
16	Indicator lamps:	LED type Teknic / Precifine/ Binay.
17	Connector strips:	Wago / Elmex make.
18	Lighting Fixtures :	Wipro / Philips / GE / Crompton.
19	Exhaust fan (Light duty):	Khaitan / Crompton / Havells.
20	Ceiling Fan ( 5 star rated ):	Crompton ( High Breeze Plus ) / Havells.
21	Wall mounted Fan ( 5 star rated ):	Crompton ( High Flow Wave) / Havells.
22	Data Cable - I / O Unit:	D - Link / Digi Link.
A	LIGHTING / FAN FIXTURES - SEE CAT NO. & SPECIFIED MAKE IN THE PRICE BID.	
B	CONTRACTOR SHOULD USE ONLY ONE COMPANY FOR ALL SWITCHBOARDS / DBS.	
C	CONTRACTOR SHOULD SUBMIT SIGNED COPY OF MAKE LIST BEFORE WORK STARTED.	

### **IMPORTANT POINTS TO BE NOTED**

- 1) Rates for LIGHT, FAN, EX. FAN, CALL BELL, RAW POWER ETC. POINTS include the cost of main wires and PVC pipes from LDB-ROW POWER DB to DIFFERENT SWITCHBOARDS WITH REQUIRE CIRCUITS
- 2) Rates for COMPUTER POWER POINTS include the cost of wires and PVC pipes from UPS DB to COMPUTER POWER POINTS.
- 3) Rates for COMPUTER I/O include the cost of DATA cables and PVC pipes from SERVER SWITCH to COMPUTER NODES.
- 4) Rates for TELE POINTS include the cost of TELEPHONE Wires and PVC pipes from EPABX/CRONE BOX to TELE. POINTS.
- 5) Rates for SMOKE/HEAT DETECTORS includes the cost of wires and PVC pipes
- 6) Rates for A.C./POWER POINTS include the cost of wires and PVC pipes from A.C. DB to DIFFERENT A.C. AND POWER POINTS WITH REQUIRE CIRCUITS.
- 7) THE CONTRACTOR SHOULD SUBMIT THE BUILTUP SLD OF PANEL, SLD OF DIFFERENT DBS TO DIFFERENT SWITCHBOARDS WITH NUMBERING, SLD OF DATARACK TO DIFFERENT I/O POINTS WITH NUMBERING, TELE. KRONE BOX TO DIFFERENT TELE. POINTS WITH NUMBERING, ETC. AFTER EXECUTION OF THE BRANCH.
- 8) THE CONTRACTOR SHOULD USE MAX. 3 CIRCUITS IN ONE CONDUIT FOR UPS & RAW POWER POINTS.
- 9) THE CONTRACTOR SHOULD USE MAX. 3 WIRES OF DATA & TELE. IN ONE CONDUIT.
- 10) EVERY CONDUIT – UPS, RAW POWER, DATA & TELE. SHOULD BE SEPARATE.
- 11) ELECTRICAL WORK SHALL BE CARRIED OUT LICENSED ELECTRICIAN AND LICENSED CONTRACTOR. WORK SHALL BE CARRIED OUT AS PER I.E RULES, IS CODE. CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY FIRE/ SHORT CIRCUIT IN THE WORK EXECUTED.

## 1. INSTRUCTIONS FOR CONTRACTORS - PLEASE READ THIS CAREFULLY

- The rate for items in schedule of Quantities must be given in words and figures. Amount of each items must also be entered in column and grand total of amount must be stuck out by the tenderer.
- If the tenderer is taken in favor of the company, a power of attorney in favor of the person who may have signed the tender for the company must accompany the tender.
- All pages of schedule of quantities etc. Should be initialed by the contractor.
- Discrepancies and adjustment of errors.

## 2. Any error in quantity or amount in schedule of quantities showing item or work to be carried out shall be adjusted in accordance with the following rules:

- In the event of a discrepancy between description in words and figures quoted by a tenderer in the rates column, the description in words shall prevail. In the event of an error occurring in the amount column of the schedule of quantities showing items of work, as a result of wrong multiplication of the unit rate and quantity, the unit rate shall be regarded, as firm and multiplication shall be amended on the basis of the rate.
- All errors in totaling in amount column in carrying forward total shall be corrected. c. Any rounding of amount against 'items' or in 'totals' shall be ignored. The tendered sum so altered shall for the purpose of the tender be substituted for the sum originally tendered and considered for acceptance.
- The clients/consultants have right to:
  - Reject any no. of quantities in the tender.
  - To decrease or to increase or to delete any quantity in the tender.
  - In case extra items are there it will be settled as exact cost of material + exact cost of labour + 15% profit including wastage. NOTE: Unless these four sets are not submitted with the final bill then the final bill will not be certified.
  - Contractor will have to use jarry cutter. The scope is making good the same.
  - The contractor will have to use the first brand specified in the specified make list. If the same is not available then be has to take written prior approval of the consultant before using the same.

**MANDATORY INFORMATION REQUIRED FOR PREQUALIFICATION OF THE BIDDER FOR ELECTRICAL WORKS FOR PROPOSED DAHEJ BRANCH, UBI-VADODARA REGION.**

- IMPORTANT:**
1. Please type or handwrite in capital letters.
  2. Attach copies of the supporting documents.
  3. Please use additional sheets if required.

SR.NO.	PARTICULAR	TO BE FILLED BY VENDOR
1	EMPANELMENT LETTER PROVIDED BY UNION BANK OF INDIA – VADODARA REGION FOR THE CURRENT YEAR. (Attach)	
2	CURRENT YEAR SOLVENCY CERTIFICATE. (NOT MORE THAN 12 MONTHS OLD) (Minimum Amount: Rs. 4.00 Lacs) (Attach)	
3	GST CERTIFICATE REGISTERED UNDER REGULAR WORK CONTRACT. PARTICIPATION OF COMPOSITE SCHEME VENDORS WILL NOT BE ACCEPTED FOR THIS TENDER. (Attach)	

**Please Note: Bank has a right to prequalify/disqualify any application without giving any reason to any applicants.**

I/We confirm that to the best of our knowledge this information is authentic and accept that any deliberate concealment will amount to disqualification at any stage.

SEAL AND SIGNATURE OF THE BIDDER/S.

DATE:

ADDRESS:

NO. OF ENCLOSURES: .....

