

सीमित निविदा आमंत्रण (LTE): आईएफएससीए (IFSCA) मुख्यालय भवन, यूनिट संख्या 9S, 9वीं मंजिल, दक्षिणी भाग, ज़ोन-1, रोड-1A, गिफ्ट एसईज़ेड, गिफ्ट सिटी, गांधीनगर, गुजरात-382050 में सिविल, विद्युत, आंतरिक सज्जा एवं वातानुकूलन कार्यों के निष्पादन हेतु प्रस्ताव (RFP) आमंत्रित किए जाते हैं।

संदर्भ संख्या: NaBFID /Admin/2026-27/03

Limited Tender Enquiry (LTE): Request for Proposal (RFP) for Carrying out Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat- 382050

Ref No.: NaBFID /Admin/2026-27/03

Participation in this Limited RFP shall be restricted to only those agencies to whom this RFP has been issued.

राष्ट्रीय अवसंरचना वित्तपोषण और विकास बैंक (नैबफिड)

National Bank for Financing Infrastructure and Development (NaBFID)

(संसद के अधिनियम के माध्यम से स्थापित एक अखिल भारतीय वित्तीय संस्था)

(An All-India Financial Institution established through an act of Parliament)

सीमित निविदा आमंत्रण (LTE): आईएफएससीए (IFSCA) मुख्यालय भवन, यूनिट संख्या 9S, 9वीं मंजिल, दक्षिणी भाग, जोन-1, रोड-1A, गिफ्ट एसईजेड, गिफ्ट सिटी, गांधीनगर (गुजरात)-382050 में सिविल, विद्युत, आंतरिक सज्जा तथा वातानुकूलन कार्यों के निष्पादन हेतु प्रस्ताव प्रस्तुत करने के लिए अनुरोध (RFP).

Limited Tender Enquiry (LTE): - Request For Proposal (RFP) for Carrying out Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat- 382050

जारी करने वाला कार्यालय और पता:
राष्ट्रीय अवसंरचना वित्तपोषण और विकास बैंक (नैबफिड)
द कैपिटल, ए विंग,
15 वीं मंजिल- 1503, जी ब्लॉक,
बान्द्रा कुर्ला कॉम्प्लेक्स, बान्द्रा (पूर्व),
मुंबई – 400051

Issuing Office and Address:
National Bank for Financing Infrastructure and Development (NaBFID),
The Capital, A Wing,
15th Floor - 1503, G Block,
Bandra Kurla Complex, Bandra (East),
Mumbai – 400051

प्रश्नों के लिए, कृपया संपर्क करें:

श्री अक्षय शेल्के- 022-41042416

ईमेल आईडी: rfp@NaBFID.org

For queries, please contact:

Shri Akshay Shelke - 022-41042416

Email ID: rfp@NaBFID.org

विधिवत भरे हुए आवेदन पत्रों की प्राप्ति की अंतिम तिथि एवं समय:

19 अक्टूबर, 2026, अपराह्न 3:00 बजे (1500 बजे) तक।

Last Date and Time for Receipt of Duly Filled-in Applications:

October 19, 2026, up to 3.00 PM (1500 HRS)

(यह दस्तावेज नैबफिड की संपत्ति है। नैबफिड की लिखित अनुमति के बिना इसे इलेक्ट्रॉनिक या अन्य किसी भी माध्यम से कॉपी, वितरित या रिकॉर्ड नहीं किया जा सकता है। इस दस्तावेज में दी गई सामग्री का उपयोग, यहां तक कि यहां निर्दिष्ट उद्देश्य के अलावा किसी अन्य उद्देश्य के लिए अधिकृत कर्मियों/एजेंसियों द्वारा भी, सख्ती से प्रतिबंधित है क्योंकि यह कॉपीराइट उल्लंघन की राशि होगी और इस प्रकार भारतीय कानून के तहत दंडनीय होगा।)

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घटनाओं की अनुसूची
Schedule of Events

Sr. No.	Particulars	Details and Timeline
1	RFP Reference No.	NaBFID /Admin/2026-27/03
2	Type of Enquiry	Limited Tender Enquiry
3	Date of Issuance of RFP and Contact details of RFP Issuing Office. (Name, Designation, Contact No., Email address for sending any kind of correspondence regarding this RFP)	September 28, 2026 Head - Administration National Bank for Financing Infrastructure and Development (NaBFID), The Capital, A Wing, 15th Floor - 1503, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051 rfp@NaBFID.org For any queries, please contact Shri Akshay Shelke - 022-41042416
4	Date, Time & Address of Pre-bid meeting	October 12, 2026 at 1500 HRS National Bank for Financing Infrastructure and Development (NaBFID), The Capital, A Wing, 15th Floor - 1503, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051
5	Last date and time for acceptance of queries in writing preferably as per clause of RFP document	October 9, 2026 till 1500 HRS
6	Date of responding to the queries requested by the Bidders	October 13, 2026
7	Last date & Time for Submission of Bid	On or Before October 19, 2026 Upto 1500 HRS at National Bank for Financing Infrastructure and Development (NaBFID), The Capital, A Wing, 15th Floor - 1503, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051 (Envelope to be dropped into the Tender Box at 15th Floor only)
8	Date of Opening of Price Bid	October 19, 2026 at 5.00 PM
9	Cost of Tender Document	Nil The formats for technical and Price Bids may be downloaded from the website https://NaBFID.org or https://eprocure.gov.in
10	Earnest Money Deposit (EMD)	INR 1,00,000/= (Rupees One Lakh Only) By means of Demand Draft/ Bankers Cheque payable at Mumbai in favor of “National Bank for Financing, Infrastructure and Development”. After award to successful Bidder, EMD of unsuccessful Bidders shall be returned without interest within 30 days from the date of issuance of LOA to successful Bidder. For successful Bidder, the Interest Free EMD will be retained and

		returned within 30 days from the date of receipt of the Performance Guarantee.
11	Validity of Bid	180 days from the date of opening of Price Bids
12	Timeline for Completing Civil, Electrical, Interior and Air-Conditioning Works	The completion period shall be 75 days from the 15 th day after the date of issuance of the Work Order or the date of handing over of the site, whichever is later.
13	Issuance of Addendum or Corrigendum, if any	Bidders to regularly check Bank's website https://NaBFID.org or https://eprocure.gov.in for any update.

Note:

- *In case of any discrepancy between the Hindi and English Version, the matter mentioned in English version shall prevail.*
- *Every agreement must be stamp of Rs. 500 or as per the State Stamp Act.*
- *NaBFID reserves the right to change dates & time without assigning any reasons thereof. Intimation of the same shall be notified on the Bank's website.*
- *This bid document is not transferable.*
- *If a holiday is declared on the dates mentioned above, the bids shall be received / opened on the next working day at the same time specified above and at the same venue unless communicated otherwise.*

NaBFID

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	(PRICE BID: PART II)	
1	Bill of Quantities (BOQs)	

NaBFID

Disclaimer

- i. The information contained in this Tender or information provided subsequently to Bidder(s) whether verbally or in documentary form/email by or on behalf of NaBFID, is subject to the terms and conditions set out in this Tender.
- ii. This Tender is not an offer by NaBFID, but an invitation to receive responses from the eligible Bidders. No contractual obligation whatsoever shall arise from the Tender process unless and until a formal contract/Agreement is signed and executed by duly authorized official(s) of NaBFID with the selected Bidder.
- iii. The purpose of this Tender is to provide the Bidder(s) with information to assist them in preparation of their bid proposals. This RFP does not claim to contain all the information each Bidder may require. Each Bidder should conduct its own analysis and check the accuracy, reliability and completeness of the information contained in this Tender and wherever necessary, should obtain independent advice / clarifications. NaBFID may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this Tender.
- iv. NaBFID, its employees and advisors make no representation or warranty and shall have no liability to any person, including any applicant or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Tender and any assessment, assumption, statement or information contained therein or deemed to form or arising in any way for participation in this bidding process.
- v. NaBFID also accepts no liability of any nature whether resulting from negligence or otherwise, howsoever caused arising from reliance of any Bidder upon the statements contained in this Tender.
- vi. The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding document. Failure to furnish all information required by the bidding document or to submit a bid not substantially responsive to the bidding document in all respect will be at the Bidder's risk and may result in rejection of the Bid.
- vii. **Contents of bidding document:**
 - a. The Bidder must thoroughly study/analyse and properly understand the contents of this RFP, its meaning and impact of the information contained therein.
 - b. Misrepresentation by the Bidder or failure to furnish all information required in the bidding document or submission of Bid not responsive to the bidding documents in any respect will be at the Bidder's risk and responsibility and the same may finally result in rejection of its Bid. NaBFID has made considerable effort to ensure that accurate information is contained in this RFP and is supplied solely as guidelines for Bidders.
 - c. Nothing in this RFP or any addenda is intended to relieve Bidders from forming their own opinions and conclusions in respect of the matters contained in RFP and its addenda, if any.

- d. The Bid prepared by the Bidder, as well as all correspondences and documents relating to the bid exchanged by the Bidder and the Institution and supporting documents and printed literature shall be submitted in English.
- e. The information provided by the Bidders in response to this RFP will become the property of NaBFID and will not be returned. Incomplete information in bid document may lead to non-consideration of the proposal. If bidder(s) made any concealment or false statement in RFP then their proposal/bid shall be cancelled / rejected.
- viii. **Bid Integrity:** misrepresentation of any fact within the Bid will lead to the cancellation of the contract without prejudice to other actions that Institution may take. All the submissions, including any accompanying documents, will become property of NaBFID.
- ix. **Contacting the Institution:**
 - a. No Bidder shall contact the Institution on any matter relating to its Bid, from the time of opening of price Bid to the time, the contract is awarded.
 - b. Any effort by a Bidder to influence the Institution in its decisions on Bid evaluation, Bid comparison or contract award may result in the rejection of the Bidder's Bid.
- x. **NaBFID's right to accept any bid and to reject any or all Bids:**

NaBFID reserves the right to accept or reject any Bid in part or in full or to cancel the bidding process and reject all Bids at any time prior to contract award without incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for NaBFID's action.
- xi. **Right to Verification:**

NaBFID reserves the right to verify any or all of the statements made by the Bidder in the Bid document and to inspect the Bidder's facility, if necessary, to establish to its satisfaction about the Bidder's capacity/capabilities to perform the job. The Bidder is expected to extend all necessary assistance in this regard, failing which NaBFID reserves the right to reject the Bid.
- xii. **Right to Audit:**

The institution shall have right to conduct audits by its internal/ external auditors or by agents appointed to act on its behalf. In this case Service Provider shall furnish all relevant information, records/data to such auditors and/or inspecting officials.

Where any deficiency has been observed during audit of the Service Provider on the risk parameters finalized by NaBFID or in the certification submitted by the auditors, the Service Provider shall correct/resolve the same at the earliest and /or within timelines stipulated by NaBFID and shall provide all necessary documents related to resolution thereof.
- xiii. The Institution (NaBFID) reserves the right to reject any application cum tender without assigning any reason thereof. NaBFID also has the right to reject all the applications and to go in for re-Tender without assigning any reason thereof.
- xiv. The issue of this RFP does not imply that the Institution is bound to select a Bidder or to award the contract to the Selected Bidder, as the case may be, for the Project and the

Institution reserves the right to reject all or any of the Bids or Bidders without assigning any reason whatsoever before issuance of purchase order and/or its acceptance thereof by the successful Bidder as defined in Award Criteria and Award of Contract in this RFP.

NaBFID

SECTION – I**NOTICE INVITING TENDER**

Subject: Tender for Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050

National Bank for Financing Infrastructure and Development (herein after referred to as '**NaBFID /The Bank**') invite sealed tenders in two parts, (I-Technical Bid and II- Price Bid) for captioned subject, from eligible Bidders as per details/scope of work mentioned in this RFP document for carrying out Civil, Electrical, Interior and Air-Conditioning Works at at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050. **Participation in this Limited RFP shall be restricted to only those agencies to whom this RFP has been issued.**

Sr. No.	Project Description	Estimated Cost	EMD	Time Period for completion
1.	Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050	Rs 2.01 Cr	Rs.1,00,000/- (Rs. One Lakhs Only)	75 days from the 15th day from the date of issuance of the Work Order or the date of handing over of the site, whichever is later.

The sealed tender in the prescribed tender form in **three** separate envelopes as follows should be addressed to **Head, Administration Department, NaBFID** and superscribed as: "**RFP for Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050**" and should submit the tender at - The Capital, A Wing, 15th Floor - 1503, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051. **(Envelope to be dropped into the Tender Box at 15th Floor only)**

Envelope No.1 - Earnest Money Deposit by means of Demand Draft/ Bankers' Cheque payable at Mumbai in favor of "National Bank for Financing Infrastructure and Development". Envelop No. 1 should be superscribed as: "**EMD – RFP for Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050**"

Envelope No.2 - The envelope shall contain the signed and stamped copy of Covering Letter, Tender Documents, a complete set of Drawings, and all other supporting documents as specified in the RFP. Envelope No. 2 should be superscribed as "**Technical Bid – RFP for Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050**"

Envelope No.3 - To contain only the Priced Bid complete in all aspects (No conditions shall be mentioned in Envelope No. 3 which will not be taken into consideration for evaluation of the tender). Envelope No. 3 should be superscribed as "**Price Bid – RFP for Civil, Electrical,**

Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side,
Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050”

Notes:

- (i) All the three envelopes to be kept in a duly **sealed bigger envelop** and superscribed as: "RFP for Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050"
- (ii) The Earnest Money Deposit (EMD) must be submitted by way of a bank demand draft (DD)/banker's cheque payable at Mumbai, drawn in favour of **"National Bank for Financing Infrastructure and Development."** Tenders without EMD will be summarily disqualified and the Technical & Price Bids of such bidders will not be opened.
- (iii) All supporting documents, the complete tender document, drawings, and other relevant documents should be signed and stamped on all pages by the authorized signatory.

The Tenderer will have to quote for all the sections included in the tender documents. NaBFID reserves the right to reject all bids without assigning any reasons for doing so. The bidder may also visit the site for further information and clarity about the project. Tenders, which do not fulfill all or any of the above conditions and conditions mentioned in the tender documents or are incomplete in any respect, are liable to be rejected. Any discrepancies, omissions, ambiguities in the tender documents or any doubts as to their meaning should be clarified during the Pre-bid meeting. No request for change in commercial/legal terms and conditions will be entertained and queries in this regard, therefore will not be entertained.

Tenderers are requested to visit the site and make themselves familiar with the work, Gift City guidelines before submitting the tenders.

Timeliness of completion, quality & workmanship are the essence of this project.

All other terms & conditions are detailed in the tender documents.

Thank you,

Yours faithfully,

Sd/-

Head
Administration Department, NaBFID.

ANNEXURE TO FORM OF TENDER

1	Stipulated time of completion	75 Days from the 15 th day after the date of issuance of the Work Order or the date of handing over of the site, whichever is later.
2	Defects Liability Period (DLP)	12 (Twelve) months to 120 months from the date of virtual completion of the work as certified by the Architect from the date of Completion of work.
3	Timeline for Commencement	Date of start of work should be from 15 th day of issue of Work Order or the date of handing over of the site, whichever is later.
4	Liquidated Damages for Delay	1% of the contract amount shown in the tender per week subject to the ceiling of 10% of the accepted contracted sum.
5	Period of final measurement	1 (One) months from the Date of Completion.
6	Value of work for Interim Certificate (RA bill)	10% of the Contract Value. (This value shall be difference of work done of consecutive bills).
7	Period of honoring Interim Certificate	10 days from date of receipt of certificate for approved work done (work done certificate) from Architect appointed for the project.
8	Period of honoring Final Certificate	30 (Thirty) days from date of receipt of completion certificate from Architect.
9	Retention Money	5% of total of each Running Account Receipts (RAR)
10	Performance Security	Performance Security will be 5% of the contract value. Performance security for works shall be returned to the party within 30 days after receipt of completion certificate.
11	Refund of total Retention Money	Retention money will be refunded within 30 days after end of the defect liability period, provided that contractor has satisfactorily carried out all the works and attended to all defects in accordance with the conditions of the Contract, including the site clearance.
12	Tender validity period	180 days from the date of opening of Price Bids

LETTER OF SUBMISSION FROM CONTRACTOR*(On letter head of the Bidder)*

To,
Head,
Administration Department, NaBFID
National Bank for Financing Infrastructure and Development,
A Wing, 15th Floor - 1503, The Capital Building,
G-Block, Bandra-Kurla Complex,
Bandra East, Mumbai – 400051
rfp@NaBFID.org

Date

Subject: Tender for Civil, Electrical, Interior and Air-Conditioning Works at premises of NAFINCO International IFSC Private Limited, a wholly Owned Subsidiary of National Bank for Financing Infrastructure and Development (NaBFID), Gift City, Gandhinagar.

Dear Sir,

I/ We, having examined the drawings, specifications, designs and bill of quantities relating to the works specified in the RFP hereinafter set out and having visited and examined the site of the works specified in the said memorandum / tender / BOQ and having acquired the requisite information relating thereto as affecting or related to the tender, I/we hereby offer to execute the works specified in the said memorandum / tender / BOQ within the time specified and at the rates mentioned in the attached bill of quantities and in accordance with the specifications, designs, drawings, instructions and conditions referred to in tender.

1. We agree to execute all the works referred to therein to your entire satisfaction, in accordance with the terms and conditions of the tender, within the stipulated time specified in the tender.
2. If I/we, fail to commence the work as per the time specified, I/we agree that NaBFID shall without prejudice to any other right or remedy, be at liberty to forfeit the said EMD
3. I/We have submitted a Demand Draft/Banker's Cheque for a sum of ₹1,00,000/- (Rupees One Lakh Only) towards the Earnest Money Deposit (EMD), payable at Mumbai. The said amount shall not carry any interest. In the event of my/our failure to execute the contract when called upon to do so, I/we hereby agree that the said Earnest Money Deposit shall stand forfeited, without prejudice to any other rights or remedies available to NaBFID under the terms of the tender or applicable law.
4. If this tender is accepted, we agree to provide an Initial Security Deposit/Performance Security Deposit for a sum equivalent to **5% (Five Percent)** of the contract value for the due performance of the contract under the terms of the conditions of Contract within 15 days of acceptance of tender. The same shall be returned to the contractor (without interest) after issue of Completion Certificate by the Bank.

5. The validity of this tender is for a period of **180** days from the date of opening of the Price bid and it shall remain binding upon us and may be accepted by the Bank at any time before the expiration of that period without any additional cost.
6. In the event of this tender being accepted, I/We agree to enter into and execute the necessary contract required by you. I/We do hereby bind myself/ourselves to the conditions of contract in this regard. I / we further acknowledge and agree that the said contract will be based on the terms and conditions of this Tender. The agreement will be in non-judicial stamp paper of value as per latest Maharashtra Stamp Act and we agree to bear the entire cost of agreement charges.
7. We agree to pay Government VAT, GST, Sales-Tax (State & Central), Service Tax, Central Excise Duty, Octroi, Work Contract Tax and all taxes as prevailing from time to time.
8. The lists showing the particulars of fit out work carried out and the names of manufactures of specialized items as given in the GIFTCL guidelines will be followed.
9. Indian law shall govern the terms and conditions under this contract.
10. Till execution of a formal contract, the LoA duly accepted by us, tender documents and other correspondence exchanged shall form a binding contract with NaBFID.
11. Conflict of Interest: Tenderers shall not have a conflict of interest. All tenderers found to have a conflict of interest as mentioned below will be disqualified-
 - Two or more different Bids submitted by Bidders having controlling shareholders in common would also be liable to be rejected.
12. It is further certified that the contents of our Bid are factually correct. We have not sought any deviation to the terms and conditions of the RFP. We also accept that in the event of any information / data / particulars proving to be incorrect, NaBFID will have right to disqualify us from the RFP without prejudice to any other rights available to NaBFID.
13. We certify that while submitting our Bid document, we have not made any changes in the contents of the RFP document, read with its amendments/clarifications provided by NaBFID.
14. We understand that Bank is not bound to accept the lowest or any tender, Bank may reject all or any tender, accept or entrust the entire work to the contractor without assigning any reason or giving explanation whatsoever.
15. We hereby certify that on the date of submission of Bid for this RFP, we do not have any past/ present litigation which adversely affect our participation in this RFP or we are not under any debarment/blacklist period for breach of contract/fraud/corrupt practices by any Scheduled Commercial Bank/ Public Sector Undertaking/ State or Central Government or their agencies/departments.
16. We undertake that:
 - (a) we shall not withdraw or modify our Bid during the period of Bid validity;
 - (b) we have not made any statement or enclosed any document/form that may be found to be false, incorrect, or misleading;

(c) if we are awarded the Contract, we shall accept the Work Order and sign the Contract with NaBFID within the specified time period stipulated in the RFP; and

(d) in the event of our failure to comply with any of the above undertakings, NaBFID shall have the right to forfeit the EMD.

We, further, hereby undertake and agree to abide by all the terms and conditions stipulated by NaBFID in the RFP document.

Dated this day of 2026

(Signature)

(Name)

(In the capacity of)

Duly authorised to sign Bid for and on behalf of (Name of the Bidder)

Seal of the Company/ Rubber Stamp of the Entity

(By the authorized signatory with Board resolution Reference and common seal of company)

SECTION II**GENERAL RULES AND DIRECTIONS**

1. Over writing on any page having specifications, Bill of quantities & mentioning other terms etc. is not permitted at all. This will lead to dis-qualification of the Bid.
2. Rates quoted by the contractor in figures and words shall be accurately filled in so that there is no discrepancy in the rates. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will be taken as correct and not the amount.
3. In the case of any tender where unit rate of any item / items appears to be unrealistic, the minimum rate decided in consultation with the Architect should prevail and will become the part of estimated cost.
4. There may be certain items of work which are appearing in schedule of quantities at more than one place. The Contractor shall quote same rates for the identical items which appear in more than one place. If different rates are quoted by the tenderers for such identical items, the same shall be rationalized by considering the lowest quoted rate for such items, for evaluation and acceptance of tender.
5. The validity of this tender is for a period of **180** days from the date of opening of the Price bid. All rates shall be quoted in schedule of quantities. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words. The total amount should be written both in figures and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs.2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should in variably 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.
6. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Bank / Architect / Site Engineer shall be communicated in writing by the contractor to Architect.
7. Goods and Service Tax (GST) or any other tax in respect of this contract shall be payable by the Contractor and NaBFID will not entertain any claim whatsoever in respect of the same. Nothing extra shall be paid on this account.
8. The Successful Bidder/ Contractor will start its work on the Project immediately after issuing of Letter of Award (LOA). Agreement/Contract and other necessary documents will be executed subsequently.

9. Applicable labour cess shall be paid by the contractor to the statutory authorities. Further, the contractor shall indemnify NaBFID towards all future claims of whatsoever nature arising out of compliance with labour cess at the time of claiming the amount towards labour cess from NaBFID
10. All rates to include GST, Labour Cess, cost of material, labour, transport, lifting, delivering, wastage, supervision & Management Cost etc. complete including scaffolding & liasioning charges if any.
 - Contractor has to consider SEZ norms for taxation (NO GST shall be paid to the contractor as the SEZ are exempted for taxes)
 - Rates shall also include preparing requisite samples & mock-ups as demanded by Architect.
 - Rate shall include appointment of safety officer and /or quality control agency, they will visit & inspect the site on regular basis & report to the Architect.
11. The Bid shall be signed by the concerned Bidder or the person(s) on behalf of the Bidder having necessary Authorization / Power of Attorney to do so. Each page of the bid document including any corrigendum, addendum, etc. shall be signed (Copy of Power of Attorney / Memorandum and Articles of Association/ Board resolution/ Authorization Letter etc) shall be furnished along with the bid document).
12. If the space in the format is insufficient for furnishing full details, such information may be supplemented on a separate sheet stating therein the part of the format and with serial number. Separate sheets shall be used for each part of the application cum tender format duly signed by the authorized signatory.
13. Bidder should ensure that the contents of their Bid are factually correct and in line with the terms and conditions of the Tender documents. In case of a deviation from the Tender, the Bidder should provide adequate information of that with the Bid submission. NaBFID may, at its discretion, waive any minor non-conformity or irregularity in a BID which does not constitute a material deviation. NaBFID, at its sole discretion, reserves the right to disqualify the Bidder in case of a material deviation.
14. Further, I / We agree that in case of forfeiture of Earnest Money or both Earnest Money & Performance Guarantee as aforesaid, I / We shall be debarred for participation in the - tendering process of the work. I/ We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret / confidential documents and shall not communicate information derived there from to any person other than a person to whom I / We am / are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Signature of Contractor

(Seal)

SECTION III
SPECIAL INSTRUCTIONS

Bidders may specially note the following:

1. Tender shall be valid for acceptance for a period of 180 days from the date of opening of Price bid.
2. No upward revision of rates will be accepted after opening of the tender on account of any reasons whatsoever.
3. The quantities mentioned in the Bill of Quantities are indicative only. The quantities may vary either side and the contractor have to execute & complete the work at the rates quoted by them. Nothing extra beyond the quoted rates shall be paid to the contractor on account of deviation between tender quantities and actual executed quantities. The final payment shall be made based on actual work executed at site based on the joint measurement and quoted rates.
4. The rates at which the work order is finally placed on the successful tenderer shall be valid till the completion of the work. No escalation or increase in the rates on account of any reasons whatsoever shall be entertained during execution of work till completion.
5. The date of commencement shall be reckoned from the 15th day of issue of work order or the day on which the contractor is instructed to take the possession of the site whichever is later.
6. The entire work shall be completed within 75 (Seventy-Five) days from the date of commencement of work.
7. Defects liability period (DLP) shall be 12 months to 120 months from the date of virtual completion of the work as detailed below as certified by the Architect:

Sr. No.	Description of the work	Defects Liability Period
1	Modular furniture work (Modular workstations, Cabin furniture and Storage units) and all other Interior Furnishing Works including chairs, sofa etc.	12 months
2	Waterproofing Work	120 months

8. Total security deposit will be 10% of contract amount, out of which 5% of contract amount (performance guarantee) will be deposited with NaBFID in FDR (issued from SBI only) / Bank Guarantee (validity up to 1 month after completion of defect liability period) of equivalent amount within 10 days after issuing of LOA. Balance security deposit will be maintained by way of deduction of 5% from the running account bills till final settled bill.
9. EMD of successful bidder will be returned within 30 days after receipt of Performance Guarantee.
10. Tenderers shall sign on places/pages in the tender wherever provided failing which the tender shall be rejected. Tenders not accompanied by EMD in the prescribed form and those that do not fulfill any of the tender conditions mentioned herein are liable to be rejected.
11. Adequate number of extinguishers, first aid boxes must be provided at the site by the contractor and all other safety codes prescribed by the GIFT authorities shall be observed

and implemented as prescribed by various statutory authorities. Nothing extra shall be paid on this account.

12. Watch and ward in respect of all plants, machinery, materials, etc at site for use in work shall be contractor's sole responsibility within their quoted rates.
13. No labour will be allowed to stay at site after working hours as per guidelines issued by the GIFT Authorities.

14. Contractor to Keep Site Clear

During the progress of the Works, the Contractor shall keep the Site reasonably free from all unnecessary obstructions and shall store or dispose off any constructional plant and surplus materials and clear away and remove from the site any wreckage, rubbish or temporary Works no longer required. Contractor shall appoint skilled / professional housekeeping agency to maintain cleanliness & finish of entire site for which no extra payment will be made.

15. Clearance of Site on completion

On the completion of the Works, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and Temporary Works of every kind, and leave the whole of the Site and works clean and in a workmanlike condition to the satisfaction of the Architect and the Bank official.

16. Watching and Lighting

The Contractor shall, in connection with the Works, provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or as required by the ARCHITECT, or by any duly constituted authority, for the protection of the Works, and, for the safety and convenience of the public or others.

17. **Telephone:** The Contractor shall maintain a Landline and/or Mobile phone at site at his own cost and shall pay all bills for calls and maintenance the telephone shall be installed by the Contractor maximum within 30 days from the date of commencement of work and the Contractor shall allow the use of the telephone to all other Contractors engaged on the works, if required and may recover proportionate call charges from them. He shall also allow free use of the telephone to the Bank /Architect/Structural Consultant and their representatives and owner's, for phone calls in connection with the work.

