# **INDIAN BANK**

ZONAL OFFICE, RANCHI

# TENDER DOCUMENT CIVIL, INTERIOR, FURNITURE AND ELECTRICAL WORK AT BOKARO DPS BRANCH

Name of Contractor:	_
Address :	_

# **BOKARO DPS BRANCH**

# **CONTENTS**

SECTION		DESCRIPTION	Page No.	
1	:	Tender Notice	3	
II	:	General Rules and Instruction for the Guidance of Tenderer	5	
III	:	Form of Tender	9	
IV	:	Articles of Agreement	12	
V	:	General Conditions of Contract	16	
		Bill of Quantities	54	

# Mandatory pre-qualification criteria for submission of tender

- 1. Indian Bank invites tender from reputed, experienced contractors / firms/companies for pre-qualification as follows:
  - At least one similar job\* for minimum value of Rs. 7.00 Lakh. in PSUs/PSBs/Govt. Sector/Private Limited Co. Copy of workorder to be submitted along with application.
    - \*Similar job means civil, interior furnishing and electrical work (composite)
- 2. The bidders have to be provide Audited Balance sheet for last financial year 2023-2024 FY.
- 3. The bidders should mandatorily have valid PAN No. and GSTIN and copy of PAN Card and GST registration details is to be submitted along with application.
- 4. The bidder should have valid trade license. Copy of trade license is to be submitted along with application.
- 5. The bidders should have Electrical License. Copy of Electrical license is to be submitted along with application.

Tender Bid shall be opened on 27.11.2024.

Work shall be carried out strictly as per site requirement & direction of Architect consultant. Approval for quality of material shall be obtained from Bank Engineer/Architect Consultant prior to execute the work.

Bank reserves right to reject / cancel any or all the bids without assigning any reason whatsoever.

## SECTION - I

# NOTICE OF INVITATION TO TENDER

Sealed Item rate tenders, are invited on behalf of

The Zonal Manager Indian Bank Ranchi Zonal Office, Bahubazar Chowk, Ranchi

For the following work:

a) Name of work : Civil, Interior, furniture and electrical work at

Bokaro DPS Branch

b) Estimated Cost : Rs. 7.39 Lakhs (approx) (excluding GST)

c) Time of Completion : 4 (four) weeks.

d) Cost of Tender Document: Rs. 500/- in favour of Indian Bank.

Zonal Office, Ranchi in the form of Demand Draft or Cheque per set of documents (original document are to be

submitted in the tender process).

(Non-refundable)

e) Availability of Tender

Document : <a href="http://indianbank.in">http://indianbank.in</a>

f) Issue of Tender : On 11.11.2024 to 26.11.2024

Document till 5.00 PM

g) Time and date of

Submission of tender : Tender should be submitted physically on or

before 27.11.2024 till 11:00 A.M.

h) Time and date of opening: After 12:30 PM. on 27.11.2024

of tender

Contd..

i) Venue : The Zonal Manager

Indian Bank

Ranchi Zonal Office, Bahubazar Chowk

Ranchi

j) Tender to be addressed

and submitted to : The Zonal Manager

Indian Bank

Ranchi Zonal Office, Bahubazar Chowk

Ranchi

k) Tender without tender cost in proper form will be rejected.

Drawings other than enclosed ones can be seen and clarification, if any, to be obtained from:

**Indian Bank** 

Ranchi Zonal Office, Bahubazar Chowk

<u>Ranchi</u>

- m) Validity of Tenders: 3 (Three) calendar months from the date of submission of Tender
- n) Goods and Service Tax (GST) shall be paid to the contractors as per applicable rules. The contractors, however, shall duly comply all necessary formalities in this regard and submit valid documents to the Bank.
- o) Delay in submission: Delay in submission of any part arising due to postal or any other irregularities at any stage will not be considered. The Bank will not be responsible for any damage in transit in case of postal delivery / delivery through courier service.
- p) All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
- q) The acceptance of tender will rest with Indian Bank which does not bind itself to accept the lowest or any tender and reserves to itself the right to reject any or all the tenders received without assigning any reason/s thereof.

The Bank also reserves to itself the right of accepting the whole or any Part of the tender and the tenderers shall be bound to perform the same at the rates quoted.

Yours faithfully, For **Indian Bank** 

#### **SECTION - II**

# GENERAL RULES AND INSTRUCTION FOR THE GUIDANCE OF TENDERER

Tenders are hereby invited on behalf of The Zonal Office, Ranchi, Bahubazar Chowk, Ranchi for Civil, interior, furniture and electrical work at Bokaro DPS Branch.

- 1. Tender Document consisting of the following:
  - i) Tender Notice
  - ii) General rules and instructions for the Guidance of Tenderers
  - iii) Form of tender
  - iv) Articles of Agreement
  - v) General Conditions of Contract with Appendices
  - vi) Technical Specifications
  - vii) Schedule of Quantities
  - viii) Drawings issued
- 2. Tender can be downloaded only from <a href="http://indianbank.in">http://indianbank.in</a> on stipulated days from 11.11.2024 to 26.11.2024. Tender will be rejected without application fees.
- 3. Tender Document collect/download and submit with proper form and full document.

**Note:** If the quoted cost is 20% above or less than the estimated cost then the bidder have to submit proper explanation with rate analysis to the bank. Unsatisfactory or unrealistic reply may attract cancellation.

- 4. The site of the work is available.
- 5. Tenders in only printed should be placed in sealed cover addressed to The Zonal Office, Ranchi, Bahubazar Chowk, Ranchi the name of the project written on the envelopes and submitted at the above office.
- 6. The sealed cover shall contain two separate sealed covers superscribed with Part I and Part II containing the documents as under:

Part-I: Covering Letter and Prequalification documents

(TD)

Part–II: The tender document with bill of quantities, duly priced,

(PS) any condition stipulated in Part-II will not be accepted.

Conditional rebates, if any given in Part-II, shall be

treated as unconditional.

- 7. Part-I will be opened on 27.11.2024 at 12:30 PM. The tenderers may depute their authorized representative to be present at the time of opening Part II, which will be opened immediately thereafter after verification of submissions made in Part I, which might necessitate withdrawal of conditions and its financial impact on the tendered sum, if any. Part II of tenders will be treated as informal in case submissions in Part I are found to be not in order. Informal tenders will not be opened and returned subsequently to the tenderer by registered post.
- 8. The tenderers should quote in figures as well as in words the rates, and amount tendered by them. The language for filling tender documents shall be in English. The amount for each item should be worked out and requisite total given.

All corrections shall be attested by the initials of the tenderers with the seal of the firm. In case any discrepancy/ difference is found on checking between rates quoted by the Contractor in words and figures or in the amount worked out by him, the following procedure shall be followed:

- a) When there is a difference between the rates in figure and in words, the rate which corresponds to the amount worked out by the Contractor, shall be taken as correct.
- b) When the amount of any item is not worked out by the Contractor or it does not correspond with the rate written either in figures or in words, then the rate quoted by the Contractors in words shall be taken as correct.
- c) When the rates quoted by the Contractor in figures and in words tally but the amount is not worked out correctly, rate quoted by the Contractor shall be taken as correct and not the amount.

- d) Amendments as mentioned above shall be based on the tender marked "original" only.
- 9. All rates shall be quoted on the proper form of the tender alone. Special care should be taken to write the rates in figures as well as in words and the amounts in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the words Rs. Should be written before the figures of rupees and words paise after the decimal figures, e.g. Rs.2.15 P. and in case of words, the word "Rupees" should precede and the word "Paise" should be written at the end, unless the rate is in whole rupees and followed by the words "only" it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word "only" should be written closely following the amount and it should not be written in the next line.
- 10. The Contractor, whose tender is accepted will be required to furnish by way of security deposit for the due fulfillment of his contract, such sum as detailed in Clause No. 17 of the General Conditions of Contract.
- 11. The acceptance of a tender will rest with The Zonal Office, Ranchi, Bahubazar Chowk, Ranchi, who does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all the tenders received without assignment of any reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
  - The Employer reserves the right to accept the tender in full or in part and the tenderer shall have no claim for revision of rates or other conditions if his tender is accepted in parts.
  - 12. Canvassing in connection with tenders is strictly prohibited and tenders submitted by the contractors who resort to canvassing will be liable to rejection.
  - 13. An item rate tender containing percentage below / above will be summarily rejected.
  - 14. On acceptance of the tender, the name of the accredited representative(s) of the Contractor who would be responsible for taking instructions from the Employer/Consultant shall be communicated to the Employer / Consultant.
  - 15. Goods and Service Tax (GST) shall be paid to the contractors as per applicable rules. The contractors, however, shall duly comply all necessary formalities in this regard and submit valid documents to the Bank.
  - 16. The Contractor shall give a list of his relative working with the Employer along with their designations and address.

- 17. No employee of the Employer is allowed to work as a Contractor for a period of two years of his retirement from Employer's services, without the previous permission of the Employer. The contract is liable to be cancelled if either the Contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Employer / Consultant as aforesaid before submission of the tender or engagement in the Contractor's service.
- 18. The tender for work shall remain open for acceptance for a period of 3 (Three) months from the date of submission of tenders. If any tenderer withdraws his tender before the said period, then the Employer shall be at liberty to forfeit the Earnest Money paid along with the tender.
- 19. The tender for the work shall not be witnessed by a Contractor or contractors who himself / themselves has / have tendered or who may and had /have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summary rejection.
- 20. It will be obligatory on the part of the tenderer to tender and sign the tender documents for all the component parts and that, after the work is awarded, he will have to enter into an agreement for each component with the Employer.

## **SECTION - III**

# **FORM OF TENDER**

The Zonal Manager Indian Bank Ranchi Zonal Office, Bahubazar Chowk Ranchi

Dear Sir (s),

# Re: <u>Civil, interior, furniture and electrical work at Bokaro DPS Branch</u>

- 1. I/We refer to the tender notice issued by Indian Bank, The Zonal Office, Ranchi, Bahubazar Chowk, Ranchi on your behalf in connection with the above work.
- 2. I/We do hereby offer to perform, provide, execute, complete and maintain the work in conformity with drawings, conditions of contract, specifications, schedule of quantities for the sum and at the respective rates quoted in the schedule of quantities.
- 3. I/We have satisfied myself / ourselves as to the site conditions, examined the drawings and all aspects of the tender conditions. Subject to above, I/We do hereby agree, should this tender be accepted in whole or in part to:
  - a) Abide by and fulfill all the terms and provisions of the said conditions annexed hereto:
  - b) Complete the work within 4 (four) weeks, as stipulated by working in two or three shifts, if considered necessary by the consultants, at no extra cost to the Employer.
- 4. I/We note, will not bear any interest and is subject to forfeiture solely at Bank's discretion if:
  - i) the work is not commenced by me/us within 7 (Seven) days from the date of issue of formal work order.

	ii)	the offer is withdrawn within the validity period of acceptance
		or
	iii)	the agreement of the contract is not executed within 30 days from award of contract.
5.		understand that you are not bound to accept the lowest or any tender eceive.
6.	failure us an execu	cceptance of this tender shall constitute a binding contract and any as mentioned in item 4 above shall constitute a breach of contract by d the tender accepting authority shall be entitled to have the work at our risk and cost and to claim extra cost/expenditure incurred by from us.
7.	Our B	ankers are :
i) ii) iii)		
8.	Name i) ii) iii) iv)	e of partners / directors of our firm :
		Yours faithfully,
		Signature

# **BOKARO DPS BRANCH**

Name of Partner / Director of the firm authorised to sign or Name	: Name
of person having power of attorney to sign the contract. (Certified true copy of power of attorney should be attached)	: Designation
Signature and addresses of Withnesses	: a) Signature :
	b) Signature :

# <u>SECTION – IV</u> <u>ARTICLES OF AGREEMENT</u>

ARTICLES OF AGREEMENT made the day of between INDIAN BANK, The Zonal Office, Ranchi, Bahubazar Chowk, Ranchi, (hereinafter called "the Employer") which expression should include its successors and assignee of the one Part and (hereinafter called the "Contractor") of the other Part which expression should include its successor and assignee.

WHEREAS the Employer is desirous civil, interior, furniture and electrical work at Bokaro DPS Branch and has caused drawings and specifications describing the work to be prepared by Indian Bank, Zonal Office, Ranchi.

AND WHEREAS the said DRAWINGS numbered the specifications and the schedule of items and quantities have been signed by and on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute upon and subject for the conditions set forth herein and schedule of items and quantities, General Conditions of Contract, Special Conditions including other Conditions etc., Technical Specifications, decisions of negotiation meetings if any all correspondences exchanged by or between the parties from the date of tender notice till the award of work both letters inclusive, (all of which are collectively herein after referred to as "the said Conditions"). The work shown upon the 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 as shall become payable thereunder (hereinafter referred to as "the said contract amount").

#### **NOW IT IS HEREBY AGREED AS FOLLOWS:**

- In consideration of the said contract amount to be paid at the times in the manner set forth in the said conditions, the contractor shall upon and subject to the said execute and complete the work shown upon the said drawings and described in the said specifications and the schedule of items and quantities.
- 2. The Employer shall pay the contractor the said contract amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.

- 3. The said conditions and Appendices thereto 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.
- 4. The plans, agreements and documents mentioned herein shall form the basis of this contract.
- 5. This contract is neither a fixed lump sum contract nor piece work contract but is a contract to carry out the work in respect of the civil, interior furniture and electrical work at Bokaro DPS Branch 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 probable quantities or as provided in the said conditions.
- 6. The Employer reserves to itself the right of altering the drawings 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. 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 seventh day after the date of issue of formal work order as provided for in the said conditions whichever is later and to complete the entire work within 4 (four) weeks subject nevertheless to the provisions for extension of time.
- 8. All payments by the Employer under this contract will be made only at Bhagalpur.

Any dispute arising under this Agreement shall be referred to arbitration in accordance with the stipulation laid down in the general conditions of contract.

9.	That the several Parts of this contract have been read by the contractor and fully understood by the contractor.					
	IN WITHNESS WHEREOF the Employer 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 or an individual.				
	IN WITNESS whereof the Employer has set its hands to these Presents through its duly authorised official and the contractor has caused its common seal to be affixed hereunto and the said two duplicates / has caused these Presents and the said two duplicate hereof to be executed on its behalf, the day and year first herein above written.	If the Contractor is a Company.				
	Signature clause :					
	SIGNED AND DELIVERED					
	By the hand of Shri(Name and Designation)					
	In the presence of					
	(1)					
	Address					
	(2)					

Address .....

in the	presence of Witness	
	(1)	If the party is a partnership firm or an Individual should be signed by all or on behalf of all the partners.
	The COMMON SEAL OF	If the contractor signs under its common seal, the signature clause should tally with the sealing clause in the Articles of Association.
1)		If the Contractor is signed by the hand
2)		of power of attorney, whether a company of individual.
	Signed on behalf of the Indian Bank by its duly authorised official.	