**PART B - PRICE BID**

**TENDER DOCUMENTS FOR ELECTRICAL WORK**

**FOR UBI - DAHEJ BRANCH (EXISTING PREMISES), UBI - VADODARA REGION.**

Union Bank of India

BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS						
UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.						
Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)	
A	B	C	D	E	F=CXE	
NOTE : ALL CHARIS OR CHASES IN WALLS / COLUMNS / SLABS MADE BY THE ELECTRICAL CONTRACTOR FOR INSTALLATION OF CONDUITS / S.B. / BOXES ETC. THE FILLING OF THE SAME IS IN THE SCOPE OF THE ELECTRICAL CONTRACTOR INCLUDING ALL NECESSITY MATERIAL AND LABOUR.						
<b>PART - A :::: BRANCH</b>						
A	INTERNAL WIRING :Phase wire must be Red colour for LDB, Yellow colour for PDB & Blue for ACDB, Neutral Wire of Black colour & Green Wire for Earthing. Color code must be maintained. Tagging from DB MCB and Switch board must be done.					
1	P and M point wiring in concealed in walls, furniture's & for above false ceiling, or on ceiling, on beams shall be fixed with saddles & spacers etc., with conduits taken in slab with 20 mm dia PVC Rigid conduits 1.5 mm thick ISI mark with 2 nos. of 1.5 sq. mm. phase & nutral & 1 nos. of 1.0 sq. mm. earthing with modular switch with company made flush metal box/surface PVC box etc. comp. with nec. main lines for switch board from LDB of mains of 2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm pvc Insulated copper conductor wire FRLS type laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark .These will be used with point wiring of light, fan, ex. fan, callbell points, etc { Max. 3 Switchboards in one circuit - One Sp MCB }.Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from Lighting DB MCB and Switch board must be done.					
1.1	<b>One 5A switch controlling one light / fan point.</b>	<b>36</b>	<b>nos</b>			
1.2	<b>One switch controlling Two light points .</b>	<b>14</b>	<b>nos</b>			
1.3	<b>5A socket outlet with 5A switch ( on common board )</b>	<b>12</b>	<b>nos</b>			
1.4	<b>5A socket outlet with 5A SP switch (as an independent point )</b>	<b>10</b>	<b>nos</b>			
1.5	<b>Call bell point with bell push complete.</b>	<b>1</b>	<b>nos</b>			
1.6	SITC of one plug point for digital time clock near signboard (in elevation ) as per standard layout of DP MCB from <b>Main panel</b> of mains of <b>2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm</b> pvc Insulated copper conductor earth wire laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark. This Point is need to made near Signboard at Entrance for Digital Moving Display Board or Digital Clock.	<b>0</b>	<b>nos</b>			
1.7	SITC of loop light points Of <b>2 nos. of 1.5 sq. mm. off wires &amp; 1 nos. of 1.0 sq. mm. earth wire</b> from <b>Main panel timer</b> of mains of <b>2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm</b> pvc Insulated copper conductor earth wire laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark ( This point is for Signage and Down Lighter Points at Entrance)	<b>2</b>	<b>nos</b>			
1.8	<b>INVERTER EMERGENCY LIGHT DB</b> -( 4 Way SPN)-For INVERTER LIGHTING with necessary require wiring from UPS I/P DB of <b>2 no of 4.0 sqmm</b> wires and <b>1 no of 2.5 sqmm</b> PVC Insulated copper conductor wire laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used for point wiring of LIGHTS operated through ups as emergency lights,etc . [This point should be installed near ENTRANCE in concealed manner.] The height of switchboard must be at reachable point for easily operation. This DB Should be In UPS Room. Incoming: 25A DP ELCB, 100mA Sensitivity (1 Nos.) Out Going: 10 A SP MCB ( 4 Nos.)	<b>1</b>	<b>nos</b>			
1.9	P and M point wiring in concealed in walls, furniture's & for above false ceiling, or on ceiling, on beams shall be fixed with saddles & spacers etc., with conduits taken in slab with 20 mm dia PVC Rigid conduits 1.5 mm thick ISI mark with <b>2 nos. of 1.5 sq. mm. &amp; 1 nos. of 1.0 sq. mm.</b> with modular switch with company made flush metal box/surface PVC box etc. comp. with nec. main lines for switch board from INVERTER EMERGENCY LIGHT DB of mains of <b>2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm</b> pvc Insulated copper conductor wire laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark .These will be used with point wiring of light, fan, ex. fan, wall fan points, callbell points, etc.( Wiring Points of INVERTER Operated Fixture)	<b>4</b>	<b>nos</b>			
2.1	SITC of <b>6/16 Amp. Switch and socket</b> complete with necessary require wiring from <b>LDB of 2 no of 2.5 sq mm wires and 1 no of 1.0 sq mm</b> PVC Insulated copper conductor earth wire laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of power points ,etc. No Looping of Neutral or earthing is allowed. Each point needs to provide separete circuit.This Points Need to Be Connected through LDB. (16 A points for Cash room, locker room, record room, etc Supply)	<b>2</b>	<b>nos</b>			
2.2	SITC of <b>6/16 Amp. Switch and socket</b> complete with necessary require wiring from <b>PDB of 2 no of 4.0 sq mm wires and 1 no of 2.5 sq mm</b> PVC Insulated copper conductor earth wire laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of power points ,etc. ( For Printer, Water Cooler, Freeze, Motor, Note Counting Machine points ). No Looping of Neutral or earthing is allowed. Each point needs to provide separete circuit.This Points Need to Be Connected through PDB. (15 A points for Printer , Pantry etc. Supply)	<b>3</b>	<b>nos</b>			
3	SITC of <b>20 A/ 25 A , 230 V , with DP MCB</b> all enclosed in a prefabricated M S boxes complete to the satisfaction of E.I.C. For SPLIT AC 1.5TR / 2.0 TR unit with necessary require wiring from ACDB of 2 no of 4.0 sqmm wires and 1 no of 2.5 sqmm PVC Insulated copper conductor wire FRLS type laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of A.C. points ,etc . Server Room AC Supply need to be given through Main Panel. Color code must be maintained. Tagging from ACDB MCB and AC point must be done. This point should be installed near Split AC in concealed manner. No Looping of Neutral or earthing is allowed. Each point needs to provide separete circuit.]. For Cassate AC power supply indoor or outdoor need to be given as per AC vendor's requirement. The height of switchboard must be at reachable point for easily operation. From that point to Split AC , empty conduit + necessary bends must in concealed mode by ele. contractor.	<b>5</b>	<b>nos</b>			
<b>B</b>	<b>LIGHTING FIXTURES :</b>					
(NOTE : ANY OF FIXTURES AND FITINGS SHALL BE RE-CONFIRMED WITH THE ARCHITECTS / CONSULANTS BEFOTE ORDERING THEM.						