18. Safety Precautions and Safety Procedures

Safety Precautions

The Contractor shall observe all applicable regulations stipulated by GIFT Authorities regarding safety on the Site.

Unless otherwise agreed, the Contractor shall, from the commencement of work on Site until taking over provide:

- fencing, lighting, guarding and watching of the Works, and

- temporary roadways, footways, guards, and fences which may be necessary for the accommodation and protection of owners and occupiers of adjacent property, the public and others.

This Sub- Clause requires the Contractor to observe all applicable regulations regarding safety on Site. Quite apart from any statutory regulations that may be applicable to the Contractor's construction activities.

The Sub-Clause also sets out the Contractor's general obligations in relation to the security of the Site itself and requires him to provide, unless otherwise agreed, fencing, lighting, guarding and watching of the Works and any temporary roadways, footways, guards, fences necessary for the protection of adjoining owners' other property and the public.

19. Contractor To Keep Site Clear

Contractor should submit a safety procedure prior to start of the construction activities for Bank's review. The procedure should include the safety measures to be taken during construction work, firefighting / safety equipment which will be provided, number of safety / fire officers and their role, periodical exercise on awareness of workers towards safety. Familiarization of workers with safety equipment, teams for firefighting etc. In case of any emergency, contractor should immediately mobilize all resources to combat the emergency and co-ordinate with the Bank suitably.

Contractor should ensure that all the contractor's personnel have undergone the approved basic training on firefighting and survival techniques before deployment.

In case of any accident at site causing injury to personnel, contractor shall inform ARCHITECT immediately. Contractor shall also arrange for pickup and immediate medical attention for the injured personnel.

20. Materials And Workmanship

i. Manner of Execution

All materials, Plant and workmanship shall be:

- of the respective kinds described in the Contract and in accordance with the ARCHITECT's instruction and
- subjected from time to time to such tests as the ARCHITECT may require at the place of manufacturer, fabrication preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places.

The Contractor shall provide such assistance, labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or Plant and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the ARCHITECT.

ii. Samples

The Contractor shall be responsible for arranging and providing all samples, catalogues, details as required by the specification to the approval of the ARCHITECT.

These shall be submitted 1 week prior to material is to be ordered. The approval shall be obtained in writing from Architect/ NaBFID. The cost of samples, its testing if required prior to approval shall be at the cost of the Contractor.

iii. Cost of Test

The Contractor shall be required to carry out all test as directed by the ARCHITECT at his cost.

The Contractor shall carry out all testing in the presence of the ARCHITECT and results jointly noted with due Certification by both i.e. the Contractor and the ARCHITECT.

The cost of setup arranging, visiting, transporting and recurring expenses of site laboratory shall be borne by the Contractor within his quoted price.

iv. Covering up Work

The Contractor shall give the Architect full opportunity to examine, measure and test any work on Site which is about to be covered up or put out of view.

The Contractor shall give due notice to the Architect whenever such work is ready for examination, measurement or testing.

The Architect shall then, unless he notifies the Contractor that he considers it unnecessary, without unreasonable delay carry out the examination, measurement, or testing.

v. Uncovering Work

If so, instructed by the ARCHITECT, the Contractor shall expose any parts of the Works. The Contractor shall reinstate and make good such parts to the ARCHITECT's satisfaction.

vi. Independent Inspection

The ARCHITECT may delegate inspection and testing of Plant to an independent inspector.

Any such delegation shall be affected in the manner required by the Contract, and for this purpose such independent inspector shall be considered as an ARCHITECT's Representative. Notice of such appointment (being not less than 14 days) shall be given by the ARCHITECT to the Contractor.

vii. Inspection and Testing During Manufacture

The ARCHITECT shall be entitled during manufacture to inspect, examine and test the materials and workmanship and check the progress of manufacture of all Plant to be supplied under the Contract. This shall take place on the Contractor's premises during working hours. If Plant is being manufactured on other premises, the Contractor shall obtain permission for the ARCHITECT to carry out such inspection, examination and testing on those premises.

No such inspection, examination or testing shall release the Contractor from any obligation under the Contract.

viii. Dates for Inspection and Testing

The Contractor shall agree with the ARCHITECT the time and place for the testing of any Plant as provided in the Contract. The ARCHITECT shall give the Contractor 24 hours' notice of his intention to attend the tests.

ix. Rejection

If as a result of the inspection, examination or testing referred here above, the Architect decides that any Plant is defective or otherwise not in accordance with the Contract, he may reject such Plant and shall notify the Contractor thereof immediately.

The Contractor shall then with all speed make good the defect or ensure that any rejected Plant complies with the Contract.

If the Architect requires such Plant to be retested, the tests shall be repeated under the same terms and conditions. Any costs incurred by the Bank by the repetition of the tests shall be deducted from the Contract Price.

x. Permission to Deliver

The Contractor shall apply in writing to the Architect for permission to deliver Plant or Contractor's Equipment to the Site. No Plant or Contractor's Equipment may be delivered to the Site without the ARCHITECT's written permission.

The Contractor shall be responsible for the reception on Site of the Plant and Contractor's Equipment.

xi. Record of Materials

The Contractor shall maintain a record in the format specified by the Architect of all materials brought to the Site. The Engineer of Architect may carry out inspection at any time to check the records and whether they have been properly stored in accordance with guidelines issued by the local authorities.

xii. Reconciliation of Materials

The Contractor shall submit material reconciliation statements supported by complete calculations. Recovery for reconciled quantity will be made from the Contractor, on the basis of sub- clause "a" and "b" of this clause.

a) Wastage Limits

In case any material is issued by Bank, while accounting for such materials, the wastage will be considered up to the limits specified in this tender document.

b) Penalty for exceeding wastage limits

For any wastage above the limits mentioned in the fit out manual of "Gift Authorities", penalty will be levied in line with the above manual.

21. Standards and Codes of Practice

Work shall be carried out to Indian Standards and Code of practices. In absence of such Indian Standards codes and practices, International standards shall be followed. These shall be latest issue. List given in contract documents is not to be considered as conclusive

and is for reference, guidance only. Any discrepancies / conflict noticed shall be directed to the ARCHITECT for his direction / approval. However, as a general rule, more stringent specification shall take precedence.

22. Publicity**i. Site Display**

The Contractor on award of work shall submit to the Engineer of Architect details about the type of display board he proposes to put up at site. Its design, matter, sizes, etc. shall be approved by the ARCHITECT with prior approval of the Bank.

ii. Media Display

All requested information concerning the works by the news media or other organization (s) or individual (s) shall be referred to the Bank. All plans for the publicity by the Contractor, his Sub-Contractor or his suppliers shall be submitted to the Bank for his approval.

23. Errors and Omission

Any apparent errors or omissions in drawings or specifications or instructions by the Architect shall be brought to the notice of the ARCHITECT. The ARCHITECT shall correct such error or omissions necessary to fulfill the interest of plans and specifications. The Contractor shall neither be eligible for any additional cost, time etc. on this account nor shall he be permitted to take any advantage thereof.

24. Fit out manual and guidelines as listed below is the part of this contract/Tender & Contractor is liable to abide by the same.

- 1) Tenant Design and Construction Guidelines – By IFSCA, Gift City, Gujarat
- 2) Instructions for Interior Fit-out Works and Premises Maintenance at IFSCA HQ Building, GIFT City.
- 3) Building Interior Guidelines & Requirements in GIFT City.

SECTION IV
GENERAL CONDITIONS OF CONTRACT

Clause No.	Description
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2	Rules of Interpretation
3	Work to be carried out
4	Sufficiency of Tender
5	Scope of Work
6	Discrepancies and Adjustment of Errors
7	Work Order
8	Contract document
9	Language
10	Security Deposit
	a) Earnest Money Deposit (EMD)
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11	Liquidated Damages
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15	Detailed drawings and instructions
16	Ownership of drawings
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20	Work to be executed in accordance with specifications, drawings, orders etc.
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1. Definitions

‘The Contract’ means the documents forming the tender and acceptance thereof and the formal agreement executed between NaBFID and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued by the Bank / Architects from time to time and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

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

‘NaBFID/Bank’ means “National Bank for Financing Infrastructure and Development “, Address -(NaBFID), The Capital, A Wing, 15th Floor - 1503, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051

‘Head Office’ NaBFID Address... NaBFID), The Capital, A Wing, 15th Floor - 1503, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051

‘Sanctioning Authority’ means authority nominated to exercise power of approval, sanction and acceptance concerning administrative, financial and technical aspects of transactions done.

‘Architect / Consultants’ means M/s Core Designs, 1107, Ajmera Sikova, Ashok Silk mills lane, off LBS Road, Ghatkopar (W), Mumbai – 400085

‘Engineer In Charge/Site Engineer’ means an Engineer appointed by the engaged Architect as their representative to give instructions and supervise the work of the contractor at site.

‘The Contractor or Contractors’ means the firm or agency or individual engaged by the Bank to execute the work. It shall also include their legal representative(s), successors or assigns.

‘Tenderer/ Bidder’ means the legal entity or agency or individual participating in the tender process.

‘Contract value’ means the value of the entire work as stipulated in the work order conveying acceptance of the tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.

‘Work order value’ means the value of the entire work as stipulated in the work order.

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

‘The Site’ means the premises, into or through which work is to be executed under the contract or any adjacent premises which may be allotted or used for the purpose of carrying out the contract.

‘Drawings’ means the drawings prepared by the Architect and issued by the Architect / Site Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Bank / Architect/ Site Engineer from time to time.

‘Specifications’ means the specifications referred to in the tender and any modifications thereof as may be furnished or approved by the Bank/ Architect from time to time.

‘Market Rate’ means the rate as decided by the Bank on the recommendations of the Architect based on the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned elsewhere to cover, all overheads and profits.

‘Schedule(s)’ referred to in these conditions mean the relevant schedule(s) annexed to the tender papers.

‘Local Controlling Authority’ means the Local Municipal Authority or any other appropriate statutory authority in Gift City viz. Town Planning Department, Town Development Authority, Town/City Improvement Trust, Electricity Board, Water and Sewerage Department, Civil Aviation Authority, High- rise Building Committee, Lift Inspectorate, Telephone Department, Pollution Control Board, Chief Fire Officer / Fire Board and any other authorities as the case may be according to whose rules and regulations a building within its jurisdiction is to be designed and approval of the drawings to be obtained.

‘Month’ means calendar month.

‘Week’ means seven consecutive days.

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

‘SBI’- State Bank of India

2. Rules of Interpretation

Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.

3. Works to be carried out:

The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the work. The descriptions given in the Bill of Quantities shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labour necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.

4. Sufficiency of Tender:

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

5. Scope of Work:

The contractor shall carry out complete and maintain the said work in every respect strictly in accordance with this contract and with the directions of and to the satisfaction of the Bank to be communicated through the Architect. The Architect at the directions of the Bank from time-to-time issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as Architect's instructions in regard to the variation or modification of the design, quality or quantity of work or addition or omission or substitution of any work. Any discrepancy in the drawings or between the BOQ and/or drawings and/or specifications should be brought to the notice of Architect before taking up the work.

6. Discrepancies and Adjustment of Errors:

The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale.

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

Unless otherwise specified, CPWD Specifications volume I - II with up-to-date corrections slips and as per the manufacturer specifications wherever applicable shall be followed in general. Any additional item of work, if taken up subsequently, shall also conform to the relevant CPWD specifications mentioned above. Should there be any difference or discrepancy between the description of items as given in the Bill of quantities, general and special conditions of contract, particular specifications for individual items of work and I.S. Codes etc., the following order of preference shall be observed:

- i) CPWD Specifications.
- ii) Description of items as given in Bill of quantities.
- iii) Special conditions of contract
- iv) General Conditions of contract
- v) Particular specifications.
- vi) I.S. Codes.
- vii) Decision of Bank / Architect / Site Engineer.

7. Work Order:

Within the validity period of the tender, the Bank shall issue a work order by registered post, email or otherwise dispatching at the address of the contractor as given in the tender to enter into a contract for execution of the work as per the terms of the tender. The work order shall constitute a binding contract between the Bank and the Contractor.

8. Contract document:

Contractor will have to execute the agreement which will be between NaBFID & Contracting agency on valid & appropriate non-judicial stamp paper, all documentation, and printing, stamp duty, legal charges etc. will be borne by the Contractor.

Basic Rate:

Basic Rate means the rate quoted by the Bidder in the Price Bid, which shall be firm, fixed and final for the entire period of the Contract and shall remain unchanged throughout the currency of the Contract. No escalation or additional payment whatsoever shall be admissible on account of any increase in the cost of materials, labour, transportation, taxes, duties, wastage, or any other incidental or associated expenditure.

The rates quoted by the Bidder shall be deemed to include all costs, charges, expenses, overheads, duties, transportation, wastage and other incidental expenses necessary for the complete and satisfactory execution of the work.

The Bidder shall accordingly quote its rates after taking into consideration all such costs and prevailing market conditions, and no claim for any revision or enhancement of the quoted rates shall be entertained during the currency of the contract.

9. Language:

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

10. Security Deposit:**a) Earnest Money Deposit (EMD).**

The tenderer shall furnish EMD of Rs1,00,000/- (Rupees One Lakhs Only) in the form of Demand Draft / Banker's cheque drawn in favour of "National Bank for Financing Infrastructure and Development" on any Scheduled Commercial Bank payable at Mumbai.

EMD shall be submitted by all Contractors/ Bidders participating in the tender process. No exemption would be allowed / available from payment of EMD amount, irrespective of the status of the entity. The tender shall be rejected if the EMD is not deposited in the required form along with the tender. No interest shall be paid on EMD.

The EMD shall stand absolutely forfeited, if the tenderer revokes his tender during the period, he is required to keep his tender open for acceptance by the Bank or after it is accepted by the Bank and the contractor fails to enter into a formal agreement or fails to submit the performance guarantee in the stipulated period.

The EMD of the successful tenderer shall be refunded within 1 month after receipt of the Performance Guarantee.

The EMD of the unsuccessful tenderer shall be refunded without interest within 1 month from the date of issuance of LOA to successful Bidder.

b) Retention Money:

Retention Money @ 5% of the certified bill amount shall be recovered from each running account bill of the Contractor.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from his security deposit or from any sums which may be due to or may become due to the contractor by the Bank on any account whatsoever and in the event of his security deposit being reduced by reason of any such deductions, the contractor shall within 10 days make good in Demand Draft / Banker's cheque of a Scheduled Bank endorsed in favour of NaBFID any sum or sums which may have been deducted from his security deposit.

The security deposit (5% Retention Money) shall be refunded to the contractor without interest after the end of defects liability period provided the contractor has satisfactorily attended to all defects in accordance with the conditions of contract or after deducting the expenditure incurred by the Bank to get the defects repaired, if any, intimated to the contractor during the defects liability.

c) Performance Guarantee:

The tenderer whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the work order amount within 10 days of award of work. This guarantee shall be in the form of Fixed Deposit Receipts issued by SBI only or Guarantee Bonds (bank guarantee) of any Scheduled Commercial Bank in accordance with the prescribed format. In case the contractor fails to deposit the said performance guarantee within the 10 days or the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

The performance guarantee submitted by the Contractor shall be released after satisfactory completion of the work. In the event that the Contractor does not start the work or abandons the work midway or the progress of the work is not satisfactory and the Bank is of the opinion that the contractor may not complete the work in the stipulated time period / are within the reasonable extended time period, the Bank reserves the right to invoke the performance guarantee (kept as security Deposit).

The minimum validity of the Performance Guarantee shall be up to 1 months after completion of defect liability period. However, the same would be released once the work is completed satisfactorily in all respects.

The performance guarantee shall be valid for the entire period of the contract. The contractor has to extend the said guarantee as directed by the Bank till the completion of the work, in the event the work is extended beyond the stipulated period.

Once the work is completed in all respects as per the terms and conditions of the contract then only the performance guarantee will be released.

Forfeiture of Performance Security - During implementation of the contract, the performance security will be forfeited under following circumstances:

- i) If the Contractor having been given by the Bank, a notice in writing that the work is being performed in an inefficient or otherwise improper or un-workmanlike manner shall omit to comply with the requirement of such notice for a period of 15 (fifteen) calendar days thereafter.
- ii) If the Contractor has, without reasonable cause, failed to proceed with the work with due diligence so that in the opinion of the Bank (which shall be final and binding), he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of 15 (fifteen) calendar days from the Bank.
- iii) If the Contractor fails to complete the work within the stipulated date of completion, on or before such date(s) of completion and does not complete it within the period specified in a notice given in writing in that behalf by the Bank.
- iv) If the Contractor persistently neglects to carry out his obligations under the contract and /or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 15 (fifteen) calendar days after a notice in writing is given to him in that behalf by the Bank.
- v) If the Contractor has obtained the contract as a result of wrong tendering or other non-bonafide methods of competitive tendering.
- vi) If the Contractor assigns, transfers, sublets or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire contract or any portion thereof without the prior written approval of the Bank.

Under the above circumstances, the Bank will not only forfeit the performance guarantee but the Bank will also (i) without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Bank, by a notice in writing cancel the contract as a whole or only such items of contract in default from the Contract and (ii) have power to carry out the incomplete work by any means at the risk and cost of the Contractor.

11. Liquidated Damages (LD)

If the contractor fails to adhere to the time schedule as per the stipulated time stated in the contract, liquidated damages for delay in completion of work will be imposed and such amount shall be recovered from the amount payable to the Contractor. An amount equivalent to 1% of the contract value per week subject to a maximum of 10% of the work value shall be recovered towards delay. LD (Liquidated Damages) for fraction of the week, will be calculated on pro-rata basis. Liquidated Damages would be applicable on the delays attributable to the Contractor.

The amount of compensation may be adjusted or set off against any sum payable to the Contractor under this contract with the Bank. The decision of the Bank in respect of liquidated damages shall be final and binding on the contractor. This shall be out of scope of any arbitration.

In case, the contractor does not achieve a particular milestone mentioned in the tender document, or the rescheduled milestone(s), the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor.

12. Secured Advance

No secured advance will be paid against the work order.

13. Mobilisation Advance

No mobilization advance will be paid for this contract.

14. Escalation

No escalation and payment due to increase in prices / wages will be made to the contractor. The rates quoted by the contractor shall remain firm throughout till completion of the work and nothing extra beyond unit rates shall be paid on account of any reason whatsoever.

15. Detailed drawings and instructions

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

The work shall be executed in conformity therewith and the contractor shall on receipt of the work order prepare and submit a detailed program schedule indicating therein the date of start and completion of various activities to the Bank through Architect, along with the details of the requirement of various resources (Manpower / Materials / Machineries etc.) day wise and stick to the approved program schedule.

16. Ownership of drawings

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

17. Setting out Work

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

18. Materials, Appliances and Employees

The contractor shall, at his own expense, provide all materials, required for the works and no material required for carrying out the work shall be supplied by the Bank. The contractor

shall procure all the materials in advance so that there is sufficient time for testing and approving the material and clearance of the same before use in work. The Contractor shall arrange for the samples of the materials to be procured and obtain the approval from Architect before procuring the entire materials.

Extra care should be taken while procuring the natural materials such as Marble, Granite, etc wherein the shade, texture, thickness, etc, should match as per sample, etc. All such materials should be procured in one lot after showing such lots to Architect only. Architect can reject any lot if the size, shade is not uniform / have bubbles, knots, etc and the decision of Architect/Bank is final and binding.

The contractor shall, at his own expense and without delay, supply to the Bank / Architect / Site Engineer samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Bank / Architect / Site Engineer furnish proof, to the satisfaction of the Bank/ Architect / Site Engineer that the materials supplied are in compliance with specifications. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site, detailed literature/test certificate of the same shall be provided to the satisfaction of the Bank/ Architect.

Before submitting the sample/literature, the contractor shall satisfy himself that the material/equipment for which he is submitting the samples/literature, meet with the requirement of tender specification. The Bank/ Architect / Site Engineer shall within one week of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by them or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Bank / Architect / Site Engineer for their approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Bank/ Architect / Site Engineer shall be issued after the test results are received. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies, inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials / equipment etc. shall be to the account of the contractor.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Bank/ Architect / Site Engineer. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

Wherever testing of any material is required, samples will be collected & got tested from the approved laboratory for which testing charges shall be borne by the employer. In case of failure of the sample the testing charges shall be borne by the contractor. The material represented by the sample shall be rejected and the contractor at his cost shall remove the same. However, in all cases cost of packaging and forwarding the samples to the approved laboratory shall be borne by the contractor. The Bank / Architect / Site Engineer shall at all

times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Bank / Architect / Site Engineer shall have full powers to require the removal from the premises of all materials which in their opinion are not in accordance with the specifications and in case of default, the Bank / Architect / Site Engineer shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Bank/ Architect / Site Engineer shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Bank / Architect / Site Engineer may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

Unless otherwise specified, the contractor shall provide and pay for all materials, labour, water, power, tools, equipment, transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless otherwise specified, all materials shall be new, and workmanship and materials shall be of the best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behaviour is found to be unsatisfactory by the Bank/ Architect / Site Engineer, he shall be removed from the site immediately. The decision of Bank / Architect / Site Engineer shall be final and binding on the contractor in this regard.

19. Quality of Materials, Workmanship & Test

All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with Bank's / Architect's /Site Engineer's instructions and shall be from time to time subject to such tests as the Bank/ Architect/Site Engineer may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory.

The contractor shall provide such assistance, instruments, machinery, labour and materials as are normally required for examining, measuring, sampling and testing any material or part of the work before incorporation in the work for testing as may be selected and required by the Bank / Architect/ Site Engineer. A list indicating names of various approved brands has been attached with the tender. The contractor shall, wherever, applicable use material as per the approved brand / make as specified in the tender and approved by Architect only.

The Contractor has to carry out the all the work on sample / mock up basis and after approval of the Engineer In-charge/Architect then only the mass execution of the work is to be carried out.

20. Work to be executed in accordance with specifications, drawings, orders etc.

The contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials, best workmanship and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work assigned by the Bank / Architect / Site Engineer.

The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

21. Action in case Work not done as per Specifications

All items to be executed as per the technical specifications & specifications mentioned in Bill of quantities in conjunction with the drawings provided & directions given at site. Any item executed without any relation to the contract & not approved by Architect / PMC will not be paid.

22. Contractor to supply tools & plants etc.

Contractor has to carry out all the requisite item work in the factory. No. payment can be made against the material laying in the factory or the items of works partially ready in the factory.

The contractor shall provide at his own cost all materials, plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Bank / Architect as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work.

The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighting and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Bank through the Architect at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract and/ or from his security deposit.

23. Protection of works and property

The contractor shall continuously maintain adequate protection of all his work from damage and shall protect the Bank's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss resulting due to his fault or negligence except due to causes beyond his control. Any damage to walls, glass, windows, etc. shall be made good by contractor at his own cost.

He shall take adequate care and steps for protection of the other floors and adjacent properties. The contractor shall take all precautions for safety and protection of his employees on the works and shall comply with all applicable provisions of Govt. and local bodies safety laws and building codes to prevent accidents, or injuries to persons or property

in or adjacent to his place of work. The contractor shall take insurance covers as specified elsewhere in the contract at his own cost. The policy shall be taken in joint names of the contractors and NaBFID.

24. Assignment and subletting

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

The contract shall not be assigned or sublet without the written approval of the Bank / Architect. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employment of Bank / Architect or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Bank shall have power to adopt any of the courses specified under clause of “when contract can be determined” hereof as the Bank may deem best suited to the interest of Bank and in the event of any of these courses being adopted the consequences specified in the said Clause of shall ensure.

25. Contractor's superintendence

The contractor shall give necessary personal superintendence during the execution of the works and as long, thereafter, as the Bank / Architect may consider necessary until the expiry of the defects liability period, stated hereto. The contractor shall depute one Graduate Engineer cum Quality Control professional at site throughout the execution of the work failing which a recovery of Rs.25,000/- (Rupees Twenty-Five Thousand Only) per month shall be made from any dues payable to the contractor by the Bank.

26. Quantities

The rates quoted for various items shall remain valid for variation of quantity against individual item. The payment to the contractor shall be made as per the actual work executed based on the joint measurement and quoted unit rates for individual items.

27. Works to be measured

The Architect shall, except as otherwise provided, ascertain and determine by measurement the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and / or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Architect and by the contractor or his authorized representative from time to time during the progress of the works and such measurements shall be signed and dated by the Architect and the contractor or their

representatives as a token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason, the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Architect, the Bank shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Architect shall be deemed to be accepted by the Contractor. All authorized extra work, omissions and all variations made shall be included in such measurements.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the CPWD specifications notwithstanding any provision in the relevant standard method of measurement or any general or local custom. In the case of items which are not covered by CPWD specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than three days' notice to the Architect / Site Engineer before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Architect / Site Engineer who shall within the aforesaid period of three days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Architect / Site Engineer's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

The Bank / Architect may cause either themselves or through other representative of Bank / Architect to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and / or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

28. Certificate of payment

The contractor shall submit interim or running account bill of 10% of the amount of the work order and above for the work executed on the basis of such recorded measurements in the approved format. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment collected, if any, since the last such payment is less than 10% of the amount of the work order in which case the interim bill shall be prepared after the requisite progress is achieved.

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement books. Architect shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. Payment on account of amount admissible shall be made on certification of the Architect to which the contractor is considered entitled by way of interim payment at such rates as decided by the Architect.

The amount admissible shall be paid with 10th working day after the day of certification of the bill by the Architect to the Bank subject to the bill is found to be in order by the Bank with no discrepancies. The Bank shall recover the statutory recoveries, other dues including the retention amount from the certificate of payment.

All such interim payment shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Architect relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate (s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract and specifications.

Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Bank / Architect under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided, without prejudice to the right of the Bank to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the Bank.

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

The Bank may, if required, modify the certificate of payment as issued by the Architect from time to time while making the payment.

29. Final Measurement

The final bill shall be submitted by the contractor in the same manner as specified in interim running account bills within one month of issue of virtual completion certificate for the work. The Architect shall issue the certificate of payment within a period of one month. The Bank shall pay the amount within a period of one month from the date of issue of certificate by the Architect provided there is no dispute in respect of rates, quantities and quality of work. No

further claims shall be made by the contractor after submission of the final bill, and these shall be deemed to have been waived and extinguished.

30. Variations

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

31. Valuation of Variations

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

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

ii) Rates for all items, wherever possible should be derived out of the rates given in the priced schedule of quantities.
- b) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the instructions in writing, inform the Bank through the Architect of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the Bank on the recommendation of the Architect shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.
- c) It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the contractor shall submit detailed rate analysis duly supported by vouchers and rate analysis worked on CPWD norms/ state PWD norms/ market rate basis for material, labour, hire/running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor's overheads and profit for approval of Architect and NaBFID before submission of subsequent/ final bill. Such items shall not be eligible for escalation.

32. Work by other agencies

The Bank/Architect/Site Engineer reserves the rights to use premises and any portion of the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work(s). Such work(s) shall be carried out in such manners not to impede the progress of the works included in the contract. The contractor is expected to factor such eventualities in his scope of work.

33. Work in shifts and holidays

For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, not with-standing the fact that the Contractor may have to pay extra amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them.

The contractor shall also obtain necessary permissions, if any, required from local authorities / Building societies for working during night at no extra cost to the Bank. Such work shall be carried out without unreasonable noise and disturbance to the other occupants of the building. The normal working hours for carrying out the work shall be 7 am to 7 pm or as may be stipulated by the Gift Authorities.

34. Insurance of Works

Before commencing the execution of work, the Contractor shall, without in any way limiting his obligations and liabilities, insure at his own cost and expense against any damage or loss or injury, which may be caused to any person or property, at site of work. The Contractor shall obtain and submit to the Bank proper Contractor All Risk Insurance Policy for an amount equal to 1.25 times the contract amount for this work, with Bank as the first beneficiary. The insurance shall be obtained in joint names of Bank and the Contractor (who shall be second beneficiary). Also, he shall indemnify the Bank from any liability during the execution of the work. Further, he shall obtain and submit to the Bank, a third party insurance policy for maximum Rs. 5 Lakh for each accident and Workman Compensation Policy, with the Bank as the first beneficiary.