# <u>SECTION – V</u> GENERAL CONDITIONS OF CONTRACT

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

#### 1. INTERPRETATION

In construing these conditions, the specifications, the schedule of quantities, tender and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires:

- i) **Employer**: The term Employer shall denote Indian Bank having their office Zonal Office, Bahubazar Chowk, Ranchi or any of its employees / representative authorized on their behalf.
- ii) **Contractor**: The Contractor shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representative(s) of such individual or persons composing such firm or company or successors of such firm or company as the case may be and permitted assigns of such individual or firm or company.
- site: The site shall mean the site where the work are to be executed as shown within the boundary in red border on the site plan including any building and erections thereon allotted by the Employer for the Contractors use.
- iv) Site Engineer / Project Management Consultant (PMC): The Site Engineer shall be appointed by the Employer. The Employer may also appoint the Project Management Consultant (PMC).
- v) **Drawings:** The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings which may be supplied or any other instruction, which may be given by the Employer / Consultant during the execution of the work.

All drawings relating to work given to the Contractor together with a copy of schedule of quantities are to be kept at site and the Employer/Consultant shall be given access to such drawings or schedule of quantities whenever necessary.

The Contractor shall ask in writing for all clarifications on matters occurring anywhere in drawings, specifications and schedule of quantities or to additional instructions at least 20 days ahead from the time when it is required for implementation so that the Employer / Consultant may be able to give decision thereon.

- vi) "The Work" shall mean the work to be executed or done under this contract.
- vii) "Act of Insolvency" shall mean any act as such as defined by the Presidency Towns Insolvency Act or in Provincial Insolvency Act or any amending statutes.
- viii) "The Schedule of Quantities" shall mean the schedule of quantities as specified and forming Part of this contract.
- ix) "Priced Schedule of Quantities" shall mean the schedule of quantities duly priced with the accepted quoted rates of the Contractor.
- Please note that firms registered with MSME / NSIC under single point registration with valid certificates issued by GOI are exempted from submitting EMD. Necessary Certificates must accompany bid. No other type of certificate is acceptable. The exemption and relaxation in EMD is subject to the validity & acceptance of their registration certificate on the date of opening of Tender.

#### 2. **SCOPE**

The work consists of civil, interior, furniture and electrical work at Bokaro DPS Branch in accordance with the drawings and "Schedule of items and quantities". It includes furnishing all materials, labour, tools and equipment and management necessary and incidental to the construction and completion of the work. All work, during its progress and upon completion, shall conform to the lines, elevations and grades as shown on the drawings furnished by the Employer / Consultant. Should any detail, essential for efficient completion of the work be omitted from the drawings and specifications it shall be the responsibility of the Contractor to inform the Employer / Consultant and to furnish and install such detail with Employers' / Consultant's concurrence, so that upon completion of the proposed work the same will be acceptable and ready for use.

Employer / Consultant may in their absolute discretion issue further drawings and/or written instructions, details, directions and explanations, which are, here after collectively referred to as "The Employer's / Consultant's instructions" in regard to:

- a) The variation on modification of the design, quality or quantity of work or the addition or omission or substitution of any work.
- b) Any discrepancy in the drawings or between the schedule of quantities and/or drawings and / or specification.
- c) The removal from the site of any defective material brought thereon by the Contractor and the substitution of any other material thereof.
- d) The opening up for inspection of any work covered up.
- e) The rectification and making good of any defects under clauses hereinafter mentioned and those arising during the Defect Liability period.

The contractor shall forthwith comply with and duly execute any work comprised in such Employer's / Consultant's instructions, provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the work by the Employer / Consultant shall if involving a variation be confirmed in writing to the Contractor within seven days. No work for which rates are not specifically mentioned in the priced schedule of quantities shall be taken up without written permission of the Employer / Consultant. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the Employer in consultation with the Consultant as provided in Clause "variation".

#### 3. **DETAILED DRAWINGS AND INSTRUCTIONS**

The Employer through its Consultant 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 Documents, true developments thereof, and reasonably inferable therefrom.

The work shall be executed in conformity therewith and the Contractor shall not work without proper drawings and instructions.

Immediately after receipt of the work order of the contract the contractor shall prepare a detailed progress schedule and submit the same to the Employer through the Consultant for approval which shall indicate the dates for the starting and completion of the various stages of constructions.

#### 4. COPIES FURNISHED

The Contractor on the signing hereof shall be furnished by the Employer through its Consultant free of charge with a copy of the priced schedule of quantities / rates, two copies of each of the said drawings and one copy of specifications and two copies of all further drawings issued during the progress of the work. Any further copies of such drawings required by the Contractor shall be supplied on payment of the charges thereof by the contractor.

#### 5. OWNERSHIP OF DRAWING

All drawings, specification and copies thereof furnished by the Employer through its Consultant are the property of the Employer. They are not to be used on other work, and with the exception of the signed contract set, are to be returned to the Employer on request at the completion of the work.

# 6. FAILURE BY CONTRACTORS TO COMPLY WITH EMPLOYER'S / CONSULTANT'S INSTRUCTION

If the contractor after receipt of written notice from the Employer and/or the Consultant requiring compliance of any instructions within ten days fails to comply with such further drawings and/or Employer's / Consultant's instructions, the Employer through the Consultant or other person, may employ other person to execute any such work whatsoever that may be necessary to give effect thereto and pay all cost incurred in connection therewith and same shall be recoverable from the contractor by the Employer on the certificate of the Consultant as a debt or shall have right to deduct same from any moneys due or to become due to the contractor.

# 7. TENDERER SHALL VISIT THE SITE

Intending tenderer shall visit the site and make himself thoroughly acquainted with the local site condition, nature and requirements of the work, facilities of transport condition, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport etc for proper execution of work as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Employer / Consultant might be deemed to have reasonably been inferred to be so existing before commencement of work.

#### 8. TENDERS

The entire set of tender paper issued to the tenderer should be submitted fully priced and also signed on the last page together with initials on every page. Initial / signature will indicate the acceptance of the tender papers by the tenderer.

The schedule of quantities shall be filled in as follows:

i) The "Rate" column to be legibly filled in ink in both English figures and English words.

- ii) Amount column to be filled in for each item and the amount for each subhead as detailed in the "Schedule of Quantities".
- iii) All corrections / overwriting are to be initiated with the seal of the Firm.

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

The Employer reserves the right to reject the lowest or any tender and also to discharge any or all of the tenders for each section or to split up and distribute any item of work to any specialist firm or firms, without assigning any reason.

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

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

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

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

#### 9. **AGREEMENT**

The successful Contractor shall sign the agreement as per draft agreement annexed within 15 days from the date of issue of formal work order and he shall pay for all stamps and legal expenses, incidental thereto. However, the written acceptance of the tender by the Employer / Consultant on behalf of Employer will constitute a binding contract between the Employer and the person so tendering whether such formal agreement is or is not subsequently executed.

#### 10. **ROYALTIES & PATENTS**

The contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Employer harmless from loss on account thereof.

#### 11. PERMITS AND LICENCES

Permits and licenses for release of materials which are under Government control will be arranged by the contractor. The Employer will render necessary assistance, sign any forms or applications that may be necessary.

#### 12. GOVERNMENT AND LOCAL RULES

The Contractor shall conform to the provisions of all local Bylaws and Acts relating to the work and to the Regulations etc. of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The Contractor shall give all notices required by the said Act, Rules, Regulations and Bylaws etc and pay all fees payable to such authority / authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc. and shall indemnify the Employer against such liabilities and shall defend all actions arising from such claims or liabilities.

#### 13. TAXES AND DUTIES

Goods and Service Tax (GST) shall be paid to the contractors as per applicable rules. The contractors, however, shall duly comply all necessary formalities in this regard and submit valid documents to the Bank.

## 14. **PROVISIONAL SUMS (P.S.)**

All provisional sum described in the schedule of quantities as P.S. shall be exclusively allotted to the purchase of materials & not for any handling & fixing with profit (or transportation charges where and if required) which shall be separately included in the contract price and described in the schedule of quantities. The disposal of the amounts covered under this head will be absolutely at the discretion of the Employer. Contractor is to make payments for these materials to the suppliers on certificate or order issued by the Employer / Consultant and release them through his bills from the Employer.

# 15. QUANTITY OF WORK TO BE EXECUTED

The quantities shown in the Schedule of quantities are intended to Part the entire new structure indicated in the drawings but the Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefor. If at any time after the commencement of the work, the Employer / Consultant shall for any reason whatsoever not require the whole work thereof as specified in the tender to be carried out, the Consultant / Employer shall give notice in writing of the fact to the contractor who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage with which he might have

derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out; neither shall he have any claim for compensation by reason of any alterations having been made in the original specification, drawing, designs and instructions which shall involve any curtailment of the work as originally contemplated.

#### 16. OTHER PERSONS ENGAGED BY THE EMPLOYER

The Employer reserves the right to execute any Part of the work included in this contract or any work which is not included in this contract by other Agency or persons and the Contractor shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The General building Contractor shall extend all co-operation in this regard.

#### 17. **SECURITY DEPOSIT & RETENTION MONEY**

The successful tenderer to whom the contract is awarded will have to deposit as "initial security deposit" (ISD) a further sum to make up 2% of the value of the accepted tender. ISD may be submitted in the form of Bank Draft/Pay Order or Bank Guarantee in a format approved by the employer. The Bank Guarantee shall be from any nationalized/ Foreign Bank banking in India other than the clientele. The initial Security Deposit will have to be made within 14 days from the date of acceptance of tender.

Apart from the initial security deposit made as above retention shall be deducted from progressive running bills @ 8% of the gross value of each running bill until the Total Security Deposit, i.e, the initial Security Deposit plus the retention money equals :

10 % on the first Rs. 1,00,000.00 of the cost of work 7.50 % on the next Rs. 1,00,000.00 of the cost of work 5.0 % on the remaining amount of the cost of work

Cost of work shall mean accepted Contract sum initially and ultimately shall mean the actual Total cost i.e. Gross value of the final bill by the Employer /Consultant

After realisation by deduction from the bill of the total retention as specified above, 50% of the total retention amount will be due for release after 15 days of virtual completion certificate issued by the Consultant/Employer.

50% of the retention amount will be refunded to the contractor on completion, subject to the following:

- a) issue of Virtual Completion Certificate by the Consultant / Employer.
- b) 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 balance 50% will be released to the Contractor within a reasonable period after the end of "Defect liability period" provided he has satisfactorily carried out all the work, submitted all documents contractually called for and attended to all defects in accordance with the conditions of the contract. No interest is allowed on retention money and earnest money deposit. The balance retention money may be transformed in appropriate Bank Guarantee on a Bank other than Indian Bank subject to performance of the project.

Further, if some dues to the Employer from the Contractor(s) have still to be recovered, the Employer reserves the right to withhold payment of so much of the retention money as in his opinion, represents the cost of the same.

#### 18. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The Contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same or may not be particularly shown or described therein provided that the same can reasonably be inferred therefrom and if the Contractor finds any discrepancies therein he shall immediately and in writing refer the same to the Employer / Consultant whose decision shall be final and binding. The Contractor shall provide himself for fresh and tested water for carrying out the work at his own cost. The Employer shall on no account be responsible for the expenses incurred by the Contractor for hired ground or fresh water obtained from elsewhere.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items of work within the contemplation of the contract and beyond the unit price no extra payment will be allowed for incidental or contingent work, labour and / or materials inclusive of all taxes and duties whatsoever except for specific items, if any stipulated in the tender documents.

The Contractor shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles, machineries and equipments and all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection of the public and safety of any adjacent roads, streets, walls, houses, buildings, all other erections, matters and things and the Contractor shall take down and remove any or all such centering, scaffolding, planking, timbering, strutting, shoring, etc., as occasion requires or when ordered so to do and shall fully reinstate and make good all matters and things disturbed during the execution of work to the satisfaction of the Employer / Consultant.

The Contractor shall also provide such temporary road on site as may be necessary for the proper performance of the contract, and for his own convenience but not otherwise. Upon completion, such road shall be broken

up and leveled where so required by the drawings unless the Employer shall otherwise direct

The Contractor shall at all times give access to workers employed by the Employer or any men employed on the buildings and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc. in any work, where directed by the Employer as may be required to enable such workmen to lay or fix pipes, electrical and telephone conduit laying, special fittings, etc. The quoted rates of the tenderers shall accordingly include all these above mentioned contingent work.

#### 19. TIME OF COMPLETION, EXTENSION OF TIME AND PROGRESS CHART

# a) Time of Completion:

The entire work is to be completed in all respects within the stipulated period of 4 (four) weeks The work shall be deemed to be commenced within 7 (Seven) days from the date of issue of formal work order or the date on which the Contractor is instructed to take possession of the site, whichever is later. Time is the essence of the contract and shall be strictly adhered to by the Contractor.

The work shall not be considered as complete until the Employer / Consultant have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

#### b) Extension of Time:

If in the opinion of the Employer / Consultant the work be delayed (a) by reason of any exceptionally inclement weather, or (b) by reason of instructions from the Employer / Consultant in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring owners or (c) by the work, or delay, of other contractors or tradesmen engaged or nominated by the Employer / Consultant and not referred to in the specification or (d) by reason of authorized extra and additions or (e) by reason of any combination of workmen or strike or lock-out affecting any of the building trades or (f) from other causes which the Employer / Consultant may consider are beyond the control of the Contractor, the Employer at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect therefor. In the event of the Employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

In case of such strikes or lock-outs, as are referred to above, the Contractor shall, immediately give the Employer, written notice thereof. Nevertheless, the Contractor shall use his best endeavors to prevent delay, and shall do all that may be reasonably required, to the satisfaction of the Employer / Consultant to proceed with the work and on his doing so that it will be ground of consideration by the Employer / Consultant for an extension of time as above provided. The decision of the Employer as to the period to be allowed for an

extension of time for completion hereunder (which decision shall be final and binding on the Contractor) shall be promulgated at the conclusion of such strike or lock-out and the Employer shall then, in the event of extension being granted, determine and declare the final completion date. The provision in Clause 20 with respect to payment of liquidated damages shall in such case, be read and construed as if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

Hindrance Register in the approved format shall be maintained and proper record of hindrances arisen and solved with the dates to be recorded in the register by the Employer's Site Engineer / Consultant's Site Engineer and Contractor's authorized representative so that extension of time to be granted can be derived from the register and recommended by the Consultant and approved by the Employer.