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

**UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.**

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
4	Supply, installation, testing and commissioning (including supply and fixing flexible wires from holder to fixtures hardwares etc.) of.... - The LED lamps should be of same make as fixture make. - The marking & cutting of fixtures should be in ele. contractor's scope.. fixtures should be approved by bank's ele. engineer / ele. consultant / architect. from the given make list before installations. LM 79 & LM 80 test reports to be submitted. nichia / Lumileds / cree - LED should be used by manufacture. Lighting Luminaire of LED for Office single piece die cost aluminium M24 housing complete with driver unit, mirror optic and other accessories Lamps of about 100 lumen/W injection moulded PC diffusers with high brightness complete unit complying with international standard (LU49, LH801) - opertive on 190V - 270 V 50 Hz with Mini 3 years warranty complete with mounting system and lamp dully wired and tested Details as under.				
4.1	<b>LED 1 x 31 W ( 3100 lumens ) ( 2' X 2' ) RECESS MOUNTED LUMINAIRE</b> with 2KV surge protection, making earthing conection complete to be recessed in false ceiling with all necessary hardwares, hanging - die cast frame arrangement, chains or hook arrangement with ceiling, connected to supply wire with PVC connector. Earthing connection with lugging need to given to body of Fixture, etc. complete. (CROMPTON make cat no. AURA 1 LCPL-36-CDL or Equivalent in GE/ Philips / Havells / Wipro make) .	14	nos		
4.2	<b>1x16 W Square / Round LED DOWN LIGHT</b> pressure die cast fixture with 2KV surge protection ( 950 lumens ) to be recessed in false ceiling with all necessary hardwares, chains, hook etc. complete.( CROMPTON make cat no. CROM ROUND / CROM SQUARE LCDN - 12 - CDL/TL/WW or Equivalent in GE / Philips / Havells / Wipro make ). Energy Efficient round recessed mounted LED down lighter with premium white powder coating and die cast aluminium housing. as per details above. Die casting material should not be CRCO type material. should be connected to supply wire with PVC connector. Earthing connection with lugging need to given to body of Fixture.	26	nos		
4.3	<b>LED tube light 1 x10 W ( 560 lumens )</b> Surface mounting type with <b>LED tube</b> , complete. (Wipro make Cat. No. MEGMA-P 7007 or Equivalent PHILIPS / GE make ) . For Toilet area.	5	nos		
4.4	Supply and insallation of <b>Call bell</b> with Indicatore. (Max or equivalent make)	1	nos		
4.5	Supply and installation of <b>Exhaust fan of 300 mm</b> , fresh air vantilator type complete & 6 Amp. 3 pin TOP. (Crompton/ Khaitan / Havells make) [Wooden mounting frame should be fixed in coordination with carpenter - furniture contractor.] - One Ex. Fan is of heavy duty industrial for Ups room.	2	nos		
4.6	Supply and instalation of <b>48" Ceiling Fan</b> with fan step socket modular regulator, Max. 3 feet Fan Rode, Anchor Fastner, etc. (WHITE COLOUR - BEE 5 star labeled ceiling fan Alluminium body and copper winding.) (Orient PSPO or equivalent approved make in Crompton / Havells).	2	nos		
4.7	Supply and instalation of <b>1 x 18W led batten light fixture (T-5)</b> with electronic driver and tube complete with necessary hardwares, etc and per watt lumens output must be above 120/watt and 90%lumems maintaiance for 90% of life with input voltage 90-270v ac 50hz operational without affecting the life, input mov.gtd protection in driver for above 270v protection. and 2 years warranty.LED Batten Comprises of Thermally conductive material. Pre-wired with high efficiency electronic driver. High translucent frosted diffuser gets glare free, smooth light distribution.	4	nos		
4.8	Supply and installation of <b>450 mm sweep wall mounted fan</b> with metal stand and guard With on site 2 years warranty. (Crompton / Havells make -. Off white colour) .	6	nos.		
4.9	SITC of Decorative <b>3 W ( 180 lumens ) LED DOWN LIGHT PANEL</b> with its driver also. ( wipro make or philips / orient or equivalent co. make). (Approved by Architrct) basic rate of fixture Rs. 1000/- ( This is for down lighter in ACP work near entrance ).	0	nos		
4.10	SITC of Decorative <b>3 W ( 180 lumens ) LED DOWN EYE BALL LIGHT</b> with its driver also. ( wipro make or philips / orient or equivalent co. make). (Approved by Architrct) basic rate of fixture Rs. 1000/-.(Need to be fixed At Entry Gate ACP Panel Work)	0	nos		
4.11	SITC of <b>LED STRIP LIGHT</b> flexible complete with driver unit, 230 v, 50 Hz, as required . ( CROMPTON make LST20WW or equivalent GE/ Philips / Wipro / Havells make).	35	mtr		
4.12	LABOUR CHARGES: Removing existing fixtures from UBI-. Branch & refixing/installation in UBI-. Branch including transportation as per instruction of Architect.Removing/Refixing/Re-Installing of existing DB's from UBI-. Branch to UBI-. Branch all including transportation as per instruction of Architect.				
4.12.1	<b>LED 1 x 31 W ( 3100 lumens ) ( 2' X 2' ) RECESS MOUNTED LUMINAIRE</b>	2	nos		
4.12.2	<b>1x15 W Square / Round LED DOWN LIGHT</b>	4	nos		
4.12.3	<b>LED tube light 1 x10 W ( 560 lumens )</b>	4	nos		
4.12.4	<b>Call bell</b> with Indicatore. (Max or equivalent make)	1	nos		
4.12.5	<b>Exhaust fan of 300 mm</b>	2	nos		
4.12.6	<b>48" Ceiling Fan</b>	2	nos		
4.12.7	<b>1 x 18W led batten light fixture (T-5)</b>	4	nos		
4.12.8	<b>450 mm sweep wall mounted fan</b>	4	nos.		
C	<b>COMPUTER POWER SUPPLY &amp; NETWORKING - TELE. SYSTEM.:</b> Phase wire must be Yellow colour for UPS O/P DB, Red colour for PDB , Neutral Wire of Black colour & Green Wire for Earthing. Color code must be maintained. Tagging from DB MCB and Switch board must be done.				
5	SITC of <b>2 nos. of 6 A, 5 pin Sockets and 1 no. of 6 \ 16 A socket</b> below table outlets with <b>one 16 A switch</b> with indicator <b>Computer power supply</b> with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 1.5 sqmm pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from UPSDB to Computer power supply boards.[Maxi. 3 computers in one circuit}. complete with necessary termination etc. complete.[ White Colour Outer Plate For These Switchboards]. LOOP POINTS MUST BE OF SAME SIZED WIRES. Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from UPS O/P DB MCB and Switch board must be done.	14	nos		

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
6	S & I of 2 nos. of 6 A, 5 pin Sockets and 1 no. of with one 6 A switches Raw power supply with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 1.5 sqmm pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.[Maxi. 3 Raw Power Points in one circuit}. complete with necessary termination etc. complete.. [ Black Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES. Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from UPS O/P DB MCB and Switch board must be done.	10	nos		
7	Providing, installing, testing, commissioning of CAT 6 UTP pvc insulated copper conductor data cable of D - Link with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. with ferrule numbering at both ends of each piece of cable complete. [ 2 Lines from BSNL Krone to new krone in server room ]	50	mtr		
8	Supply, installation, testing and commissioning of CAT 6, RJ 45 information outlet (I/O) of D-link mke with front modular cover plate, flush box metallic or PVC for trucking system etc. complete with terminations etc complete.with Providing, installing, testing, commissioning of CAT 6 UTP pvc insulated copper conductor data cable of D-link make with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. with ferrule numbering at both ends of each of piece of cable etc. complete as per the requirement from data rack to I/O points below tables. etc. ( One for LCD & Two for ATM & one for IP phone in BM cabin). Dual jack plate will not be allowed. Cross Ferruling need to be provided for each point. on Data point tagging must be done).	12	nos		
9	LABOUR CHARGES: Removing, re-installation, testing and commissioning of 6 U metal rack for computer clamping switch etc complete with Tray Mounting Fan + power supply board. Bank's hardware - port switch / patch panel must be installed by ele. Contractor in this rack. - ( make : D Link / Digi Link / Elixer ).	1	nos		
10	SITC of 24 - port ibernet switch. ( make : D Link / Digi Link ).	0	nos		
11	SITC of 24 port patch panel for computers mounting in metal rack. ( make : D Link / Digi Link ).	0	nos		
12	Supply and crimping of RJ 45 connector with proper testing.	9	nos		
13	Supply & fixing the Patch cord 1 mtr. Long (factory built) .-When supplying , then first ask to BM / Consultant / Architect / Bank Authority.	2	nos		
14	Supply & fixing the Patch cord 2 mtr. Long (factory built) .-When supplying , then first ask to BM / Consultant / Architect / Bank Authority.	6	nos		
15	Supply and installing Telephone point with Telephone socket outlets of RJ 11 of approved make with company made concealed boxes in walls / furniture's etc. complete with Providing, installing, testing, commissioning of 2 pair of 0.51 cross section pvc insulated copper conductor telephone wire of ITI approved with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. complete.from krone box to tele. RJ - 11 sockets below tables. etc.- for Intercom / fax / direct Tele. facility. Cross Ferruling need to be provided for each point. on Telephone point tagging must be done.	8	nos		
16	SITC of 20 pair jelly filled armoured cable for tele. Lines from GF BSNL BOX to GF FLOOR NEW KRONE BOX / EPABX.	0	mtr		
17 (A)	Supply, installation, testing and commissioning of 20 pair krone telephone tag block duly enclosed in sheet metal powder coated box with locking arrangement complete with necessary terminations.	0	nos		
17 (B)	Supply, installation, testing and commissioning of 10 pair krone telephone tag block duly enclosed in sheet metal powder coated box with locking arrangement complete with necessary terminations o/s the branch.	1	nos		
D	<b>DISTRIBUTION BOARD AND PANELS :</b>				
18	LABOUR CHARGES: Removing/Refixing/Re-Installing of existing DB's from UBI-O.P. Road Branch, Vadodara to UBI-Dahej Branch all including transportation as per instruction of Architect.				
18.1	4 - WAY TPN DB : ( PDB ).	1	nos		
	incoming : 40 A FP ELCB, 100 mA. - 1 NO .				
	outgoing : 25 A DP MCB ( 3 nos ) for HI- WALL SPLIT AC.				
	outgoing : 16 A SP MCB ( 6 nos ).				
18.2	12 - WAY SPN DB : ( LDB ).	1	nos		
	incoming : 40 A ELCB, 100 mA - 1 NO .				
	outgoing : 10 to 20 A SP MCB ( 8 nos).				
18.3	6 WAY TPN DB : ( 3 phase ACDB ). - All MCBs must be C Type Characteristic.	1	nos		
	incoming : 63A FP ELCB, 100 mA - 1 NO .				
	outgoing : 25 A / 32 A FP MCB ( 0 nos ) for 3 PHASE CASSETTE AC points.				
	outgoing : 20 A / 25 A DP MCB ( 6 nos ) for HI- WALL SPLIT AC / CASSETTE AC points.				
18.4	12 WAY SPN DB : (UPS DB) OUTPUT. - All MCBs must be C Type Characteristic.	1	nos		
	incoming : 40 A DP 100 mA ELCB.				
	outgoing : 10 to 20 A SP MCB ( 8 nos ).				
18.5	UPS METAL DP ENCLOSURE. (For server output) . - All MCBs must be C Type Characteristic.	1	nos		
	outgoing : 10 A / 20 A. DP MCB -1 NO FOR SERVER OUTPUT.				
18.6	UPS 12 WAY SPN DB (For all computers) . - All MCBs must be C Type Characteristic.	1	nos		
	incoming : 63 A FP MCB - 1 NO FOR 3 - phase UPS.(big) .				
	incoming : 25 A DP MCB - 1 NO FOR 1 - phase INVERTER.				
	incoming : 25 A DP MCB - 1 NO FOR 1 - phase UPS. (server).				
19	SITC of 32A / 40 A / 63 A FP ELCB, 100 mA ( C - Curve) with powder coated compny made metallic double door sheet stell enclosure complete For three phase 3.0 / 5.5 / 8.5 TR VRF / DUCTABLE / CASSETTE AC units. This will be executed near trap door of indoor unit at reachable height. ( as per IP 65 protection ). THE ENCLOSURE SHOULD BE SAME MAKE AS MCB MAKE.	0	nos		