The insurance shall be obtained in joint names of Bank and the Contractor (who shall be second beneficiary). The Contractor shall provide documentary evidence as regards payment of premium for all the Insurance Policies for keeping them valid till the completion of the work.

Without prejudice to any of its obligations and responsibilities specified above, the Contractor shall, within 10 days from the date of work order, submit documentary evidence as required by the Bank. No work shall be commenced by the Contractor unless he obtains the Insurance Policies as mentioned above. Also, no payment shall be made to the Contractor on expiry of insurance policies unless renewed by the Contractor. Nothing extra shall be payable on this account. No claim of hindrance (or any other claim) shall be entertained from the contractor on these accounts.

35. Treasure Trove etc

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

36. Dismantled material Bank's property

The contractor shall treat all materials obtained during dismantling of the premises as Bank's property and such materials shall be disposed off to the best advantage of Bank according to the instructions in writing issued by the Bank / Architect / Site Engineer as per the terms of the contract and guidelines issued by the local authorities. Noting extra shall be payable in this account.

37. Maintenance of Registers

The contractor shall maintain the following registers at site of work and should produce the same for inspection of the Bank / Architect / Site Engineer whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities/Govt. from time to time.

- i) Daily progress register
- ii) Site order book
- iii) Register for hindrance to work
- iv) Register for running account bill

38. Permits, Laws and Regulations

Permits and licenses required for execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give necessary notices and comply with the local regulations, laws, ordinances, rules, applicable for execution of work. If the contractor performs any act which is against the local law, rules and regulations, he shall meet all the costs and consequences arising there from and shall indemnify the Bank against any legal actions arising there from. The contractor shall arrange to submit the required documents to obtain completion certificate and liaison with the concerned local authorities after completion of work such as Chief Fire Officer, GIFTUDL, GIFTACL, GIFTCL etc. The rates quoted by the contractor are inclusive of providing all such assistance and liaison with authorities for submitting and obtaining such approval(s) and nothing extra beyond quoted rates shall be paid by the Bank to the contractor on this account.

39. Local Laws, Acts, Regulations

The contractor shall strictly adhere to all prevailing labour laws inclusive of contract labour (regulation and abolition act of 1970) and other safety regulations. The contractor shall comply with the provision of all labour legislation including the latest requirements of all the Acts, laws, any other regulations that are applicable to the execution of the project, including but not limited to the requirements of:-

- i) Minimum Wages Act, 1948 (Amended)

- ii) Payment of Wages Act, 1936 (Amended)
- iii) Workmen's Compensation Act 1923 (Amended)
- iv) Contract Labour Regulation and Abolition Act 1970 and Central Rules 1971 (Amended)
- v) Apprentice Act 1961 (Amended)
- vi) Industrial Employment (Standing Order) Act 1946 (Amended)
- vii) Personal Injuries (Compensation Insurance) Act 1963 and any other modifications
- viii) Employees' Provident Fund and Miscellaneous Provisions Act 1952 and amendment thereof
- ix) Shops and Establishment Act
- x) Any other Act or enactment relating thereto and rules framed there under from time to time.

The Contractor shall keep the Bank saved, harmless and indemnified against all the claims under applicable labour laws or otherwise, if any, of the workmen or any other person and all costs and expenses as any be incurred by the Bank in connection with any claim that may be made by any workman or any other person.

The successful bidder shall be responsible for settling any claim / compensation against any and all damages and accidents caused due to negligence on the part of his employees/workers engaged by it for fulfilling the obligations under this agreement and keep employer indemnified from any compensation / liability.

Bank shall not be responsible for any violation by the Contractor on the above-mentioned acts/ rules. The Contractor shall be wholly/ solely responsible for any claim in the above referred subjects The contractor shall be responsible for all statutory provisions and deductions towards ESI, PF or any other applicable Labour Laws, as the case may be or any other levies and taxes shall be borne by the contractors.

The contractor shall be responsible for payments of all statutory dues with respect to each of his personnel/employees engaged by him to render service under this Agreement with respect to each applicable/extant labour law. No dues/contributions under any labour legislations as applicable, remain payable by the Bank with respect to his personnel/employees, and the contractor shall produce all records to the Engineer-in-charge or any other statutory authority as and when called for. The Engineer- in-charge does not hold any responsibility on account of any lapses in this regard. The contractor shall submit an undertaking in this regard with each bill confirming payment of all dues of sub-contractors (if permitted) and all statutory wages to labour working under him/her/sub-contractor.

Bank shall not be held responsible for any penalty on failure of the any Labour Regulations. Bank shall have the power to inspect the Wage Register and for physical verification of salary paid to the staff with reference to any records of the Contractor and to insist the Contractor to comply with Laws.

The Contractors shall arrange to provide first-aid treatment to the labourers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in

connection with execution of the works, report such accident to the employer and also to the competent authority where such report is required by law.

40. Commencement of Works

The date of commencement of the work will be reckoned from the 15th day of issue of work order by Bank or the first day when the contractor is instructed to take possession of the site whichever is later.

41. Time for completion

Time is the essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period of Seventy-Five (75) days from the date of commencement of work. If required in the contract or as directed by the Bank / Architect, the contractor shall complete certain portions of work before completion of the entire work. However, the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.

42. Rate of progress

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

43. Extension of Time

The time of 75 days from the date of commencement of work allowed for execution of the works or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from the 15th day from the date of work order or first day when the contractor is instructed to take possession of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Bank shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the EMD absolutely.

43.1 As soon as possible after the Contract is concluded; the Contractor shall submit a Time and Progress Chart and get it approved from the Architect on behalf of Bank. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Bank / Architect and the Contractor within the limitations of time imposed in the Contract documents, and to ensure good progress during the execution of the work. The Bank shall be at liberty to withheld upto 5% of the payment of the work done so far, if the milestones indicated in the progress chart have not been achieved. However,

the same shall be released if the contractor achieved the same in subsequent work and complete the entire work within stipulated time.

If the work(s) be delayed by:

- i) force majeure, or
- ii) abnormally bad weather, or
- iii) serious loss or damage by fire, or
- iv) civil commotion, location commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- v) delay on the part of other contractors or tradesmen engaged by Bank in executing work not forming part of the Contract, or
- vi) Any other causes which, in the absolute discretion of the Bank is beyond the Contractor's control.

Then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Bank through Architect but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Bank / Architect to proceed with the works.

Request for extension of time, to be eligible for consideration, shall be made by the contractor in writing within seven days of the happening of the event causing delay. The Contractor may indicate in such a request the period for which extension is desired.

In any such case, the Bank on the basis of recommendations of Architect will give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the Bank in writing, within 1 month of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Bank and this shall be binding on the contractor. The Bank's decision shall be final and binding on all concerned.

The contractor shall apply for extension of time atleast 15 days before the expiry of the scheduled time and while applying for extension of time, he shall furnish detailed reasons and his justification, if any, for the delays.

While granting extension of time, the contractor shall be informed about the extended period which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the Bank, the provision of liquidated damages as stated under relevant clause of liquidated damages shall become applicable. Further contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

44. Virtual Completion Certificate (VCC)

Soon after the completion of the work, the contractor shall give notice of such completion to the Bank / Architect and within 5 days of the receipt of such notice, the Bank / Architect shall inspect the work and if there is no defect in the work, the Architect on behalf of the Bank shall furnish the contractor with a virtual completion certificate, otherwise a provisional virtual

completion certificate of physical completion indicating defects (a) to be rectified by the contractor and / or (b) for which payment will be made at reduced rates, shall be issued. But no virtual completion certificate shall be issued, nor shall the work be considered to be completed until the contractor shall have removed from the premises on which the work shall be executed, all scaffolding, surplus materials and rubbish etc. as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Architect / Site Engineer.

If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish etc. as aforesaid and cleaning off dirt on or before the date fixed for the virtual completion of work, the Bank may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

On successful completion of entire works covered by the contract to the full satisfaction of the Bank, the contractor shall ensure that the following works are also completed to the satisfaction of the Bank.

- a) Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labour, equipment and machinery.
- b) Demolish, dismantle and remove the contractor's site office, temporary works, structures including labour sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the Bank and not incorporated in the permanent works.
- c) Remove all rubbish, debris etc. from the site as required by the Bank.
- d) Shall put the Bank in undisputed custody and possession of the site.
- e) Shall hand over the work in a peaceful manner to the Bank.
- f) All defects/imperfections have been attended and rectified as pointed out by the Bank / Architect to the full satisfaction of Bank.

Upon the satisfactory fulfilment by the contractor as stated above, the contractor shall be entitled to apply to the Architect for virtual completion of the work. The Architect shall within Nine (9) days of the receipt of the application for virtual completion certificate (VCC), issue a VCC in respect of the work for which the VCC has been applied.

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

45. When Contract can be determined

Subject to other provisions contained in this clause, the Bank may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/ or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) If the contractor having been given by the Bank / Architect a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- iii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Bank (which shall be final and binding), he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Bank.
- iv) If the contractor fails to complete the work within the stipulated date of completion, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Bank / Architect.
- v) If the contractor persistently neglects to carry out his obligations under the contract and /or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Bank / Architect. When the contractor has made himself liable for action under any of the cases aforesaid, the Bank shall have power:

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

- a) To pay to the labour employed by the Bank 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 the price of the materials (of the amount of which cost and price certified by Architect on behalf of the Bank 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 his contract. The certificate of the Architect on behalf of the Bank as to the value of the work done shall be final and conclusive against the contractor provided always that action under the sub-clause shall only be taken

after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Bank are less than the amount payable to the contractor at his agreement rates, the difference shall not be paid to the contractor.

- b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof as shall be un-executed out of his hands and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which excess the certificate in writing of the Architect on behalf of the Bank 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 Bank under his contract or on any other account whatsoever or from his security deposit as the case may be. If the expenses incurred by the Bank are less than the amount payable to the contractor at his agreement rates, the difference shall not be paid to the contractor.

In the event of anyone or more of the above courses being adopted by the Bank, 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 made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Architect on behalf of the Bank has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

46. Suspension of work

- i) The contractor shall, on receipt of the order in writing of the Bank (whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time and in such manner as the Bank / Architect may consider necessary so as not cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons.
 - a) On account any default on the part of the contractor, or
 - b) For proper execution of the works or part thereof for reasons other than the default of the contractor, or
 - c) For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Bank / Architect.

- ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:

The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

If the works or part thereof is suspended on the orders of the Bank for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the Bank requiring permission within fifteen days from receipt by the Bank of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by the Bank or where it affects whole of the works, as an abandonment of the works by the Bank, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Bank. In the event of the contractor treating the suspension as an abandonment of the contract by the Bank, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment.

47. Foreclosure of contract due to abandonment or reduction in scope of work

If at any time after acceptance of the tender, the Bank decides to abandon or reduce the scope of the work for any reason whatsoever and does not require the whole or any part of the works to be carried out, the Bank shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

48. Cancellation of contract in full or part

If contractor:

- i) at any time makes default in proceeding with the works or any part of the work with the due diligence and continues to do so after a notice in writing of 7 days from the Bank / Architect; or
- ii) commits default to complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Bank / Architect; or
- iii) fails to complete the work, on or before the stipulated date of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Bank / Architect; or
- iv) In the event of anyone or more of the above courses being adopted by the Bank, 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 made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Architect on behalf of the Bank has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

- v) shall offer or give or agree to give to any person in Bank / Architect service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Bank / Architect or
- vi) shall enter into a contract with Bank in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Bank; or
- vii) shall obtain a contract with Bank as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- viii) being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- ix) being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- x) shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- xi) assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Bank / Architect;

The Bank may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Bank, by a notice in writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Architect / Site Engineer shall on such cancellation by the Bank have powers to:

- a) take possession of the site and any materials, constructional plant, implements, stores, etc. thereon; and / or
- b) Carry out the incomplete work by any means at the risk and cost of the contractor.

Any sums in excess of the amounts due to Bank and unsold materials, constructional plant, etc., shall be returned to the contractor, provided always that if cost or anticipated cost of

completion by Bank of the works or part of the works is less than the amount which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the contractor.

49. Settlement of Disputes and Arbitration

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

If the Contractor considers any work demanded of him to be outside the requirements of the Contract, or disputes any drawings, record or decision given in writing by the Architect any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 7 days request the Architect in writing for written instruction or decision. Thereupon, the Architect shall give his written instruction or decision within a period of one week from the receipt of the contractor's letter.

If the Architect fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Architect, the contractor may within 7 days of the receipt of Architect's decision, appeal to the Bank who shall afford an opportunity to the contractor to be heard, if the letter so desires, and to offer evidence in support of his appeal.

The Bank shall give his decision within 15 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the Bank for appointment of a sole arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

The work under the contract shall however continue during the arbitration proceedings and no payment payable to the contractor relating to the disputed items shall be withheld on account of such proceedings.

The arbitrator from time to time with the consent of the parties enlarge the time for making and publishing the award.

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 terms of the contract and give a reasoned award.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Bank of the appeal.

It is also a term of this contract that no person other than a person appointed by such Bank, as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 60 days of receiving the intimation from the Bank that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Bank shall be discharged and released of all liabilities under the contract in respect of these claims. Further it is agreed that for the purpose of this clause such notice is deemed to have been received by the contractor within two days of posting of the letter by NaBFID or delivered by hand immediately after receipt thereof by the contractor whichever is earlier. Further a letter signed by the officials of the NaBFID that the letter was posted to the contractor shall be conclusive.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and conciliation Act, 1996(26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and, in all cases, where the total amount of the claims by any party exceeds Rs.50,000/-, the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statements of claims. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

The award of the arbitrator shall be final and binding on both parties.

Any dispute of value Rupees 10 Crores or above which remains unresolved between the parties will be referred to the Mediation as per the Mediation Act 2023.

Arbitration/ Mediation proceeding shall be held at Mumbai, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

50. Force Majeure

Neither contractor nor NaBFID shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire,

storms, floods, droughts, earthquakes or ordinances or any act of God or for any other cause beyond the reasonable control of the party affected or prevented or delayed.

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

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

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

Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting to a period of 6 months or more, the two parties shall mutually decide regarding the future execution of this contract.

51. Peaceful handing over of the premises

It shall be the responsibility of the contractor to see that the premises under furnishing is not occupied by anybody unauthorizedly during execution of work and is handed over to the Bank with vacant possession of complete furnishing. If such premises though completed are occupied illegally, then the Bank shall have the option to refuse to accept the said premises in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay a levy up to 5% of tendered value of work may be imposed by the Bank whose decision shall be final both with regard to justification and quantum and be binding on the contractor.

However, the Bank through a notice may require the contractor to remove the illegal occupation any time on or before completion and delivery of the work.

52. Contractor liable for damages, defects during defects liability period

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, enclosure, water pipe, cables, drains, electric or telephone post or wires, contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within 12 months to 120 months (details mentioned in elsewhere in this document) of issue of virtual completion certificate issued by the Architect on behalf of the Bank as aforesaid arising out of defect or improper materials or workmanship, the contractor shall, upon receipt of a notice in writing on that behalf through the Architect / employer shall make the same good at his own expense or in default, the Bank cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit.

53. Accidents

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

54. With-holding and lien in respect of sums due from contractor

- i. Whenever any claim or claims for payment of sum of money arises out of or under the contract or against the contractor, the Bank shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Bank shall be entitled to withhold the security deposit, if any furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Bank shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Bank pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or money so withheld or retained under the lien referred to above by the Bank will be kept withheld or retained as such by the Bank till the claim arising out of or under the contract is determined by the arbitrator by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Bank shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner / limited company as the case may be, whether in his individual capacity or otherwise.

- ii. The Bank shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for the Bank to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible, and if it is found that the contractor was paid less than what was due to him under contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Bank to the contractor, without any interest thereon whatsoever.

Provided that the Bank shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short whether such payment has

been agreed upon between the Bank on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Bank / Architect.

55. Compensation during warlike situations

The work (whether fully completed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Bank and a certificate from Bank to the effect obtained.

In the event of the work or any materials property brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Bank / Architect to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Bank / Architect, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for in case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Bank through the Architect.

The contractor shall be paid for the damages / destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Bank based on the recommendations of the Architect regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the

A.R.P. Officers or the Bank. (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Bank.

56. Apprentices Act provisions to be complied with

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Bank may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

57. Table of Milestones for Interior Furnishing works

Sr. No.	No. of Days from date of start	Physical Progress of work / Milestones	Cumulative Penalty leviable if progress is Not achieved as per milestone
1	7 Days	i) Layout Marking ii) Submit all Samples for Approval along with technical specifications.	1% of Contract Value
2	17 Days	i) 80% Partition framing work completion ii) 40% completion of IPS/CC flooring and 80% surface preparation for carpet flooring. iii) 20% completion of partition works iv) 25% of electrical wiring work v) 20% framing work for false ceiling vi) Mockup for furniture along with all the specifications.	2% of contract value
3	35 Days	i) 100% completion of flooring works except wooden & Carpet flooring ii) 50% Ducting over the false ceiling iii) 75% Partition works iv) 50% framing work for false ceiling v) 75% Wiring work over the false ceiling Placing order of Furniture	4 % of contract value
4	50 Days	i) 100% Wiring work complete underflooring and over false ceiling ii) Ducting complete iii) 100% Partition and door work complete. iv) 80% False ceiling work complete. v) 80% Plumbing and sanitary work complete. vi) Delivery of material for CCTV, Access control, FA/FS	5 % of contract value
5	70 Days	i) 100% False ceiling work complete along with	6% of contract value

		ii) painting 100% Floor work complete along with wooden flooring iii) 100% Furniture work complete iv) 100% Electrical & Low Voltage works, light fittings, fire alarm, CCTV, AV conference, Access control, fire extinguisher, painting, carpets, planters, artifacts complete etc. v) 100% Plumbing & sanitary work complete vi) HVAC INSTALLATION WORKS vii) Any other work those not covered above but available in the BOQ to complete the project.	
6	75 Days	Testing commissioning and handing over the complete project to client	7% of Contract value

58.I – RUNNING A/C BILL

- i) Name of Contractor :
- ii) Name of Work :
- iii) Sr. No. of this bill :
- iv) No. and date of previous bill :
- v) Reference to Agreement No.:
- vi) Date of work order :
- vi) Date of commencement of work
- vii) Date of completion as per the agreement
- vii) Expected date of completion of work as per actual progress of work.

Sl. No.	Item Description	Unit	Rate (Rs.)	As per tender	
				Qty	Amount (Rs.)
1	2	3	4		5

Upto Previous R/A Bill		Present Bill		Upto Date (Gross)		Remarks
Qty	Amount (Rs)	Qty	Amount (Rs.)	Qty	Amount (Rs.)	
6		7		8		9

- Note : 1. If part rate is allowed for any item, it should be indicated with reasons for allowing such a rate.
2. If adhoc payment is made, it should be mentioned specifically.

Net value since previous bill

59**CERTIFICATE**

The measurements on the basis of which the above entries for the Running Bill No.

_____ were made have been taken jointly on _____
and are recorded at pages _ to _____ of measurement book
No. _____.

Signature of the Contractor with date

The work recorded in the above-mentioned measurements has been done at the site satisfactorily as per tender drawings, conditions and specifications.

Signature of the Architect with date
(Seal)

60. APPENDIX

Name of Work	Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat- 382050
Location	IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat - 382050
Defects Liability Period	12 (Twelve) months to 120 months from the date of virtual completion of the work as certified by the Architect from the date of Completion of work.
Date of Commencement	Date of start of work should be from 15 th day of issue of Work Order or the date of handing over of the site, whichever is later.
Time of completion	75 days from 15 th day of issue of Work Order or the date of handing over of the site, whichever is later.
Liquidated Damages	1% of the contract amount shown in the tender per week subject to the ceiling of 10% of the accepted contracted sum.
Value of work for interim certificate	10% of the Contract Value. (This value shall be difference of work done of consecutive bills).

61. SAFETY INSTRUCTIONS

Protective safety measures

Necessary protective and safety equipment shall be provided to the Site Engineer, workers & supervisory staff by the Contractor at his own cost and used at site.

1. First aid appliances including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
2. An injured person shall be taken to a public hospital without loss of time, in case where the injury necessitates hospitalization.
3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used, an extra mazdoor shall be engaged for holding ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the trench or half of the depth of trench whichever is more. All trenches and excavation shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or rails whose minimum height shall be one meter.
7. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement mortar of concrete and lime mortar shall be provided with protective footwear and rubber hand-glove.
9. Those engaged in welding works shall be provided with welder's protective eye shield and gloves.
10. i) No paint containing lead or lead products shall be used except in the form of paste and readymade paint.

ii) Suitable facemasks should be supplied for use by the workers when the paints applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Hoisting machines and tackle used in the works, including their attachments, anchored and supports shall be in perfect condition.
12. The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.
13. All applicable safety precautions and guidelines issued by the relevant local/GIFT authorities shall prevail, and the Contractor shall strictly always adhere to the same.

SECTION V
SPECIAL CONDITIONS OF CONTRACT

Clause No.	Description
1	Scope of Work
2	Address and Inspection of site
3	Inspection of drawings before tendering
4	Contractor to verify site measurement
5	Dimensions and Levels
6	Notice of Operation
7	Construction Records
8	Safety of Adjacent Structures
9	Temporary Works
10	Water Supply
11	Power
12	Office Accommodation
13	Labour accommodation
14	Dismissal of Workmen
15	Tools, Storage of Materials, Protective Works and Site Office Requirements
16	Storage of material at site
17	Fire Fighting Arrangement
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42	Preparation of Furnishing Work for Occupation and Use of Completion
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43	a) For the drawings issued to the contractor by the Architect. b) For the Drawings prepared by the Contractor
44	Completion Certificate
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NaBFID

1. Scope of Work

Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat- 382050.

2. Address and Inspection of site

The site address is: Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat- 382050

The Contractors are advised to inspect and examine the site and its surroundings and satisfy themselves with the nature of site, the means of access to the site, the constraints of space for stacking material / machinery, labour etc. constraints put by local regulations, if any, weather conditions at site. Nothing extra shall be payable on these accounts. No claim, whatsoever, shall be entertained from the Contractor, on the plea that the information supplied by the Bank in the tender is insufficient or is at variance with the actual site conditions. The contractors are also advised to inspect the area and to understand the security requirements of the area, rules/ regulations of the building society movement of men and materials, etc and quote the rates taking into consideration all the above facts.

3. Inspection of drawings before tendering

The Contractor shall, if required by him, before submission of the tender, inspect the drawings in office of the Architects. The Bank shall not bear any responsibility for the lack of knowledge and also the consequences, thereof to the Contractor. The information and data shown in the drawings and mentioned in the tender document have been furnished, in good faith, for general information and guidance only. The Bank, in no case, shall be held responsible for the accuracy thereof and / or interpretations or conclusions drawn there from by the Contractor and all consequences shall be borne by the Contractor. No claim, whatsoever, shall be entertained from the Contractor, if the data or information furnished in tender document is different or in-correct otherwise or actual working drawings are at variance with the drawings available for inspection or attached to the tender document. It is presumed that the Contractor shall satisfy himself for all possible contingencies, incidental charges, wastages, bottlenecks etc. likely during execution of work and acts of co-ordination, which may be required between different agencies. Nothing extra shall be payable on this account.

4. Contractor to verify site measurement

The contractor shall check and verify all site measurements whenever requested by other specialists' contractors or other sub-contractors to enable them to prepare their own shop drawings and pass on the information with sufficient promptness as will not in any way delay the works.

5. Dimensions and Levels

All dimensions and levels shown on the drawing shall be verified by the contractor on the site and he will be held responsible for the accuracy and maintenance of all the dimensions and the levels. Figured dimensions are in all cases to be accepted and no dimension shall be scaled. Large scale details shall take precedence over small scale drawings. In case of

discrepancy, if any, the contractor shall ask for clarification from the Architect before commencing and proceeding with the work.

6. Notice of Operation

The contractor shall not carry out any important operation without consent in writing from the Architect.

7. Construction Records

The contractor shall keep and provide to the Architect full and accurate records of the dimensions and positions of all new work and any other information necessary to prepare complete drawings and recording details of the work as constructed.

8. Safety of Adjacent Structures

The contractor shall provide and erect to the approval of the Architect such supports as may be required to protect effectively all structures which may be endangered by the execution of the works or otherwise take such permanent measures as may be required by the Architect to protect the adjacent structures.

9. Temporary Works

Before any temporary works are commenced, the contractor shall submit at least 7 days in advance to the Architect for approval complete drawings of all temporary works, he may require for the execution of the work. The contractor shall carry out the modifications relating to strength, if required by the Architect in accordance with the conditions of contract at his own cost. The contractor shall be solely responsible for the stability and safety of all temporary works and unfinished works and for the quality of the permanent works resulting from the arrangement eventually adopted for their execution. Nothing extra shall be paid on this account.

10. Water Supply

The rates quoted by the contractor shall include all expenditures towards providing water for the full contract period required for the works, including that for the workmen and all its staff on the site. However, the contractor may be allowed to use water from the existing source at site, free of cost.

The contractor has to arrange for distribution and bear all charges for installation of pipes and other equipment which shall be laid out/installed by the contractor only with the prior approval and as directed by the Bank/ Architect so as not to interfere with the progress of other contractors' work engaged by the Bank.

However, the Bank does not take any responsibility for uninterrupted water supply for the work as mentioned above. The Bank may at any time without notice or specifying any cause suspend or discontinue water supply as aforesaid to the contractor, and such suspension or discontinuance shall not entitle the contractor to any compensation or damage or constitute basis of extension of time for completion.

11. Power

The Bank shall supply the Power at one point for the works at site on chargeable basis @ 0.5% of actual project value which will be deducted from the contractor's bills.

The Bank may at any time without notice or specifying any cause suspend or discontinue power supply as aforesaid to the contractor and such suspension or discontinuance shall not entitle the contractor to any compensation or damage or constitute basis of extension of time for completion.

Power supplied by the Bank to the contractor shall be entirely at the risk of contractor as the continuity and regularity of supply, maintenance of voltage and adequacy of load without any warranty by or liability to the Bank in respect thereof and without entitlement to the contractor on grounds of discontinuance, fluctuation of voltages or inadequacy of load or any other cause whatsoever to claim from Bank in respect thereof or consequences thereof.

The contractor shall make contingency arrangement of stand-by electric supply for smooth progress of the work so that work does not suffer on account of power failure or disconnection or not getting connection at all. No claim of any kind whatsoever shall be entertained on this account from the Contractor. Nothing extra shall be payable on this account.

12. Office Accommodation

- a) The contractor shall provide and maintain all necessary offices, workshops, stores, shelters, sanitary facilities, canteens and other temporary structures for themselves in connection with the work at the site, at their own cost after getting the approval from the Bank / Architect.
- b) All temporary buildings and facilities as mentioned above shall be removed on completion of the work or at any other earlier date as directed by the Bank / Architect.
- c) All the expenses for obtaining statutory approvals and maintenance of the above facilities as well as running expenses shall be borne by the contractor at no extra cost to the Bank. It is also the responsibility of the contractor to obtain statutory approvals for providing the above facilities.

13. Labour accommodation

No labour accommodation is available at the site of work. The Contractor shall make his own arrangements for labour accommodation. The Bank shall in no way be responsible for any delay on this account and no claim, whatsoever, on this account shall be entertained. Nothing extra shall be payable on this account.

The contractors have to shift the material using the stairs/ service lift. The area where the materials are being stacked up / placed / kept should be cleaned and the directions of the landlord / society should be adhered by the Contractor. The decision of the NaBFID in this regard shall be final and binding on the Contractor.

14. Dismissal of Workmen

The contractor shall on the request of the Bank / Architect / Site Engineer immediately dismiss from works any person employed thereon by him, who may in the opinion of the Bank / Architect / Site Engineer be unsuitable or incompetent or who may misconduct

himself. Such discharges shall not be the basis of any claim for compensation or damages against the Bank or any of their officer or employee.

15. 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 works and make good all work disturbed.

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.

Every precaution shall be taken by the contractor to prevent the breeding of mosquitoes on the works during the furnishing work, and all receptacles, cistern, water tanks etc used for the storage of water must be suitably protected against breeding of mosquitoes. The contractor shall indemnify the Bank against any breach 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 or upon any boarding gantry, building structure other than those approved by the Bank.