# c) Progress of work / work programme:

During the period of construction/execution of work, the Contractor shall maintain proportionate progress on the basis of the Programme Chart submitted by the Contractor immediately before commencement of work and agreed to by the Employer / Consultant. Contractor should also include planning for procurement for scarce materials well in advance and reflect the same in the Programme Chart so that there is no delay in completion of the project.

#### 20. LIQUIDATED DAMAGES

Should the work be not completed to the satisfaction of the Employer / Consultant within the stipulated period, the Contractor shall be bound to pay to the Employer a sum calculated @ 1.00% of the accepted contract sum per week of delay subject to a maximum of 10% of the accepted contract value by way of liquidated damages and not as penalty during which the work remains un-commenced or unfinished after the expiry of the completion date.

# 21. ACTION WHEN WHOLE OF 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 liquidated damages amounting to the whole of his security deposit (whether paid in one sum or deducted by installments) the Employer shall have power to adopt any of the following courses as they may deem best suited to the interest of the Employer:-

- a) To rescind the contract (of which rescission notice in writing to the contractor under hand of the Employer shall be conclusive evidence), and in which case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of the Employer.
- b) To employ labour by the Employer and to supply materials to carry out the work, or any part of the work, debiting the contractor with the cost of the labour and price of material (of the amount of which cost and

price of a certificate of the 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 Employer as to the value of the 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 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 Consultant shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Employer under the contract or otherwise, or from his security deposit or the proceeds of sale thereof or a sufficient part thereof.

In the event of any of the above courses being adopted by the Employer / Consultant the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials 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 be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under this contract unless and until the Employer / 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.

# 22. TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS

The Contractor shall provide, fix up and maintain in an approved position proper office accommodation for the Contractor's representative and staff, which offices shall be open at all reasonable hours to receive instruction notices or communications and clear away on completion of the work and make good all work disturbed.

All drawings maintained on the site are to be carefully mounted on boards of appropriate size. They are to be protected from ravages of termites, ants and other insects.

The Contractor shall provide at his own cost all artificial light required for the work and to enable other contractors and sub-contractors to complete the work within the specified time.

The Contractor shall provide a suitable temporary hut for the watchmen and clear away the same when no longer required and to provide all necessary attendance, lights etc, required.

The Contractor shall arrange for temporary latrines for the use of workers and field staff and keep the same in a clean and sanitary condition to the satisfaction of the Public Health Authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the work disturbed by these conveniences.

Every precaution shall be taken by the Contractor to prevent the breeding of mosquitoes on the work during the construction and all receptacles, cisterns, water tanks etc. used for storage of water must be suitably protected against breeding of mosquitoes. The contractor shall indemnify the Employer against any each of rules in respect of anti-malarial measures. The Contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding gantry, building structure other than those approved by the Employer.

#### **Protective Measures**

The Contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

The Contractor shall indemnify the Employer against any possible damage to the building, roads, or member of the public in course of execution of the work.

The Contractor shall provide necessary temporary enclosures, gates, entrances etc. for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the work and making good all work undisturbed.

#### Storage of materials

The Contractor shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that may be executed on the site including the tools and materials of subcontractors and remove same on completion. Sheds for storage of cement are to have pucca floor raised above the ground. Cement godown shall be constructed for storing about six weeks requirements of cement and stored as per norms with a stack of 10 bags each, two ft. opening all around with two ft. passage between each stack. Structure shall be waterproof from all the sides and top. Cement should be stored one ft. above the ground level and have pucca raised floor.

So also reinforcement bars are to be stored above the ground level to prevent the same from getting rusted.

#### **Tools**

All tools, equipment and instruments as instructed by the Employer / Consultant and considered necessary for the work shall be provided by the Contractor for the due performance of this contract.

All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for taking measurement shall be supplied by the Contractor.

The mistries and the supervisors on the work shall carry with them always an one metre or two metre steel tapes and a measuring tape of 30 metres, a spirit level, a plumb bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the contractors as he chooses for checking the work executed or being executed on the contract.

The Contractor should cover in his rates for making provisions for all reasonable facilities for the use of his erected scaffolding, and / or tools and plant etc by sub-contractors for their work or for work to be carried out by other agencies employed by the Employer / Consultant.

#### 23. NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS

The Contractor shall conform to the provisions of any Act of the Legislature relating to the work and to the Regulations and Bylaws of any authorities, and/or any water, lighting and other companies, and/or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specification that may be associated to so conform, give the Employer / Consultant written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer / Consultant on receipt of such intimation, shall give a decision within a reasonable time.

The Contractor/s shall arrange to give all notices required for by the said Acts. Regulations or Byelaws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

The Contractor shall indemnify the Employer against all claims in respect of patent rights, royalties, damages to buildings, roads or member of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Employer saved harmless and indemnified in all respects from such actions, costs and expenses.

#### 24. CLEARING SITE AND SETTING OUT WORKS

The site shown on the plan shall be cleared of all obstructions, trees, bushes, shrubs, loose stone, and rubbish materials of all kinds. All holes or hollows whether originally existing or produced by removal or loose stone or materials shall be carefully filled up with earth well rammed and leveled off as directed at his own cost.

The Contractor shall set out the work and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the Contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer / Consultant. The Contractor shall further set out the work to the alternative positions at the site until one is finally approved and the rates quoted in his tender should include for this and no extra on this account will be entertained.

#### 25. **DATUM**

The 'datum' will be furnished by the Consultant / Employer in conformity with regulations of appropriate Authority. The contractor shall make arrangements for preserving the above datum till completion of the work. All levels shown in the drawings are to be strictly adhered to.

#### 26. BENCHES

The Contractor is to construct and maintain proper benches of all the main walls, in order that the lines and levels may be accurately checked at all times.

These benches will consist of timber posts of adequate length and minimum diameter 75mm to be driven in the ground at suitable distance as directed encased with brick work. The wire nails will be driven on the top of wooden post on the center line of columns, walls, inside and outside faces of foundation trenches. Center line of walls, columns etc. may be clearly indicated so that checking may be done at any time, if it is so required.

#### 27. CONTRACTOR IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the Contractor to a safe place as per rules of the appropriate authorities.

The Contractor shall keep the foundations and work free from water and shall provide and maintain at his own expenses electrical or other power driven pumps and other plant to the satisfaction of the Employer for the purpose, until the building is handed over to the Employer.

The Contractor shall arrange for the disposal of the water so accumulated to the satisfaction of the Employer and the local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

#### 28. ACCESS

Any authorised representative of the Employer / Consultant shall at all reasonable times have free access to the work and/or to the workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the Contractor shall give every facility to the Employer or their representatives necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the Employer and Consultant no person shall be allowed at any time without the written permission of the Employer.

## 29. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS

All the work specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workman like manner with materials of the approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Employer / Consultant during the execution of the work, and to his entire satisfaction.

A list of Mandatory Tests is annexed (Appendix III) which is only indicative and not exhaustive. The contractor will have to carry out the tests at his own cost in any approved testing laboratory as necessary. Any other tests, special or routine, on any material or workmanship, if advised to be done by the Employer / Consultant for any reason whatsoever, shall be carried out by the Contractor for which no additional payment will be made.

A list of materials of approved make and brand is shown in the "Technical Specifications". Materials are to be used from the annexed approved materials list. In case of non-availability of specified makes, alternative products of equivalent quality may be used with prior permission from the Employer / Consultant.

All the materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charges for all duties and other charges legally payable and must be the best of their kind available and the Contractor/s must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workman like manner. Samples of all materials to be used must be submitted to the Employer / Consultant when so directed by the Employer / Consultant and written approval from Employer / Consultant must be obtained prior to placement of order.

During the inclement weather, the Contractor shall suspend concreting and plastering for such time as the Employer / Consultant may direct and shall protect from injury all work during its course of execution. Any damage (during construction) to any part of the work for any reasons due to rain, storm or neglect of Contractor, shall be rectified by the Contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lock-outs or any other cause, the Contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from any of these causes.

The Contractor shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the work whether by himself or special tradesmen or sub-Contractor and any damage caused must be made good by the Contractor at his own expenses.

#### 30. **REMOVAL OF IMPROPER WORK**

The Employer / Consultant shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer / Consultant are not in accordance with specifications or instructions, the substitutions or proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions. In case the Contractor refuses to comply with the order the Employer / Consultant shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer / Consultant shall be borne by the Contractor or may be deducted from any money due to or that may become due to the Contractor. No certificate which may be given by the Consultant shall relieve the Contractor from his liability in respect of unsound work or bad materials.

#### 31. SITE ENGINEER / PROJECT MANAGEMENT CONSULTANTS (PMC)

The term Site Engineer / Project Management Consultants (PMC) shall mean the person appointed and paid by the Employer to superintendent the work. The Contractor shall afford the Site Engineer / PMC every facility and assistance for examining the work and materials and for checking and measuring work and materials. The Site Engineer / PMC shall have no power to revoke, alter, enlarge or relax any requirements of the contract or to sanction any day work, additions, alterations, deviations or omission or any extra work whatever, except in so far as such authority may be specially confirmed by a written order of the Employer.

The Site Engineer / PMC shall have power to give notice to be Contractor or to his foreman, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Employer / Consultant is obtained. The work will from time to time be examined by the Consultant, Engineer of the Employer and the Site Engineer / PMC. But such examination shall not in way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at any stage of the work or after the same is complete. Subject to the limitations of this clause the Contractor shall take instructions only from the Consultant / Employer.

#### 32. OFFICE ACCOMMODATION FOR THE SITE ENGINEER / PMC

The Contractor shall provide, erect and maintain at his cost a separate simple watertight office accommodation for the Site Engineer / PMC in case it is not already available at site. This accommodation shall be well lighted and ventilated and provided with windows, door with a lock. The Site Engineer / PMC's office shall be a minimum of 14 Sqm. (150 Sqft.) and the contractor shall provide a desk, chairs, drawers for keeping drawings, a cupboard having proper lock and a tackboard for displaying drawings and lights and fans. The accommodation shall be demolished when directed.

#### 33. **CONTRACTOR'S EMPLOYEES**

The Contractor shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the working hours to receive and comply with instruction of the Employer / Consultant. The Contractor shall engage at least one experienced Engineer as Site Engineer 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 labourers on the work as far as possible.

No labourer below the age of sixteen years and who is not an Indian National shall be employed on the work.

Any labourer supplied by the Contractor to be engaged on the work on daywork basis either wholly or partly under the direct order or control of the Employer or his representative shall be deemed to be a person employed by the contractor.

The Contractor shall comply with the provisions of all labour legislation including the requirements of –

- a: The Payment of Wages Act
- b: Employer's Liability Act
- c: Workmen's Compensation Act
- d: Contract Labour (Regulation and Abolition) Act, 1970 and Central Rules 1971.
- e: Apprentices Act 1961
- f: Any other Act or enactment relating thereto and rules framed thereunder from time to time.

The Contractor shall keep the Employer saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Employer in connection with any claim that may be made by any workmen.

The Contractor shall comply at his cost with the order of requirement of any Health Officer of the State or any local authority or of the Employer regarding the maintenance of proper environmental sanitation of the area where the Contractor's labourers 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 work and shall remove and clear away the same on completion of the work. Adequate precautions shall be taken by the Contractor to prevent nuisance of any kind on the work or the lands adjoining the same.

The Contractor shall arrange to provide first-aid treatment to the labourers engaged on the work. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the work, report such accident to the Consultant / Employer and also to the competent authority where such report is required by law.

#### 34. **DISMISSAL OF WORKMEN**

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

#### 35. **ASSIGNMENT**

The whole of the work included in the contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Employer 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.

#### 36. NOMINATED SUB-CONTRACTOR

All specialists, Merchants, Tradesmen and others executing any work or supply and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities / Rates and / or specifications who may be nominated or selected by the Employer are hereby declared to be sub-contractors employed by the contractor and are herein referred to as nominated sub-contractors.

No nominated sub-contractor shall be employed on or in connection with the work against whom the contractor shall make reasonable objection or save where the Employer and contractor shall otherwise agree who will not enter into a contract provided:

- a) That the nominated sub-contractor shall indemnify the contractor against the same obligations in respect of the subcontract as the Contractor is under in respect of this contract.
- b) That the nominated sub-contractor shall indemnify the contractor against claims in respect of any negligence by the sub-contractor, his servants or agents or any misuse by him or them of any scaffolding or other plants the property of the contractor or under any Workman's compensation Act in force.

c) Payment shall be made to the nominated sub-contractor by the contractor within fourteen days of his receipt of the Consultant's certificate provided that before any certificate is issued the contractor shall upon request furnish to the Consultant proof that all nominated sub-contractors' accounts included in previous certification have been duly discharged, in default whereof the Employer may pay the same upon a certificate of the Consultant and deduct the amount thereof from any sums due to the contractor. The exercise of this power shall not create privity of contract between the Employer and the sub-contractor.

#### 37. DAMAGE TO PERSONS AND PROPERTY, INSURANCE ETC.

The Contractor shall be responsible for any injury to the work or workmen to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-Contractor or of any of his or a sub-Contractor's employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include inter-alia, any damage to buildings whether immediately adjacent or otherwise, and any damage to roads, street, foot-paths or pathways as well as damage caused to the buildings and the work forming the subject of this contract by rain, wind or other inclemency of the weather. The Contractor shall indemnify and hold harmless the Employer in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.

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

## 38. **INSURANCES**

The Contractor shall obtain a policy covering under Workmen Compensation Act, a third party Insurance as well as any other insurance and indemnity the Employer entirely from all responsibility in this respect. The insurance must be placed with a company approved by the employer.

Unless otherwise instructed the Contractor shall insure the work and keep them insured until the virtual completion of the contract against loss or damage by fire and/or earthquake, flood or damages from whatever cause by an "All Risk Insurance Policy" for the full value of the contract and workmen. The minimum limit of coverage for third party insurance shall be 0.5% (zero point five percent) of the accepted contract sum per occasion and maximum four occurrences a year at any time of the contract period.

The insurance is to be at their own cost and must be placed with a company approved by the Employer, in the joint names of the Employer and the Contractor for such amount. For any further sum if called upon to do so by the Employer, the premium of such further sum being allowed to the Contractor as an authorised extra.