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

**UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.**

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
20	Supply, installation, testing and commissioning of Main panels as per drawing and specifications. Panel should be dust and vermin proof. Panel shall be fabricated from 14/ 16 SWG CRCA sheet metal duly powder coated of approved paints. Panel should be as per the specifications of ERDA/CPRI. fabrication, Switch gear installation. Internal wiring and Test Certificate from Manufacturer to be submitted. - All MCBs must be C Type Characteristic. <u>Panel Drawing Need to be approved by Electrical Consultant / Bank's Engineer before starting work.</u>				
	LABOUR CHARGES: Removing/Refixing/Re-Installing of existing DB's from UBI-O.P. Road Branch, Vadodara to UBI-Dahej Branch all including transportation as per instruction of Architect.				
	<b>MAIN PANEL :</b>	<b>1</b>	<b>nos</b>		
	100 A FP MCCB (1 No.) as Incoming.				
	* 80 A, FP Change over switch (1 No.).				
	* 160 AMP. 500 Volts, 3 phase 50 Hz FP Alu. bus bars of suitable length -Current ratio shall be 1 sq mm = 1.2 A.				
	* Digital AVF Meter with control fuses. C.T. shall be of 15VA class 1 type and shall be resin cast type.				
	* Phase indicator lamps phase wise.				
	* <b>Outgoing feeder:</b>				
	* 25 A DP MCBS (1 no - ups room AC ).				
	* Timer of L & T make Cat. No. 67DDTO digicom Timer with 16A. 4P contactor / Theben make Cat no. SUL 180 a - T180 001 ANALOGTimer with L & T make contactor MNX 18 ( operating coil voltage 230V, 50 Hz). (24 hrs).- <b>1 No for signage light.</b>				
	* 06 A DP MCBS (1 no - logo).				
	* 40 A DP MCBS (1 no - Sign board).				
	* 40 A FP MCB (1 NO - LDB).				
	* 63 A FP MCB (1 NO - UPSDB ).				
	* 63 A FP MCB (1 NO - ACDB ).				
	* 40 A FP MCB (1 NO - PDB ).				
	* 40 A FP MCB (1 NO - ATM DB).				
	* 63 A FP MCB (1 NO - SPARE DB).				
21	Labour charges for Removing & Re-fixing of <b>100A FP MCCB( 36KA)</b> (1 No.) ( lcs =100% lcu., confirmed to IS / IEC 60947 -2 adjustable Ir rating from 0.7 to 1 ) Unit M. S. compartment enclosure IP65 with hinged door & locking arrangement duly fabricated from 18 SWG sheet metal box duly painted with one coat of red-oxide paint and two coats of approved enamel paints with 100A OPEN TYPE MCCB UNIT <u>with Phase indicator lamps phase wise</u> , control fuses & wooden back complete. THIS WILL BE INSTALLED NEAR MAIN DOOR - INSIDE OR OUTSIDE - OF THE BANK. ( first ask to BM / Consultant / Architect / Bank Authority.	<b>1</b>	<b>nos</b>		
22	SITC of <b>63A ELCB</b> with IP65 Encloser for outdoor application.	<b>0</b>	<b>nos</b>		
E	<b>EARTHING SYSTEM:</b>				
23	Providing and making Earthing Pit with all necessary material and making masonry kundli, watering arrangement etc complete as per ISI 3043-1987 (FOLLOWING ITEMS MAY OPERATE). Resistivity as per IEC / IS. ( 3 years Manufacturer Warranty. Earthing Certificate Need to Attached). ( At the Time of buried of earthing Photograph must be taken Without Photographic Proof Earthing Will be Rejected. Earthing Rod Photo Must be attached with Bill.). Earthing need to measure at Site and it should be less than 5 Ohm. If found less than 5 ohm than will be rejected. Earthing Pit Must be Provided for both Cu as well as GI earthing				
23.1	ECO SAFE environment friendly electrical grounding system with <b>T-193- Hot Dip Galvanised</b> , having 50mm dia. of outer pipe and 25 mm dia. of inner pipe and length of 3mtrs with 50kg Back Fill Compound as per UL 476, of Powerfill Eco friendly electrical grounding backfill compound and clamp (DB - PANEL) - G. I. -(Chemical GI Earthing) ERDA & NSIC approved, E link or ETP MAKE or ASHLOK MAKE. Any other make will not be consider. (DB - PANEL) .	<b>1</b>	<b>nos</b>		
23.2	ECO SAFE environment friendly electrical grounding system with <b>T-193- Copper electrode</b> used upto 11 KV, having 50mm dia. of outer pipe and 25 mm dia. of inner pipe and length of 3mtrs with 50kg Back Fill Compound as per UL 476, of Powerfill Eco friendly electrical grounding backfill compound and clamp (UPS ) - Chemical GI Earthing) ERDA & NSIC approved, E link or ETP MAKE or ASHLOK MAKE. Any other make will not be consider. - Cu. ( UPS ) .	<b>1</b>	<b>nos</b>		
24	Supply, laying and jointing of following wire / strip / earth cable on walls, ceiling etc. With necessary non rusting clamps, washers, nuts and bolts etc complete.				
24.1	<b>25 x 3 mm G.I. Strip</b> - From G. I. Earthpit to Main Panel + From Cu. Earthpit to UPS I / P DB.	<b>20</b>	<b>Rmt</b>		
24.2	<b>25 x 3 mm CU.strip.</b>	<b>5</b>	<b>Rmt</b>		
24.3	<b>8 SWG G.I. Wire</b> with 20 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete for ELE. PANEL, ALL DBS, ETC.	<b>20</b>	<b>Rmt</b>		
24.4	<b>8 SWG CU. Wire</b> with 20 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete.	<b>20</b>	<b>Rmt</b>		
F	<b>CABLES &amp; CABLE TERMINATIONS:</b>				
25	Supply, Lying, installation, testing and commissioning of following sizes of PVC insulated PVC sheathed copper / aluminum conductor armoured cable to be laying in existing caboe trench or to be laid in existing pipes of with necessary clamps, spacers with cleating on wall ceiling etc. complete to the satisfaction of EIC. All types of cable excavation works should be in contractor's scope. ( LENTH TO BE VERIFY AT SITE ).				
25.1	<b>4 C x 2.5 sq. mm Cu . Conductor</b> YWY cable. (for Signboard).	<b>20</b>	<b>mtr</b>		
25.2	<b>4 C x 4.0 sq. mm Cu. Conductor</b> YWY cable. ( From 3 phase cassette AC DB to 3 phase cassette AC 4 P ELCB to outdoor units. ) .	<b>0</b>	<b>mtr</b>		
25.3	<b>4 C x 6.0 sq. mm Cu. Conductor</b> YWY cable. (Main Panel to UPS I/P DB ) .	<b>60</b>	<b>mtr</b>		
25.4	<b>4 C x 10.0 sq. mm Cu. Conductor</b> YWY cable. (Main Panel to 3 PHASE CASSETTE AC DB ) .	<b>0</b>	<b>mtr</b>		
25.5	<b>4 C x 16.0 sq mm Alu. Conductor</b> AYFY cable. ( Main Panel to LDB, PDB, ATMDB. ) .	<b>30</b>	<b>mtr</b>		
25.6	<b>3.5 C x 50.0 sq. mm Alu. Conductor</b> AYFY cable. (main cable from Panel to main mccb nr. energy meter) (LENGTH as per site contition) .	<b>50</b>	<b>mtr</b>		
25.7	<b>4.0 C x 25.0 sq mm Alu. Conductor</b> AYFY cable. ( Main Panel to DG SET) .	<b>0</b>	<b>mtr</b>		