16. Storage of material at site

No inflammable materials including P.O.L shall be allowed to be stored in huge quantity at site. Only limited quantity of P.O.L may be allowed to be stored at site subject to the compliance of all rules / instructions issued by the relevant authorities and as per the direction of Bank / Architect / Site Engineer in this regard. Also, all precautions and safety measures shall be taken by the Contractor for safe handling of the P.O.L products stored at site. All consequences on account of unsafe handling of P.O.L shall be borne by the Contractor.

17. Fire Fighting Arrangement

- i) The contractor shall provide suitable arrangement for firefighting at his own cost. For this purpose, he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water. This equipment shall be provided at suitable prominent and easily accessible places and shall be properly maintained.
- ii) Any deficiency in the fire safety or unsafe conditions shall be corrected by the contractor at his own cost and to the approval of the relevant authorities. The contractor shall make the following arrangements at his own cost but not limited to the following:
 - a) Proper handling, storage and disposal of combustible materials and waste.
 - b) Work operations which can create fire hazards.
 - c) Access for firefighting equipment

- d) Type, number and location of containers for the removal of surplus materials and rubbish.
- e) Type, size, number and location of the fire extinguishers or other firefighting equipment.
- f) General housekeeping.

18. Site Order Book

A site order book shall be maintained at site for the purpose of quick communication between the Bank / Architect / Site Engineer and the contractor. Any communication relating to the works may be conveyed by recording in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of contract. Each site order book shall have machine numbered pages in triplicate and shall be carefully maintained and preserved by the contractor and made available to the Bank/ Architect / Site Engineer as and when demanded. Any instruction which the Bank / Architect/ Site Engineer may like to issue to the contractor, or the contractor may like to bring to the Bank / Architect / Site Engineer. Two copies of such instructions shall be taken from the site order book, and one copy will be handed over to the party against proper acknowledgement and the second copy will be retained for their record.

19. Temporary Fencing/Barricading

The contractor shall provide and maintain a suitable temporary barricading at his cost to adequately enclose all boundaries of the site for the protection of the public and for the proper execution and security of the work and in accordance with the requirement of the Bank / Architect / Site Engineer and regulations of local authorities. These shall be altered, relocated and adopted from time to time as necessary and removed on completion of the work. Nothing extra shall be paid on this account.

20. Site Meetings

Site meetings will be held to review the progress and quality evaluation. The contractor shall depute a senior representative along with the site representative and other staff of approved sub-contractors and suppliers as required to the site meetings and ensure all follow up actions. Any additional review meetings shall be held, if required by the Bank / Architect.

21. Disposal of refuse, Debris (Malba) etc. from site

The Contractor shall not stack building material / malba / muck on the land or road of the local development authority or on the land owned by the others, as the case may be. So, the muck, rubbish etc. shall be removed periodically at least twice in a week as directed by the Site Engineer, from the site of work to the approved dumping grounds as per the local byelaws and regulations of the concerned authorities and all necessary permissions in this regard from the local bodies shall be obtained by the Contractor. Nothing extra shall be payable on this account. In case, the Contractor is found stacking the building material/ malba as stated above, the Contractor shall be liable to pay the stacking charges / penalty as may be levied by the local body or any other authority and also to face penal action as per the rules, regulations and bye-laws of such body or authority. The Bank shall be at liberty to recover, such sums due but not paid to the concerned authorities on the above counts,

from any sums due to the Contractor including amount of the security deposit in respect of this contract agreement.

22. Procurement of Materials

The contractor shall make his own arrangements to procure all the required materials for the work. All wastages and losses in weight shall be to the contractor's account.

23. Patent, Royalty, Trademark etc.

Royalty at the prevalent rates shall be paid by the Contractor. The Contractor shall assume all liability, financial or otherwise in connection with this contract and shall protect and indemnify the Bank from any and all damages and claims that may arise on any account. The Contractor shall indemnify the Bank against all claims in respect of patent rights, royalties, design, trademarks of name or other protected rights, damages to adjacent floors of the building, roads or members of public, in course of execution of work or any other reasons whatsoever and shall himself defend all actions arising from such claims and shall indemnify the Bank in all respect from such actions, costs and expenses. Nothing extra shall be payable on this account.

24. GST, Excise Duty, Taxes, Levies etc.

- i. GST, Sales Tax or any other tax on materials in respect of this contract shall be payable by the contractor and the Bank shall not entertain any claim whatsoever in this respect.
- ii. The contractor shall deposit royalty and obtain necessary permit for supply of various materials from local authorities.

The contractor shall pay and be responsible for payment of all taxes, duties, levies, royalties, fees, cess or charges in respect of the works including but not limited to goods and service tax, etc. payable in respect of materials, equipment plant and other things required by the contractor. All the taxes, duties, levies, fees and charges shall be to the contractor's account and the Bank shall not be required to pay any additional or extra amount on this account. Variation of taxes, duties, fees, levies etc if any, till completion of work shall be deemed to be included in the quoted rates and no extra amount beyond quoted unit rates will be payable on this account. Nothing extra shall be payable on this account.

TDS under Income Tax Act 1961 would be deducted by NaBFID on payments made to the Contractor at the applicable rates based on the invoice produced and the nature of payment. TDS on GST, if any, shall be deducted as applicable.

25. Incidental cost

The nomenclature of the item given in the Bill of quantities gives in general the work content but is not exhaustive i.e. does not mention all the incidental works required to be carried out for complete execution of the item of work. The work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and / or described in the specifications, provided that the same can be reasonably inferred there from. There may be several incidental works, which are not mentioned in the nomenclature of each item but will be necessary to complete the item in all respect. All these incidental

works / costs which are not mentioned in item nomenclature but are necessary to complete the item shall be deemed to have been included in the rates quoted by the contractor for various items in the Bill of quantities. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation / change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) on account of the directions of Bank / Architect / Site Engineer. Nothing extra shall be payable on this account.

26. Rates applicable for and upto to all heights

Unless otherwise provided in the Bill of Quantities, the rates quoted by the Contractor shall be inclusive of carrying out the works at and / or upto all heights, lifts and leads. The contractor shall make all arrangements for the same. Nothing extra shall be payable on this account.

27. Government and Local Rules

The contractor shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc. of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notices required by said Act, Rules, Regulations and Bye-laws 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 etc and shall indemnify and protect the Bank and its Employees against such liabilities and / or claim arising out of violation of any such laws, ordinances, orders, decrees and shall defend all actions arising from such claims or liabilities. The contractor shall also liaison and pursue for obtaining various no objection certificates from local authorities such as CFO etc. at no extra cost to the Bank.

28. Removal of Improper Work

The Bank 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 Bank / Architect / Site Engineer are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanships not in accordance with the drawings and specifications or instructions. In case the contractor refuses to comply with the order, the Bank shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Architect on behalf of the Bank 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 Architect on behalf of the Bank shall relieve the contractor from his liability in respect of unsound work or bad materials.

29. Work to be kept in good condition

The Contractor shall maintain all the work in good condition till the completion of entire work. The Contractor shall be responsible for and shall make good, all damages and repairs, rendered necessary due to fire, rain, traffic or any other causes. The Bank shall not be

responsible for any claims for injuries to person/workmen or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the Contractor or of any other of his representatives, in his employment during the execution of the work. The compensation, if any, shall be paid directly to the Department / authority / persons concerned, by the Contractor at his own cost.

30. No waiving of legal rights and powers

The Bank / Architect / Site Engineer shall not be precluded or stopped from taking any measurements, framing of estimates or detaining any certificates made either before or after the completion and acceptance of the work and payment, from showing the true amount and character of the works performed and materials furnished by the Contractor and from showing that any such measurements, estimates or certificates untrue or incorrectly made and that Engineer-in-Charge shall not be precluded or stopped from recovering from the Contractor such damages as it may be sustained by reasons of his failure to comply with the terms and conditions of the contract.

31. Concealed Work

The contractor shall give not less than 3 days' notice to the Bank / Architect/ Site Engineer whenever any work is to be buried 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 Bank / Architect / Site Engineer be either opened up for measurement at the contractor's expense or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc. or other matters which cannot be conveniently tested or checked, the notes of the Bank / Architect/ Site Engineer shall be accepted as correct and binding on the contractor.

32. 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.

33. Guarantee for the Specialized Works

Wherever provision for submission of a guarantee has been advised, the same shall be submitted from the specialized agency along with a counter guarantee by the main contractor engaged for the work. The guarantee shall be furnished on a non-judicial stamp paper of appropriate value. If the contractor is required to submit guarantee/ guarantees for any item/items for a period of more than 12 months to 120 months (details mentioned in elsewhere in this document), the guarantee/ guarantees in case of those items shall remain valid even after expiry of the defect liability period as stipulated in the contract.

34. Protective Measures

The contractor from time to time of being placed 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 Bank against any possible damage to the building, roads, or members 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 works and making good all works disturbed. Nothing extra shall be paid on these accounts.

35. Storage of Materials

The contractor shall provide and maintain proper sheds for the proper storage and adequate protection of materials etc and other work that may be executed on the site including the tools and materials of nominated sub-contractors and remove same on completion.

36. Tools

Theodolite, levels, prismatic compass, chain, steel and metallic tapes and all other surveying instruments found necessary on the works shall be provided by the contractor for the due performance of this contract as instructed by the Architect.

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

The mistries and the supervisors on the works shall carry with them always a one meter or two-meter steel tape, a measuring tape of 30 meters, 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 Architect will use any or all measuring instruments or tools belonging to the contractors as he chooses for checking the works 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 scaffolding, tools and plant etc by nominated sub-contractors for their work.

37. Datum

The average ground level will be considered as the crown of the nearest road, which should be taken as "Datum" which is however, subject to final confirmation by the Bank / Architect. All levels shown in the drawings are to be strictly adhered to.

38. 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.

39. Possession Prior to Completion

The Bank shall have the right to take possession of or use any completed or partially completed part of the work. Such possession or use shall not be an acceptance of any work not completed in accordance with the contract Agreement.

40. Prevention of nuisance and pollution

The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupants of the adjacent floors / properties and to the public in general. The Contractor shall take all care, as not to damage any other adjacent floors / properties or other services running adjacent to the plot. If any damage is done, the same shall be made good by the Contractor at his own cost and to the entire satisfaction of the Bank / Architect / Site Engineer. He shall make good at his own cost and to the entire satisfaction of the Bank / Architect in Charge for any damage to roads, paths, cross drainage works or public or private property whatsoever caused, due to the execution of the work or by traffic brought thereon, by the Contractor. Further, the Contractor shall take all precautions to prevent any pollution of streams and waterways. All waste or superfluous materials shall be carted away by the Contractor, entirely to the satisfaction of the Bank / Architect / Site Engineer. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants/ users of adjoining floors / buildings. No claim whatsoever on account of site constraints mentioned above or any other site constraints not specifically stated here, shall be entertained from the Contractor. Therefore, the Contractors are advised to visit site and get firsthand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.

41. Security & traffic arrangements

The contractor shall adhere to all traffic restrictions imposed by the local authorities. In event of any restriction being imposed by the traffic or any other statutory authority, on the working or movement of labour, materials, etc., the Contractor shall strictly follow all such restrictions or instructions issued regarding the same and nothing extra shall be payable to the Contractor on account of such restrictions or instructions. No delay or claims of any kind shall be entertained from the Contractor on this account. The loss of time on this account, if any, shall have to be made up by the contractor by generating and deploying additional resources etc. Nothing extra shall be payable on this account.

42. Preparation of Furnishing works for Occupation and Use of Completion

The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects put right. On completion of such inspection the contractor shall inform the Bank / Architect / Site Engineer that he has completed the work, and it is ready for inspection.

On completion the contractor shall clean all windows and doors including the cleaning and oiling, if necessary, of all hardware, inside and outside, all floors, staircases, and every part of the building/furnishing work. He will leave the entire building neat and clean and ready for immediate occupation and to the satisfaction of the Bank/ Architect / Site Engineer.

43. As built drawings

- i) For the drawings issued to the contractor by the Architect.

The Architect will issue two sets of drawings to the Contractor for the items for which some changes have been made from the approved drawings as instructed by the Bank / Architect / Site Engineer. The contractor will make the changes made on these copies and return

these copies to the Architect / Site Engineer for their approval. In case any revision is required or the corrections are not properly marked, the Architect/ Site Engineer will point out the discrepancies to the contractor. The contractor will have to incorporate these corrections and/or attend to discrepancies either on the copies as directed by the Architect / Site Engineer and resubmit to them for approval. The Architect / Site Engineer will return one copy duly approved by him.

ii) For the Drawings prepared by the Contractor

The contractor will modify the drawing prepared by him wherever changes are made by the Bank / Architect / Site Engineer and submit two copies of such modified drawings to the Architect / Site Engineer for approval. The Architect / Site Engineer shall return one copy of the approved drawing to the contractor.

44. Completion Certificate

The contractor shall arrange to submit the required documents to obtain completion certificate from local bodies including getting the required site visits conducted by such authorities with a view to obtain the same. The contractor shall also be responsible for liasoning work required, if any, in this regard with the local bodies. Statutory charges, fees etc. required to be paid to the local bodies in this connection shall only be payable by the Bank or shall be reimbursable to the contractor on production of proof of actual payment by him.

45. Defects after completion

The contractor shall make good at his own cost and to the satisfaction of the Bank / Architect all defects, shrinkage, settlements or other faults which may appear within 12 months to 120 months (details mentioned in elsewhere in this document) after completion of the work. In default the Bank through Architect may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Bank or may be deducted by the Bank, in lieu of such amending and making good by the contractor, deduct from any money due to the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that balance from the contractor from the amount retained under Security Deposit Clause together with any expenses the Bank may have incurred in connection therewith.

46. Defect liability period (refund of security deposit)

The defect liability / maintenance period shall be 12 months to 120 months (details mentioned in elsewhere in this document) after the date of virtual completion of work for this contract agreement. The Security Deposit shall be released after completion of defect liability period of 12 months to 120 months (details mentioned in elsewhere in this document) provided the performance is satisfactory but subject to other provisions specified elsewhere in the contract agreement.

47. Declaration

I/We have inspected the site of works and have made fully acquainted with the local conditions in and around the sites of works. I/We hereby declare that I/We have gone through the conditions laid down in the Notice Inviting Tender, General Conditions of Contract, Special Conditions of Contract, Technical Specifications etc. and understood the same and on the basis of the same, I/We quote our rates in the Bill of quantities attached with the tender documents.

I/We shall also uniformly maintain such progress with the work, as may be directed by the Bank / Architect to ensure completion of same within the target date as mentioned in the tender document.

Signature of Tenderer

Witness:

Address: _____

Date :

NaBFID

48. SPECIMEN COPY OF PERFORMANCE GUARANTEE

In consideration of the (hereinafter referred to as " Bank ") having offered to accept the terms and conditions of the proposed agreement between the Bank and (Indicate name of the Contractor) (hereinafter referred to as "said Contractor") for the work..... (Hereinafter referred to as "said agreement") having agreed to production of irrevocable Bank Guarantee for Rs.(Rupees only) as security / guarantee from the said contractor for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We (hereinafter referred to as "the Bank") hereby (Indicate the name of the Bank) undertake to pay to the Bank an amount not exceeding Rs..... (Rupees only) on demand by the Bank.

2. We, the Bank do hereby undertake to pay to the Bank on demand the amount due and payable under this Guarantee without any demure and merely on demand by the Bank stating that the amount claimed is due from the said contractor. Any such demand made to the Bank shall be conclusive as regard to the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees only)

3. We, the bank further undertakes to pay to the Bank any money so demanded notwithstanding any dispute raised by the contractor in any suit or proceeding pending before any court or Tribunal relating thereto, and our liability under this guarantee being absolute and unequivocal.

4. The payment so made by us under this guarantee shall be a valid discharge of our liability for payment therein under and the said contractor shall have no claim against us for making such payment.

5. We, the Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Bank under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Authorized Officer on behalf of the Bank certifies in writing that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor and accordingly the guarantee will be discharged.

6. We, the Bank further agree with the Bank that the Bank shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance of the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Bank against the said contractor and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor or for any forbearance, act or omission on the part of the Bank or any indulgence by the Bank to the

said contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

7. This guarantee will not be discharged due to the change in the constitution of the Bank or the said contractor.

8. We, the bank lastly undertakes not to revoke this Guarantee except with the previous consent of the Bank.

9. This guarantee shall be valid up to unless extended on demand by Bank.

Notwithstanding anything mentioned above, our liabilities against this guarantee is restricted to Rs./-(Rupees only) and unless a claim in writing is lodged with us within nine months of the date of expiry or extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

10. Notwithstanding anything contained herein:-

a. Our liability under this Bank Guarantee shall not exceed Rs (Rupees. Only).

b. This Bank Guarantee shall be valid up to

c) We are liable to pay the Guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before.....
All the rights of the beneficiary under the said Guarantee shall be forfeited and Guarantee shall be released and discharged from all liabilities thereafter.

The Bank has under its constitution, power to give this Guarantee in your favour made under our Memorandum and Articles of Association and Mr/Mrs who signed it on behalf of the Bank has the authority to do so.

Dated this the day of for ... (indicate the name of bank)

49. Special Site Instructions

1. The site shall be available 24×7 for execution of the works. The Contractor shall ensure judicious deployment of labour in compliance with applicable labour laws and regulations. Work beyond the normal working hours, including night work or shifts, shall be undertaken only with the prior written approval of the Bank and in accordance with applicable statutory requirements.

Where night work, double shifts, or extended working hours are technically necessary to maintain the required progress or quality, the Contractor shall obtain prior approval of the Bank and carry out such work at no additional cost to the Bank. Night work shall be conducted without unreasonable noise or disturbance and in accordance with guidelines issued by the local authority.

Any change in working hours shall not affect the overall project schedule, and the works shall be completed within the stipulated completion period.

2. Workers of the Contractor should clean & clear the site before leaving the premises.
3. Common corridors/passages shall be kept free from any obstructions, encroachments, storages etc. so as to have easy means of escape in the event of emergency.
4. Entrance/Exits, passages, escape route shall be kept free from any obstructions.
5. Contractor should check the antecedents of the workers proposed to be deputed by him at site and will issue a photo-pass to each of his workers / supervisors or any other officials which has to be duly certified by Security Officer of IFSCA and shall comply with the instructions issued by the Security Dept. of IFSCA, as may be required.
6. Contractor shall follow all safety norms as regards to execution of work including manpower.
7. Since the firefighting arrangement may be disbanded, contractor must keep & maintain the firefighting arrangements with adequate number of fire extinguishers along with proper training to his staff who shall be well trained to operate the same.
8. Contractor shall keep all the materials and debris stack at site in proper fashion and should remove all debris regularly within the above said working time only.
9. Toilets on the floor may be locked or may not be available for use of workers. Toilets for workers will be available on the Ground / Basement area or as may be designated by IFSCA Authority.
10. Contractor shall protect the site especially the existing glazed façade from inside, service lift, other floors made available to them including staircase etc., The workers should not use the passenger lifts.
11. The contractor has to shift the material using either the freight lift (if available) or the stairs or other mechanical means to be erected on their own. The freight lift (if available) should be covered by plywood so as not to damage the interiors of the lift. The cost towards the protective work should be borne by the Contractor. Similarly, erection of any other mechanical means for transport of material should be borne by the contractor and nothing extra is payable in this regard. The area where the materials are being

stacked up / placed / kept should be cleaned and the directions of the landlord / society should be adhered by the Contractor. The decision of the NaBFID in this regard shall be final and binding on the Contractor.

12. If the work is carried out during late evening and night hours, all the necessary permissions, liaisoning with Police / GIFT SEZ Authorities and other Local authorities if any, shall be responsibility of the Contractor.
13. The contractor should maintain proper registers at the work site and extend all necessary safety/social benefits as required under the relevant labour Laws/Statutes, as applicable. The contractor should keep necessary First Aid Box/ Medicines etc., to attend to any injuries etc. The contractor would be solely responsible for this.
14. Since the work is to be carried out in a running office building, the contractors have to take special care as to not cause damage to the existing floorings, wall claddings, lights and fixtures, glass façade/partitions/SS cladding to the Columns while executing the work. In case of any damage, the contractor has to make good the damages at his own cost to the satisfaction of IFSCA, failing which Bank may take suitable measures to make good of the damages itself and the expenses will be recovered from any payment due to the contractor or from retention money/performance guarantee.
15. The existing flooring in the actual work area which is to be retained shall be protected with suitable mechanism. The curtain glazing in the work area should be protected by suitable mechanism. In view to expedite the work, it will be advisable that the Contractor should carry out the loose furniture work in his factory including doors, tables, sofas, lounge chairs, beading, moulding and AC ducting work etc.
16. One licensed electrician must be present all the time till completion of work and fully responsible for all the inspections, queries and timely response. His primary duty is to coordinate with other agencies at all times of working and settle the differences immediately after consulting with the Architect.
17. The electrical works shall only be carried out by valid licensed electricians and contractors approved by the Local authorities for carrying out the electrical work, under the direct supervision of the persons holding valid certificates issued or recognized by the Appropriate Authority. The contractor should furnish the particulars of the license with validity period held by him. The contractor shall furnish the names and particulars of certificates of competency of supervisors and workmen to be engaged for carrying out electrical work.
18. All the equipment and materials shall be tested / inspected by the Architect and approved before they are installed / used in the execution of the works covered in the contract. If the Contractor uses any equipment / material without the prior approval, the same is liable to be rejected. The Contractor shall furnish, as and when demanded the Test Certificate / warranty / Guarantee certificate, cash memos, invoices for verification of quality and make of the materials. No material must be used for execution work without prior approval of Architect / EIC.
19. Rejected materials shall be removed from site immediately and replaced with approved quality ones. No compensation shall be paid whatsoever on this account.

20. All electrical works connected with and inclusive of installation under this contract shall be done in accordance with the standard and established methods of installation of electrical equipment and shall comply with relevant Indian Electricity Rules, National Electrical Code, BIS Codes of Specifications and Standards. The work shall also be strictly in accordance with the instructions / recommendations of the manufacturers. All equipments shall be leveled carefully before being fixed finally in position. All fragile and sensitive equipments shall be protected adequately and handled carefully during installation and erection. Manufacturer's test Certificates shall be furnished on demand. Certificates of compliance to routine test shall also be furnished. The work shall be carried out as per the CPWD or as per the specifications by GIFT Authorities as may be applicable.
21. Unless and otherwise mentioned in the tender documents, the following work shall be done by the contractor and therefore, their cost shall be deemed to be included in their tender cost –
- Cutting and making good of all damages caused during installation and restoring the same to their original finish.
 - Sealing of all floor openings provided by him for pipes and cables from fire safety point of view after laying of the same.
 - Painting at site of all exposed metal surfaces of the installation other than pre-painted items like switch-gear, transformer etc. Damages to finished surfaces of these items while handling and erection shall however be rectified to the satisfaction of Architect.
22. Care shall be taken by the Contractor to avoid damage to the building during execution of his part of the work. He shall be responsible for repairing of all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of his work from the site on regular basis or as directed.
23. The dismantled materials shall be segregated under serviceable and unserviceable items. The Decision on Bank in respect of these items shall be final and binding on the contractor.
24. Whenever the cabins are fully / partly enclosed with the timber / wood partition, the timber / wood shall be painted with approved fire-retardant paint. Similarly, the timber/ wood / plywood and all the woodwork shall be treated with anti-termite treatment line Proguard of M/s. PCI Pest Control Pvt. Ltd. or other equivalent. The cost towards the same deemed to have been included in the unit rates quoted in the price bid and nothing extra shall be payable in this regard.
25. Glass used in partition should be toughened and confirm the insulation and integrity characteristics.
26. Wherever Plywood is used the same shall be of BWP Marine Grade Plywood complying to IS 710 Executive range only.
27. Wherever Plywood is Used the same shall be exterior Grade Complying to IS

28. False ceiling suspenders / runners shall be of non-combustible material.
29. Whenever ducts or electric wiring passes through walls, the opening around the duct or electrical work shall be sealed with fire resisting material such as vermiculite cement. The cost towards same deemed to have been included in the unit rates quoted in the price bid.
30. The material movement in the premises shall be through the freight elevators (if available) or through the staircase. The contractor shall take appropriate precautions so as to avoid any damage to the freight elevator.
31. Storage of inflammable and hazardous substance shall be prohibited on the site.

50. Moral Code of Conduct for the Bidder(s).**Commitments of the Bidder(s)/contractor(s)-**

1. The Bidder(s)/Contractor(s) commit themselves to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - a. The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Bank 's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b. The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Bank as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
2. The Bidder(s)/ Contractor(s) will not instigate third persons to commit offenses outlined above or be an accessory to such offenses.

Disqualification from tender process and exclusion from future contracts-

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of commitments mentioned above or in any other form such as to put his reliability or credibility in question, the Bank is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as deemed fit.

Compensation for Damages-

1. If the Bank has disqualified the Bidder(s) from the tender process prior to the award, the Bank is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

Previous transgression-

1. The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process, or action can be taken as deemed fit.

Criminal charges against violating Bidder(s)/Contractor(s)/ Subcontractor(s) -

If the Bank obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Bank has substantive suspicion in this regard, the Bank will inform the same to the Chief Vigilance Officer.

Duration-

This begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid, unless it is discharged / determined by Competent Authority.

Other provisions-

1. The contract shall be interpreted in accordance with the laws of the Republic of India and shall be subjected to the exclusive jurisdiction of courts at Mumbai.
2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
3. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

51. Other Special Conditions: -

- i) Minimum disturbance to the existing offices – methodology to be adopted during interior work:

The existing building where proposed work is to be undertaken is occupied by the other allottees/occupants of the complex at different floors and is fully operational. The contractor will create the minimum degree of noise and air pollution and disturbance to them so that their office work doesn't hamper.

- ii) Completion Drawings, Statutory Approvals and Licenses

The contractor shall furnish three copies of Ammonia print along-with the original tracing of all the "As-built" drawings of works to NaBFID within 28 days of completion of work without any extra cost. Also, the contractor shall submit the Professional Photographs/ Videography of the project within 7 days of completion of work nothing shall be paid on this account.

The contractor will do all liasioning work to obtain the statutory approvals which will be his sole responsibility. NaBFID and the appointed Architect will however extend necessary paper support to the contractor for this work, wherever required. Nothing extra shall be paid to him on account of obtaining aforesaid approvals.

- iii) Time is essence of contract. The said work is to be carried out in specified time frame at said site, and the contractor may need to work during night as mentioned above also at no extra cost. Contractor should mandatorily maintain the high-level execution of the work, finished etc.
- iv) The contractor shall provide/appoint one experienced consultant/architect for preparation of shop drawings, services drawings, finishing for supervision of all works in consultation with Architect/client. These drawings shall be got approved from the Architect/Bank before implementing the same. The cost of Architect/Draftsman etc. is deemed to be included in the quoted rate.
- v) The tentative concept layout drawings enclosed with the tender documents which is subject to change as per requirement of the Clients i.e., NaBFID after award of work. The contractor will prepare all shop drawings based on the drawings approved by the Architect/Client subsequently.
- vi) Submission of samples of values item of works before supplying at site.

The material / products to be used in this work shall be one of the approved make / brands out of list of manufacturer / brands / Makes given in the tender documents and as approved by the Architect. The contractor shall take the approval of material from the Architect / Client before supplying at site. Contractor shall arrange MTCs along with invoices for purchased items, Technical specifications within his quoted rates as per instruction of Architect.

- vii) Process for approval of samples: Contractor must submit a technical sheet along with the sample for approval by the Architect/ Client (NaBFID) before procurement of material-
 - a) Product specifications and makes as per make list.
 - b) Selected product specifications.
 - c) This sheet has to be signed by authorized Signatory of Contractor.
 - d) A time frame of 4-7 working days should be given for approval.
 - e) Demo of the product to the Architect/Client prior before installation along with the confirmatory certificate of the product for the site and authorization form of the OEM to bidder for installation testing and commissioning.
 - f) OEM Confirmatory certificate should also clearly specify the place of the origin and manufacturing.

viii) FACTORY INSPECTION OF THE VARIOUS MATERIALS:

The Architect/ NaBFID may like to inspect any material at the contractor's manufacturer works/factory before dispatch at site. The contractor will inform Architect of the work in writing before delivery of major items at site and will give an inspection call to the engineer in charge 15 days before dispatch for factory inspection of the same by the Architect/ NaBFID, if required by the latter. NaBFID/ Architect at its discretion may waive off the inspection call in the exigencies of work.