Moreover, the contractor will be required to obtain "Workman's Compensation Insurance" from an approved insurance company at his own cost.

The Contractor shall deposit the policy and receipt for premiums paid with the Employer within 7 (Seven) days from the date of commencement of the work unless otherwise instructed. In default of the Contractor insuring as provided above, the Employer on his behalf may so insure and may deduct the premiums paid from any money due, or which may become due to the contractor. The Contractor shall as soon as the claim under the policy is settled or the work reinstated by the Insurance Company should they elect to do so, proceed with due diligence with the completion of work in the same manner as though the fire has not occurred and in all respects under the conditions of the contract. The Contractor in case of rebuilding or reinstatement after fire, shall be entitled to extension of time for completion as the Employer may deem fit.

Insurance is compulsory and must be effected from the very initial stage. The Contractor shall also be responsible for any thing which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this contract.

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

### 39. ACCOUNTS RECEIPTS AND VOUCHERS

The Contractor shall, upon the request of the Employer / Consultant furnish them all the invoices, accounts, receipts and other vouchers that they may require in connection with the work under this contract.

If the Contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the Contractor as to the amount of materials the Contractor is required to use for any work under this contract.

### 40. **MEASUREMENT OF WORK**

The Contractor will record the measurements in the approved printed measurement book available in the Consultant's office on payment and submit measurements for verification and endorsement of Project Management Consultant / Site Engineer and representatives of Consultant and Employer. The contractor should submit the bill with such endorsement.

The Consultant shall upon receipt of the bill intimate to the contractor that he requires the work to be measured, and the contractor shall forthwith attend or send a Qualified Agent to assist the Consultant or the Consultant's Representative / Employer's Representatives in taking such measurements and calculations and to furnish all particulars or to give all assistance required by either of them.

Should the Contractor not attend or neglect or omit to send such Agent then the measurement taken by the Consultant or a Representative approved by him shall be taken to be the correct measurement of the work.

The Contractor or his Agents may at the time of measurement take such notes and measurements as he may require. All authorised extra work, omissions and all variations made without the Consultant's knowledge, if subsequently sanctioned by him in writing, with the approval of the Employer shall be included in such measurements. The final measurement should be done within three months from the date of completion of work jointly by the Consultant and / or his Representative. If the contractor fails to comply, the measurements taken by the Consultant will be final.

### 41. **METHOD OF MEASUREMENT**

Unless otherwise mentioned elsewhere in the tender document, measurements will be done on the net quantities of work produced in accordance with upto date rules laid down by the Indian Standard Institution. In the event of any dispute with regard to the measurement of the work executed, the decision of the Consultant / Employer shall be final and binding on the contractor.

### 42. ACTION WHERE NO SPECIFICATION

In the case of any class of work for which there is no such specification in Technical Specification, such work shall be carried out in accordance with the I.S. Specification and in the event of there being no I.S. Specification, then in such case the work shall be carried out in all respects in accordance with the instructions and requirements of the Consultant / Employer.

# 43. CONTRACTOR NOT TO DEPOSIT MATERIALS IN A MANNER THAT MAY CAUSE INCONVENIENCE TO THE PUBLIC

The contractor (s) shall not deposit materials on any site which will cause inconvenience to the public. The Employer / Consultant may require the contractor to remove any materials, which are considered by him to be a danger or inconvenience to the public or cause them to be removed at the contractors cost.

### 44. PAYMENTS

All bills shall be prepared by the Contractor in the form prescribed by the Employer / Consultant (format enclosed). Normally one interim bill shall be prepared each month subject to minimum value for interim bill as stated in APPENDIX – I, for interim certificates. The bills in proper forms must be duly accompanied by detailed measurements recorded in the approved measurement books and should be submitted any other duly endorsed by the Site Engineer as defined in Clauses 40 & 41 above in support of quantities of work done and must show deductions for all previous payments, retention money, etc. Ad-hoc payment for work actually executed together with other accepted claims will be made for the interest of Bank's work at absolute discretion of the Employer on specific request of the contractor. However adhoc payment will be made, shall not exceed more than 75% of billed value. The contractor will be required to submit the bill along with the records of joint measurements for claiming ad-hoc payment together with vouchers / bills etc.

The Consultant / Employer shall issue a certificate after due scrutiny of the Contractor's bill stating the amount due to the Contractor from the Employer and the Contractor shall be entitled to payment thereof, by the Employer within the period of honoring certificates mentioned in the APPENDIX – I.

The amount stated in an interim certificate shall be the total value of work properly executed and approx. 75% of invoiced valued of material brought to site for permanent incorporation into the work upto the date of the bill provided that they are of a durable non-fragile nature less the amount to be retained by the Employer as retention money vide Clause 17 of these conditions and less installments previously paid under these conditions. The materials against which secured advance will be considered are timber, ply boards, block boards, pre-laminated particle boards, laminated sheets, door and window frames & shutters, flooring materials, paints, G.I. & C.I. pipes & fittings, sanitary fixtures & fittings etc. Such materials against which secured advance are considered are not to be prematurely brought to site.

The materials to be considered for secured advance shall only include the value of the said material and goods as and from such time as they are reasonably, properly and not prematurely brought to or placed adjacent to the work and then only if adequately protected against weather or other casualties, provided also that the materials are considered acceptable by the PMC / Consultant. An indemnity bond is to be submitted in the annexed format whenever Secured Advance against materials are prayed for.

If the Employer has supplied any materials or goods to the Contractor, the cost of any such materials or goods will be progressively deducted from the amount due to the Contractor in accordance with the quantities consumed in the work.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude determine or affect in anyway the powers of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the Contractor to the Consultant within one month of the date fixed for completion of the work or of the date of certificate of completion furnished by the Consultant and payment shall be made by the Employer within three months from the date of receipt of the final bill duly verified & certified by the Consultant.

### **FINAL PAYMENT**

The final bill shall be accompanied by a certificate of completion from the Consultant. Payments of final bill shall be made after deduction of Retention Money as specified in Clause 17 of these conditions, which sum shall be refunded in the manner stated in Clause 17. The acceptance of payment of the final bill by the Contractor would indicate that he will have no further claim in respect of the work executed.

### 45. **VARIATION / DEVIATION**

The Contractor may when authorised and shall when directed in writing by the Employer add and / or omit or vary the works shown in the drawings or described in the specifications or included in the Price Schedule of Quantities. The Contractor on his own accord shall make no addition, omission or variation without such authorisation or direction by the Employer or his accredited representative shall when confirm correctly by the contractor in writing within 3 days shall be deemed to have been given in writing.

The price all of such non-tendered / substituted items will be worked out on the basis of rates quoted for similar items in the contract wherever existing or on Engineering rate analysis based on prevalent fair price of labour, materials at site of work and other components as required.

No claim for an extra shall be allowed unless it shall have been executed by the authorisation of Employer/ Consultant. No variation i.e. addition, omission or substitution shall vitiate the contract.

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, labour, hire/running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor' overheads and profit. Such items shall not be eligible for escalation.

### 46. **SUBSTITUTION**

Should the Contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Employer / Consultant in writing for any such substitution well in advance. For materials designated in this specification by such term as "Equal" or "Other approved" etc. specific approval of the Employer / Consultant has to be obtained in writing.

# 47. PREPARATION OF BUILDING WORKS FOR OCCUPATION AND USE ON COMPLETION

The whole of the work will be thoroughly inspected by the Contractor and deficiencies and defects put right. On completion of such inspection, he shall inform the Consultant that he has completed the work and it is ready for inspection.

On completion, the Contractor shall clean all windows & doors including cleaning and oiling, if necessary, of all hardware, inside & outside, all floors, staircases and every part of the building. He will leave the entire building neat and clean and ready for immediate occupation and to the satisfaction of the Employer / Consultant.

### 48. CLEARING SITE ON COMPLETION

On completion of the work the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary work of every kind and leave the whole of the site and the work clean and in a workmanlike condition to the satisfaction of the Employer / Consultant.

### 49. **DEFECTS AFTER COMPLETION**

The Contractor shall make good at his own cost and to the satisfaction of the Employer / Consultant all defects, shrinkage, settlements or other faults which may appear within 12 months after completion of the work and considered as the "defect liability period". In default the Employer 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 Employer or may be deducted by the Employer, 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 under Clause No.17 together with any expenses the Employer may have incurred in connection therewith.

### 50. **CONCEALED WORK**

The Contractor shall give due notice to the Employer / Consultant whenever any work is to be buried in the earth, concrete 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 whereof the same shall, at the opinion of the Employer / Consultant be either opened up for measurement at the Contractor's expense or no payment be made for such materials. Should any dispute or difference 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 Employer / Consultant shall be accepted as correct and binding on the Contractor.

### 51. **ESCALATION**

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

### 52. **IDLE LABOUR**

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

### 53. **SUSPENSION**

If the Contractor except on account of any legal restraint upon the Employer preventing the continuance of the work or in the opinion of the Employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default the Employer shall have the power to give notice in writing to the Contractor requiring the work be proceeded within a reasonable manner such notices purport to be a notice under this Clause.

After such notice shall have been given, the Contractor shall not be at liberty to remove from the site of the work or from any ground contiguous thereto, any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the Contractor shall fail for 7 (seven) days after such notice has been given to proceed with the work as therein prescribed, the Employer may proceed as provided in the Clause 54. (Termination of Contract by the Employer).

### 54. TERMINATION OF CONTRACT BY EMPLOYER

If the Contractor being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated insolvent or shall make an assignment or a composition for the benefit of the greater part, in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the Official Assignee in insolvency, or the Receiver of the Contractor in insolvency, shall repudiate the contract, or if a Receiver of the Contractor's firm appointed by the court shall be unable, within fourteen days after notice to his requiring him to do so, to show to the reasonable satisfaction of the Employer that he is able to carry out and fulfill the contract and if so required by the Employer to give reasonable security therefor, or if the Contractor shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the contractor, or shall assign, charge or encumber this contract or any payments due or which may become due to the Contractor, thereunder, or shall nealect or fail to observe and perform all or any of the acts matters of things by this contract, to be observed and performed by the Contractor within three clear days after the notice shall have been given to the Contractor in manner hereinafter requiring the Contractor to observe or perform the same or shall use improper materials or workmanship in carrying on the work, or shall in the opinion of the Employer not exercise such due diligence and make such due progress as would enable the work to be completed within due time agreed upon and shall fail to proceed to the satisfaction of the Employer after three clear days notice requiring the Contractor so to do shall have been given to the Contractor as hereinafter mentioned, or shall abandon the contract, then and in any of the said cases, the Employer may not withstanding previous waiver determine the contract by a notice in writing to the effect as hereinafter mentioned, but without thereby affecting the powers of the Employer of the obligations 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 work subsequently executed had been executed by or on behalf of the Contractor (without thereby creating any trust in favour of the Contractor) further the Employer or his agent, or servants, may enter upon and take possession of the work and all plants, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads and sell the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the work or by employing any other contractors or other persons or person 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 contractors or other persons or person employed from completing and

finishing or using the materials and plants for the work when the work shall be completed, or as soon thereafter as conveniently may be the Employer shall give notice in writing to the Contractor to remove his surplus materials and plants and should the Contractor fail to do so within a period of 14 days after receipt by him the Employer may sell the same by Public Auction and shall give credit to the Contractor for the amount so realised. Any expenses or losses incurred by the Employer in getting the work carried out by other contractors shall be adjusted against the amount payable to the Contractor by way of selling his tools and plants or due on account of work carried out by the Contractor prior to engaging other contractors or against the Security Deposit.

### 55. **ARBITRATION**

- All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the work or the execution or maintenance thereof of this contract or the rights touching or concerning the work or the execution or maintenance thereof of this contract or the construction remaining operation or effect thereof or to the right or liabilities of the parties or arising out of or in relation thereto whether during or after determination, fore closure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Appointing Authority who shall be appointed for this purpose by the Employer be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.
- B) It is also a term of the contract that if Contractor (s) do/does not make any demand for arbitration in respect of any claim (s) within 90 days of receiving intimation from Employer / Consultant that the bill after due verification is passed for payment of a lesser amount, or he has accepted the payment as per clause 44 whichever is earlier or otherwise, the Contractor's right under this agreement to refer to arbitration shall be deemed to have been forfeited and Employer / Consultant shall be relieved and discharged of their liability under this agreement in respect of such claims. Further, it is agreed that for the purpose of this clause, such notice is deemed to have been received by the Contractor(s) within 2 days of posting of the letter by Employer / Consultant or when delivered by hand immediately after receipt thereof by the Contractor(s), whichever is earlier. Further, a letter signed by the officials of Employer / Consultant that the letter so posted to the Contractor(s) shall be conclusive.

For the purpose of appointing the sole Arbitrator referred to above, the Appointing Authority will send within thirty days of receipt by him of the written notice, aforesaid to the Contractor, a panel of three names of persons who shall be presently unconnected with the organisation for which the work is executed from the following categories of Arbitrators.

- i) Retired High Court / Supreme Court Judges, who have experience in handling Arbitration cases.
- ii) Members of the Council of Arbitration.
- iii) Fellow of the Institution of Engineers, or Indian Institute of Consultant.
- iv) Eminent Retired Chief Engineers from State / Central P.W.D. / Public Sector Undertakings, of good reputation and integrity.
- C) The Contractor shall on receipt by him of the names as aforesaid select any one of the persons named to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within thirty days of receipt by him of the names. The Appointing Authority shall thereupon without any delay appoint the said person as the sole Arbitrator. If the Contractor fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the Sole Arbitrator.
- D) If the Appointing Authority fails to send to the Contractor, the panel of three names as aforesaid within the period specified, the Contractor shall send to the Appointing Authority a Panel of three names of persons out of the above mentioned four categories of Arbitrators who shall all be unconnected with either party. The appointing Authority shall on receipt by him of the names as aforesaid select any one of the person named and appoint him as the sole Arbitrator. If the Appointing Authority fails to select the person and appoint him as the sole Arbitrator within 30 days of receipt by him of the panel and inform the Contractor accordingly, the Contractor shall be entitled to appoint one of the persons from the panel as the sole Arbitrator and communicate his name to the Appointing Authority.
- E) 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 as aforesaid.
- F) The work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.
- G) The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the Parties fixing the date of the first hearing.
- H) The Arbitrator may from time to time, with the consent of the Parties, enlarge the time for making and publishing the award.