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
25.8	25.0 sq. mm single core Cu. wire supply & laying for main load wire from meter to main switch in flexible pipe.	10	mtr		
25.9	3 C X 10.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( UPS to UPS O/P DB & UPS I/P DB to UPS).	15	mtr		
25.10	3 C X 6.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( UPS to UPS O/P DB & UPS I/P DB to UPS).	15	mtr		
25.11	3 C X 4.0 sq. mm. flexible PVC Insulated copper conductor cable laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark from AC indoor unit to AC outdoor unit. (For SPLIT AC units.) OR as per other requirement .	10	mtr		
26	End termination of following PVC insulated armoured cables including supply and fixing of brass single compression type cable glands and crimping type aluminum / copper lugs suitable for terminations of armoured cables of following overall diameters, incl.				
26.1	4 C x 2.5 sq. mm Cu . Conductor YWY cable. (for Signboard).	1	nos		
26.2	4 C x 4.0 sq. mm Cu. Conductor YWY cable. ( Main panel to LDB , From main panel to 3 phase cassette AC 4 P ELCB to outdoor units. ) .	6	nos		
26.3	4 C x 6.0 sq. mm Cu. Conductor YWY cable. (Main Panel to UPS I/P DB ) .	2	nos		
26.4	4 C x 10.0 sq. mm Cu. Conductor YWY cable. (Main Panel to 3 PHASE CASSETTE AC DB ) .	0	nos		
26.5	4 C x 16.0 sq mm Alu. Conductor AYFY cable. ( Main Panel to LDB, PDB, ATMDB . ) .	6	nos		
26.6	3.5 C x 50.0 sq. mm Alu. Conductor AYFY cable. (main cable from Panel to main mccb nr. energy meter).	2	nos		
26.7	4.0 C x 25.0 sq mm Alu. Conductor AYFY cable. ( Main Panel to DG SET ) .	0	nos		
26.8	25.0 sq.mm single core end termination with copper lugs.	8	nos		
26.9	3 C X 10.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( UPS to UPS O/P DB & UPS I/P DB to UPS).	0	nos		
26.10	3 C X 6.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( UPS to UPS O/P DB & UPS I/P DB to UPS).	4	nos		
G	MISCELLANEOUS ITEMS :				
27	Supply and installation of 300 x 300 x 40 mm size GI box duly fabricated from 18 SWG m.s. sheet with top cover of s. s. sheet complete with necessary knock outs at all the sides of box for conduit entries duly fixed in floor, including breaking in floor and re-finished the same etc. complete (Wire Draw Box).	0	nos		
28	Supply and installation of 150 x 150 x 40 mm size GI box duly fabricated from 18 SWG m.s. sheet with top cover of s. s. sheet complete with necessary knock outs at all the sides of box for conduit entries duly fixed in floor, including breaking in floor and re-finished the same etc. complete (Wire Draw Box).	0	nos		
29	Supply an installation of 24 Hr, 7 days A/C Timer with 2 nos. power conector of M.D.S, L & T ,SEIMENS,THEBEN ( indoasian) Make. All enclosed in sheet steel powder coated enclosure of 400 X 400 mm complete with all necessary termination for system room A.C & E lobby AC. Here Ready made Cyclic Timer Will not be permitted.	0	nos		
30	Supply and installation of 2.5 sq. mm. 3 core flexible cable of approved make (3 mtr. Length) with heavy duty industrial pvc flexible pipe & 15 amp. 3 pin top of approved make for the supply of locker room.	2	nos		
31	Supply and installation of 4.0 sq. mm. 3 core flexible cable of approved make (5 mtr. Length) with heavy duty industrial pvc flexible pipe & 20 A. industrial plug socket with metal box & provision of DP MCB slot of approved make for the supply of locker room AC point.	0	nos		
32	SITC of CABLE TV cable line with proper fixing and connecting with modular Co-Axial TV Socket. - 2 run.	0	mtr		
33	Supply & laying of the Empty conduit . - 25 mm.	0	mtr		
34	Existing floor cutting for laying conduits & finished by sand - cement mixer for strong finishing ( PCC works ) .	5	mtr		
35	SITC of core cutting in R.C.C/slab for cables.	1	job		
36	Laisioning work ( addition Load ) WITH Electric supply Co. in branch & Apporoval and Neccessary certificate.	0	job		
37	Providing Necessary plug points & light points for tube lights (including nessary wiring), Tubelights for temporary lighting arrangments at various locations as required by various contractors for execution of various works / to run equipments such as drill / cutter etc. during the entire execution process. The accessories used for this purpose shall be of temp. nature (anchor piano or eq.) & the contractor has to take back the same on completion of the project. The supply for this shall be taken from the temporary connection provided at / from nearby general meter under co.ordintion with the LANDLORD. & also providing temporary power supply for computers and data connection for computers with wiring, switchboard, Comp. I/O Points,etc. for smoothly running of the branch with removing & reshifting of the computers , printers, etc. bank hardware accessories.	1	job		
<b>TOTAL - PART A :::</b>					
<b>PART - B ::: ATM</b>					
A	INTERNAL WIRING :Phase wire must be Red colour for LDB, Yellow colour for PDB & Blue for ACDB, Neutral Wire of Black colour & Green Wire for Earthing. Color code must be maintained. Tagging from DB MCB and Switch board must be done.				
38	P and M point wiring in concealed in walls, furniture's & for above false ceiling, or on ceiling, on beams shall be fixed with saddles & spacers etc., with conduits taken in slab with 20 mm dia PVC Rigid conduits 1.5 mm thick ISI mark with 2 nos. of 1.5 sq. mm. off wires & 1 nos. of 1.0 sq. mm. earth wire with modular switch with company made flush metal box/surface PVC box etc. comp. with nec. main lines for switch board from LDB of mains of 2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm pvc Insulated copper conductor earth wire laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark .These will be used with point wiring of light, fan, ex. fan, callbell points, etc { Max. 3 Switchboards in one circuit - One Sp MCB }				
38.1	One 5A switch controlling one light / fan point.	1	nos		
38.2	One switch controlling Two light points .	2	nos		
38.3	5A socket outlet with 5A switch ( on common board )	0	nos		
38.4	5A socket outlet with 5A SP switch (as an independent point ) [ for ex. Fan, extra points.]	0	nos		