- ix) All costs towards sample, material, collection, transport, manpower, testing, etc. shall be borne by the contractor and are deemed to be included in the rates quoted by him in the bill of quantity. The contractor shall furnish manufacturer's test reports and manufacturers test certificates for all bought out items. It shall also be the responsibility of the contractor to get the mandatory tests as per CPWD specifications carried out from a Govt. approved laboratory and furnish the results.
- x) The Bidder shall ensure the seamless integration of equipment's/ panels (electrical system, firefighting system, fire alarm system, PA system, Ventilation and HVAC system, Plumbing, BMS including safety and security etc.) as required for smooth functional operation including installation and commission with the existing (Centrally) system equipment's/ panels etc. in the premises. It is deemed that the cost of the same is included nothing shall be paid extra.
- xi) The Bidder shall submit the OEM (Original Equipment Manufacturer) Certificate of the product supplied at the site to the Architect/Client along with guarantee/warranty card/certificate prior to installation.
- xii) The contractor shall have to attend all the meetings at his own cost with the Architect/ NaBFID during the currency of the contract, as and when required and fully cooperate with such personal and agencies involved during these discussions. The contractor shall not deal in any way directly with the clients/ owner or consultants of NaBFID/owner/clients and any dealing/correspondence, if required at any time with the clients/owners/consultants shall be through NaBFID only.

During the execution of the work, contractor shall submit at his own cost a detailed fortnightly progress report along with photos of site and program report which shall be got approved by Architect in charge of NaBFID.

xiii) Milestones and Penalty for non-achievement: -

Time is the essence of the contract. The work should be planned in such a manner that following milestones are achieved within the schedule completion time:

Sr. No.	No. of Days from date of start	Physical Progress of work / Milestones	Cumulative Penalty leviable if progress is Not achieved as per milestone
1	7 Days	iii) Layout Marking iv) Submit all Samples for Approval along with technical	1% of Contract Value

		specifications.	
2	17 Days	vii) 80% Partition framing work complete viii) 40% completion of IPS/CC flooring and 80% surface preparation for carpet flooring. ix) 20% completion of partition works x) 25% of electrical wiring work xi) 20% framing work for false ceiling xii) Mockup for furniture along with all the specifications.	2% of contract value
3	35 Days	vi) 100% completion of flooring works except wooden & Carpet flooring vii) 50% Ducting over the false ceiling viii) 75% Partition works ix) 50% framing work for false ceiling x) 75% Wiring work over the false ceiling - Placing order of Furniture	4 % of contract value
4	50 Days	vii) 100% Wiring work complete underflooring and over false ceiling viii) Ducting complete ix) 100% Partition and door work complete. x) 80% False ceiling work complete. xi) 80% Plumbing and sanitary work complete. xii) Delivery of material for CCTV, Access control, FA/FS	5 % of contract value
5	70 Days	viii) 100% False ceiling work complete along with painting ix) 100% Floor work complete along with wooden flooring x) 100% Furniture work complete xi) 100% Electrical & Low Voltage works, light fittings, fire alarm, CCTV, AV conference, Access control, fire extinguisher, painting, carpets, planters, artifacts complete etc. xii) 100% Plumbing & sanitary work complete xiii) HVAC INSTALLATION WORKS xiv) Any other work those not covered	6% of contract value

		above but available in the BOQ to complete the project.	
6	75 Days	Testing commissioning and handing over the complete project to client	7% of Contract value

If the contractor fails to achieve a particular milestone out of above within the timelines given but at the same time makes up the same in next milestone, no penalty will be imposed, and amount withheld from his payment against penalty shall be released to the contractor. However, the entire work must be completed within the overall period of 75 days failing which the full penalty amount equal to 7% of contract value shall be recovered from the payment of the contractor.

Besides, if contractor fails to complete the entire work within contract period then an additional penalty @ 1% of contract value weekly will be imposed. However, over all penalty including milestone shall not exceed 10% of contract value. In addition to this, if Contractor fail to complete the work even on extended time, NaBFID may consider recovery of rent outgoing.

Accordingly, the contractor will submit a Bar Chart/Pert Chart within three days of issue of LOA (Letter of Award) which will form part of the agreement and delivery schedule of materials.

In case of any substitute item / extra item / deviation arises, the decision regarding incorporation as decided by Architect/ NaBFID shall be final and binding on the contractor.

The extension of time (EoT) shall be granted only on the genuine ground and valid only after approved the same from the client. If client does not agree for the same, no EOT will be approved on whatever may be the reason and Penalty as above will be imposed.

- xiv) The contractor will obtain necessary temporary power connection from the GIFT PCL after the approval of Building owner at site for the required load of this premises within the schedule completion time. He will do all liaison work with the Supply Authority, if required. NaBFID /client will provide all necessary paper/documents if required. The Bank shall supply the Power at one point for the works at site on chargeable basis @ 0.5% of actual project value which will be deducted from the contractor's bills.
- xv) While procuring of material for the construction activity as per the scope of work, BOQ, Technical specification etc. for the execution of the project, he shall be liable to comply with all the statutory Laws/rules/regulations.
- xvi) The Contractor has to tie up with the owner/ management of the building for obtaining the necessary work permissions/ gate passes and has to follow their Security & Safety guidelines.
- xvii) The Contractor shall deploy a Graduate Engineer-cum-Quality Control Professional at the site throughout the execution of the works. The deployed professional shall also ensure smooth and uninterrupted execution of the works beyond normal working hours, as and when required.
- xviii) Any Defect Discovered and brought to the notice of the Architect/Client during the execution or after the completion of the work till the defect liability period shall be rectified

by the contractor. In the event of failure on his part the work shall be rectified at his risk and cost.

- xix) Minor dismantling and repair work for the completion of works, if any, has to be executed by the Contractor within his quoted rates. Nothing extra shall be paid to the contractor on this account. The Contractor is advised to visit the site before quoting for this tender to understand the project requirements and site condition.
- xx) All scaffolding, mounting, jula or any other machines and tools required to complete the work as per BoQ shall be the part of the scope of the work and nothing extra shall be payable on this account.
- xxi) For the execution of works related to networking, IT, LAN, Servers, HVAC etc., contractor should nominate/ appoint a vendor/ System integrator who is certified/ registered by the Original Equipment Manufacturer. Contractor has to furnish the supporting document to NaBFID for the same.
- xxii) The Contractor shall initiate or defend any suit on behalf of NaBFID, in Court of Law against any or all persons/body/authority, in respect of any dispute arising out of the project works done or to be done.
- xxiii) Bidder should ensure that the contents of their Bid are factually correct and in line with the terms and conditions of the Tender documents. In case of a deviation from the Tender, the Bidder should provide adequate information of that with the Bid submission. NaBFID may, at its discretion, waive any minor non-conformity or irregularity in a BID which does not constitute a material deviation. NaBFID, at its sole discretion, reserves the right to disqualify the Bidder in case of a material deviation."

PROFORMA OF CONTRACT / SERVICE LEVEL AGREEMENT

This Agreement is entered into and executed at Mumbai this -----day of _____ between NATIONAL BANK FOR FINANCING INFRASTRUCTURE AND DEVELOPMENT (PAN – **AAAGT1281P**) a body corporate constituted under The National Bank for Financing Infrastructure And Development Act, 2021 having its office at The Capital Building – 15th floor (A-1503), on plot no. C-70, “G” Block, Bandra Kurla Complex, Mumbai through _____, (hereinafter referred to as the “Bank” which expression shall unless repugnant to the context or meaning thereof include its successors and substitutes) of the One Part;

AND

.....(Name of the Contractor) (PAN –) having its address at.....
.....(hereinafter referred to as “Contractor” which expression shall unless it be repugnant to the subject, context or meaning thereof shall deem to mean and include his heirs, successors, executors and assignees etc.) of the Other Part,

The “Bank” and “Contractor” shall hereinafter collectively be referred to as “Parties” and individually as “Party” as the context may permit or be required. Whereas, the Bank, in the process of engaging a Contractor for Carrying out Civil, Electrical, Interior and Air-Conditioning Works at IFSCA HQ Building, Unit No. 9S, 9th Floor, South Side, Zone -1, Road -1A, Gift SEZ, Gift City, Gandhinagar, Gujarat- 382050 (hereinafter referred to as “Site”) has issued limited tender for the said purpose in Bank’s Website and Central Public Procurement Portal (CPPP) on _____.

Whereas, after completion of due tendering process Bank has issued Letter of Award (LoA) to the Contractor, who emerges as L1, (vide its letter ref. no _____ dated _____) for carrying out the aforesaid works for an amount of Rs____/- (Rupees _____ only) which is inclusive of all taxes. Contractor has to consider SEZ norms for taxation (NO GST shall be paid to the contractor as the SEZ are exempted for taxes). Whereas the parties hereto agree to enter into a formal agreement to write down terms and conditions, therefore, this agreement is being executed.

Whereas, after completion of due tendering process Bank has issued Letter of Award (LoA) to the Contractor, who emerges as L1, (vide its letter ref. no _____ dated _____) for carrying out the aforesaid works for an amount of Rs _____/- Rupees... only) which is inclusive of all taxes.

Whereas the parties hereto agree to enter into a formal agreement to write down terms and conditions, therefore, this agreement is being executed.

In view of the above submission and for valuable considerations, sufficiency and validity of which is acknowledged and admitted, parties hereto agree and executed this present as under–

1. The following words and expressions shall, unless the context requires otherwise, have the following meanings-

- a. 'The Contract' means the documents forming the tender and acceptance thereof, Letter of Award dated ----- and the formal agreement executed between NaBFID and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued by the Bank / Architects from time to time and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
- b. 'NaBFID/Bank' means "National Bank for Financing Infrastructure and Development", Address-(NaBFID), The Capital Building – 15th floor (A-1503), on plot no. C-70, "G" Block, Bandra Kurla Complex, Mumbai.
- c. 'Sanctioning Authority' means authority nominated to exercise power of approval, sanction and acceptance concerning administrative, financial and technical aspects of transactions done.
- d. 'Architect / Consultants' means M/s_____. and includes its representatives, successors and assigns.
- e. 'Engineer In Charge/Site Engineer' means an Engineer appointed by the engaged Architect as their representative to give instructions and supervise the work of the contractor at site.
- f. 'The Contractor or Contractors' means the firm or agency or individual engaged by the Bank to execute the work. It shall also include their legal representative(s), successors or assigns.
- g. 'Tenderer/ Bidder' means the legal entity or agency or individual participating in the tender process.
- h. 'Contract value' means the value of the entire work as stipulated in the work order conveying acceptance of the tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.
- i. 'Work order value' means the value of the entire work as stipulated in the work order.
- j. 'Works or Work' means the permanent or temporary work(s) described in the 'Scope of Work' and/or to be executed in accordance with the contract and includes materials, apparatus, equipment, temporary supports, fittings and things of all kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.
- k. 'The Site' means the premises, into or through which work is to be executed under the contract or any adjacent premises which may be allotted or used for the purpose of carrying out the contract.
- l. 'Drawings' means the drawings prepared by the Architect and issued by the Architect / Site Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Bank / Architect/ Site Engineer from time to time.
- m. 'Specifications' means the specifications referred to in the tender and any modifications thereof as may be furnished or approved by the Bank / Architect from time to time.

- n. 'Market Rate' means the rate as decided by the Bank on the recommendations of the Architect based on the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned elsewhere to cover, all overheads and profits.
- o. 'Schedule(s)' referred to in these conditions mean the relevant schedule(s) annexed to the tender papers.
- p. 'Local Controlling Authority' means the Local Municipal Authority or any other appropriate statutory authority viz. Town Planning Department, Town Development Authority, Town/City Improvement Trust, Electricity Board, Water and Sewerage Department, Civil Aviation Authority, High- rise Building Committee, Lift Inspectorate, Telephone Department, Pollution Control Board, Chief Fire Officer / Fire Board and any other authorities as the case may be according to whose rules and regulations a building within its jurisdiction is to be designed and approval of the drawings to be obtained.
- q. 'Month' means calendar month.
- r. PMC-Project Monitoring Consultant(s)
- s. 'Week' means seven consecutive days.
- t. 'Day' means a calendar day beginning and ending at 00 Hrs and 24 hrs respectively.
- u. 'SBI'- State Bank Of India
2. The above Letter of Award (LoA) dated _____ shall include and comprise of all the Tender Documents submitted by the Contractor along with its tender / offer i.e. Technical Bid, Tender Drawings, Price Bid after arithmetical check-up (all corrections countersigned by both parties) and Corrigendum issued on _____ (collectively referred to as Tender Documents). All these documents shall be read together and conjointly.
3. The Contractor hereby agrees to carry out the works at Site as per terms and conditions stipulated in the above Letter of Award (LoA dated _____)
4. Tender Document (Tender No. _____), Corrigendum issued on _____, the Letter of Award (LoA), all related correspondences and this AGREEMENT shall together form part of the contract document.
5. Time is the essence of the contract and shall be strictly adhered to by the contractor. The works shall be completed within a period of 75 days (Seventy-Five Days) from the date of commencement of work. The date of commencement shall be reckoned from the 15th day of issue of work order (i.e.,_____).
6. The site has been handed over to the Contractor on the date of his acceptance of the Letter of Award (LoA).
7. The work in accordance with the terms and conditions of the Letter of Award (LoA) and contract documents shall be carried out under -- supervision of the Architect/ Consultant M/s _____ (name and address of the Architect/ Consultant) who is appointed by the Bank.

8. The Contractor hereby unconditionally state, affirm and agrees to execute the work assigned to it through above Letter of Award (LoA) dated _____ strictly in accordance with the terms and conditions of the above Letter of Award (LoA) dated _____, Tender no. NaBFID /Admin. / Tender / ____dated _____ inclusive of Technical Bid, Tender Drawings, Price and Corrigendum issued on _____ are as per the tender terms and conditions.

9. The order in which the above referred documents will prevail is as under –

a. Letter of Award (LoA)

b. The Master Hard copy of tender documents inclusive of Technical Bid, Tender Drawings, Price Bid and Corrigendum issued on _____,

c. This agreement

In case of any inconsistency on any term amongst these documents, the terms and conditions of Master Hard copy of Tender document available at the office of NaBFID will prevail.

10. Both Parties shall fully indemnify and hold the other Party harmless from and against all actions, liabilities, claims, demands and losses, incurred or suffered by the other Party by reason of or in connection with:

(a) Any claims of infringement or misappropriation of any intellectual property rights, alleged to have occurred in connection with the use of systems, deliverables, materials or other resources provided or utilized by either Party;

(b) Breach of Confidentiality obligations undertaken by either Party, Negligence or wilful misconduct on the part of either Party;

(c) Material breach of any of the representations and obligations undertaken by either party as regards to this Agreement;

(d) Violation of any laws, rules, regulations, order, judgment applicable to either Party as regards to this agreement.

(e) Any claim arising out of a breach of the data protection and privacy laws including but not limited to non public personal information, protected health information, personal information, material non public information and personal data.

(f) Any action taken by either party at the request or instructions of the other Party which causes / leads to losses or litigation against the Party.

11. DISPUTE RESOLUTION / JURISDICTION

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

If the contractor considers any work demanded of his to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Site Engineer any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 7 days request the Architect in writing for written instruction or decision. Thereupon, the Architect shall give his written instruction or decision within a period of one week from the receipt of the contractor's letter.

If the Architect fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Architect, the contractor may within 7 days of the receipt of Architect's decision, appeal to the Bank who shall afford an opportunity to the contractor to be heard, if the letter so desires, and to offer evidence in support of his appeal.

The Bank shall give his decision within 15 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the Bank for appointment of a sole arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

The work under the contract shall however continue during the arbitration proceedings and no payment payable to the contractor relating to the disputed items shall be withheld on account of such proceedings.

The arbitrator from time to time with the consent of the parties enlarge the time for making and publishing the award.

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 terms of the contract and give a reasoned award.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Bank of the appeal.

It is also a term of this contract that no person other than a person appointed by such Bank, as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this agreement that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 60 days of receiving the intimation from the Bank that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Bank shall be discharged and released of all liabilities under the contract in respect of these claims. Further it is agreed that for the purpose of this clause such notice is deemed to have been received by the contractor within two days of posting of the letter by NaBFID or delivered by hand immediately after receipt thereof by the contractor whichever is earlier. Further a letter signed by the officials of the NaBFID that the letter was posted to the contractor shall be conclusive.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and conciliation Act, 1996(26 of 1996) or any statutory modifications or re-enactment thereof and

the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and, in all cases, where the total amount of the claims by any party exceeds Rs.50,000/-, the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statements of claims. The venue of the arbitration shall be Mumbai . The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

The award of the arbitrator shall be final and binding on both parties.

Any dispute of value Rupees 10 Crores or above which remains unresolved between the parties will be referred to the Mediation as per the Mediation Act 2023.

Arbitration/ Mediation proceeding shall be held at Mumbai, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

12. NOTICES - Any notice or other communication required or authorized under this Agreement shall be in writing and given to the Party for whom it is intended at the address given in this Agreement Notices shall be marked for the attention of the following individuals listed below: -

Bank Contractor

NAME:

Title :

Full Address :

e-mail

Any notice or other communication given under this Agreement shall be by registered post or speed post, or a reputed courier or email.

13. Subject to other provisions contained in this clause, the Bank may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/ or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) If the contractor having been given by the Bank / Architect a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un workman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- iii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Bank (which shall be final and binding), he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Bank.
- iv) If the contractor fails to complete the work within the stipulated date of completion, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Bank / Architect.
- v) If the contractor persistently neglects to carry out his obligations under the contract and /or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Bank / Architect. When the contractor has made himself liable for action under any of the cases aforesaid, the Bank shall have power:
- vi) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Bank shall be conclusive evidence).
- vii) Upon such determination or rescission, the security deposit already recovered under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Bank.

14. Cancellation of contract in full or part will take place in following circumstances at the sole discretion of the Bank -

If contractor:

- i) at any time makes default in proceeding with the works or any part of the work with the due diligence and continues to do so after a notice in writing of 7 days from the Bank / Architect; or
- ii) commits default to complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Bank / Architect; or
- iii) fails to complete the work, on or before the stipulated date of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Bank / Architect; or
- iv) In the event of anyone or more of the above courses being adopted by the Bank, 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 made any advances on account or with a view to the execution of the work or the performance of the

contract. In case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Architect on behalf of the Bank has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

v) shall offer or give or agree to give to any person in Bank / Architect service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Bank / Architect or

vi) shall enter into a contract with Bank in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Bank; or

vii) shall obtain a contract with Bank as a result of wrong tendering or other non-bonafide methods of competitive tendering; or

viii) being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or

ix) being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or

x) shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or

xi) assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Bank / Architect;

The Bank may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Bank, by a notice in writing cancel the contract as a whole or only such items of work in default from the Contract.

The Architect / Site Engineer shall on such cancellation by the Bank have powers to:

a) take possession of the site and any materials, constructional plant, implements, stores, etc. thereon; and / or

b) Carry out the incomplete work by any means at the risk and cost of the contractor.

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

15. Force Majeure

a. Neither contractor nor Bank shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as war, hostilities, revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable control of the party affected or prevented or delayed.

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

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

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

e. Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting to a period of 6 months or more, the two parties shall mutually decide regarding the future execution of this contract.

16. Peaceful handing over of the premises

It shall be the responsibility of the contractor to see that the premises under furnishing is not occupied by anybody unauthorizedly during execution of work and is handed over to the Bank with vacant possession of complete furnishing. If such premises though completed are occupied illegally, then the Bank shall have the option to refuse to accept the said premises in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay a levy up to 5% of tendered value of work may be imposed by the Bank whose decision shall be final both with regard to justification and quantum and be binding on the contractor.

However, the Bank through a notice may require the contractor to remove the illegal occupation any time on or before completion and delivery of the work.

17. The original AGREEMENT shall be in the custody of Bank and a copy of the same shall be handed over to the Contractor.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE SET THEIR HANDS ON THE DATE
AND PLACE ABOVEWRITTEN

PARTIES OF THE FIRST PART PARTY OF THE SECOND PART

For National Bank for Financing For (name of the Contractor)

Infrastructure and Development

(NaBFID).

NaBFID

SECTION VI
TECHNICAL SPECIFICATIONS – INTERIOR WORKS

1. JOINERY IN WOOD WORK

- 1.1 Joinery is to be prepared immediately after the placing of the contact framed up, bonded and wedged up. Any portions that are wrapped or found with other defects are to be replacing before wedging up. The whole of the work is to be framed and finished in a proper workman like manner in accordance with the detailed drawings, brought and whenever required fitted with all necessary metal ties, straps, belts, screws, glue etc. running beaded joints are to be cross tongued. Jointers work generally to be finished with fine sand / glass paper.
- 1.2 All joints will be standard mortise and tenon, dowel, dovetail, and cross -halved. Nailed or glued butt joints will not be permitted. Screws, nail etc. will be stated, from wire of oxidized 'Nettle Fold' make unless specified where mortise and tenon joints are used, tenons should fit the mortises exactly.
- 1.3 Nailed or glued butt joints will not be permitted, expect in exceptional cases with approval of Consultant / NaBFID.
- 1.4 Where screws shown on a finished surface these will be sunk and the hole plugged with wood plug of the same wood and grains of the finished surfaces unless detail otherwise. Nail on finished, surface will be neatly punched and the hole filled with wood filler to match the colour.
- 1.5 Should joints in joiner's work open, or other defects arise with in the period stated for defect liability in the contract and cause thereof be deemed by NaBFID / Consultant to be due to such defective joinery shall be taken down, and refilled, redecorated and/ or replaced if necessary and any work distributed shall be made good at the Contractor's expense.
- 1.6 The NaBFID / Consultant shall of lengths and weights approve nails, spikes and bolts. Nails shall comply with IS 1959 -1960 or approved equivalent quality sample. Brass headed nails are to comply with B.S. 1210. Wire-staples shall comply with B.S. 1994 or equivalent.
- 1.7 The contact surface of dowel, tenons, wedges etc. shall be glued with an approved adhesive.
- 1.8 Where glued joinery and carpentry work is likely to come into contact with moisture, the glue shall be waterproof.
- 1.9 All dovetail joints shall be further strengthened with M.S. cleats for Cabinet furniture like tables, storage units etc.

2 HARDWARE AND METALS

- 2.1 The hardware throughout shall be of approved manufacturer or supplier well-made and equal to/every respect to the samples deposited with the Consultant. The contractor may

be required to produce and provide samples from many. different sources before NaBFID / Consultant take decision and nothing extra shall be paid for this.

- 2.2 Fitting generally shall be brass oxidized, unless otherwise specified and shall be suitable for their intended purpose. In any case, it will have to approve by NaBFID/ Consultant before the contractor procures it at the site of work.
- 2.3 Screws are to match the finish of the article to be fixed, and to be rounds or flat headed or counter sunk as required.
- 2.4 The contractor should cover up and protect the metal surface such as brass, bronze SS etc. with thick grease or other suitable protective material, renew as necessary and subsequently clean off and clear away on completion.
- 2.5 Aluminum and stainless steel shall be of approved manufacture and suitable for its particular application. Generally, the surface of aluminum shall have an anodized finish and both shall comply with the samples' approved by NaBFID / Consultant. All stainless-steel sheets shall be 3P4 S. S Japan or equivalent with gauge as specified but not thinner than 16 G.
- 2.6 All steel, brass, bronze, aluminum and stainless-steel articles shall be subjected to a reasonable test for strength, if so, required by NaBFID / Consultant at the contractor's expense.
- 2.7 All brazing and welds are to be executed in a clean and smooth manner rubbed down and left in the flattest and tidiest way, particularly where exposed.
- 2.8 Chromium plating shall be in accordance with I.S. standard or as per approved specifications for normal outdoor conditions and shall be on a, base material of copper or brass.

3 GLAZIER

- 3.1 All glass to be of approved manufacturer complying with IS 1548 -1966 as per approved quality and sample to be of the selective qualities specified and free from cracks, bubbles, smoke, wanes, waviness, air holes and any other defects.
- 3.2 Polished plate glass shall be 'glazing glass' (G.G) quality and that for mirrors shall be "silvering quality" (S.O.) confirming to I.S 3438-1965 or as per approved sample and quality.
- 3.3 The compound for glazing to metal is to be a special non-hardening compound manufactured for the purpose and of a brand and quality approved by NaBFID / Consultant.
- 3.4 While cutting glass, proper allowance is made for expansion each square of glazing to be on whole sheet. On completion of work clean all glass inside and outside, replace all cracked scratched and broken panes and leave in good condition.

4. PAINT AND POLISHES

- 4.1 All material required for the works shall be of specified and approved manufacturer, delivered to the site in the manufacture's containers with the seals, etc., unbroken and

clearly marked with the manufacture's name or trade mark with a description of the contents and color. All materials are to be stored on the site of work.

- 4.2 Spray painting with approved machines will be permitted only if written approval has been obtained from NaBFID / Consultant prior to painting. No spraying will be permitted in the case of priming coats where the soiling of adjacent surfaces is likely to occur. The nozzle and pressure to be so operated as to give an even coating throughout to the satisfaction of NaBFID / Consultant. The paint used for sprayings is to comply generally with the specifications concerned, and is to be specially prepared by the manufacturer for spraying. Thinning of paint made for brushing will not be allowed.
- 4.3 Wood preservative shall be so lignum or other equal approved impregnating wood preservative and all concealed woodwork shall be treated with wood preservative.
- 4.4 All brushes, pots, tools, kettles, etc. used in carrying out the work shall be clean and free from foreign matter and are to be thoroughly cleaned out before being used with a different type of class.
- 4.5 All iron and steel surface shall be thoroughly scraped and rubbed with wire brushes and shall be entirely free from rust, mill scale, etc. before applying the priming coat.
- 4.6 Surface of new woodwork, which is to be painted, is to be rubbed down, clean down to the approval of the Architect / Consultant.
- 4.7 Surfaces previously painted woodwork which are to be painted are to be cleaned down with soap and water detergent solution or approved solvent to remove dirt, grease, etc. Whilst wet the surface shall be flattened down with a suitable abrasive and then rinsed down and allowed to dry. Minor areas of defective paint shall be removed completely by chipping, scraping back to a firm edge and the exposed surface touched in with the primer as described and stopped with putty. Where woodwork has been previously painted or polished and is to be newly polished, scraping, burning off or rubbing down, should be carried out properly.
- 4.8 Surfaces of previously painted metal which shall be painted are to be clean down, and flattened down as described in surfaces of any rust and loose scale shall be removed completely by chipping, scraping, and wire brushing back to the bare metal touched in with 2 coats of epoxy rust preventive primer as described/ specified/ directed by the Consultant.

5. UPHOLSTERY

- 5.1 This will be of first-class standard workmanship with webbing, no sag springs, coiled springs, padding and filling as specified, on drawing. Covering fabrics will be soon tufted and corded as shown on Drawing and as approved by NaBFID / Consultant.
- 5.2 Cushion Vents: Brass "Cushion Vents" should be installed at the back or under side of seat cushions (especially those covered in leather, vinyl plastic or very tightly woven fabric) to allow air to escape easily and to prevent torn steel.

- 5.3 Materials: Finished timber shall be of the type specified, furnishing fabrics, color, pattern, substance to be as specified, and manufactured or supplied by the company specified, no variations of this will be permitted unless with prior approval of the Architects /NaBFID.

6 POLISH

- 6.1 French polish: The basic material shall be shellac dissolved in methylated spirit. Preparation: The timber must be well sanded and cleaned and the grain filled with grain filler. Any staining must be done before applying the polish.

Equipment: The polishing rubber, the most important implement in French polish shall consist of a pad of cotton wool, which acts as a reservoir for the polish, and a cover of a soft white linen or cotton fabric similar to a well-worn handkerchief, which acts as a filler. The rubber must never be dipped into the polish on to the pad with the cover removed.

Application: work evenly over the surface with a slow figure-of-eight motion until the timber is coated with a thin layer of polish. The object is to apply a series of thin coats, allowing only a few minutes for drying between the coats. When a level and even body surface is obtained the work is ready for the second stage i.e., spiriting off.