- I) The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of the contract. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.
- J) In all cases, where the amount of claim in dispute is Rs.75,000/- (Rupees seventy five thousand only) and above, the Arbitrator shall give reasons for the award.
- K) The fees, if any, of the Arbitrator shall, is required to be paid before the award is made and published, be paid half and half by each of the Parties. The cost of the reference and of the award including the fees if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any Cover thereof shall be paid and may fix or settle the amount of costs to be so paid.
- L) The award of the Arbitrator shall be final and binding on both the Parties.
- M) Subject to aforesaid the provisions of the Arbitration Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made thereunder, and for the time being inforce, shall apply to the Arbitration proceeding under this clause.
- 56. The contractors should have their own Electrical License.
- 57. The contractors needs to be empanelled with Indian Bank.
- 58. The contractors should have minimum working experience in Indian Bank atleast 5 Lakhs in any two projects or 10 Lakhs in any one project in the year 2022 2023.

# <u>APPENDIX – I</u>

1. Name of work : civil, interior, furniture and

electrical work at Bokaro DPS Branch

2. Defect liability period : 12 (Twelve) months

(Cl. 49)

3. Date of commencement : 7<sup>th</sup> day from issue of order or

(Cl.19) handing over site, whichever is

later.

4. Date / Time of completion : 4 (four) weeks.

(Cl. 19)

5. Liquidated damages (Cl.20) : 1.00% of the accepted

contract sum per week subject to a maximum of 10% of the accepted

contract value.

6. Initial security deposit (CI.17) : 2% of the accepted contract sum

to be deposited within 14 days of

date of acceptance of tender.

7. Retention Percentage (Cl.17) : 8% of the value of work done, till it

equals:

10 % on the first Rs. 1,00,000.00 of the

cost of work

7.50 % on the next Rs. 1,00,000.00 of

the cost of work

5.0 % on the remaining amount of the

cost of work

8. Installment after completion : 50% of the total retention amount.

Certificate (Cl. 17)

9. Period of Honouring Certificate : 2 weeks from date of receipt of (Cl. 44) Certificate from the Consultant.

NOTE: Clauses (CI) refer to General Conditions of Contract.

# APPENDIX-II

# **BILL FORMAT**

# RUNNING A/C BILL

1.	Name	e of work	:
2.	Name	e of Employer	:
3.	Name	e of Contractor	:
4.	Acce	pted Contract amount	:
5.	Date	of commencement	:
6.	Stipul	ated date of completion	:
7.	Actua	al date of completion	:
8.	Exten	sion, if any	:
9.	Insurc	ance valid upto	
	a)	Workmen Compensation Act	:
	b)	Contractor's all risk comprehensive insurance Policy etc.	:
10.		ur License No. and date valid upto	:
11.	Serial	No. of this bill	:
12.	No. &	adate of previous bill	:
13.	Ref. to	o Agreement No.	:
14.	Earne	est money deposit	:
15.	Total	retention money excluding	:

16. Period of execution of work for Work which this bill has been

E.M. upto this bill

: From

to

Prepared (Date to be Mentioned)

SI. No.	Item Description	Unit	Rate (Rs.)	As per Tender
	·		,	Qnty. Amount
1.	2.	3.	4.	5.

	revious R/A	Upto date (Gross)		Present bill		Remarks	
Bill  Qty. (Rs)	Amount	Qty.	Amount (Rs)	Qty.	Amount (Rs)		
6			7	3	3	9	

Note: 1) If part rate is allowed for any time, It should be indicated with reasons

for allowing such a rate.

Net Value (A)

2) If adhoc payment is made,

it should be mentioned specifically.

Since previous

Bill.

# **ACCOUNT OF SECURED ADVANCE, IF ADMISSIBLE** ON MATERIALS HELD AT SITE BY THE CONTRACTOR

Quantity No. Remarks Item Unit **Amount** 

# **BOKARO DPS BRANCH**

1.	2.	3.	4.	5.	6.	
Total value	e of materials	at site				
Secured A	dvance @	%, of c	ibove value		(B)	
Contracto item is ou nature) ar	or to the site of outstanding on and are all requ	of the work an their security	d no advand , (ii) that the ontractor for u	ce on any que materials (course in the work	een brought by th antity of any of th are of imperishable in connection with.	is e
Date :			Sign	eature of Site	Engineer /PMC	
			SIGI	preparing	Engineer /PMC The bill	
Date :				Signature of C	ontractor	
Date :			 Sigr	ature of Cons Site Engine		
Date :			Sian	ature of Cons	ultant	

# **MEMORANDUM OF PAYMENT**

Date:

# **BOKARO DPS BRANCH**

1.	Name of work		:			
2.	Name of Employer		:			
3.	Name of contractor		:			
4.	Contract Amount		:			
5.	Date of Commencer	ment	:			
6.	Stipulated date of co	ompletion	:			
7.	Actual date of comp	pletion	:			
8.	Insurance valid upto					
a)	Workmen Compenso	ation Act	:			
b)	All Risk Insurance Poli	СУ	:			
9.	Gross value of work d	one				
	Upto Bill		:			
	Less : Rebate @	as per tender	:			
10.	Retention money		:			
11.	Add: Secured Advaragainst materials	nce	:			
12.	Less : Payment made uptoBill	÷	:	(-)	Rs.	
					Rs.	
13.	Less : Ad-hoc payme	ent certified	:	(-)	Rs.	

Rs.

# **BOKARO DPS BRANCH**

			Say Rs.
			For <b>Indian Bank</b>
	oill amounting to Rs) has been scrut isurements of work as required and	inised by r	me after due test checking of the
_	ature of Bank's Engineer date.		
Statu	utory deductions :		
(1)	Total amount due	:	Rs
(2)	Less : I.T. Payable	:	(-)Rs
(3)	Less : Tax on Works Contract	:	(-)Rs
	Net payable	:	Rs
	figures given in the Memorandum ed for payment of Rs		
Date	<del>)</del> :		
			ature of Authorized Official

# CERTIFICATE

Certified that the various items of work claimed in this running bill / final bill by the contractors'
——————————————————————————————————————

### GENERAL SUMMARY

### NOTE:

Rates to include any incidental expenses incurred on account of dismantling, handling, temporary stacking / storing and removal of existing partitions, grilles, furnture/electrical items etc. necessary for the work.

SECTION NO.	DESCRIPTION	FOLIO NO.	AMOUNT Rs.	AMOUNT Rs.				
I	CIVIL WORK	SCH-CIV/1						
II	INTERIOR WORK	SCH-INT/5						
III	FURNITURE WORK	SCH-FUR/2						
IV	ELECTRICAL WORK	SCH-E/1						
TOTAL :								

# SECTION - I CIVIL WORK

SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
1	<b>Dismantling</b> carefully all types of brick masonry with plastering etc and existing window including stacking of serviceable materials as directed and disposal of materials outside the premises in conformity with local Municipal Regulations.	Sqm	3.50		
2	Providing and laying <b>half brick work</b> with bricks of approved quality having compressive strength not less than 75 kg/sq.cm. laid in cement mortar (1:4) in plain or curved surfaces including offsets etc. complete in all respects including supplying and laying H.B. wire netting at every third layer as directed and specified at all levels and heights as per drawing and specification complete.	Sqm.	14.00		
3	Providing and laying <b>cement plaster 1:5</b> (1 cement : 5 sand) to walls etc. including raking out joints, cleaning and preparing the surface. Thickness of plaster to be so adjusted to match adjacent sides.	Sqm.	35.00		
4	Applying maximum 1.5 mm thick <b>white cement putty</b> to plastered surface after sand papering and preparing the surface complete as per direction.	Sqm.	35.00		
5	Providing and applying minimum two coats of <b>acrylic emulsion paint</b> of approved shade and make on a base coat of necessary primer including necessary surface preparation.	Sqm.	35.00		
6	Supllying and fixing <b>rolling shutters</b> of approved make, made of $80 \times 1.20 \text{ mm}$ M.S laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary $27.5 \text{ cm}$ long wire springs grade no. 2, ball bearings and $1.20 \text{ mm}$ thick M.S top cover for rolling shutters.	Sqm.	9.00		
7	Providing and fixing in position <b>collapsiple steel shutters</b> with vertical channels 20 x 10 x 2 mm and braced with flat iron diagonals 20 x 5 mm size with top and bottom rail of T $-$ iron 40 x 40 x 6 mm with 40 mm dia steel pulleys complete with bolts, nuts, locking arrangement, stoppers, handles including applying a priming coat of approved steel primar.	Sqm.	3.00		

### <u>SECTION - II</u> INTERIOR WORK

SL. ITEM DESCRIPTION NO.	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)	
--------------------------	------	------	---------------	-----------------	--

Providing and fixing in position seamless gypsum board false ceiling in one or more levels including vertical surfaces between different levels, conforming to the following specifications.

Framework ('Gypsteel Ultra' or approved equivalent) shall be suspended from MS angle hangers fixed to main ceiling/ main roof by dash fasteners, complete with connecting clips, GI wires at each junctions and all necessary components;

12.5 mm. thick gypsum boards shall be fixed to the frameworks by 25 mm. drive all screws at 230 mm. intervals :

Work shall also include ensuring a seamless, flush finish of all boards joints with recommended jointing tapes, fillers etc.;

Necessary opening for light fittings, AC grilles / diffusers, etc. shall also be made including ensuring the stability of the suspension and framework system;

Gypsum board surfaces shall be finished with minimum two coats of acrylic emulsion paint of approved shade after necessary surface preparation and primer work.

Sqm. 39.00

Supplying & fixing of approved **mineral fibre false ceiling** system on 15mm flange stitched suspension Silhouette black reveal grid system having maintee 3000mm long X 42mm web height X 15mm wide tee sections. The Main Runner is to be fixed with 2mm thick pre-stretched G.I. wire with soffit cleat & G.I. Rawl Plug inserted on the main roof to be fixed at 1200mm C/C. The last hanger at the end of each main runner should not be greater than 450mm from the adjacent wall. The Main Runner will be at the distance of 1200mm C/C, The flush fitting 1200mm X 42mm X 15mm wide Cross Tee sections, with precision stub end is to be click fit in between the Main tee at a distance of 600mm to make a module of 1200mm X 600mm. Another cross tee with precision stub end of size 600mm X 42mm X 15mm is to be click fitted at 1200mm sections parallel to Main tee at 600mm centre to make a square grid of 600mm X 600mm.

All base frame material clip end should be made of cold rolled steel components & coated with hot dip galvanized steel. It should have a capping of material coated with baked polyester paint. The perimeter trim(shadow moulding) of dimension 3000mmX19mmX7mmX7mmX14mm, white colour secured at 450mm C/C. Silhouette main runners and cross tee to have mitred ends and "birdsmouth" notches to provide mitred cruciform junctions.

Prima Dune Premier 99 of M/s. Armstrong or similar equivalent, pre-painted microlook edged tiles 15mm thick suitable for 600mm X 600mm grid to be placed on grid. Tiles should have NRC of 0.50, having light reflection of 85% and thermal conductivity K-0.052-0.057 W/M degrees centigrade and weight of 3.90 kg/sq.mt. The Fire rating of tile should be class 0 for fire propogation & Class 1 for spread of flames as per BS-476, & having humidity resistance of 99% Rh.

For A.C. Grills & Light fixtures, additional members if required is to be provided into the grid system. The work has to be done as per the direction & supervision of Architect/Manufacturer's representative.

Sqm. 7.00

Providing and fixing **125 mm. wide and 12 mm. thick** BWR grade plyboard to be fixed on the wall at the junction of horizontal and vertical surface, the plyboard to be finished at he top upto 75 mm. depth finished with laminate sheet of approved quality. Free edges of plyboard are to be provided with polished 6 mm. thick wood lipping with polish finish, all complete as directed.

Mtr. 20.00

4 Supplying and erecting **full height opaque partitions** (upto 2500 mm. high) as per drawing and conforming to the following specifications:

basic frame work

Framework of Aluminium sections (minimum 50 x 50 mm.) at horizontal and vertical spacings not exceeding 600 mm. c/c.

skin membrane

Single layer 6 mm thick MR grade plyboard on each face as per drawing/instructions.

finishing:

One side finished with 1 mm thick laminate sheet of same or combination shades as per instruction and other side finished with two coats of synthetic enamel paint of approved shade and quality over a coat of approved primer on sigle layer MR grade plyboard.

Quoted rates shall include all necessary materials, accessories and labour and also allow provisions for electrical/telephone/computer wiring conduits and switch boxes, etc (Materials for wiring conduits and switch boxes shall be separately paid for.)

Sqm. 30.00

5 Supplying and erecting **full height partly glazed partitions** (upto 2500 mm. high) as per drawing and conforming to the following specifications:

basic frame work

Framework of Aluminium sections (minimum 50 x 50 mm.) at horizontal and vertical spacings not exceeding 600 mm. c/c.

Exposed frame members in the glazed portions shall have wider spacings (max. 1800 mm.clear) as per instructions.

skin membrane

Opaque portion at top and bottom and exposed frame members in the glazed portions shall have single layer 6 mm. thick MR grade plyboard on each face, as per drawing/instructions.

finishing :

1 mm thick laminate sheet of same or combination shades as per instructions

glazing

8 mm. thick clear float glass fixed with continuous teak wood glazing beads of approved shape (from 35 x 25 mm) all round , polished and coated with melamine lacquer finish.

Quoted rates shall include all necessary materials, accessories and labour and also allow provisions for electrical/telephone/computer wiring conduits and switch boxes, etc (Materials for wiring conduits and switch boxes shall be separately paid for.)

Sgm. 19.00

6 Supplying and erecting **low height opaque partitions** (upto max. 1200 mm. high) as per drawing and conforming to the following specifications:

basic frame work

Framework of Aluminium sections (minimum 50 x 50 mm.) at horizontal and vertical spacings not exceeding 600 mm. c/c.

skin membrane

Single layer 6 mm thick MR grade plyboard on each face, as per drawing/instructions.

finishing:

1 mm thick laminate sheet of same or combination shades as per instructions.

### edge moulds:

All free top/end surfaces shall have polished teak wood moulds of approved shape of size  $80 \text{ mm} \times 20 \text{ mm}$  with melamine lacquer in mat satin finish.

Quoted rates shall include all necessary materials, accessories and labour and also allow provisions for electrical/telephone/computer wiring conduits and switch boxes, etc (Materials for wiring conduits and switch boxes shall be separately paid for.)

Sqm. 4.00

SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)

Supplying and erecting coloumn/wall panelling/single skin full height opaque partitions as per drawing and conforming to the following specifications:

Framework of aluminium sections (minimum 50 x 50 mm.) at horizontal and vertical spacings not exceeding 600 mm. c/c.