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

**UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.**

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
38.5	SITC of loop light points Of <b>2 nos. of 1.5 sq. mm. off wires &amp; 1 nos. of 1.0 sq. mm. earth wire</b> from Main panel timer of mains of <b>2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm pvc Insulated copper conductor earth wire</b> laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark ( <b>This point is for Signage and Down Lighter Points at Entrance</b> )	1	nos		
38.6	P and M point wiring in concealed in walls, furniture's & for above false ceiling, or on ceiling, on beams shall be fixed with saddles & spacers etc., with conduits taken in slab with 20 mm dia PVC Rigid conduits 1.5 mm thick ISI mark with <b>2 nos. of 1.5 sq. mm. &amp; 1 nos. of 1.0 sq. mm.</b> with modular switch with company made flush metal box/surface PVC box etc. comp. with nec. main lines for switch board from INVERTER EMERGENCY LIGHT DB of mains of <b>2 nos. of 2.5 sq.mm wire and 1 no.of 1.0 sqmm pvc Insulated copper conductor wire</b> laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark .These will be used with point wiring of light, fan, ex. fan, wall fan points, callbell points, etc.	1	nos		
39	SITC of <b>6/16 Amp. Switch and socket</b> complete with necessary require wiring from <b>PDB of 2 no of 4.0 sq mm wires and 1 no of 2.5 sq mm PVC Insulated copper conductor earth wire</b> laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of power points ,etc. <b>No Looping of Neutral or earthing is allowed. Each point needs to provide seperate circuit.</b>	1	nos		
40	SITC of <b>20 A, 230 V, with DP MCB</b> all enclosed in a prefabricated M S boxes complete to the satisfaction of E.I.C. For SPLIT AC 1.5TR unit with necessary require wiring from ACDB of 2 no of 4.0 sq mm wires and 1 no of 2.5 sq mm PVC Insulated copper conductor earth wire laying in with 20 mm/25 mm dia type PVC rigid conduits 1.5 mm thick ISI mark. These will be used with point wiring of A.C. points ,etc [This point should be installed near Split / window AC in concealed manner.] The height of switchboard must be at reachable level as suggested by Arch. for easy operation. - from that point to Split AC , empty conduit + necessary bends must in concealed mode by ele. contractor. Server Room AC Supply need to be given through Main Panel. No Looping of Neutral or earthing is allowed. Each point needs to provide seperate circuit. For Cassate AC power supply indoor or outdoor need to be given as per AC vendor's requirement. THE ENCLOSURE SHOULD BE SAME <b>MAKE AS MCB MAKE</b>	2	nos		
<b>B</b>	<b>LIGHTING FIXTURES :</b>				
	(NOTE : ANY OF FIXTURES AND FITINGS SHALL BE RE-CONFIRMED WITH THE ARCHITECTS / CONSULANTS BEFORE ORDERING THEM.				
41	Supply, installation, testing and commissioning (including supply and fixing flexible wires from holder to fixtures hardwares etc.) of.... - The LED lamps should be of same make as fixture make. - The marking & cutting of fixtures should be in ele. contractor's scope.. fixtures should be approved by bank's ele. engineer / ele. consultant / architect. from the given make list before installations. LM 79 & LM 80 test reports to be submitted. nichia / LUmileds / cree - LED should be used by manufacture. Lighting Luminaire of LED for Office single piece die cost aluminium M24 housing complete with driver unit, mirror optic and other accessories Lamps of about 100 lumen/W injection moulded PC diffusers with high brightness complete unit complying with international standard (LU49, LH801) - opertive on 190V - 270 V 50 Hz with Mini 3 years warranty complete with mounting system and lamp dully wired and tested Details as under.				
41.1	<b>LED 1 x 31 W ( 3100 lumens ) ( 2' X 2' ) RECESS MOUNTED LUMINAIRE</b> with 2KV surge protection, making earthing conection complete to be recessed in false ceiling with all necessary hardwares, hanging - die cast frame arrangement, chains or hook arrangement with ceiling, connected to supply wire with PVC connector. Earthing connection with lugging need to given to body of Fixture, etc. complete. (CROMPTON make cat no. AURA 1 LCPL-36-CDL or Equivalent in GE/ Philips / Havells / Wipro make).	1	nos		
41.2	<b>1x16 W Square / Round LED DOWN LIGHT</b> pressure die cast fixture with 2KV surge protection ( 950 lumens ) to be recessed in false ceiling with all necessary hardwares, chains, hook etc. complete.( CROMPTON make cat no. CROM ROUND / CROM SQUARE LCDN - 12 - CDL/TL/WW or Equivalent in GE / Philips / Havells / Wipro make ). Energy Efficient round recessed mounted LED down lighter with premium white powder coating and die cast aluminium housing. as per details above. Die casting material should not be CRCO type material. should be connected to supply wire with PVC connector. <u>Earthing connection with lugging need to given to body of Fixture</u>	4	nos		
41.30	SITC of <b>LED STRIP LIGHT</b> flexible complete with driver unit, 230 v, 50 Hz, as required . ( CROMPTON make LST20WW or equivalent GE/ Philips / Wipro / Havells make).	4	mtr		
<b>C</b>	<b>COMPUTER POWER SUPPLY &amp; NETWORKING - TELE. SYSTEM.:</b> Phase wire must be Yellow colour for UPS O/P DB, Red colour for PDB , Neutral Wire of Black colour & Green Wire for Earthing. Color code must be maintained. Tagging from DB <b>MCB and Switch board must be done.</b>				
42	SITC of 2 nos. of <b>6 A, 5 pin Sockets and 1 no. of 6 \ 16 A socket</b> below table outlets with one <b>16 A</b> switch with indicator Computer power supply with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 1.5 sqmm pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from UPSDB to Computer power supply boards.{Maxi. 3 computers in one circuit}. complete with necessary termination etc. complete.[ White Colour Outer Plate For These Switchboards]. LOOP POINTS MUST BE OF SAME SIZED WIRES. Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from UPS O/P DB MCB and Switch board must be done.	3	nos		
43	S & l of 2 nos. of <b>6 A, 5 pin Sockets and 1 no. of with one 6 A switches raw power</b> supply with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 1.5 sqmm pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.{Maxi. 3 Raw Power Points in one circuit}. complete with necessary termination etc. complete.. [ Black Colour Outer Plate For These Switchboards]. LOOP POINTS MUST BE OF SAME SIZED WIRES. Phase wire must be Red colour, Nutral Wire must be Black color & Green Wire for Earthing. Color code must be maintained. Tagging from UPS O/P DB MCB and Switch board must be done. .	1	nos		
<b>D</b>	<b>DISTRIBUTION BOARD AND PANELS :</b>				