Allowing the work to stand for at least eight hours, then take a fresh rubber with double thickness of cover materials and charge with methylated spirit. The object of spiriting off is to and remove the rubber marked and to give the brilliance of finish.

Finally, work in the direction of the grain and continue until the surface is free from smears and rubber marks then leave to harden off.

- 6.2 Wax polish: Wax polish shall contain silicon and driers. A good silicon wax is to be used, not a creamy or spray. The timber shall be sealed first with another finish such as Ronseal, before applying the wax.

Application: Apply a light coat of the sealer by brush or cloth direct to the unfilled timber, working it well in and finishing evenly with the grain. Allow drying thoroughly then sanding lightly with fine abrasive paper. Apply a heavy coat of wax by cloth or on flat surfaces, with a stiff brush. Work well into the timber and finish off by stroking with the grain before leaving to harden. Leave for several hours before rubbing up with a soft brush. Finally, buff the grain with a soft cloth.

- 6.3 Transparent Colored Polyurethane (Melamine): This shall be applied where natural grain of the wood is required to be shown. Polyurethane gives tough surface, which resists chipping, scratching and boiling water.

Application: Clean off all the grease and wax with an abrasive and white spirit, this should be applied in humid conditions.

Apply the same coat, preferably of clear hard glaze with a cloth pad. Leave this to dry for at least six hours, then applied for the coat with paint brush off you wait for longer than 24 hours between coats, rubbed down the previous coats with fine glass paper or medium grade of steel wool. Obtain a matt finish, if required, by giving a final coat of clear Ronseal Matt Coat.

7 TIMBER

- 7.1 All internal frame works shall be of Central Province Teak Wood (C.P.T.W.) unless otherwise specified.
- 7.2 All exposed woodwork shall be of first quality B.T.C. grade teak only or as specified.
- 7.3 All the wood shall be properly seasoned, natural growth and shall be free from worm holes, loose or dead knots or other defects, saw die square and shall not suffer warping, splitting or other defects.
- 7.4 The moisture content shall not exceed 12%.
- 7.5 All B.T.C, C.P teak wood and must be approved by Architect /Consultant before using.
- 7.6 All internal frameworks shall be treated with approved wood preservative.
- 7.7 All wood brought to site shall be clean; should not have any preservative or other coating/covering.
- 7.8 All rejected, decayed bad quality wood shall be immediately removed from site.
- 7.9 All wood brought to site must be stacked stored properly as per instruction.

8 PLYWOODS

- 8.1 Plywood/ block board/ teak particleboard/ veneered board, etc. as specified in the approved list of manufacturers shall only be used.
- 8.2 Only B.W.R grade phenol formaldehyde bonded hot pressed plywood generally confirming to I.S.I 303 of approved make shall only to be used.
- 8.3 Marine plywood shall generally confirm to I.S. 710-1980 and also to Defense/Navy specification, bonded with phenol formaldehyde treated with wood preservative.
- 8.4 Only teak wood particleboard shall be used, particleboard shall be phenol formaldehyde and generally confirm to I.S. 3087-1965.
- 8.5 Only 3mm. to 4mm. thick straight-grained group matching approved veneers shall be used. Only veneers laminated from species like Teak, Maple White cedar, Rosewood, White cedar, Walnut, Mahogany shall be considered for approval and use.
- 8.6 Block board shall be equal or superior quality to that laid down in B.S. 3444 with one of the following I.S. Specifications or such approved adhesives:

I.S.I 851-1957: Synthetic resin adhesive for construction works in wood.

I.S.I 849-1957: cold setting case in glue for wood.

Block board shall be generally confirming to I.'S.I. 1959-1960 or as per approved' sample.

9 LAMINATES

Laminates where specified shall be of approved brand, type, texture and thickness and manufactured as per IS: 2046-1969. Fixing of laminates shall be done as per best trade practices and strictly as per printed instructions of the manufacturers using Phenol Formaldehyde Synthetic Resin Adhesive of approved make. Unless otherwise indicated laminates shall be 1.5 mm thick for horizontal surfaces and 1.0 mm thick for vertical surfaces.

10 IRON MONGERY

All finish hardware shall be well made, reasonably smooth and free from sharp edges and corners flaws and other defects and shall be as per relevant Indian Standard Code. Unless otherwise required, all finish hardware shall be polished brass.

All hardware shall be of approved make and shall be specifically got approved by the Architect / Consultant before ordering. No fittings and fixtures shall be fixed before all major work is over. While fixing correct handling of fixtures shall be ensured.

All finish hardware shall be fixed by skilled carpenters experienced in this work. Work shall be done as per manufacturers printed instructions and to the satisfaction of the Architect / Consultant.

All hardware fixed to respective location shall be adequately protected from damage- and splashes of mortars and paints by covering suitable with Jute Cloths/ Black PVC sheets till handing over of the work to the Bank to his satisfaction. The finished hardware shall be absolutely clean without any foreign materials and fully showing the original finish in its best condition.

11. FALSE CEILING/FALSE FLOOR WORKS:

Measurements will be taken for the area of tiles actually laid. No deduction will be Made for light fittings, A.C. grilles etc. Light fittings will be fixed free of cost by the

False ceiling Contractor. All wastage will be borne by Contractor.

Contractor will provide necessary cut outs for spot lights, smoke detectors A.C. grilles and light fittings within his quoted rates. Contractor will supply frames for A.C. grills as required and directed without any extra cost.

12. METAL FIRE DOORS

Hollow Metal Frames Series CF Materials: Cold Rolled Steel (CRS) Face sheets 1.2

mm Design & Construction: All frames are of Jamb depth 150 mm .All frames are of Face Dimension 50.8 mm Series CF profile is of stop size 5/8" (16mm).Hardware Provisions : Hinge preparations are handed, Hinge jambs are mortised for 4 ½" high, standard weight Hinges, 4.2 mm thick steel reinforcement is welded inside the frame jamb and are drilled & tapped for fasteners in Accordance with ANSI A156.7 Surface mounted closer reinforcement is 2.5 mm steel plate. Optional for Non-Fire Rated Doors. Frame fixing Jamb Anchors: EO – Existing Opening Anchors NOT including fixing bolts. Finish factory standard rust-inhibit prime. Fire Labeled: All doors are of types & sizes Door thickness 45 mm. Internal Door Core: Face sheets are totally supported by a foamed -in – place polyurethane core. The core fills the entire door cavity and is chemically bonded to all entire surfaces. Density of foam exceeds 1.8 pcf and it has crush strength of 3600 Psf . Core thermal characteristic: 0.067 U factor & 14.97 R factor. Sound transmission STC 26. Flush top

channel & inverted bottom channel 1.2 mm thick are welded to both face sheets. Hardware Provisions: Hinge preparations are handed, hinge Edges are mortised for 4 ½" high, standard weight hinges, 4.2 mm thick steel reinforcement is welded inside the door edge and are drilled & tapped for fasteners

in accordance with ANSI A156.7 Surface mounted closer reinforcement is 2.5 mm steel Channel. Optional for Non-Fire Rated Doors. Finish : factory standard rust-inhibit prime coat. Fire Labeled.

13. FULL HEIGHT PARTITION PANELS

- These partitions must have a minimum thickness of 75 mm. These shall comprise of a framework of Salwood comprising of vertical and horizontal members made from minimum 2" x 1.5" sections.
- The panels will be secured to the floor and ceiling through sections having a minimum height of 40mm.
- The panel joinery of these panels shall be simple and effective in order to install the panels in any desired configuration and in any angle with respect to each other.
- Wire Management: The panel shall have a provision of vertical and horizontal wire management

14. GENERAL SPECIFICATIONS FOR CHAIRS

A) The chairs shall conform to the following specifications :

- i) Castors shall be twin with castors with smooth rolling action with kingpin ring locking arrangement to snap fit on moulded base. All components injection moulded in polyamide polymer. Load tested for 80 kg.
- ii) Chair base shall be five-pronged injection moulded in polyamide polymer with top surface textured for scratch resistance. The component withstands static load with minimum deflection at the center. Honeycomb ribbing pattern on the underside provided to prevent torsional deflection.
- iii) Metal Parts shall be of CRCA and mild steel and powder coated with epoxy polymer. Pre-treatment shall be done in the seven-tank process.
- iv) Central Pillar shall be detachable pillar made from M.S. outer tube with revolving pipe provided with the system of thrust bearing for smooth bottom revolving and a Morse taper of 3. The shaft shall be zinc plated to prevent corrosion. The whole assembly shall be covered by a telescopic dust cover.
- v) Cushions shall be made of Polyurethane Moulded Cushions as per designs and contoured shapes
(Thickness: Back:- Min.50mm & Seat :-Min 50mm). Latex moulded cushions shall be provided.
- vi) Fabric shall be easy breathing fabric in polyester as architect's choice of color and pattern.
(Basic cost : Rs.150 per meter for 48" width).
- vii) Seat & back shall be using vacuum formed and Injection Moulded ABS plastic covers for seat and back .
- viii) Handles shall be made as per approved architect's design in self-skinning polyurethane with a textured finish.
- ix) Plywood shall be nine ply hot pressed with UF resins as bonding agent. The components shall be contoured for ergonomic comfort.

B) Features for various categories of chairs

- i) Centre tilt shall be lockable center tilt with a single lever for tilting and height adjustment.
- ii) Synchro shall be 1:3 Synchro Mechanisms with lockable facility at any angle to suit the use of Chairs.
- iii) Gas Back Lock shall be permanent back contact mechanisms with lockable facility at any angle to suit the use of chairs.
- iv) Permanent Contact Tilt shall be where the back will move along with the body movement and shall be lockable in 3 positions.
- v) Height Adjusters shall be one touch Height Adjuster Gas Springs with different strokes made by Suspa or Stabil us. The only approved suppliers of gas spring for all reputed chair manufactures world over.

C) Features of chairs required :**• Staff Chairs**

Model	Sample to be submitted
Back Height	Medium back
Lifting Mechanism	Gas Lift
Tilting Mechanism	Synchro tilt
Arms	P.U.arms
Back	Mesh Back
Seat bottom side	ABS base
Seat Fabric (Cost of Fabric : Rs.150/- per metre,48" width)	As chosen by Architect
Seat & Back Profiles	As in sample chairs
Swiveling	Revolving, 5-pronged S.S. base with castors

• Cafeteria Chairs

Model	Sample to be submitted
Back Height	Low back
Back	PVC moulded
Seat	PVC moulded
Seat & Back Profiles	As in sample chairs
Legs	Fixed frame S.S. Legs

Note: The specifications vary with various manufacturers. The chairs for site must have the same styling irrespective of the specifications so that they look alike visually. The vendors shall mention in a separate sheet the variations to the above specifications. A mock up conforming to the quotation shall be put up for inspection by the user/client along with the offer at a location specified by the users

15. GENERAL SPECIFICATIONS FOR MODULAR FURNITURES

a. Partition Thickness:

The partition panels will be tile based & shall have minimum overall avg. thickness 52 mm. Please refer to drawings for details.

b. Frame :

The frame work shall be made of knockdown metal frame comprising of vertical sections made from CRCA MS D Grade formed into channels of suitable size as per drawings without affecting structural stability and powder coated finish. These vertical channels shall have slots (as per drawing) in them at suitable intervals to accept tile claddings. The vertical upright section of each panel shall have side slots for passage of cables throughout the width of panel. The vertical upright section should also have front slits for fixing work surface, storage unit and accessory brackets.

The top horizontal member of this framework shall be made from M.S. section of suitable sectional dimension (within the tolerance of manufacturer) without affecting structural stability and powder coated finish. The bottom horizontal member of this framework will be a MS section.

c. Vertical & Horizontal edges trims:

All exposed vertical edges of partition panels shall be finished by end extrusions made of powder coated Aluminum alloy of suitable size, thickness and of matching height of the panel fitted with Plastic end trim holders. The end corners shall not have any pointed/sharp edges which may cause injury to the user.

Top horizontal edge of partition panel shall be finished with a top runner made of powder coated Aluminum alloy extrusion of suitable size. The top runner shall be snap fitted to the top of the panel by means of PVC top clip.

Cover metal trim of extrusions made of powder coated Aluminum alloy shall be provided at vertical junctions and fixed with M.S connector brackets and screws.

d. Bottom Panel :

Each Panel shall have a metal raceway fascia as bottom skirting consisting of a powder coated CRCA M.S.'C' fascia of size approx. 150 mm height and suitable cross section (as per drawing) of matching length and located horizontally on both sides of Panel. It shall be fixed on the front face of the vertical upright sections in the available slots with Poly propylene hanger buttons. Each Panel shall have a laminated Tile up to the bottom skirting level consisting of 9 mm thick laminated particle board having all its edges with minimum and fitted with nylon hanger buttons on the rear side for fixing to the front face of the vertical upright sections in the slot of partition frame.

e. Wire management:

The workstation shall have proper wire management where the cable wires are carried inside the panels and are accessible through metal raceways located at the bottom and intermediate level of the panels. Each panel is provided with glide screws provided at the base for adjusting the level of the partitions to allow for variations in the flooring level.

f. Partition panel:

the panel on which switches are to be mounted shall have an intermediate raceway below the work surface consisting powder coated (of approved shade) CRCA M.S.'C' fascia of 150 mm height and suitable cross section (as per drawing) and of length matching width of Panel and located on both the sides of Panel having cutouts of required sizes for installing electrical switch boards. The bottom horizontal member in the panel shall have two slots for passage of data and electrical wires from the bottom to the intermediate raceway.

Two adjacent panels at 2-way 180-degree junction shall be connected by 180° plastic joinery piece. The partition panel shall be connected in a 2-way, 3 way and 4-way layout as the case may be, with 2-way ,3 way and 4-way M.S connector brackets and the junctions are covered by powder coated aluminum extrusions of alloy (please refer drawing).

Laminate finish tile: 8mm thick particle board finished with laminate 1 mm thick having all its edges with minimum 0.4 mm thick PVC edging and fitted with nylon buttons on the rear side for fixing to partition frame and with 2 stiffeners for additional strength.

Tuckable tile: It consists of metal sheet frame of M.S CRCA grade D sheet as per IS:513-1994 of minimum thickness 0.6 mm, with inlay of fiberglass sheet ,fabric of approved shade shall be suitably glued to the frame work. Tiles shall be fitted with Poly propylene plastic hangers fitted on the rear side for fixing to partition frame.

Non tuckable fabric magnetic Tile: It shall consist of the fabric upholstered on M.S CRCA grade D sheet as per IS: 513-1994 of minimum thickness 0.6 mm.

Writing Glass tile: Consists of Aluminum frame of extruded aluminum sections and 5 mm thick. glass. The aluminum frame shall be epoxy powder coated.

Work surface : They shall be of any of the below mentioned types:

Work surface 25 mm thick Post formed: Work top shall be made of 25mm thick Plain Particle board interior grade conforming to IS:3087:1985 . The front edge of work surfaces shall be profiled in half round shape and the top shall be laminated with post forming laminate of 0.6 mm thickness of approved shade as per IS:2046-1995 and glue

of PVAC. Bottom shall have a backing laminate of minimum 0.6 mm thickness.

Non-working edges of the work surface shall be provided with machine pressed 0.5 mm thick PVC lipping glued with hot melt EVA glue.

Work top shall be mounted onto the partition panels for work stations by means of cantilever brackets made from CRCA grade D steel as per IS:513-1994 duly pretreated and powder coated in black color. The work surface shall be provided with circular cut outs as per the requirement, for passing of wires. These cut outs shall be provided with ABS grommets.

PVC Keyboard Pullout tray: Should be of size of 580 mm (WIDTH) x 82mm (DEPTH) made of ABS. It should also have in built LHS/RHS mouse pad, with 3 mm thick synthetic foam sheet with PVC sheet on Top. The said tray shall be mounted on zinc electro plated (as per IS:1573-1996) single extension ball slides.

16. GENERAL SPECIFICATIONS FOR CIVIL WORKS:

A. POLISHED GRANITE STONE SLABS FOR FLOORING, STEPS, STAIRS, CLADDING ON PANTRY AND WASH BASIN COUNTERS Providing & fixing granite of approved quality and color of required size mm double polished M/C cut of 20mm thick over floor surface in proper line. Level in CM 1:4 including finishing the joint with matching color cement, polishing the top surface etc., complete as per instruction of EIC/ Consultant. Granite stone shall be of best quality machine polished, Machine Cut and of approved color, dense and homogenous in texture free from cracks, decay, weathering and flaws. The stone shall be of required size and shall be 20 mm thick. The material shall have to be approved by consultant before and after procurement. Before laying flooring, the surface shall be paved and thoroughly hacked, cleaned off all mortar scales, loose materials etc., unless and until the surface is approved by Consultant / Engineer-in charge, the laying shall not be done. The bedding with CM 1:4 proportion as directed by Consultant / Project-in-charge with minimum thickness of 30 mm layer shall be laid evenly and to the required slope. The granite shall be truly and evenly set in thin paste of next cement apply to the bottom and to the prepared base. The stone then shall be tempted down with wooden mallet until they are exactly in true plane and in line with adjacent stone. The stone shall be closed jointed and filled with matching cement. The entire surface of flooring shall be polished with machine up to to mirror polish achieved including necessary use of antimony trioxide anilix acid etc., as directed by Consultant / Project-in-charge.

B. CERAMIC TILES GLAZED/ MATT FINISH: Ceramic tiles in toilets and other areas where called for shall be non-slip ceramic tiles of approved make and shade. The tiles shall be laid to the pattern as approved by the Consultant. The tiles shall be of uniform color, true to size and shape and free from cracks, twists, uneven edges, crazing and other defects. The size and thickness of the tiles shall be as specified. The tiles shall be laid as per the pattern shown in the drawings over a bed of specified thickness of cement mortar leveled to a true surface. The surface of the bedding mortar shall be left rough to provide bond for the tiles. A floating coat of thick cement slurry shall be laid over the screed to proper levels and the tiles set over the same firmly to correct line and levels. The joints shall be filled and finished neat with cement paste pigmented to the shade of the tile. The joints shall be finished neat as directed and shall be straight, regular and uniform. On completion, the surface shall be washed with water, rubbed with fine saw dust and left clean. The finished floor surface shall be true to required levels.

C. VITRIFIED TILES: The tiles shall generally conform to latest IS standards shall be procured by the contractor. They shall be flat, true to shape and free from cracks, crazing spots, chipped edges and corners. The glazing shall be of uniform shade and color shall be as shown in the drawings. The tiles shall be of specified size and thickness as per drawing. The tolerance on facial dimension value shall be +/- 1.0mm and +/- 0.5 mm in thickness. The top surface of the tiles shall be glazed. The glazed shall be either glossy or matt as specified. The underside of the tiles shall be completely free glazed in order that the tile may adhere properly to the base. Type edges of the tiles shall be preferably free form glaze, however, and glazed if unavoidable,

shall be permissible on any one edge of the tile. 9.1.2 LAYING The Vitified tiles shall be laid over ferrow cement slab & it shall be cleaned, wetted Mortar of specified mix shall be spread to required thickness over a small area. The slab, washed clean, shall be laid on the mortar, pissed tapped, with a wooden mallet, and brought to required level The tiles shall be laid as per the pattern shown on the drawings or as approved by Architect / Bank. It shall then be removed and laid a side. The top of the mortar shall then by corrected by adding fresh mortar at hollows. The mortar is then allowed to harden and cement slurry of paste like consistency shall be spread over the same at the rate of 1 bag per sq mt. area. The edges of the tile already laid shall be buttered with slurry of cement and pigment to match the shade of slabs. The tile to be laid shall then be placed back in position, pressed and properly bedded in level with adjoining tiles with as fine a joint as possible. Other tiles are also laid in similar manner to correct levels with fine joints. The surplus slurry on the surface shall be cleaned off. The tiles shall be soaked in water, washed clean, and a coat of cement slurry applied liberally at the back of tiles and set in the bedding mortar. The tiles shall be tamped and corrected to proper plans and lines. The tiles shall be set in required pattern and butt jointed. The joints shall be as fine as possible. Where full size tiles cannot be fixed these shall be cut to the required size and their edges rubbed smooth.

D. WATER-PROOFING FOR ROOF The waterproofing shall be integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations: a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with proprietary water proofing compound conforming to IS : 2645 over the RCC slab including cleaning the surface before treatment. b) Laying cement concrete using broken bricks/brick bats 25mm to 100mm size with 50% of cement mortar 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 over 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 to required slope and treating similarly the adjoining walls upto 300mm height including rounding of junctions of walls and slabs. c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to IS: 2645. d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 (1 cement: 4 coarse sand) admixed with proprietary water proofing compound conforming to IS: 2645 and finally finishing the surface with trowel with neat cement slurry. The whole area so finished shall be flooded with water for a minimum period of 1 week for curing and for final test. All above operations to be done in order and as directed and specified by the Project-in-charge. With average thickness of 120mm.

MODE OF MEASUREMENT

1	Walls	Elevation
2	Flooring	Plan Area between skirting
3	Skirting	Running length
4	Window	Elevation Area
5	False Ceiling	Actual Area between partitions(Rate shall be inclusive of making hole/cutouts/ openings for light fittings, AC grill, Smoke Detectors, Sprinklers, provision of perimeter channel for support/fixing of grills/light fittings and suitable boards of 300 x 300 x 10 mm for spotlights. No deductions shall be made for any such cutouts/opening. However, column areas shall be deductible.
6	Partition	Elevation area (from finished floor/false floor level to finished false ceiling level)
7	Wall Paneling	Elevation area
8	Work Stations	Nos
9	Tables	Nos
10	Rear/Side Credenza	Elevation Area

11	Utility/Staff counters	Running length
12	High/Low Storage	Elevation Area
13	Storage above counter	Elevation Area
14	Door/Frames	Nos.
15	Rolling Shutter/Collapsible gate	Elevation Area
17	Blinds	Elevation Area
18	Grills	Actual Surface area
19	Pest Control/Anti-termite treatment	Carpet area

Note: Measurement shall be recorded up to one digits after decimal point.

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SECTION VII
TECHNICAL SPECIFICATIONS – ELECTRICAL WORKS

1. CODES & STANDARDS

The design, supply, Installation & performance of the equipments shall comply with latest ISI standards, code of practices, I.E. regulations, safety codes in the locality where the equipments will be installed Nothing in this specification shall be construed to relieve the contractor of his responsibility.

2. PERFORMANCE & CHARACTERISTICS

The switchgear, wiring installation shall be capable of satisfactory operation for the application, duty, and requirements as specified.

3. ELECTRICAL WIRING.

- i. The definition of terms shall be in accordance with Indian Standard Code of Practice for Electrical Wiring Installation IS 732-1963 except for the definition of “point”.
- ii. The point wiring shall be inclusive of circuit wiring. Point wiring shall include cost of all labor and materials necessary for complete wiring of a switch circuit of any length from the tapping point on the distribution board to the following via the switch:
- iii. Junction box, ceiling rose or connector in the case of light points/ ceiling fan/ exhaust fan points.
- iv. Socket outlet (in case of socket outlet points).
- v. Lamp holder (in the case of wall brackets, batten points, fan points, bulkhead and similar fittings).

The cost of the following shall be deemed to be included in the rate for the primary point wiring, starting from D.B. to fitting via switch/ push button.

- a. Required specified circular box.
- b. Junction box, ceiling rose or connector as required.
- c. Any special and suitable block for neatly housing the connector and covering the fan hook in case of fan point.
- d. Metal box, bushed conduit or porcelain tubing where cables pass through walls / floors etc.
- e. GI/MS/PVC conduit as required including intermediate junction/looping boxes / pull boxes.

- f. All metal blocks, boards and boxes sunk or surface type for mounting control switches, sockets, etc., including those required for mounting fan regulator but excluding those under the main and sub-distribution switchgears.
- g. All fixing accessories such as nuts, bolts, check-nuts, bushes, clips, nails, screws, fill plug, wooden plug, etc., as required.
- h. Connection to ceiling-rose, connector, socket outlet, lamp holder, switch, fan regulator, etc.
- i. Earth wire from light/fan points to the common earth including connections.
- j. Looping, interconnections and end-terminations with socket/ferrules etc., wherever required.
- k. Earth wire from three-pin socket outlet point/fan regulator to the common earth including connections.
- l. Fish wire in case of concealed wiring.
- m. Painting with oil-based paint as required.
- n. Required length of circuit wiring from DB including reasonable spare length of cables at termination points.
- o. For "Secondary Point" the cost shall be inclusive of all items from "a to m" only. Looping circuit wiring from switch boxes shall be included in the cost of switches controlling the point. Light points looped from primary light points and controlled by same switch or different switches shall be termed as "Secondary Points".

4. Main, Sub-main wiring.

- i. Wiring other than point wiring shall be paid on per unit basis. The length of main/ sub-main wiring shall include all lengths from end to end of conduit exclusive of inter-connection inside the switch board, etc. The increase in cable length on account of diversion or slackness shall not be included in the measurement.
- ii. Main, sub-main wiring shall include the cost of material and installation charges for complete wiring length as detailed below:
 - a) GI/ MS/ PVC conduit as required. b)
 - Cables as specified.
 - c) Earth wire.
 - d) Painting on MS/PVC conduit as required.
 - e) All fixing accessories such as clips, nail, screws, saddles, plugs, etc.
 - f) All joints elbows, bends, joint boxes, inspection covers, pull boxes, etc., as read.

- g) Interconnections with switch/ switchboards or any electrical item including all accessories read for terminations.
- h) First wire in case of concealed conduit wiring.

5. System of wiring

Distribution

- i. The wiring shall be carried out on each system as may be specified in the tender schedules. "Power and Heating" wiring shall be kept
- ii. Separate and distinct from "lighting"/ "Fan" wiring. All conductors shall be buried as far as accessible into the walls and ceiling, so as to be accessible and capable of being wired from point to point and switch.
- iii. Light and fans may be wired on a common circuit. However, such circuit shall not have more than 10 points of light/ fan, outlets in a single-phase circuit or 1000 Watts whichever is less.
- iv. 16A & 20A single phase convenience socket outlets shall be metal clad industrial type and shall be wired on individual circuits with wires from DB's drawn through trunking/ conduits as necessary.
- v. 5A, 3 pin single-phase convenience socket outlets shall be plastic molded type and shall be wired looped 4/5 outlets per circuit. 5A outlets shall not be connected to lighting circuits, excepting in toilets where such outlets may be provided for window mounted exhaust fans. In such cases, a separate 5A fused plug or a fused socket outlet shall be used to ensure complete protection for the load connected.
- vi. The balancing of circuits in the poly-phase installations shall be ensured.
In large rooms, light and socket outlet points shall be distributed over more than one circuit.

6. Joints and looping back

Unless otherwise specified the wiring shall be done as shown on tender drawings. The phase conductor alone shall be looped at switch box and the neutral shall terminate directly at the lighting point. Jointing of cable at junction boxes located on ceiling is not allowed. No bars or twisted joints are allowed at point. Looping of neutrals between different circuits for point wiring is not allowed. No joints in conductors shall be made at intermediate points in the through run of cables unless the length of a final sub-circuit, sub-main is more than the length of the standard coil.

7. Positions of wiring runs and points.

All runs of wiring and the exact positions of all points and switch boxes shall be first marked on the building drawings and approved by the engineer before actual commencement of the work.

8. Wiring terminations.

Wiring shall be terminated in junction box/ ceiling rose where no fitting is mentioned.

9. Provision for maximum load.

All conductors, switches and accessories etc., shall be suitably rated so as to be capable of carrying, without their respective ratings being exceeded, the maximum current, which will be normally through them.

10. Fixing to walls and ceiling.

Nylon plugs on ordinary walls or ceiling for pipe hooks, etc., may be used. The plugs shall be fixed into the walls/ ceiling with special grouting cement. Where the equipment to be fixed is heavy suitable insert shall be embedded in the civil works and the equipment suitably fixed to these inserts.

11. Damage to wall/ floor.

Wherever required, the wall/floor etc., shall be cut to accommodate switchboards, conduit, etc., and made good at no extra cost.

12. Conduit Wiring

The installation shall generally be carried out in conformity with IE 732 as amended up to date and also the relevant regulation of the Electric supply authority concerned. Normally PVC concealed conducting is envisaged for all areas. Surface wiring in GI conduits for external lights shall be followed. The conduit wiring shall be done in accordance with the specifications laid down in the following paragraphs.