Single layer 6 mm thick MR grade plyboard as per drawing/instructions.

1 mm thick laminate sheet of same or combination shades as per instructions Quoted rates shall include all necessary materials , accessories and labour and also allow provisions for electrical/telephone/computer wiring conduits and switch boxes, etc (Materials for wiring conduits and switch boxes shall be separately paid for).

Sqm. 9.00

8 Providing and fixing 12 mm thick clear float glass, machine polished along all free edges..

Sqm. 3.00

9 Providing and erecting in position, Cash Workstation comprising of the basic workstation and a side - top unit conforming to relevant drawings and following specifications:

### **Basic workstation**

Approximate overall size 1500mm. long, 850 mm. wide and 750 mm. high. The workstation shall include a **customer - top** of approx. overall size 1500 mm. long, 300 mm. wide and 1050 mm. high (finished size)

The workstation shall be made of 19 mm thick, BWR grade blockboards, suitably supported on the peripheral partition system.

The workstation shall also include a **cash - drawer unit** of approx. overall size 400 mm. wide, 500 mm. deep and 725 mm. high comprising of one tea - tray and three cash drawers of equal depth. It shall be made of 19mm. thick BWR grade blockboards and 12 mm. thick BWR grade plywoods for drawers.

The customer side of the drawer unit shall be protected with a lining of 14G MS sheet over the entire area. The metal surfaces shall be finished with two coats of synthetic enamel paint over a coat of approved primer.

The **customer - top** shall be made of 19 mm. thick BWR grade blockboards with the writing surface finished with mirror polished granite slab of approved shade and quality (single piece upto 1500 mm. length and 300 mm. wide) fixed with approved chemical adhesive. The work shall also include necessary edge mouldings of the stone in approved profile.

A **box - band** of 'U' profile made of 19 mm. thick BWR grade blockboards of approx. overall size 1500 mm. long, 300 mm. wide and max. 650 mm high shall be erected at height of approx. 1050 mm. above the customer top level. The boxband shall be supported on the peripheral partition system and shall be finished with 1 mm. thick laminate sheet of approved shade over an additional layer of minimum 5.5 mm. thick MDF board in grooved pattern.

The vertical gap between the customer - top and the box - band (approx. 1050 mm.) shall have 12 mm clear float glazing in two pieces (1 No. 1500 mm. x 300 mm. and 1 No. 1500 mm. x 550 mm. approx.) as per drawing / instructions. Glass edges shall have machine polished finish. Fixing arrangements of glazings shall be with SS glazing cleats and supporting angles of approved quality at both ends

All blockboard surfaces shall be finished with 1 mm. thick laminate sheet of approved shade or combination of shades as per instructions. Inner faces of workstation including cabinets and drawers shall have polished finish. Blockboard edges shall have polished lippings of approved quality wood. Lamination of the apron part shall be on an additional layer of 4 mm. thick BWR grade playwood laid in grooved pattern.

SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
------------	------------------	------	------	---------------	-----------------

### 9 Contd..

### Basic side - top unit

Approx. overall size 1200 mm. long, 400 mm. deep and 725 mm. high. The side top shall also include a **drawer unit** of approx. overall size 400 mm. wide, 400 mm deep and 700 mm. high comprising of one ordinary drawer (approx. 100 mm. clear height) and one shuttered cabinet below.

The side - top unit shall be made of 19 mm thick BWR grade blockboards and 12 mm. thick BWR grade plywood for drawers. It shall be suitably supported from the peripheral partition system and the workstation structure.

All blockboard surfaces shall be finished with 1 mm thick laminate sheet of approved shade or combination of shades as per instructions. Inner faces of workstation including cabinets and drawers shall have polished finish. Blockboard edges shall have polished lippings of approved quality wood.

### Accessories

The work of high cash workstations shall also include the following accessories: Readymade metal keyboard drawer (INNOFITT/ IS KD 510 M or similar approved)

Readymade CPU Trolly (INNOFITT / IS CPU TR)

Approved quality drawer slides (25 kg) (EGL / GLYDO)

Approved quality concealed type auto - closing shutter hinges

Approved quality shutter / drawer locks with keys in duplicate.

Approved quality SS cabinet / drawer handles in matt satin finish.

Approved quality wire managers (plastic).

Rates to include all necessary allied works. Partition system shall be seperately paid for.

Mtr. 1.50

- Supplying and fixing in position well seasoned teak wood scantling to door frame as directed and specified. Exposed surfaces are to be polished in approved colour and finished with melamine lacquer in mat satin finish.
- Cum. 0.04
- Supplying and fixing in position 37 mm thick parly glazed door shutter made of 15 mm thick well seasoned second class teak wood planks with double layer (6 mm + 4 mm thick) commercial plywood finished wirth 1.00 mm thick laminate sheet (without joints) of approved quality on both sides of the door shutter upto 900 mm from floor level. The upper portion of the shutter is to be provided with 6 mm thick clear float glass fixed with polished steam beech wood glazing beads of approved design, complete as per drawing. Rate to include cost of hardware fittings e.g.mortice locks. brass hinges etc. of approved make and quality.

Sam. 4.00

Supplying and fixing in position overall 32 mm thick solid core hot pressed phenol formaldehyde bonded approved flush door shutter finished with 1.0 mm thick laminate sheet (without joints) of approved shade and quality on both sides of the door shutter including cost of hardware fittings e.g.brass hinges, Mortice lock sets with handles etc.of approved make and quality.

Sqm. 12.00

Providing and fixing **slim - stile door** made of 50 mm thick well seasoned first class teak wood of special design for stiles and rails, with 8 mm thick clear float glass, necessary hardware fixtures of approved make and design, viz., brass flush bolt, stainless steel decorative tubular handle (Dorset or equivalent approx. 600 mm long) on both faces, including floor spring complete as per instructions. Wooden surfaces shall be polished in approved shade melamine lacquer in mat satin finish.

Sqm. 2.20

SL. ITEM DESCRIPTION NO.	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
--------------------------	------	------	---------------	-----------------

Providing and erecting in position electrical box made of 19 mm thick BWR grade blockboard with lockable shutters, etc. and 6 mm thick BWR grade ply board at the back, conforming to the following specifications:

Shutter faces and exposed sides shall be finished with 1 mm thick laminate sheet of same or combination shades as per instructions with polished teak wood (6 mm thick) edge lippings.

Shutters will be hung by one and half fold hinges of approved quality. Locks, satin finish S.S handles etc. will be approved variety & make Inner surfaces of shutters and box and plyboard at the back to be finished with two coats of synthetic enamel paint over a coat of approved primer. (Payment shall be on the area of cabinet face)

Maximum 400 mm deep x 1800 mm high

Providing & fixing in Rolling shutter covering in position Aluminium Composite Panel (ACP) with framing of Aluminium Tube sections of min 1.5" x 1" and 20 gauge 2'-0" C/C both ways. Joints to be finished with Silicon based sealant. ACP thickness of 2.00 mm minimum. Aluminium foil thickness to be min 0.20 mm. 2'-0" C/C both ways. ACP to be in 2' width panels or distributed equally.

Shades to be as per Bank's standard colours; with ACP Trap door.

Providing and fixing sliding shutter over bunker made of 4 mm. thick MR grade

ply board with Aluminium channel system and necessary hardware as required finished handel and expsoed shutter shall be finsih with 1 mm thick laminate sheet and inner face shall be paint with synthetic enamel paint after necessary

primer work.

Providing and fixing etching films (frosted) on glass surfaces of approved graphical design in patterns of strips as directed.

Sqm. 5.00

Sqm. 8.00

Sqm 13.00

25.00 Sqm.

### **TOTAL CARRIED TO GENERAL SUMMARY:**

SCH-INT/5

### SECTION - III FURNITURE WORK

1 Providing and erecting in position, **free - standing table** as per drawing and conforming to the following specifications:

basic structure of 19 mm thick BWR grade block board for sides, top and modesty panel, finished with 1.00 mm thick laminate sheet of approved shade and make including inner faces. The laminate on the front face of modesty panel shall be on an additional single layer of 4 mm BWR plyboard forming 4 x 4 mm groove pattern.

drawer-cum-cabinet unit of approximate overall size of 400 x 500 x 725 mm ( w x d x h) of 19 mm thick BWR grade block board and 12/6 mm thick BWR grade plywood. The drawer unit shall comprise of one readymade drawer manager of engineering plastic ( DM BG 1416/ INNOFITT SYSTEMS or similar) with laminated block board facia, one ordinary drawer and one cabinet with inner faces polished in approved shade. The drawer unit shall be finished with 1.00 mm thick laminate sheet of approved shade including inner faces of cabinet shutters.

Readymade keyboard drawer of engineering plastic ( KD 575. P.MT / INNOFITT SYSTEMS or similar) and all necessary accessories , suitably susppended below table top:

Readymade CPU holder with swivel facility (CPU HL SW / INNOFITT SYSTEMS or similar)

Quoted rates shall also include cost of polished teak wood moulding (finished 40x20 mm and 20 x 20 mm sections) to edges; polished teak wood lipping (6mm thick) to free edges of block board /plywood surfaces; approved drawer slides, concealed type auto - closing shutter hinges and locks with keys in duplicate; other necessary hardware and accessories including satin finish S.S handles and plastic wire - managers etc. of approved quality.

- i) Approx. size 1650 x 750 x 750 mm
- ii) Approx. size 1200 x 750 x 750 mm

Each 1 Each 2

Providing free standing **Daptari table** of approx. overall size 900 mm x 600 mm x 750 mm high, made of well seasoned malaysian sal wood support of 50 mm x 50 mm and 19 mm. thick block board on top finished with 1.0 mm thick laminate sheet of approved shade and quality. The exposed edges of block board shall be provided with 6 mm. thick teak wood lipping. All the exposed timber surfaces are to be polished in approved colour.

Each 1

3 Providing and erecting in position side / back cabinet units with sliding shutters of approx. size of 450 mm deep x 725 mm high made of 19mm thick BWR grade blockboards including intermediate shelves as per drawing /instructions. The rear faces shall be of 6 mm thick BWR grade plyboard. Exposed blockboard surfaces shall be finished with 1.00 mm laminate sheet of approved shade and make . Inner faces shall be polished in approved shade.

Free edges of blockboard shall have polished approved quality wood lipping.

Quoted rates shall include cost of necessary hardware, viz., SS flush handles, locks with keys in duplicate and approved sliding channels etc.

Mtr. 2.00

CADD	ED	OVER	
CARR	ᇆ	UVER	-

NO. (Rs.)	SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
-----------	------------	------------------	------	------	---------------	-----------------

Supplying and fixing free-standing **customer writing ledge/suggestions box/Cheque drop box/writing ledge** of overall size 450 mm long x 300 mm deep x 900 mm high made of 19 mm thick phenol formaldehyde block board, all as in drawing, complete with hardware fittings and fixtures of old materials of existing Branch.

On top 18 mm thick single piece granite of approved shade and quality including moulding piece, all complete as in drawing.

All exposed surfaces of block board are to be finished with 1mm thick laminate sheet of approved shade and quality. Inner faces of block board surfaces are to be finished with minimum two coats of synthetic enamal paint of approved shade and quality over a coat of approved primer.

Each 1

5 Providing and fixing in position notice board as per drawing and conforming to the following specifications

basic frame work:

well seasoned Malayasian sal wood sections, treated with two coats of wood preservatives, minimum 50 x 25 mm, at suitable horizontal / vertical spacings not exceeding 600 mm c/c.

skin membrane

1 x 4 mm. thick BWR grade plywood over which 12 mm thick approved quality soft board cladded with fabric of approved shade and quality.  $\underline{\text{edge moulding :}}$ 

All free edges shall have polished 2nd class teak wood moulds of approved shape (finished 50 x 25 mm sectons) with melamine lacquer in mat finish.

Sqm 2.00

### **TOTAL CARRIED TO GENERAL SUMMARY:**

SCH-FUR/2

# SECTION - IV ELECTRICAL SUMMARY OF COST

### **IMPORTANT NOTE:**

- Megger test of the newly installed electrical system shall be mandatory.
- ii) Bidders shall make themselves familiar with actual site conditions before submitting their rates.

TOTAL CARRIED TO GENERAL SUMMARY:

- iii) The successful bidder assigned to execute the work shall make necessary arrangements to dismantle the existing wiring system, electrical fittings,A.C. wirings,UPS & LAN in a phased manner and also temporarily re- install the same to facilitate normal functioning of the Branch/Office according to actual site conditions. The quoted rates shall have to be accordingly worked out by the bidders and no separate claims on these accounts shall be entertained.
- iv) During the execution period ,the contractors shall ensure presence of a competent electrician in order to maintain normal office activities.

SECTION NO.	DESCRIPTION	FOLIO NO.	AMOUNT Rs.
Α	DB'S,CABLING AND WIRING WORK	SCH-E/6	
В	SUPPLY & INSTALLATION OF LIGHT FITTINGS	SCH-E/7	
С	COMPUTER POWER WIRING	SCH-E/9	

### A. DB's, CABLING AND WIRING WORK

SL. NO. ITEM DESCRIPTION UNIT QTY. RATE AMO (Rs.)
---

### 1 MAIN SWITCH

Supply and fixing of Switch Fuse Unit (SFU) with HRC fuse in sheet steel enclosure on M.S. angle frame / M.S. legs on wall complete with interconnection, mending good damages to original finish, painting, etc. as required.

i) 63 A TPN SFU with HRC fuses.

ii) 32 A TPN SFU with HRC fuses.

Each. 1 Each. 2

### 2 CHANGE OVER SWITCH (COS)

Supply, installation, testing and commissioning of 63A 4P On load front operated change over switch in sheet steel enclousure on M.S legs on wall complete with interconnection, mending good damages to original finish, painting etc. as required.

Each 1

Each.

### 3 MCB DISTRIBUTION BOARD

Supply, installation, testing and commissioning of following MCB Distribution Board in sheet steel enclosure with double door and suitable for mounting on wall by chase cutting and flushed with finished level to the position shown in the Electrical Layout complete in all respect, mending good all damages to the original finish, painting, interconnection, etc. as required. Short circuit I.C. of all MCBs should be 10 KA (minimum) and RCBO should have earth leakage, overload and short circuit protection. Name plate of DB's to be fixed / written on front door alongwith switch board numbers / DB's at the outgoing.

### a) MAIN DISTRIBUTION BOARD (MDB)

TPN 6 way vertical type MCB DB complete with busbar and the following

MCBs: Incoming

1 no. : 63A 4P MCB Iso.