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

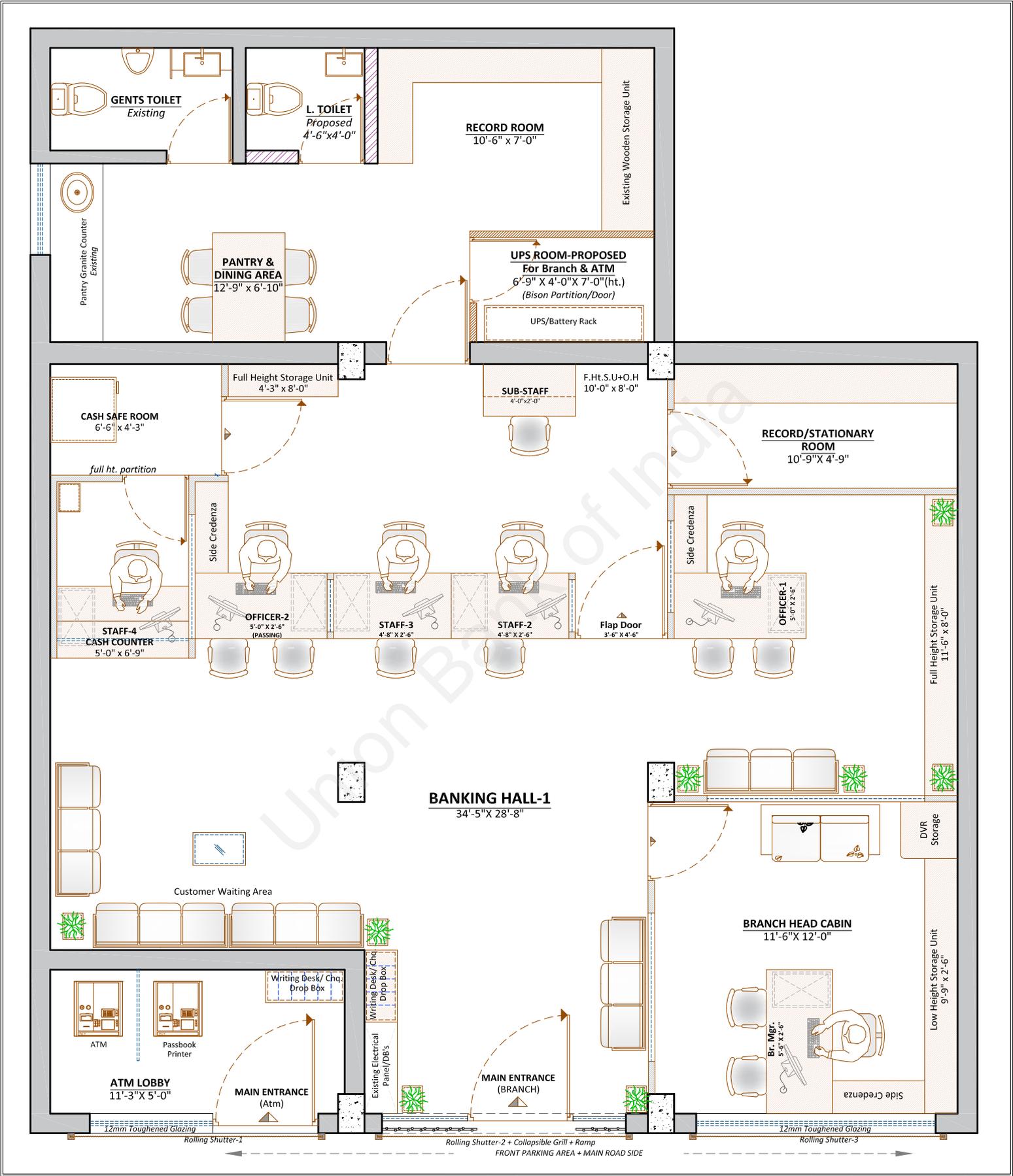
UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
44	LABOUR CHARGES: Removing/Refixing/Re-Installing of existing DB's from UBI-. Branch to UBI-. Branch all including transportation as per instruction of Architect.				
44.1	<b>6 - WAY TPN DB : ( LDB ) .</b>	1	nos		
	incoming : 40 A FP ELCB, 100 mA - 1 NO .				
	incoming : 25 A DP ELCB, 100 mA - 1 NO . FOR ATM UPS I/P.				
	* Timer of L & T make Cat. No. 67DDTO digicom Timer with 16A. 2P contactor / Theben make Cat no. SUL 180 a - T180 001 ANALOGTimer with L & T make contactor MNX 18 ( operating coil voltage 230V, 50 Hz). (24 hrs).- <b>1 No for signage light .</b>				
	outgoing : 20 / 25 A DP MCB ( 1 nos ) for split AC.				
	outgoing : 16 A DP MCB ( 1 nos ) for SIGNBOARD.				
	outgoing : 6 to 10 A SP MCB ( 2 nos). One for lighting & other for raw power.				
44.2	<b>4 WAY SPN DB : (UPS DB) OUTPUT. - for E Lobby Area.</b>	1	nos		
	incoming : 25 A DP 100 mA ELCB.				
	outgoing : 6 to 10 A SP MCB ( 2 nos ).				
44.3	<b>4 WAY SPN DB : (UPS DB) for E Lobby Area. - in ups room.</b>	1	nos		
	incoming : 25 A DP MCB. - 1 no.				
	outgoing : 25 A DP MCB. - 1 no.				
<b>E</b>	<b>EARTHING SYSTEM:</b>				
44.4	Providing and making Earthing Pit with all necessary material and making masonry kundi, watering arrangement etc complete as per ISI 3043-1987 (FOLLOWING ITEMS MAY OPERATE). Resistivity as per IEC / IS. ( 3 years Manufacturer Warranty. Earthing Certificate Need to Attached). ( At the Time of buried of earthing Photograph must be taken Without Photographic Proof Earthing Will be Rejected. Earthing Rod Photo Must be attached with Bill.). Earthing need to measure at Site and it should be less than 5 Ohm. If found less than 5 ohm than will be rejected. Earthing Pit Must be Provided for both Cu as well as GI earthing				
44.5	ECO SAFE environment friendly electrical grounding system with <b>T-193- Copper electrode</b> used upto 11 KV, having 50mm dia. of outer pipe and 25 mm dia. of inner pipe and length of 3mtrs with 50kg Back Fill Compound as per UL 476, of Powerfill Eco friendly electrical grounding backfill compound and clamp (UPS ) - Chemical GI Earthing) ERDA & NSIC approved, E link or ETP MAKE or ASHLOK MAKE. Any other make will not be consider. - Cu. ( UPS ) .	1	nos		
45	Supply, laying and jointing of following wire / strip / earth cable on walls, ceiling etc. With necessary non rusting clamps, washers, nuts and bolts etc complete.				
45.1	25 x 3 mm G.I. Strip - From G. I. Earthpit to Main Panel + From Cu. Earthpit to UPS I / P DB.	20	Rmt		
45.2	25 x 3 mm CU.strip.	0	Rmt		
45.3	8 SWG CU. Wire with 20 mm dia. PVC rigid conduit duly cleated / concealed / burried in floor etc. complete.	20	Rmt		
<b>F</b>	<b>CABLES &amp; CABLE TERMINATIONS:</b>				
46	Supply, Laying, installation, testing and commissioning of following sizes of PVC insulated PVC sheathed copper / aluminum conductor armoured cable to be laying in existing caboe trench or to be laid in existing pipes of with necessary clamps, spacers with cleating on wall ceiling etc. complete to the satisfaction of EIC. All types of cable excavation works should be in contractor's scope.				
46.1	3 C x 2.5 sq. mm Cu . Conductor YWY cable. (for Signboard).	15	mtr		
46.20	3 C X 4.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( <b>UPS to UPS O/P DB &amp; UPS I/P DB to UPS</b> ).	12	mtr		
46.30	3 C X 4.0 sq. mm. flexible PVC Insulated copper conductor cable laying in with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark from AC indoor unit to AC outdoor unit. (For SPLIT AC 2.0 TR unit -OUTDOOR SUPPLY) .	3	mtr		
47	End termination of following PVC insulated armoured cables including supply and fixing of brass single compression type cable glands and crimping type aluminum / copper lugs suitable for terminations of armoured cables of following overall diameters, incl.				
47.1	3 C x 2.5 sq. mm Cu . Conductor YWY cable. (for Signboard).	1	nos		
47.20	3 C X 4.0 sq. mm flexible Cu. cable with 20 mm/25 mm dia PVC rigid conduits 1.5 mm thick ISI mark . ( <b>UPS to UPS O/P DB &amp; UPS I/P DB to UPS</b> ).	2	nos		
<b>G</b>	<b>MISCELLANEOUS ITEMS :</b>				
48	Supply an installation of 24 Hr, 7 days <b>A/C timer</b> with 2 nos. power contector of M.D.S, L & T ,SEIMENS,THEBEN ( indoasian) Make. All enclosed in sheet steel powder coated enclosure of 400 X 400 mm complete with all necessary termination for system room A.C & E lobby AC. Here Ready made Cyclic Timer Will not be permitted.	1	nos		
<b>TOTAL - PART B :::</b>					
<b>PART - C ::: LESS BUYBACK</b>					
49	<b>BUY BACK</b> : FROM old premises - Entire existing electrification, telephone wirings, LAN wirings with conduits shall be removed and shall be purchased by the contractor including switches and accessories, <b>lighting fixtures, ceiling fans, exhaust fan , Cables</b> , etc. (Contractor shall last visit site before quoting and the submit the list of material with quantities which are buying and the quoted rate shall be lump sumn basis)	1	Job		
	Old Electrical Items of UBI-. Branch : which was supposed to be replaced.				
	Old Electrical Items Items: UBI . Branch : which shall not be reused at UBI-. Branch.				
50	<b>FINAL TOTAL BASIC AMOUNT: IN WORDS:</b> ..... ..... ..... .....				