At all the switch and socket positions or where the conduit terminates, a galvanized metal box shall be provided. Provision must be made to enable cable to be withdrawn and new ones drawn without interfering with the installation. Therefore, all inspection box and drawn-in boxes must be installed in position where they will remain accessible.

Cable shall be drawn into the conduit only when the Consultant has given his consent and has satisfied himself that the conduit work has been properly carried out. Suitable means shall be taken to prevent entry of insects/dirt inside the conduit.

A draw wire shall be used for drawing cables in conduit. When drawing-in number of cable, they must be fed-in very carefully at the delivery end. Cable reels should be used for this purpose. In hot weather, when the compound on the cable is liable to become soft, the drawing-in can be assisted by rubbing French chalk on the cables.

As much slack cable as possible shall be left in all draw-in and inspection boxes, switch boxes and distribution boards to facilitate alterations or repairs when necessary.

13. Conduit Types**PVC conduits.**

High impact rigid PVC conduit for electrical wiring shall be used wherever approved by the Engineer. The conduits shall have outside diameters measuring 20, 25, and 32mm. the length of the conduit will also include all purpose made accessories like joints,

bends, junction/ pull box, etc., and fish wire for drawing-in cables.

M.S conduits.

M.S Conduit suitable for electrical wiring may also be used wherever approved by Engineer. It will be of approved make, made of 14 gauge sheet steel, rolled and electrical resistance welded. The conduit shall be finished with heavy coat of black enamel.

The length of the conduit will also include all purpose made accessories like joints, bends, junction/pull box, etc., and fish wire for drawing – in cables.

G. I. conduit.

Conduit shall be of the mild steel welded construction, rigid & screwed type. The internal bore of all conduits up to 32mm dia shall be 16 SWG. Conduits above 32mm. shall be of 14 SWG. The conduits shall have a uniform coating of zinc up to 70 microns.

14. Use of pipes.

- a) Cable running in slabs in a concealed system to light points, etc. shall be of the u-PVC type and in a surface fixed system shall be with MS conduits (unless until called for), especially in areas covered by false ceiling. Conduits in wall chases or in partition voids shall be of u-PVC type only.
- b) Cable running in concealed system to light points, etc., for external areas shall be in PVC conduits. If these are run in surface fixed to external points, then GI conduits shall be used.
- c) Power/ Control Cable crossing roads, entering from outside through walls, etc., shall be laid in RCC pipes/ GI pipes.

The maximum number of PVC insulated, 650/ 1100V Grade Single core copper wires allowed in one conduit is indicated below:

Nominal cross

Size of conduit.

Sectional area

mm ²	20mm (3/4)	25mm 1"	32mm 1 ¼"	40mm 1 ½"	50mm 2"
1.5	4	5	8	-	-
2.5	3	4	6	-	-
4.0	-	3	4	-	-
6.0	-	2	4	-	-
10.0	-	-	3	4	-
16.0	-	-	2	3	4

25.0	-	-	-	2	3
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Draw – in boxes must be provided so that the cables are not drawn round more than two right angle bends or their equivalent. The radius of ends must not be less than the standard normal bend. The standard radius of normal bends shall be given as tabulated below (for single core cables).

Normal radius of conduit bends.

Outside dia. Of conduit	Radius of normal bends	Remarks.
20mm	50mm	Radius measured from center of curvature to axis.
25mm	60mm	
32mm	80mm	
40mm	95mm	
50mm	125mm	

Cables must not be drawn round tees or elbows except those of the inspection type.

The above only provides a guideline. Actual no. of single phase/ 3-phase cables allowed in a conduit and radius of bending allowed will be decided by Owner/ Consultant in specific cases.

The radius of the conduit bends shall also be determined by the size of cables, which will be drawn into the conduit. Cables must be so bent that the radius at the inside of the bent is within of the bent is within the prescribed limit for the particular cable.

16. Fixing of conduit.

Metal conduits must be “securely fixed”. Galvanized saddles should be used and fixed by means of two screws. These should not be separated at more than 1meter apart. A spacing plate (GI) will be welded to the steel frame or screwed to concrete, if found necessary. The slackness of the saddle shall not be less than 24 gauges for conduits up to 25mm and not less than 20 gauge for conduits of higher sizes.

Conduits boxes to which fittings are to be fixed shall be drilled at the back and also fixed with screws.

Fixing saddles and screws etc., must be made of steel and coated heavily to withstand corrosion. Concealed PVC conduit shall be fixed to reinforcement with steel wire in case of concealed conducting system. All PVC circular boxes shall be tied with steel wire using wire nails driven into shuttering to support on either side. If wire nails cannot be driven, at least

2 nos. of special steel re-inforcement shall be used to tie and secure the circular box. Ties must be provided on both sides of bends, couplers and similar accessories. Ready-

made bends shall not be used in slab; only purpose made hot bends (long) shall be used for drops and risers in walls.

17. Removal of burrs from ends of conduits.

The burrs caused by cutting the conduits shall be removed with a round “rat-tail” file or with a reamer and under no circumstances must any conduit be installed until the burrs at the end of the conduit has been removed.

18. Continuity of conduit system.

A screwed conduit system must be mechanically and electrically continuous across all joints, and will be earthed at connecting to the will be earthed at both ends by connecting to the earth wire which is running continuously along with the cable. PVC conduit system shall be continuous and mechanically jointed using adequate glue. A continuous insulated (green) earth wire shall be within the conduit along with each circuit.

19. Entry into DB/ switchboard

Wherever a MS conduit enters distribution board/ switchboard or any other appliance, it shall be securely fixed by means of two check nuts one on either side of the apparatus. Conduit entries or terminations shall be protected with adequate sized plastic or bakelite bushes of suitable strength approved for the purpose. PVC conduits shall terminate through female adaptors only.

20. GI Surface conduit system.

The conduit must be arranged in a fashion to avoid crossing at points where they take different directions.

All conduit accessories shall be of threaded type and under no circumstances pin grip type or clamp grip type accessories shall be used .

Inspection elbows and inspection tees may not be used if there is insufficient room for drawing in cables and if it presents a shoddy appearance. A standard round box or rectangular box will be used in this case. For conduits up to 25 mm diameter, the small circular boxes may be used; for conduits larger than 25 mm, rectangular boxes of suitable size shall be used.

The conduits should be run as straight as possible and in drops they should be vertical.

21. Concealed conduit system.

The conduits will be installed within the building construction and must be buried in floor & walls in such a manner that the cables can be drawn-in at any time after the completion of the works.

When the conduit is run to switch and other positions in wall, it will be run in a chase must be deep enough to allow at least 10 mm of cement and plaster covering.

At ceiling point, the conduit boxes will be flush with the finish of concrete ceiling. Extension rings may be used to suit the thickness of plaster.

At the position of ceiling points, PVC box shall be provided. Suitable ceiling rose/PVC glands shall be fixed to the box for connecting light / fan fitting, etc. Suitable outlets will

be provided in the fittings for concealed wiring.

For other technical particulars specification for surface conduit system shall be referred to. To facilitate drawing of wires in the conduit, a G.I. fish wire of 10 SWG shall be laid and kept inside the conduit.

22. EQUIPMENT

a) Lighting distribution board.

- i. All lighting main and sub-distribution boards shall be suitable for use on 430V, 50HZ, 3 phase, 4 wire, AC system with its neutral point solidly earthed having a symmetrical fault capacity as indicated in the schedule. It will have SP/ TPN Switch fuse unit/ MCCB/ isolator as incoming and TPN/ SPN/ MCB or switch fuse units as outgoing feeders.
- ii. The enclosure of 18 SWG sheet steel, dust and vermin proof, should conform to IP 41 or as indicated. Switch handle for incomer module should be accessible from front side. It should be inter-locked with the door, so that door can be opened only when the switch is in OFF position, and the switch can be put ON only when the door is closed. Manual interlock defeat should be provided for inspection. The handles of outgoing feeder MCB' s should be accessible also from front side. Suitable insulating sheet should be provided between the operating knobs of the MCB' s and other live parts to prevent accidental contacts.
- iii. Bus bars shall be made of copper. All bus bars and main current carrying sections shall have the same cross-sectional area throughout their length. The bus bars support and terminal connections shall be designed to permit expansion and contraction of buses with variations in site ambient temperature. The bus bars are to be taped with color-coded tapes (red, yellow blue for phases and black for neutral). The arrangement of color codes bus bars shall be RYB left to right, top to bottom, rear to front, as IS specification. Neutral bus shall have enough number of holds/ terminals to connect the cables. The neutral bus bar shall be of the same size as that for phase bus up to 100 amps. The bus bars shall be carried on supports constructed from a suitable insulating material like hylam, formica, or porcelain insulators. The supports shall be sufficiently close and robust to effectively withstand electromechanical stresses developed during short circuit conditions.
The minimum air clearance to be maintained inside bus bar chamber shall be 16mm between phases to earth and 25mm between phases. A bakelite sheet of minimum 3mm thickness shall be fixed in between the cover and the bur bar/ all live parts to avoid accidental contact.
- iv. Double compression type cable glands suitable for size & type of the cable entering the DB are to be provided. Suitable ferrules shall be provided connecting the outgoing cables. Sufficient clearances shall be provided in the panel board for easy maintenance of cables. PVC insulated copper conductors shall be used for connections from bus bars. For higher capacities solid conductors/ strips suitably insulated with PVC tapes shall be used. Detachable undrilled gland plates of thickness 4 to 6.6mm depending on the cable size shall be provided at top or bottom. The name of the panel board as indicated in the drawings should be

prominently marked on the front cover of the board. It shall be complete with suitable brackets for fixing on wall/ structures.

- v. Two separate earthing terminals shall be provided on either side of the board. A tinned copper earth bar not less than 12mm x 3mm shall be provided between these two terminals inside the cubicle.
- vi. The sheet steel parts shall be powder-coating finish after rust prevention process. Panel board shall be finished in approved color. A "Danger" board shall be provided.

23. Indoor type Distribution Panel Boards.

- a) The panel boards shall be of the floor/ plinth mounting type, totally enclosed and compartmentalized. It shall be suitable for IP 41 class protection. It shall contain TPN/FP MCCB/ fuse switch unit as incoming and TPN/ SPN/ SFU/MCCB as outgoing units. For controlling appropriate motor loads, the fuses shall be sized correctly. Indicating lamps, metering and energy monitoring equipment shall be installed on the incomer. The Panel shall be suitable for 430V, 30, 4 wire AC system with neutral solidly earthed and symmetrical vault withstand capacity of not less than 20KA (rms) or 35 KA peak (or As called for). Only HRC fuse will be used for SFU.
- b) The cubicle shall be designed for mounting over cement brickwork or concrete plinths. The cubicle shall be constructed out of heavy gauge sheet steel of thickness 16 SWG with suitable side frames and stiffeners. All doors shall be fitted with dust excluding gasket. The door shall also be fitted with suitable locking arrangement. Ventilation louvers in the form of fine wire mesh shall be provided on the two sides of the cubicle to ensure natural ventilation along with suitable deflectors/ baffle plates to avoid the ingress of rain/ splash water. Doors shall have earthing connection.
- c) Specification for bus bars and supports shall be the same as prescribed for lighting distribution board. However, suitable phase barriers shall be provided to prevent accidental short circuits during operation. Suitable insulating barriers shall also be provided between door and bus bars to accidental contact with any live part. The main bus bars shall be at the top of the panel and the connecting bus situated vertically in a separate chamber.
- d) Cable glands shall be rigidly mounted to a framework inside the cubicle. Proper cable alleys shall be provided for each column of switches. Two separate earth terminals shall be provided. A tinned copper earth bar of size 25mm x 5mm shall be provided between the earth terminals inside the cubicle. A Danger board shall be fixed on the cubicle.
- e) The sheet steel material used shall undergo a rigorous rust proofing process comprising alkaline degreasing, descaling and phosphating process. After metal treatment the interior of the cubicles shall be painted with two coats of air-drying red lead primer followed by two coats of air-drying red anti-condensation paint. The exterior of the cubicle shall be painted with two coats of stoving red oxide primer followed by two coats of synthetic enamel paint of approved colour or shall have powder coated finish with approved color as called for.

24. Lighting Fixtures & Lamps

All the luminaries shall be designed, manufactured and tested in accordance with relevant IS specifications so far as they are applicable.

25. Fluorescent Light Fixtures

a) Anti-corrosive type fluorescent light fitting.

This anti-corrosive and dust proof fluorescent tube light fitting shall have fiber glass reinforced polyester canopy or as called for with gear tray for control gear, p.f. Correction condenser to improve p. f. to 0.95 and connector block along with spring loaded rotor lamp holder, starter holder, starter and wired to a connector block. Reeded acrylic cover shall be fixed with stainless steel toggle clips to the canopy.

b) Decorative fluorescent light fitting.

Decorative type fluorescent tube light fitting complete with stove enamelled mounting rail, polyester fitted copper wound ballasts, spring-loaded rotor lamp holders, starter holder and starter, p.f. correction condenser to improve the p.f. to 0.95 mirror finished aluminium reflector and chrome louver with frame. In areas having false ceiling, fitting shall be suitable for flush mounting with down rod assemblies fixed to the main ceiling.

c) Fluorescent strip light fitting.

Fluorescent strip light fitting shall be with white stove enamelled mounting rail incorporating all electrical accessories such as polyester filled ballasts or as called for, spring loaded rotor lamp holders, starter, starter holder and p.f. improvement capacitor up to 0.95 etc.

d) Industrial type fluorescent light fitting.

The fitting shall have channel and reflector made of C.R.C.A. sheet steel and light grey stove enamel with white cover plate for channel and reflector shall be finished with light grey stove enameled outside and white stove enameled inside. The fitting shall be complete with all electrical accessories like polyester filled ballasts or as called for, starter, spring-loaded rotor lamp holders, starter holder, p.f. improvement capacitor up to 0.95 etc.

All types of fluorescent fittings shall be suitable for mounting on wall/ ceiling/ conduit suspension.

26. Energy saving fitting.

Either recessed type or ceiling fixed type decoratively styled complete with energy effective 9/11/15/23W Compact Fluorescent lamp. The fitting shall have a metal housing accommodating the ballast & lamp holder wired up to a terminal block. Reflector shall be of high purity aluminium electrochemically brightened and anodized. The diffuser shall be of vee cut ABS chrome louver in frame. The fitting shall be complete with p.f. correction condenser to improve the power factor of the fitting to 0.95. Wall mounted type fittings shall have white reflector and clear prismatic louver along with all above-mentioned accessories.

27. Exit Lights.

Shall be wall fixed type or ceiling hung type. Body to be made of CRCA steel, white enamel painted, complete with 2 nos. 9W PL lamps. The diffuser shall be of

moulded opal acrylic with exit sign and directional arrows screen printed, in green colour.

28. Lamps.

a) Incandescent lamp:

These should be gas filled, clear finished and wherever possible the filament should be coiled coil type. The bulb caps shall be of aluminum and screw type with ES/ GES threads. The incandescent lamps shall be suitable for operation on 240V, 50 HZ AC.

b) Fluorescent lamp:

All fluorescent lamps shall be cool daylight and shall be suitable for switch start. Fluorescent lamps wherever called for shall be of TLD type
–36W, colour 86 or 84 as called for.

29. Socket, switches and other installation accessories.

a) Single-phase socket outlets.

Industrial type: 16A/20A/32A, 240V, single phase, socket outlet, 3 pin (two pole and scraping earth) shall be metal clad, industrial type, heavy duty with interlocked rotary switch suitable for pipe termination as detailed in schedule of quantities.

b) Flush mounting type socket outlet.

5A/15A, 240V, single phase, 5/6pin (two pole and one earth) socket outlet shall be flush mounted type along with grid type switch and shall be the plastic moulded type.

c) Pull, anchor, junction and outlet boxes.

Pull, anchor, junction and outlet boxes fabricated with sheet steel shall have a minimum thickness of 2mm unless otherwise specified in schedule of items.

d) Control switches.

- i. The switches shall be industrial rotary type, single pole/ double pole/ TP&N suitable for mounting wall/ structures. These switches shall be used for industrial premises.
- ii. Single pole multi-gang type, 5A, grid switches shall be used for light point wiring in the premises and in other areas and branch switches shall be placed in line conductor of the circuit and no single switch fuse shall be inserted in the neutral conductor of the circuit.

30. Ceiling roses.

- a) A ceiling rose shall not be used on a circuit the voltage of which normally 250 volts.
- b) Normally only one flexible cord shall be attached to a ceiling rose.
Specially designed ceiling roses shall be used for multiple pendants.
- c) A ceiling rose shall not embody fuse terminal as integral part of it. All ceiling roses shall be of three-plate pattern.

31. Fans, regulators and clamps.

- a) All ceiling fans shall be wired to a ceiling rose and suspended from a hook in shackle and insulated from the same. All joints in the suspended rod shall be screwed and all joints or bolts in connection therewith shall in addition be secured by means of split pin.
- b) The canopy at the top of the suspension rod shall effectively hide the suspension.
- c) The lead in wires shall not be smaller than 24/0.2mm PVC insulated flexible copper conductor cable and shall be protected from abrasion.
- d) Unless otherwise stated, all ceiling fans shall be hung at 2.75 meter above the floor, or as directed by the engineer in charge. The length of the down rod supplied shall be suitable for this purpose.

32. Lighting shades.

No inflammable shade shall form part of light fitting unless such shade is well protected against risk of fire. Plastic shade shall not be normally used in the fittings suitable for incandescent lamps.

33. Cables

- a. Cables for main feeders shall be normally PVC insulated, armoured, PVC sheathed or as called for, 1100V grade. The cables shall have stranded aluminium conductors as read.
These cables will be used for supply of power from LT switchboard to main lighting board/ DB/ sub-distribution board if any.
These cables shall also be used for outdoor cables laid in trenches for street and boundary wall lighting, up to the terminal box at the street light poles and main switch board at the watch tower conform to IS 1554 part I 1976.
- b. Cables for point wiring i.e. from lighting DB/ sub-DB to individual light points shall be normally single core, unarmoured PVC/FRLS PVC insulated, 660/ 1100V grade with copper conductor conforming to IS 694-1977.
- c. Cables used for connecting from junction boxes/ ceiling roses to individual light fittings shall be PVC insulated, 650/1100V grade with copper conductor conforming to relevant IS.
- d. All cables shall be of reputed make and shall be accompanied by the maker's test certificate stating the class and giving the results of insulation tests.
- e. In case of conduit wiring, the colours of single core wires shall be as detailed below:
 - 1. Red, Yellow, blue for phase.
 - 2. Black for neutral.
 - 3. Green with yellow strip for earth or bare copper wire.
- f. All feeder cables will be provided at reasonable intervals, with cable tags indicating feeder No./ destination.

34. Painting

Unless otherwise specified all the sheet materials shall undergo a rigorous rust proofing process comprising alkaline degreasing, descaling and phosphating process. After the metal treatment both sides of the sheet shall be painted with two coats of best quality air drying red oxide paint followed by two coats of spray painting with synthetic paint of approved quality and color.

35. SPECIFICATIONS FOR INSTALLATION**a) Installation of lighting distribution boards/ sub-distribution boards.**

The lighting distribution boards/ sub-distribution boards will be generally mounted on a wall or structural column. The distribution board shall be mounted in such a way that the operating handle of the incomer and outgoing gears shall not exceed 1800mm. from the finished floor level for easy operation. The panel will be fixed on the wall/ column securely by means of suitable brackets and fixing clamps/ bolts etc. If the main distribution board is floor mounting type suitable base channel shall be supplied and the floor inserts incorporated in the civil works by the contractor. Requirements like surface trenches will be designed and incorporated in the civil works by the contractor along with inserts and supply and installation of hooks/ arms for cable support and all other connected work.

b) Installation of feeder pillars

The feeder pillar is mounted outside, on a brick masonry plinth, at the side of a road/ building. The details of the associated civil work are as specified elsewhere in the equipment specification and form a part of the installation.

c) Installation of light fixtures, fans etc.

All light fittings such as high bay, fluorescent tube light fittings, street light fixtures etc., are to be installed as per given layout drawings, conforming to standard installation norms.

MS bracket/ MS hook/ GI pipe bracket etc., required for supporting the light fixtures shall be designed, fabricated and supplied by the contractor conforming to the standard practices. If typical bracket

details are not supplied, the same shall be designed by the contractor considering the building details and the drawing shall be submitted for approval. These are to be approved by the engineer before

fabrication. All the MS brackets/ MS hooks supplied by the contractor shall be

painted with two coats of red oxide paint and one coat of aluminum paint.

All the light fixtures shall be rigidly fixed to the wall, ceiling/ structure and shall be aligned properly to give good aesthetic appearance. Fan

hooks and any plate/ pipe insert etc., required to be incorporated in the civil works shall be planned and incorporated in the civil works by the contractor. However details of inserts shall be indicated to owner/

engineer sufficiently in advance and got approved before incorporating in the civil works.

d) Installation of control switches, socket outlets and switch boards.

All the control switches, sockets and switchboards are to be installed as per given drawing. When no drawings are given, they will be installed as per specification, standard norms and direction of site engineer. The switch controlling the socket shall be connected to live side of the socket.

e) Junction box, outlet box, anchor box etc.

All junction boxes, outlet boxes, are firmly fixed to walls /ceiling / structures using MS bracket and bolt and nuts.

36. Laying of cables in trench.

- a) Cable shall be laid direct in ground in all kinds of soil or in the prepared ducts. 65mm dia (min). GI pipe shall be provided wherever these cables cross the roads, water lines, sewerage lines, etc. GI pipe shall also be provided wherever the cables enter the building. Cables terminating to any equipment shall also be encased in a GI pipe rising from the ground level to the equipment connection. Unless mentioned otherwise the sizes of GI pipes will be as given below:

<u>Size of cable</u>	<u>G.I. pipe</u>
Upto 4 x 50sq.mm	65 mm dia
3 ½ x 70 –3 ½ x120sq.mm.	90 mm dia
3 ½ x 185 –3 ½ x240sq.mm	100 mm dia

In case of prepared duct inside building, the cables shall be fixed on racks, trays or cleats for proper supports, accessibility and neatness of the installation. Crossing of cables to be avoided.

- b) The minimum width of the trench shall be 350mm. Wherever more than one cable are to be laid in the same trench on horizontal formation, the width of the trench shall be increased such that the inter-axial spacing between the cables shall be minimum 100mm. There shall be a clearance of at least 150mm between axis of the end cables and the sides of the trench

The depth of trench shall be not less than 700mm. Where more than one tier of cable is unavoidable and vertical formation of laying is adopted, depth of trench shall not be increased by 150mm for each additional tier to be formed.

- c) The bottom of the trench shall be level and free from stone, brick tats, etc. The trench shall than be provided with a layer of clean, dry sand cushion, of not less than 100mm for the full width of trench. Cables shall be laid on this sand layer, slightly slacked to allow for expansion and again covered with a top layer of sand of minimum 150mm. The second tier of cables shall be laid on this sand layer, and again shall be covered by a top layer and sand of 150 mm. Bricks shall be laid over the topmost sand layer and the rest of the trench will then be filled with earth (back fill) and completed.
- d) Approximately 3m of surplus cables shall be left on each end of the cable, on each side of the underground joint, at entries and places as may be decided by the engineer in charge. The surplus cable shall be left in the form of a loop.
- e) The trench cut through the roadways or other paved areas inside buildings shall

be restored to the same density and materials as the surrounding areas at no extra cost. Black toping of the road will, however, not done by the contractor.

- f) Cable route markers shall be provided along straight runs of the cable and at locations approved by the engineer in-charge, at locations generally not exceeding 30 meters
- g) Wherever cables are taken in conduits both ends of the conduits shall be blocked after laying the cable to avoid the ingress of water.
- h) All associated materials like G.I. earth wire, sand, bricks, clamps and route markers etc., shall be supplied by the contractor. The cost for laying of cables shall inclusive of all these items.

37. Laying of cables on walls/ columns/ ceiling/ structures.

- a) All the cables are to be neatly bunched and laid on surface of walls/ columns/ ceiling/ structures. All the cables laid on surface of walls/ columns/ ceilings shall be supported by using clamps/ rawl plugs and screws/cable/hooks. All the cables laid on structures shall be fixed with suitable clamps or supported on proper trays.
- b) Cables are to be supported at minimum regular intervals of 0.5m horizontal and 1m vertical run.
- c) Care is to be taken while laying/ pulling so that insulation of cables does not get damaged.

38. Cable Terminations

- a) All the cables shall be terminated to the switch terminals, sockets, bus bars etc., by means of suitable size of cable socket/ lugs/ ferrules. Crimping tools shall be used for fixing the ferrules/ sockets to the cable ends.
- b) (This shall be applicable even in case of single strand cable ranging form 1.5mm.sq.)
- b) The cable sockets or ferrules shall be preferably be tinned copper.
- c) For connection to bus bars etc., brass or cadmium plated nuts/ bolts are washers shall be used. Suitable measures shall be taken to avoid heating due to bi-metallic contacts.

39. INSTALLATION OF EARTHING CIRCUIT.

All exposed metal parts such as Feeder pillar enclosures, metal clad switches, MCB/ DB enclosures, lamp brackets, lamp holder, plug socket enclosure, junction box, computer equipment, etc., shall be properly earthed by connecting these to the earth electrode by means of bare copper wire/ flat or single core copper conductor wire of approved size to pass the fault current safely to earth in case of leakage at the apparatus or in the system. The minimum size of earthing wire unless specified otherwise is indicated below.

- a) Main earthing (connecting the earth pits) 25 x 5mm copper strip or equivalent.
- b) Loop earthing ring for main distribution board/ sub-distribution board earthing 12 x 3mm copper strip or as applicable.
- c) Light/ plug point earthing half the size as point wiring single core PVC insulated copper wire or else as called for.

40. Installation of earthing pits.

A. Material required for an earth pit.

- i. 50mm dia GI pipe, ' B ' class, 4 meters long in one single piece or 600 x 600 x 3mm copper plate buried below the watering pipe. 12mm holes made on all sides of the pipe at 150mm apart up to height of minimum 3.0 meters from bottom.....1 no.
- ii. Bolts, nuts, washers and sockets for earthing connection.....1 set.
- iii. Charcoal of not less than 12mm size.....100 kg.
- iv. Salt granular.....50 kg.
- v. 130mm dia 80mm long funnel with mire mash welded at top and G.I. nut welded at bottom (to fit the G.I. pipe)
- vi. C.I. cover with lifting handle hinged so C.I. frame 400 x 400mm...1 no.
- vii. Watering pipe with funnel in case of plate earthing.....1 no.

B. Method of erection

- i. The pit for an earth electrode will be of size not less than 1000x1000x4.2 metres and will be dug with its center at minimum 2.5 metres away from the edge of any building/masonry work.
- ii. The copper plate will be vertically erected and the necessary copper tapes will be bolted to it by means of brass bolts nuts.
- iii. The G.I. pipe will be erected vertically at the center of the pit with top of the pipe minimum 200mm above the ground level.
- iv. Alternate layers of charcoal and salt each 150mm will be put into the pit beginning from the bottom of pit around the pipe to cover the same up to minimum 3.0 metres length from bottom.
- v. The space above the salt/charcoal layers will be filled with loose sandy soil up to a level of 550mm from ground level.
- vi. A cement concrete chamber of inner dimension 350 x 350mm will be erected

around the top of the earth pipe so that top surface of the chamber is flushed with the out side finished ground level.

- vii. The copper earthing strip 25 x 6 mm tightly connected to the electrode copper plate by means of brass bolt, nuts and washers shall be connected to a common earth link to which the loops will also be connected.

C. Earthing of lighting/power distribution boards.

The lighting distribution board shall be provided with two separate earth terminals. An earth busbar of approximate cross section shall be provided inside the lighting board and connected to the earth terminals provided on either side of the board. Adequate number of holes/ terminals shall be provided on earth bus with suitable provision for terminating the earth wire. Specified earth wire shall be rigidly connected to the earth terminals separately.

D. Earthing of light fixtures and socket outlets.

The single core PVC insulated, bare copper wire and the third core of the flexible wiring cable shall be used for earthing the light fixtures and single-phase socket outlets, etc.