Outgoing:

1 no. : 415V,32A TP, MCB 6 nos. : 240V, 20-25A SP MCB 3 nos. : 240V,16A SP MCB

Complete board as above

### b) Lighting Distribution Board (LDB)

TPN 4 way vertical type MCB DB complete with busbar and the following

MCBs:

Incoming

1 no.: 40A FP MCB

C	٩R	RI	IED	0	<b>VER</b>	
---	----	----	-----	---	------------	--

SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
	BROUGHT FORWARD :				

b) Contd...

Outgoing:

3 Nos.: 25A TP MCB 2X32A DPMCB

Complete board as above

Each.

12 way Horizontal type SPN DB c)

Incoming:

1 No. 32 A DB MCB (20 KA)

Outgoing:

10x6/10a SPMCB

Each

1

MCB FOR GLOW SIGN BOARD d)

> Supply and fixing of 20A SPN MCB & 20A timmer with 40A DP contractor suitable enclosure on wall for enclosure on wall for Glow Sign board connection.

Each.

1

**DISTRIBUTION CABLE:** 

**SUPPLYING OF CABLE:** a)

> Supplying of 1.1 KV grade following PVC insulated and PVC sheathed armoured aluminium conductor cables conforming of IS:1554 (Part-I):

3.5 core 35 Sq.mm.

Mtr.

50.00

ii) 4 core 16 Sq.mm. Mtr.

70.00

b) LAYING OF CABLE

> Laying of above cable from metre to MDB on wall/column/as per side condition including supply and fixing of M.S. clamps/galvanised bar saddles @ 300 mm apart, making holes and mending good damages or partly through pre-laid pipe.

i) 3.5 core 35 Sq.mm. Mtr.

40.00

ii) 4 core 16 Sq.mm. Mtr.

60.00

CABLE GLAND AND FINISHING THE END c)

> Supplying and fixing of compression type brass cable gland alongwith rubber rings for dust and moisture proof entry of following 1.1 KV grade aluminium conductor PVC insulated and PVC sheathed armoured cable and finishing the end by crimping method including supply and fixing of "Dowell" make solderless socket, tapes and jointing materials as required to be completed in all respect.

3.5 core 35 Sq.mm.

Set

ii) 4 core 16 Sq.mm. Set

SL	CRIPTION UN	INIT QTY.	RATE (Rs.)	AMOUNT (Rs.)
			, ,	,

### 5 <u>SUBMAIN WIRING</u>

Submain wiring with following sizes 1100 V grade, single core, PVC insulated flexible FRLS copper conductor wire (IS:694) through suitable size PVC. conduit (ISI marked embossed on conduit surface)/ flexible PVC conduit complete with junction box, circular box, elbows, bends and other accessories on surface above false ceiling or concealed by chase cutting on wall/in wooden furnitures, as per site condition, mending good all damages to original finish, interconnection, painting etc. as required to be completed in all respect. All connections of wires to be done by means of "Waqo" type connectors:

 i) With 2 Nos. 6 Sq. mm + 1 No. 2.5 Sq. mm (green colour for earth) PVC insulated Copper wire.(For Glow Sign Board)

Mtr. 110.00

### 6 AC POINT WIRING (UPTO 2.0 TON)

i) A.C. power point wiring from Main DB to A.C. Power points with 1100 volt grade following rating ( Green colour for earthing ) PVC insulated flexible FR copper conductor cable through suitable size PVC conduit ( ISI marked embossed on conduit surface ) complete with junction box, circular box, elbows, bends, couplers and other accessories surfaced on wall above false ceiling or concealed by chase cutting on brick / wooden wall. The work includes supply & fixing by chase cutting on wall, 'North-West' make A.C. power unit having suitable rating socket with plug,plug-top & starter in sheet steel enclosure complete with interconnection, mending good all damages to original finish, painting etc. as required. All connections of wires to be done by means of 'Wago' type connectors
With 2 nos. 4 sq.mm. + 1 no. 2.5 sq.mm. ( green colour for earth ) PVC insulated copper wire in 25 mm dia PVC conduit / casing caping. (for AC unit)

Each. 3

### 7 6/16A SOCKET OUTLET POINT WIRING

Power point wiring for 6 pin 6/16 A shuttered socket outle wiring with controlling switch from DB with 1100 volt grade 2 Nos. single core 2.5 sq.mm. + 1 No. 1.5 sq.mm. (Green colour for earthing) PVC insulated flexible FRLS copper conductor wire (IS:694) through suitable size PVC. conduit (ISI marked embossed on conduit surface) complete with junction box, circular box, elbows, bends, couplers and other accessories on surface above false ceiling or concealed by chase cutting on wall. The work includes supply & fixing of modular type 6/16A 6 pin shuttered socket outlet with controlling switch, suitable size mounting box and front plate for socket outlet flushed with finished wall, mending good all damages to original finish, interconnection, painting, etc. as required to be completed in all respect. All connections of wires to be done by means of 'Wago' type connectors.

Each 2

NO.   (Rs.) (Rs.)	SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
-------------------	------------	------------------	------	------	---------------	-----------------

### 8 POINT WIRING

Point wiring with 1100 V grade 3 nos. single core 1.5 sq.mm. (1 for phase, 1 (black colour) for common neutral by looping method and 1 (green colour) for common earth by looping method) PVC insulated flexible FRLS copper conductor cable (IS:694) through suitable size PVC. conduit (ISI marked embossed on conduit surface) complete with junction box, circular box, elbows, bends, couplers and other accessories on surface above false ceiling or concealed by chase cutting on wall from light & fan switch board to light, fan & 6A socket outlet on the same switch board or separately mounted switch board. The work includes supply and fixing of all materials such as modular type 6A switch for each light and fan point, 6A 2/3 pin shuttered socket outlet with switch, 3 plate ceiling rose / angle or batten holder etc. as required.

The point wiring also includes circuit wiring with 1100 V grade 2 nos. single core 2.5 sq.mm. (1 for phase and 1 (Black colour) for neutral) + 1 no. single core 1.5 sq.mm. (Green colour for earth) PVC insulated flexible (FRLS) copper conductor cable (IS:694) through suitable size PVC. conduit as described above from DB to switch board, interconnection, mending good all damages to original finish, painting etc. as required to be completed in all respect. All connections of wires to be done by means of "Wago" type connectors. (All wiring in strong room, locker room, records & stationery room will be of surface conduit type).

i)	1 light control by 1 switch.	Each	17
ii)	2 light control by 1 switch.	Each	4
iii)	Wall Bracket fan point with 2/3 pin socket to be installed at fan height and switch at the switch board	Each.	7
iv)	Ceiling fan with 2 module Step regulator.	Each	1
v)	Exhaust fan point	Each	1
vi)	Call bell point with bell push	Each	1
vii)	Red light & incandescent light point	Each	1
viii)	1x6A 2/3 pin shuttered socket with switch on separate switch board other than light / fan switch board	Each	9
ix)	2/3 pin 6A switch shuttered socket outlet with switch on light and fan switch board.	Each	5
x)	UPS point	Each	3
9	Connecting the main switch to MCB DB by supply and fixing of 6 SWG G.I. wire along the cable with G.I. staples, bolts, nuts, washers, etc. and mending good all damages to original finish.	Mtr.	70.00

SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
	BROUGHT FORWARD :				
10	Supply and fixing of 16A modular type master controlling switch with indicator in mounting box and front plate on wall for controlling external light fittings including interconnection, etc. as required.	Each	1		
11	Earthing (General)				
	Earthing the installation as per I.E Rules conforming to I.S: 3043 - 1987 or its latest ammendment by making earth sation with 3 meter long 50 mm dia G.I earth Pipe ( Partly Perforated ) to be installed such that its top end shall be at 300 mm below ground level after preparation of ground with charcoal & Salt and connecting with 25 mm x 6 mm G.I earth lead-in-strip upto 10 metre length by bolting and then brazing, complete with nut, bolt, washer etc. as required. The earthing station shall be provided with 300 mm x 300 mm x 300 mm inside dimension masonry inspection Pit with C.I. hinged cover.	Each	2		
40					
12	Extra for earth lead-in-strip exceeding 10 meter as mentioned in above Item with supply and fixing of 25mm x 6mm G.I Strip to be fixed on wall or directly buried in ground including connection complete.	Mtr	25.00		
13	Supplying and fixing of 16 A plug top with 1100 V grade 3 core 2.5 sq. mm PVC insulated copper cable of 1.5 mtr. length one metre to be permanently fixed to the Switch Board of Locker Room, complete in all respects.	Each	1		
14	Supply & fixing of 415V,40A 4P MCB in suitable size M.S. Box same for Light cut off switch in Main Gate.	Each	1		
15 a)	<b>Bifarcation work :</b> Supplying and fixing of 32A DP MCB enclosure for 5KV or 32 A TPN MCB 10 KV UPS with enclosure.				
b)	Submain wiring ( $2x4+1x2.5$ ) Sqm. wire for incoming enclosure to socket				
c)	cluster. Socket cluster 6A x 2 nos. 16A x 1 no. 5 pin socket with 16A x 1 no. switch for HUB/FIRE/CAMERA 3 set.	Each	1		
16	Inverter system work :				
i)	Inverter input	Each	1		
ii)	Inverter output	Each	1		
iii)	Inverter DB 8 way	Each	1		
iv)	2x2.5 Sq.mm + 1x1.5 Sq.mm wire	Rmt	30.00		
v)	Inveter point	Each	8		

# **B. SUPPLY AND INSTATIONAL OF LIGHT FITTINGS & FANS**

SL. NO.	ITEM DESCRIPTION	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)	
1	Supply & installation of light and electrical fittings and all necessary accessories :					
a)	Surface mounted / Suspended luminaries					
i)	1x22 watt LED Light fittings Philips or similar approved make ) .	Each	6			
2	Recessed mounted luminaries					
i)	LED based luminaries 1x32 watt LED based square light fittings (Philips or equivalent approved make).	Each	5			
ii)	Down lighter 1x15 W LED down lighter fittings Philips or similar approved make.	Each	10			
3	Supply of fan fittings with all necessary accessories, but except regulator.					
i)	Wall bracket fan 400 mm dia. ( Havells/Crompton ).	Each	7			
ii)	Exhaust Fan 300 mm dia (Havells/CROMPTON).	Each	1			
4	SUPPLY & FIXING OF CALL BELLS					
	Supplying and fixing on wall call bell buzzer ( approved by Consultant ) suitable for 240 volt single phase A.C. supply including interconnection, etc. as required.	Each.	1			

TOTAL CARRIED TO ELECTRICAL SUNMMARY:

SCH-E/7

### C. COMPUTER POWER WIRING

SL. NO.	DESCRIPTION OF ITEM	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)
------------	---------------------	------	------	---------------	-----------------

### 1 INDUSTRIAL TYPE SOCKET AND PLUG DB

Supply and installation of following Legrand make universal mounting DB with Industrial type socket and match plug for UPS incoming & outgoing only :

- 32A, 3P+N+E, 5 pin industrial type socket with matching plug and 25A, TP MCB control including interconnection.(for UPS incoming)
- Each 2
- ii) 32A, 2P+E, 3 pin industrial type socket with matching plug and 25A, DP MCB control including interconnection.(for UPS outgoing)
- Each 2
- supply and installation of 2 no 32A 4P on load cahnge over switch,100A copper busber, 2 nos 32A SP MCBs etc. in sheet steel enclosure for computer distribution system.
- Each

### 2 COMPUTER DISTRIBUTION BOARD (CDB)

Supply and installation of following MDS make metallic double door MCB Distribution Board with MCB having short circuit breaking capacity of 10 KA (minimum) and RCBO of 300 mA sensitivity having overload, short circuit and earth leakage protection complete with busbar, interconnection, mounted on flat iron frame on wall/flushed with finished wall by chase cutting, mending good to original finish, painting, etc. as required. Name plate of DB is to be fixed up on front door of DB for its identification.

SPN 12 way SPN MCB DB complete with busbar and the following MCBs./ RCBO:

**INCOMING:** 

1 No. 240 V 25A DP MCB

**OUTGOING**:

10 Nos. 240 V 6A SP MCB

Each 2

### 3 COMPUTER SOCKET OUTLET CLUSTER POINT WIRING

Computer socket outlet cluster point wiring with 1100 V grade 3 nos. single core (1 for earth, green colour) 2.5 sq.mm. PVC insulated flexible FRLS copper conductor cable conforming to IS: 694 through suitable size PVC.conduit (ISI mark embossed on conduit surface) and conduit accessories partly concealed in wall/ embedded in floor, partly on surface above false ceiling and partly through partition or through flexible conduit from DB to computer socket outlet cluster as detailed below and upto connection of 2 nos. socket clusters in 1 (one) circuit connecting by looping method. The work includes supply and fixing of socket outlet clusters component/ sets as detailed below:

SL. NO.	DESCRIPTION OF ITEM	UNIT	QTY.	RATE (Rs.)	AMOUNT (Rs.)	
------------	---------------------	------	------	---------------	-----------------	--

Each computer socket outlet cluster comprising the following :

2 nos. 6A 5 pin modular type shuttered socket. (below table)

2 no. 6/16A 6 pin modular type shuttered socket. (below table)

2 no. 16A modular type controlling switch with indicator. (above table)

1 no. Front Plate of suitable size.

1 no. Mounting box of suitable size.

Each 9

### 4 SUBMAIN WIRING:

Submain wiring with following size 1100 V grade, single core, PVC insulated flexible copper conductor cable conforming to IS: 694 through PVC.conduit (ISI mark embossed on conduit surface) and conduit accessories partly on surface (above false ceiling) with M.S. bar saddles, partly through partition and partly concealed in wall / embedded in floor by chase cutting, mending good all damages, painting, etc. as required to be completed in all respect.

 From Main DB to UPS Incoming and UPS outgoing to CDB with 2 nos. 6 Sq.mm. + 1 no. 2.5 Sq.mm. (Green colour for earth) PVC insulated flexible copper conductor cable in 25 mm dia. M.S.conduit

Mtr 160.00

With 2 nos. 2.5 sq.mm. + 1 no. 1.5 sq.mm. ( green colour for earth ) PVC insulated copper wire in 20 mm dia PVC conduit / casing caping. (for each computer power point)

Mtr 240.00

### 5 <u>EARTHING (COMPUTER)</u>

Earthing the installation as per I.E. rules conforming to IS:3043-1987 or its latest amendment by making earth station with 450mm x 450mm x 6mm (minimum) thick copper plate electrode to be installed such that its top edge shall be at a minimum depth of 3.0 metre below ground level after preparation of ground with charcoal and salt and connecting the earth lead-in-wire by bolting and then brazing to the copper plate complete with copper bolts of suitable length double nuts and washers, copper lugs including supply and fixing of 50mm dia. partly perforated G.I. pipe with funnel for watering arrangement.

i) The earthing installation should be provided with 300mm x 300mm and 300mm depth inside dimension masonry inspection pit with C.I. hinged cover having locking arrangement and restoring the surfaces duly rammed.