**BILL OF QUANTITIES : ELECTRICAL / RENOVATION WORKS**

UBI - DAHEJ BRANCH & ATM, VADODARA REGION, GUJARAT.

Sr. No.	DESCRIPTION	QTY.	UNIT	U.RATE (Rs.)	AMOUNT (Rs.)
51	ADD GST @ 18% (C.GST@9% + S.GST@9%)			18.00%	
52	FINAL GRAND TOTAL WITH GST :				
<b>IMPORTANT NOTES FOR ELECTRICAL WORK CONTRACTOR:</b>					
1	ALL RATES SHOULD BE INCLUDE OF ALL TAXES EXCLUDING GST WHATEVER IS APPLICABLE.				
2	THE CONTRACTOR SHOULD DEPUTE ONE PERSON AT SITE FROM START OF WORK TO FINISH FOR GIVING TEMPORARY CONNECTIONS & ATTENDING PROBLEMS.				
3	THE CONTRACTOR SHOULD WORK ACCORDING TO THE FINAL LAYOUT.				
4	THE CONTRACTOR SHOULD SUBMIT & APPROVE MAKE LIST WITH ARCH./ BANK'S ENGINEER / ELE. CONSULTANT BEFORE WORKING & SUBMIT SIGNED COPY WITH FINAL BILL SUBMISSION.				
5	THE CONTRACTOR SHOULD CHECK ELE. APPROVED MAKE LIST BEFORE QUOTE.				
6	THE CONTRACTOR SHOULD SUBMIT TEST CERTIFICATE OF PANEL FROM PANEL BUILDER AS PER PERFORMA GIVEN IN TENDER. BUT THE PANEL SHOULD BE MADE AS PER CPRI TERMS & CONDITIONS & ALSO APPROVED BY BANK'S ELE. ENGINEER / CONSULTANT . THE CONTRACTOR SHOULD FOLLOW THE GA DRAWING & PANEL SLD IF GIVEN IN TENDER.				
7	LOWEST BIDDER SHALL BE DECIDED AFTER DEDUCTING THE BUYBACK VALUE.				
8	THE CONTRACTOR SHOULD SUBMIT BANK GUARANTEE OR WARRANTY OF FIXTURES - LED FOR MIN. 3 YEARS.				
9	CONTRACTOR SHOULD BE SUBMITTED THE CERTIFICATE OF WIRES THOSE USED FOR THE BRANCH FROM DULY SIGNED BY COMPANY AUTHORISED PERSON. - PER PROJECT BASIS.				
10	EARTH RESISTANCE SHOULD BE CHECKED & SUBMITTED THE REPORT WITH DULY SIGNED BY ELE. CONTRACOTR AT THE TIME OF BILL CHECKING.				
11	SINGLE LINE DIAGRAM SHOULD BE SUBMITTED AT BRANCH & ONE COPY SHOULD BE ATTACHED NEAR DB / MAIN PANEL.				
12	SHOCK TREATMENT CHART SHOULD BE PEST NEAR DB / MAIN PANEL. STICKERS SHOULD BE PEST ON DBS / MAIN PANEL.				
13	THE CONTRACTOR'S PRESENCE MUST BE COMPULSORY FOR SHIFTING / INSTALLING OF UPS , DATA RACK, EPABX SYSTEMS. - MUST HELP TO BANK'S VENDORS LIKE PCS (				
14	CONFIRMATION/ RECEIVED SIGNATURE FROM BRANCH MANAGER REQUIRED FOR SUPPLY OF PATCH CORDS.				
15	THE RATES QUOTED BY THE CONTRACTOR IN THE COLUMN WHERE QUANTITY & UNIT ARE NOT MENTIONED IN THE TENDER ARE NOT NECESSARY BE ACCEPTED , IF LATER THE SAME ARE TO BE FIXED ON SITE.				
16	THE CONTRACTOR SHOULD BE ADVISED NOT TO LAY ANY CONDUIT / CABLE MAIN LINES THROUGH THE CASH ROOM / LOCKER ROOM / RECORD ROOM FOR SECURITY SAFETY				
17	IF THE CONTRACTOR HAS NOT CARRIED OUT ELECTRICAL WORK AS PER STANDARD SPECIFICATION THEN CONTRACTOR IS LIABLE TO REMOVE AND REWORK AS PER STANDARD SPECIFICATION AND WHATEVER THE DAMAGE IN CONNECTION WITH CIVIL/ FURNITURE/ AC WORK WILL BE BEAR BY CONTRACTOR. IF CONTRACTOR WILL NOT DONE REWORK THEN WHATEVER BEEN THE COST FOR REWORK WILL BE DEDUCTED FROM CONTRACTOR'S BILL.				
18	THE CONTRACTOR SHOULD BE ADVISED TO FIX 2 / 3 INCH SIZE PIES FOR HOLES IN OUTSIDE AREA WHERE THERE WILL BE CREATED THE HOLES IN WALL FOR CABLES / EARTH STRIP LAYING WORKS. FILLED WITH CEMENT / MORTAR WITH END CAPS OF PIPES.				



**PROJECT: UNION BANK OF INDIA - DAHEJ BRANCH (Existing Premises)**  
**INTERIOR LAYOUT - GROUND FLOOR, VADODARA REGION, GUJARAT.**

REVISION NO. 1	DATE: 07/03/2022	DRG. : BRANCH - INT. LAYOUT_09	DRG. NO.:UBI/ DAHEJ BRANCH_INTERIOR LAYOUT - 03
PROJECT NO. : UBI.VR/09C-2022	CLIENT DETAIL : UBI - VADODARA REGION	CHECKED BY : AR. VIENDRA SHAW	DRAW BY : DRG. DATE : 07/03/2022
		DRG. SCALE : N.T.S.	

PROJECT CONSULTANT:  
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