Each 1

ii) Supplying and fixing of 1 x 10 Sq.mm PVC insulated copper wire through suitable size PVC conduit to be fixed on wall surface with bar saddles / clamps at an interval of 300mm etc. as required to be completed in all respect. The underground portion of earth lead-in-wire to be laid at an average depth of 500 mm below ground level.

Mtr. 30.00

### 6 COMPUTER DATA SOCKET

Supply and fixing on wall / furniture / partition recessed type D - Link make Computer data socket (RJ 45) with mounting box & front plate as shown in the drawing complete with chase cutting, mending good etc. as required.

Each 9

### 7 COMPUTER DATA WIRING

Supplying and laying of CAT – 6 cables through pre-laid rigid PVC conduit as shown in the drawing or otherwise as directed by the consultant from server to Computer Data Socket (through HUB, if required) including interconnection mending good, etc. as required to be completed in all respect.

Mtr. 300.00

### **TOTAL CARRIED TO ELECTRICAL SUMMARY:**

# **INTERIOR & FURNITURE WORKS**

SL. NO.	MATERIAL	BRAND/MANUFACTURER
1.	PLYWOOD & BLOCK BOARD, (MR/BWR)	- GLOBE - GREEN - SWADESH - ARCHID PLY
2.	LAMINATES	- SUNMICA (ICA) - MERINOLAM - ARCHID LAM - GREEN LAM
3.	GLAZING	- MODI FLOAT - ST GOBAIN
4.	GYPSUM BOARD FALSE CEILING	- SAINT GOBAIN GYPROC
5.	MINERAL FIBRE FALSE CEILING	- ARMSTRONG - DAIKEN
6.	PAINT	- ASIAN PAINTS - BERGER PAINTS - ICI
7.	WHITE CEMENT PUTTY	- BIRLA WHITE - J.K. WHITE
8.	CABINET /DRAWER LOCKS, DRAWER SLIDES, AUTO- HINGES, KEYBOARD TRAYS, CABINET HANDLES ETC.	- EFFICIENT GADGETS, - EBCO - INNOFITT SYSTEMS - HAFFELE
9.	DOOR LOCKS AND HANDLES	- DORSET - ACME - GODREJ NIGHT LATCH (CASH & SINGLE WINDOW)

# **LIST OF APPROVED MATERIALS**

ELECTRICAL WORKS

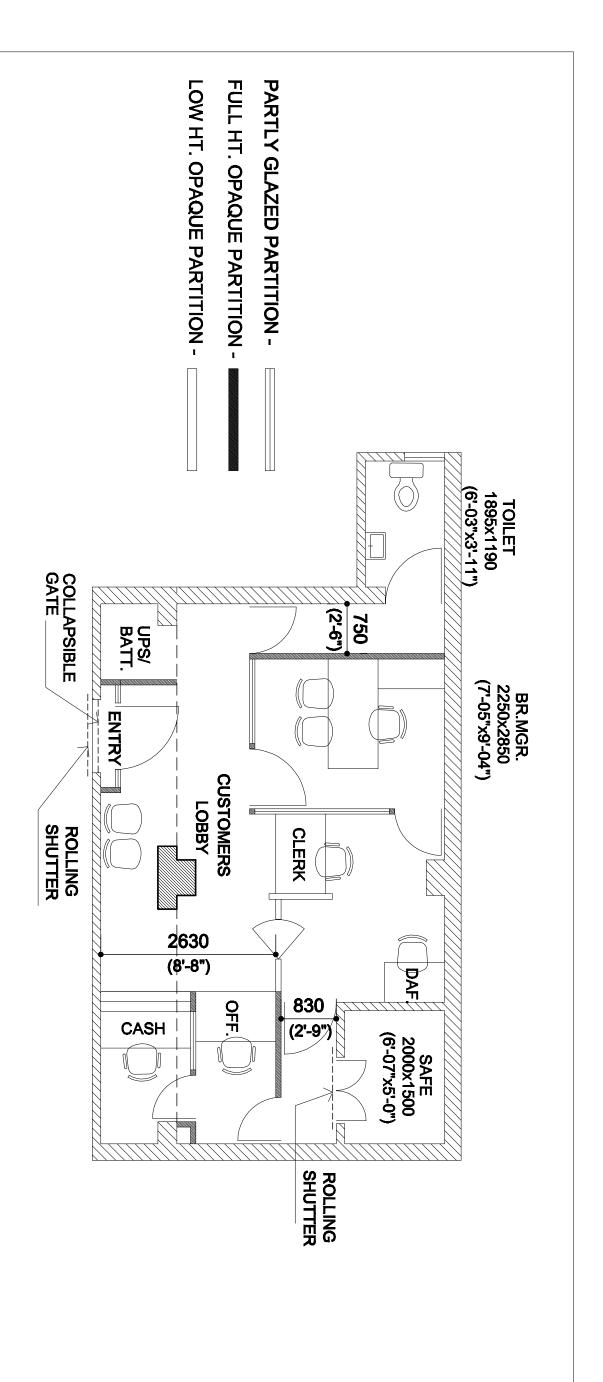
SL.	ITEM	ITEM DETAIL	APPROVED BRAND /
NO.			MANUFACTURER
1.	CONDUITS	I) M.S.(BLACK STOVE ENAMELED)	- B.E.C. - NIC - AKG - SENCO
		II) PVC RIGID	- B.E.C. - AKG - PRECISION
		III) G.I. FLEXIBLE	- B.E.C. - PRECISION - AKG - ATUL
		IV) GALVANISED STEEL	- B.E.C. - PRECISION - AKG - ATUL
		V) PVC CASING –CAPPING	- PRECISION - PRESTO-PLUS
2.	CABLES & WIRES	I) 11 KV ALUMINUM	- POLYCAB - FINOLEX - HAVELS - MESCAB
		II) 1100 V GRADE PVC / XLPE INSULATED STEEL ARMORED AND OVER ALL PVC SHEATHED	- FINOLEX - POLYCAB - HAVELS - MESCAB
		III) PVC INSULATED STRANDED/FLEXIBLE COPPER CONDUCTOR WIRE WITH SIZE IN SQMM. EMBOSSED ON CABLE SURFACE (FOR INTERNAL WIRING)	- FINOLEX - POLYCAB - HAVELS - MESCAB
		IV) LAN	- FINOLEX - LUCENT - D – LINK/AMP/MOLEX
		V) TELEPHONE	- FINOLEX - DELTON
		VI) TV ANTENNA	- FINOLEX - POLYCAB - ORBIT - KEI - MESCAB

SL. NO.	ITEM	ITEM DETAIL	APPROVED BRAND / MANUFACTURER
3.	PROTECTIVE DEVICE	I) TPN & SPN SWITCH FUSE UNIT WITH HRC FUSE	- SIEMENS - L&T - SCHNEIDER - ABB - INDO ASIAN - NORTH WEST
		II) MCCB, MCB, MCB-DB, RCBO, RCCB, ACB & ELCB	-SIEMENS -L&T - SCHNEIDER - ABB - HAVELS - PHILIPS
		III) MANUAL CHANGEOVER SWITCH/AUTO CHANGE OVER SWITCH	- L&T - LEGRAND, -HAGER
		IV) DOL STRATER	- SIEMENS - LARSEN & TOUBRO - INDO ASIAN
		V) CURRENT TRANSFORMER	- L & T, - KAYCCE - KUPPA/AE/IMP - INDO ASIAN
4.	SWITCHES & SOCKET SWITCH FRONT PLATE AND MOUNTING BOX (MODULAR TYPE)	I) 6A / 16A SWITCH, SOCKET, TELEPHONE SOCKET (RJ-11) LAN SOCKET(RJ-45), ELECTRONIC REGULATOR/DIMMER	- MK(WRAPAROUND PLUS) - Anchor(Roma) -Legrand(Myrius)
		II) ON/OFF / SELECTOR SWITCH	- SIEMENS - LARSEN & TUBRO - INDO ASIAN
		III) METAL CLAD SOCKET & PLUG HAVING SCRAPING EARTH ARRANGEMENT	- SIEMENS - LEGRAND - HAGER
5.	BELL	BUZZER BELL/CALL BELL, BUZZER INDICATOR (LUMINOUS TYPE)	- BAJAJ - ANCHOR
6	INSTRUMENT	INDICATING INSTRUMENT/ MEASURING INSTRUMENT	- AE - IMP - L&T - GE
7.	LUMINARIES	I) LED LIGHT FITTINGS	- PHILIPS - WIPRO - HAVELLS - BAJAJ

SL. NO.	ITEM	ITEM DETAIL	APPROVED BRAND / MANUFACTURER
8.	FAN FITTINGS	II) WALL MOUNTING / PEDESTAL FAN	- HAVELLS - BAJAJ - CROMPTON - USHA - ORIENT - POLAR - HAVELLS - BAJAJ
			- CROMPTON - USHA - ORIENT - POLAR
		III)EXHAUST FAN	- HAVELLS - BAJAJ - CROMPTON - USHA - ORIENT
9.	AIR-CONDITIONERS (3 STAR OR EQUIVALENT)	WINDOW TYPE HI-WALL SPLIT TYPE DUCTABLE SPLIT TYPE	- VOLTAS - CARRIER - HITACHI - BLUE-STAR
10.	STARTER	LIGHT-STARTER	-SIEMENS -L&T - SCHNEIDER
11.	REGULATOR	CEILING FAN-REGULATOR	-ANCHOR -LEGRAND -CLIPSAL
12.	RELAY		-L &T -ABB -SIEMENS -INDO ASIAN

# Note:

All other items not covered above, as per sample approved by employer/consultant.



TOTAL CARPET AREA EXCLUDING TOILET, COLUMN, 41.79 SQM. (449.66SFT.)

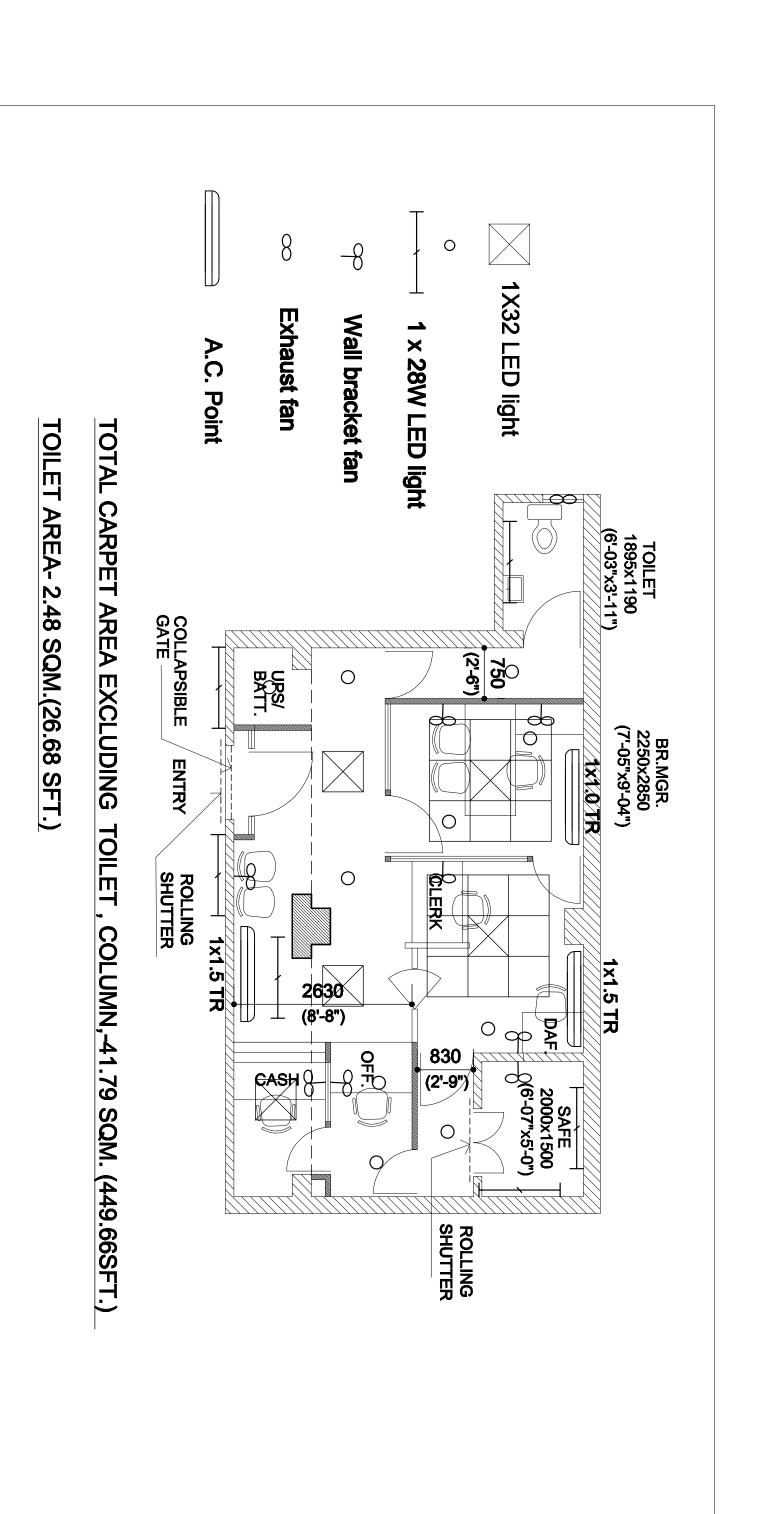
TOILET AREA- 2.48 SQM.(26.68 SFT.)

# FOR INDIAN BANK DPS BOKARO BRANCH PROPOSED GROUND FLOOR LAY-OUT PLAN

DEALT- N.G.KUNDU SCALE:-1:100 DATE - OCT.16 2024

**ALTERNATIVE-1** 





# FOR INDIAN BANK DPS BOKARO BRANCH PROPOSED GROUND FLOOR ELECTRICAL PLAN

DEALT- N.G.KUNDU SCALE:-1:100 DATE - NOV.05 2024

**ALTERNATIVE-1** 