E. Earthing of metal boxes and brackets.

Not less than 1.5sq.mm. PVC copper cable/ 14 SWG copper wire shall be used for earthing all metal boxes and brackets or as called for

Standards

The following standards and rules shall be applicable:

1	IS:2675-1983	Enclosed distribution fuse boards and cutouts for Voltages not exceeding 1000V.
2	IS:375-1963	Marking and arrangement of Switchgear busbars main connections and auxiliary wiring.
3	IS:8828-1996	Miniature circuit Breakers
4	IS:2607-1976	Air break Isolators for voltages not exceeding 1000V.
5	IS:9926-1981	Fuse wire used in Rewirable type Electric fuses up to 650 volts.
6	IS : 732: 1989	Code of Practice for Electrical wiring installation (System voltage not exceeding 650V)
7	IS :1646:1982	Code of Practice for fire safety of building (General) Electrical Installation.
8	IS: 1653:1972	Rigid steel conduits for electrical wiring
9	IS: 2667:1976	Fittings for rigid steel conduits for electrical wiring
10	IS: 3480:1966	Flexible steel conduits for electrical wiring
11	IS: 837:1976	Accessories for rigid steel conduit for electrical wiring

12	IS: 694:1977	PVC insulated wires.
13	IS: 509:1973	Rigid non-metallic conduits for Electrical wiring
14	IS : 6946	Flexible (Pliable) non-metallic conduits for electrical installation
15	IS : 1293	3 pin plugs and sockets
16	IS : 8130	Conductors for insulated electric cables and flexible cord
17	IS:9537- 1980	Specification for conduits for Electrical installations
18	Indian Electricity Act 1910 and rules issued there under.	

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SECTION VIII**TECHNICAL SPECIFICATIONS – HVAC WORKS****1. GRILL & DIFFUSER FIXING**

A) The air outlets shall be grille or diffuser type as indicated on the drawing. The grilles and diffusers shall be aluminum powder coated as shown on the drawing and schedule of material.

B) Air grilles Supply shall be double deflection type with horizontal face bars and vertical rear bars placed in a rigid marginal frame. Bars shall be shaped and spaced at 18mm centers with swaged pivot pins positively holding the deflections setting under all conditions of velocity and pressure. All grilles shall be provided with integral opposed blade, grille face kept-operated dampers.

C) Return grilles shall have fixed face bars shaped and set at 18mm centers. Bars shall be set at 5-degree deflection for vision proof installation. The grilles shall be complete with rigid marginal frames and shall be matching with the supply grilles.

D) Ceiling diffusers shall be round Swirl type square face flush type horizontal / vertical air diffusion pattern. Swirl Diffusers shall have ample margins to minimize ceiling smudge.

E) All duct collars terminating on to a grille or diffuser shall be given two coats of black paint for a length of 300mm.

F) Aluminium grilles and diffusers wherever specified shall be of extruded aluminium with margins & GSS butterfly dampers. Grilles shall have horizontal face bars only

2. TECHNICAL SPECIFICATIONS OF DAMPERS:

Provide 18 G louver type dampers of robust construction. Design, method of Operation etc. Shall be suitable for the location & service required.

Provide suitable links, levers & quadrants required for proper operation & control of settings in any position. Dampers & other operating devices shall be made easily operable & accessible through access doors in ducts. Every damper shall have an Indicating device clearly showing the damper position.

Provide dampers in main ducts & for all branch connections even if not indicated on Drawings for volume control & balancing of the system.

A) The GUIDE VANES shall be provided as shown below:

- i) At every non-split branch take off
- ii) At every bend/elbow of less than 1.3 R/D ratio
- iii) At first 4 collars after the fans and first two collar after every bends.

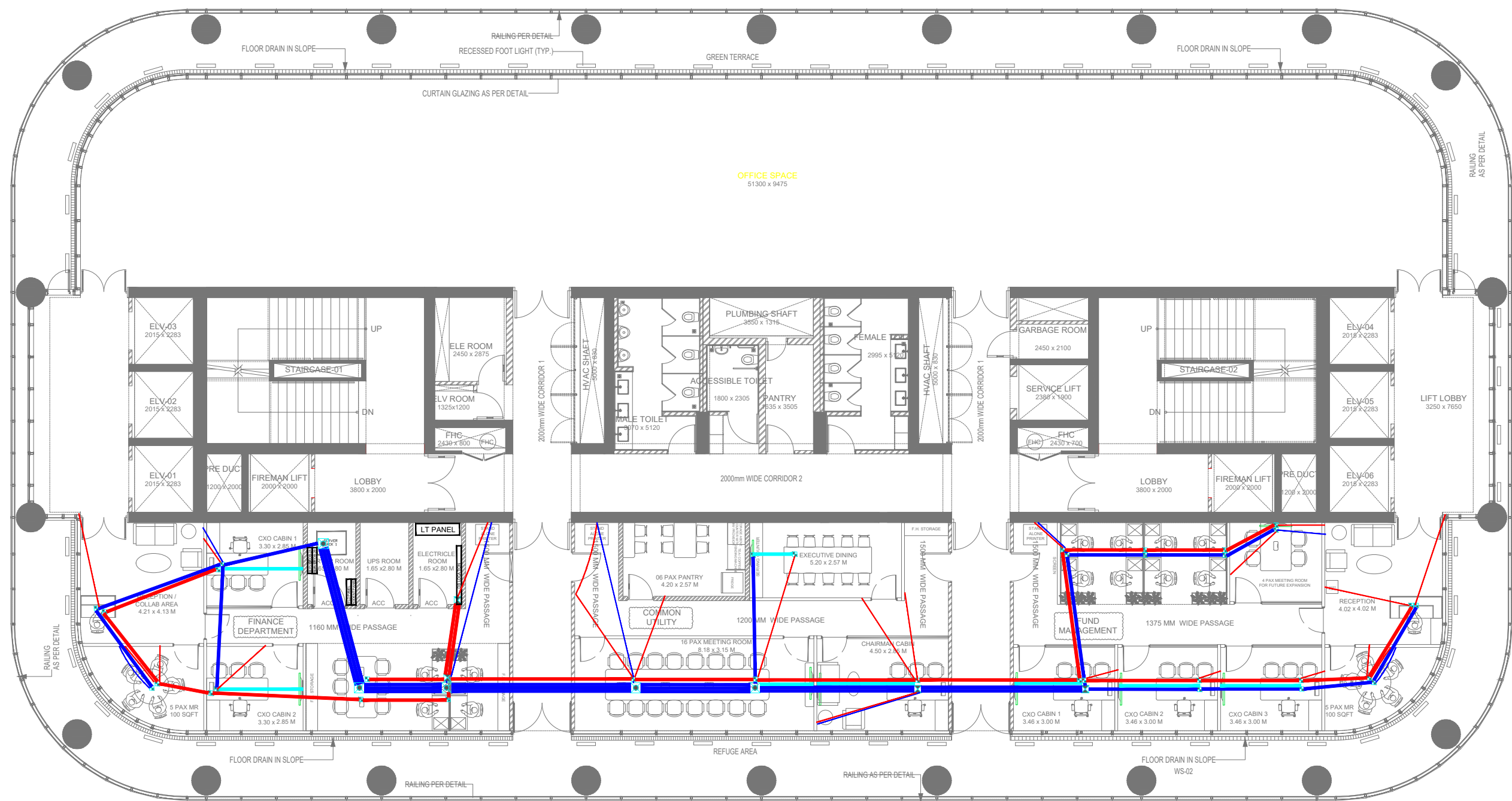
The vanes shall be double walled & properly curved for smooth airflow & changing direction of flow and shall be fabricated out of 0.8 mm (31 sheets) The vanes shall be fixed to the side runners at equidistant & reverted/bolted to the ducts.

B) The SPLITTER DAMPERS shall be double walled aerofoil blade fabricated out 1.6mm (16 SWG) GI sheet. The damper shall be complete with flanged sheet metal enclosure to suit the upstream and downstream duct.

The LOUVRED DAMPERS shall be multi blade aerofoil construction with opposed/

Parallel blades maximum 250 x 1200 mm size. The blades shall be mounted on 50mm channel with suitable gang operated linkage and operating rod. The operation rod shall be terminated in a locking quadrant with position indicator.

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POWER & NET WORK RACE WAY LEGENDS:		
POWER FLOOR RACE WAY (LEGEND)	NO.	
1. 100 x 100 x 100 mm Raceway	34	
2. 100 x 100 x 100 mm Raceway	05	
3. 100 x 100 x 100 mm Raceway	05	
4. 100 x 100 x 100 mm Raceway	05	
5. 100 x 100 x 100 mm Raceway	05	
6. 100 x 100 x 100 mm Raceway	05	
7. 100 x 100 x 100 mm Raceway	05	
8. 100 x 100 x 100 mm Raceway	05	
9. 100 x 100 x 100 mm Raceway	05	
10. 100 x 100 x 100 mm Raceway	05	
11. 100 x 100 x 100 mm Raceway	05	
12. 100 x 100 x 100 mm Raceway	05	
13. 100 x 100 x 100 mm Raceway	05	
14. 100 x 100 x 100 mm Raceway	05	
15. 100 x 100 x 100 mm Raceway	05	
16. 100 x 100 x 100 mm Raceway	05	
17. 100 x 100 x 100 mm Raceway	05	
18. 100 x 100 x 100 mm Raceway	05	
19. 100 x 100 x 100 mm Raceway	05	
20. 100 x 100 x 100 mm Raceway	05	

- Note-
1. Data cable minimum 35nos, cat 6 cables in 1 nos, 100x 38 raceway
 2. Power circuit- minimum 24 nos 3 x 2.5 Sqmm Cu circuit in 1 nos, 100 x 38 MM raceway
 3. DB location shall be confirmed by architect
 4. Contractor shall install junction boxes as per modular furniture marking

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4. FOR R.C.C. DETAILS REFER STRUCTURAL ENGINEER'S DRAWINGS.
5. ANY VARIATION BETWEEN THE DRAWING & THE SPECIFICATION, SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECTS BY THE CONTRACTORS IN WRITING PRIOR TO CONSTRUCTION.

PROJECT :
NABFID IFSC 9TH FLR

DRAWING TITLE :
RACEWAY LAYOUT

REVISION NO :

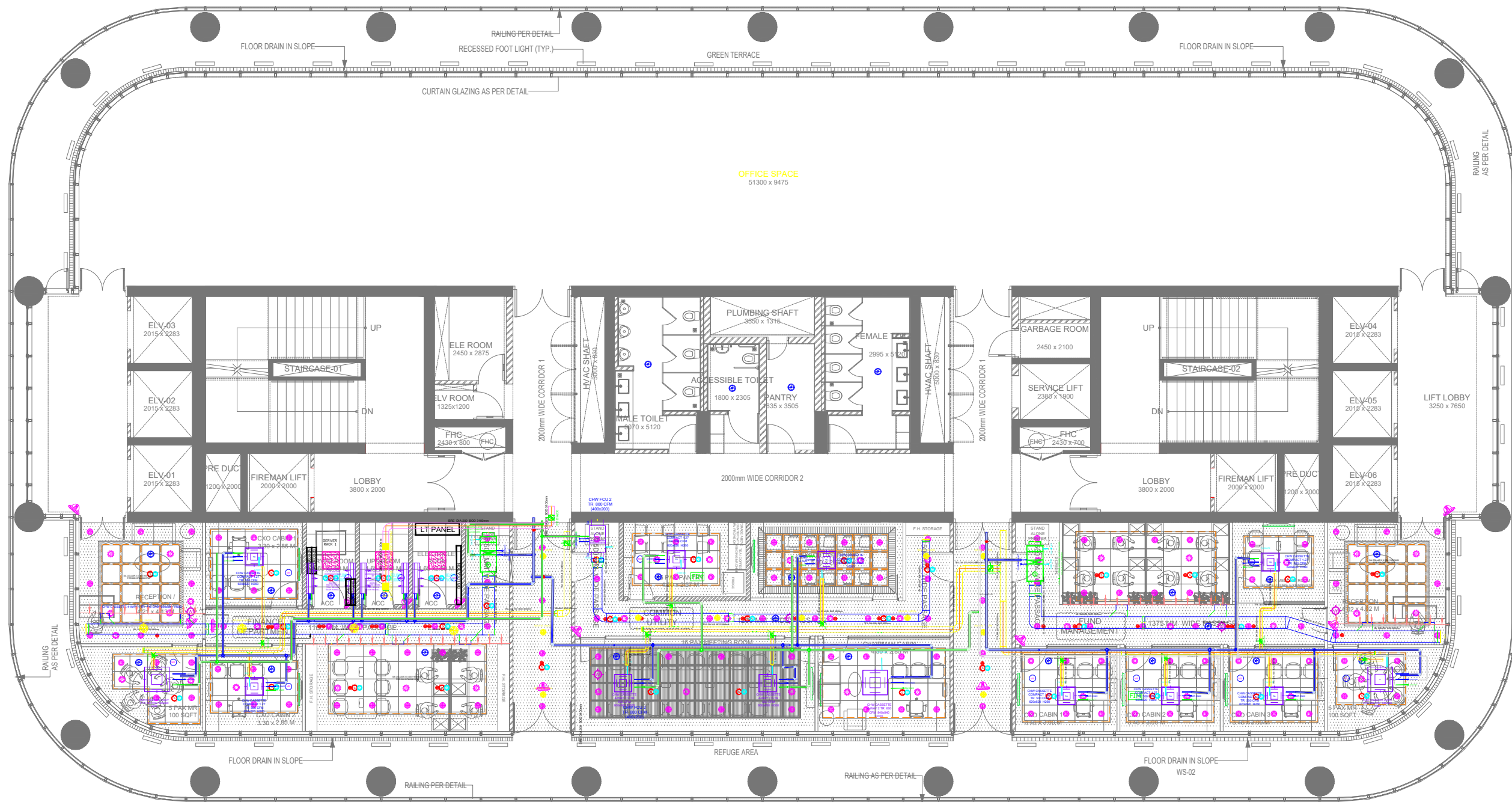
JOB NO.	SCALE	DATE	DWN.BY	CHK BY
	N.T.S.	25.08.2025	KOMAL	AR.GIRISH

CLIENT:-
NSE IFSC

ARCHITECTS:



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Note- Check the existing sprinkler and reroute the same as per new sprinkler locations
(Piping shall be decided as per site requirements – levels given by architect)

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PROJECT :
NABFID IFSC 9TH FLR

DRAWING TITLE :
RCP LAYOUT

REVISION NO :

JOB NO.	SCALE	DATE	DWN.BY	CHK BY
	N.T.S.	25.08.2025	KOMAL	AR GIRISH

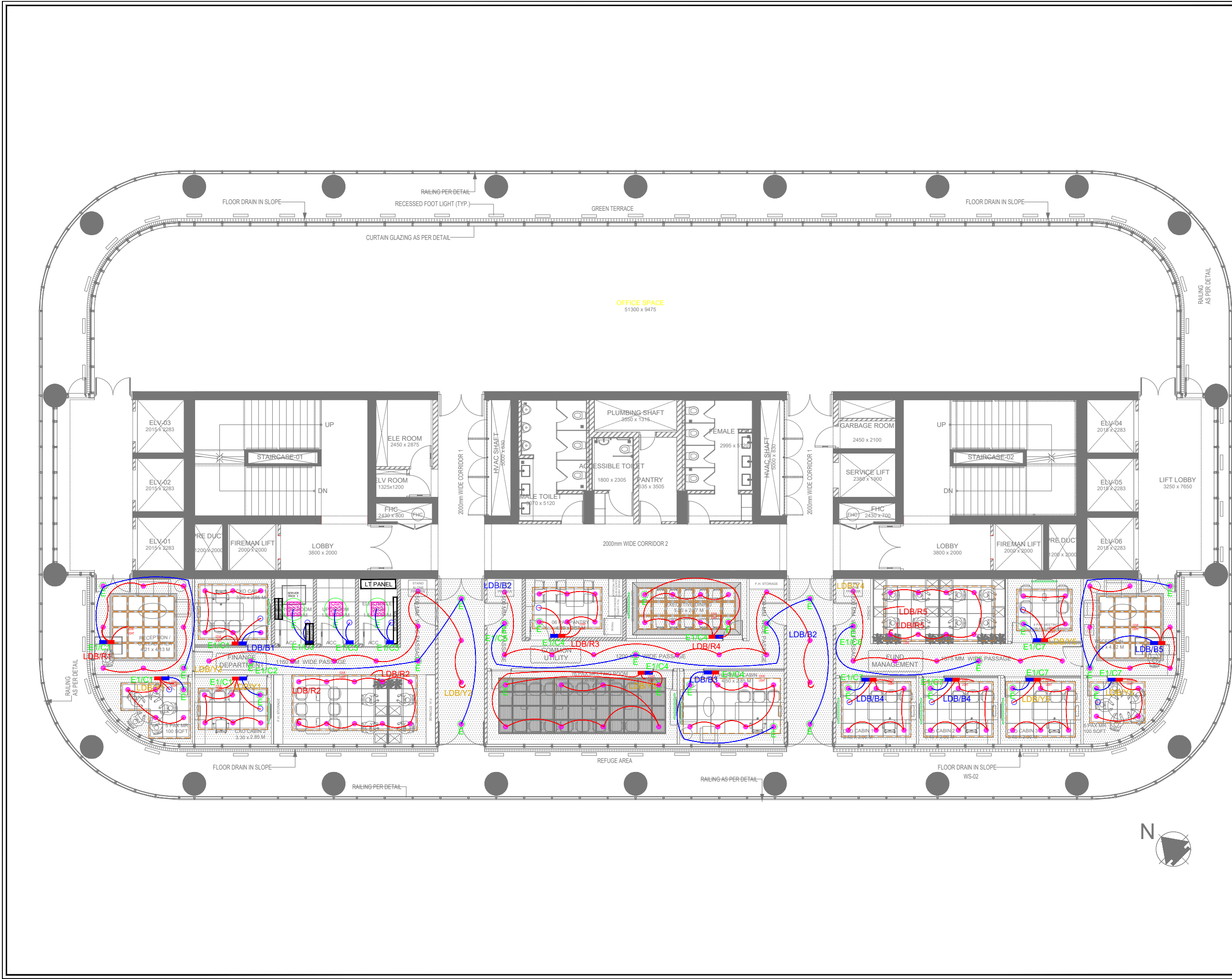
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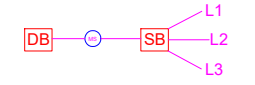


LIGHTING LEGENDS:

- LIGHTING SB
- EM LIGHTING SB
- MOTION SENSOR
- 3R x 1.5 Sqmm FRLS Wire in FRLS pvc pipe for NORMAL light points
- 3R x 1.5 Sqmm FRLS Wire in FRLS pvc pipe for EM light points

Normal and EM Circuit Wiring
3R x 1.5 Sqmm cu
FRLS Wire in FRLS PVC pipe

Note- Contractor to confirm SB/DB location and height with Architect at site before installation of back box



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PROJECT ::
NABFID IFSC 9TH FLR

DRAWING TITLE :
LIGHTING LAYOUT

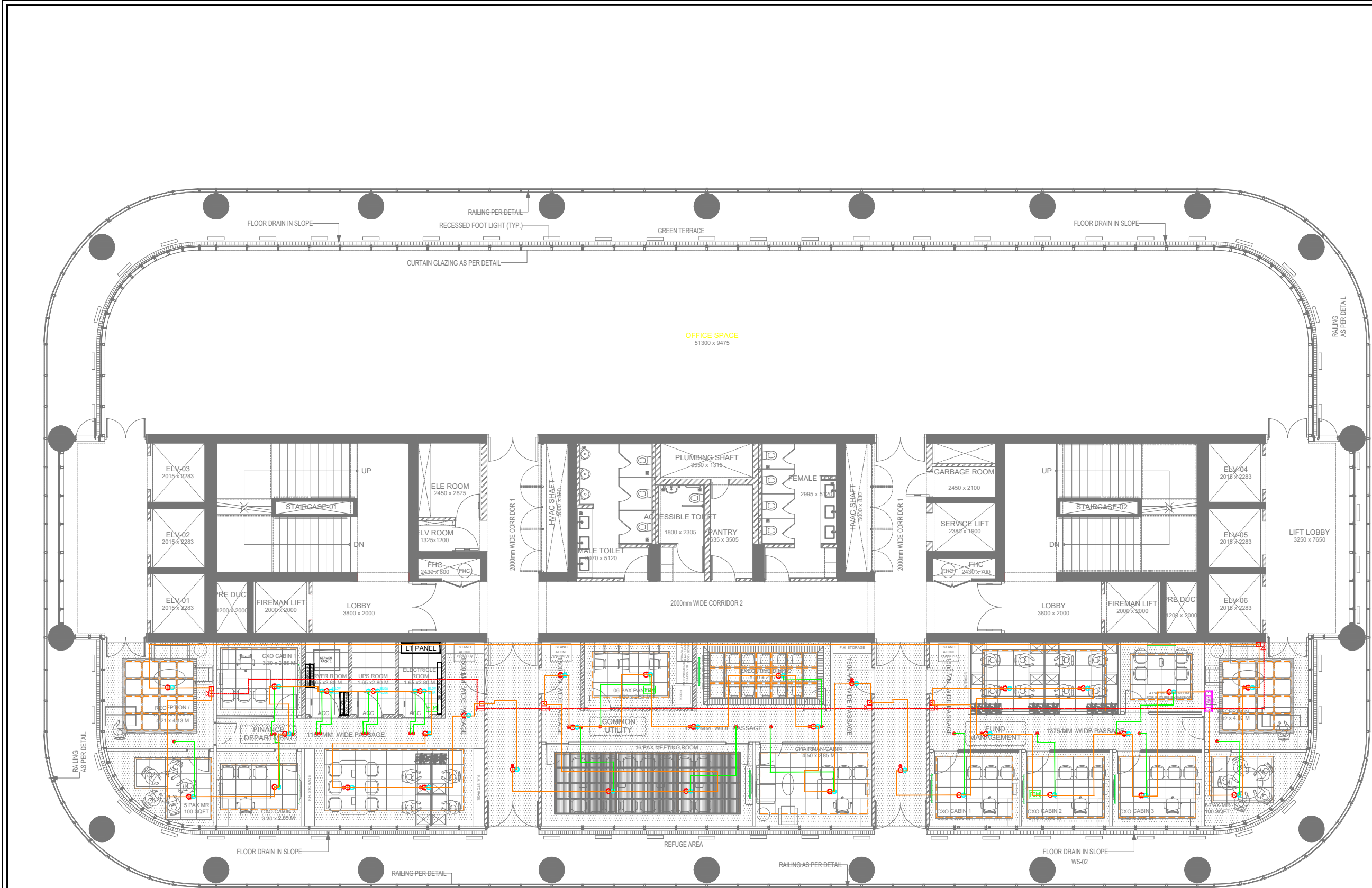
REVISION NO :

JOB NO.	SCALE	DATE	DWN.BY	CHK BY
	N.T.S.	25.08.2025	KOMAL	AR.GIRISH

CLIENT:-
NSE IFSC

ARCHITECTS:

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FIRE ALARM SYSTEM -		
01	BELOW HEAT DETECTOR	03
02	BELOW FALSE CEILING SURFACE MOUNTED SMOKE DETECTOR	34
03	ABOVE FALSE CEILING SMOKE DETECTOR	37
04	RESPONSE INDICATOR	33
05	ELECTRONIC BOOSTER To be install at 150mm below False ceiling.	06
06	MANUAL CALL POINT To be install at 1.4 meter height from FFL.	06
07	RELAY MODULE	04
08	FAULT ISOLATOR MODULE	03
09	MONITOR MODULE	02
10	FIRE ALARM CIRCUIT 2 x 1.1.7.4.8.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.101.102.103.104.105.106.107.108.109.110.111.112.113.114.115.116.117.118.119.120.121.122.123.124.125.126.127.128.129.130.131.132.133.134.135.136.137.138.139.140.141.142.143.144.145.146.147.148.149.150.151.152.153.154.155.156.157.158.159.160.161.162.163.164.165.166.167.168.169.170.171.172.173.174.175.176.177.178.179.180.181.182.183.184.185.186.187.188.189.190.191.192.193.194.195.196.197.198.199.200.201.202.203.204.205.206.207.208.209.210.211.212.213.214.215.216.217.218.219.220.221.222.223.224.225.226.227.228.229.230.231.232.233.234.235.236.237.238.239.240.241.242.243.244.245.246.247.248.249.250.251.252.253.254.255.256.257.258.259.260.261.262.263.264.265.266.267.268.269.270.271.272.273.274.275.276.277.278.279.280.281.282.283.284.285.286.287.288.289.290.291.292.293.294.295.296.297.298.299.300.301.302.303.304.305.306.307.308.309.310.311.312.313.314.315.316.317.318.319.320.321.322.323.324.325.326.327.328.329.330.331.332.333.334.335.336.337.338.339.340.341.342.343.344.345.346.347.348.349.350.351.352.353.354.355.356.357.358.359.360.361.362.363.364.365.366.367.368.369.370.371.372.373.374.375.376.377.378.379.380.381.382.383.384.385.386.387.388.389.390.391.392.393.394.395.396.397.398.399.400.401.402.403.404.405.406.407.408.409.410.411.412.413.414.415.416.417.418.419.420.421.422.423.424.425.426.427.428.429.430.431.432.433.434.435.436.437.438.439.440.441.442.443.444.445.446.447.448.449.450.451.452.453.454.455.456.457.458.459.460.461.462.463.464.465.466.467.468.469.470.471.472.473.474.475.476.477.478.479.480.481.482.483.484.485.486.487.488.489.490.491.492.493.494.495.496.497.498.499.500.501.502.503.504.505.506.507.508.509.510.511.512.513.514.515.516.517.518.519.520.521.522.523.524.525.526.527.528.529.530.531.532.533.534.535.536.537.538.539.540.541.542.543.544.545.546.547.548.549.550.551.552.553.554.555.556.557.558.559.560.561.562.563.564.565.566.567.568.569.570.571.572.573.574.575.576.577.578.579.580.581.582.583.584.585.586.587.588.589.590.591.592.593.594.595.596.597.598.599.600.601.602.603.604.605.606.607.608.609.610.611.612.613.614.615.616.617.618.619.620.621.622.623.624.625.626.627.628.629.630.631.632.633.634.635.636.637.638.639.640.641.642.643.644.645.646.647.648.649.650.651.652.653.654.655.656.657.658.659.660.661.662.663.664.665.666.667.668.669.670.671.672.673.674.675.676.677.678.679.680.681.682.683.684.685.686.687.688.689.690.691.692.693.694.695.696.697.698.699.700.701.702.703.704.705.706.707.708.709.710.711.712.713.714.715.716.717.718.719.720.721.722.723.724.725.726.727.728.729.730.731.732.733.734.735.736.737.738.739.740.741.742.743.744.745.746.747.748.749.750.751.752.753.754.755.756.757.758.759.760.761.762.763.764.765.766.767.768.769.770.771.772.773.774.775.776.777.778.779.780.781.782.783.784.785.786.787.788.789.790.791.792.793.794.795.796.797.798.799.800.801.802.803.804.805.806.807.808.809.810.811.812.813.814.815.816.817.818.819.820.821.822.823.824.825.826.827.828.829.830.831.832.833.834.835.836.837.838.839.840.841.842.843.844.845.846.847.848.849.850.851.852.853.854.855.856.857.858.859.860.861.862.863.864.865.866.867.868.869.870.871.872.873.874.875.876.877.878.879.880.881.882.883.884.885.886.887.888.889.890.891.892.893.894.895.896.897.898.899.900.901.902.903.904.905.906.907.908.909.910.911.912.913.914.915.916.917.918.919.920.921.922.923.924.925.926.927.928.929.930.931.932.933.934.935.936.937.938.939.940.941.942.943.944.945.946.947.948.949.950.951.952.953.954.955.956.957.958.959.960.961.962.963.964.965.966.967.968.969.970.971.972.973.974.975.976.977.978.979.980.981.982.983.984.985.986.987.988.989.990.991.992.993.994.995.996.997.998.999.1000	01

Note: MCP / Hoister location shall be decided on site as per interior layout
Fire panel location as per back office layout
PHASE 2 FIRE PANEL - EXTRA LOOP
SHALL BE USED FOR PHASE 3
DETECTORS

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PROJECT :
NABFID IFSC 9TH FLR

DRAWING TITLE :
FIRE ALARM LAYOUT

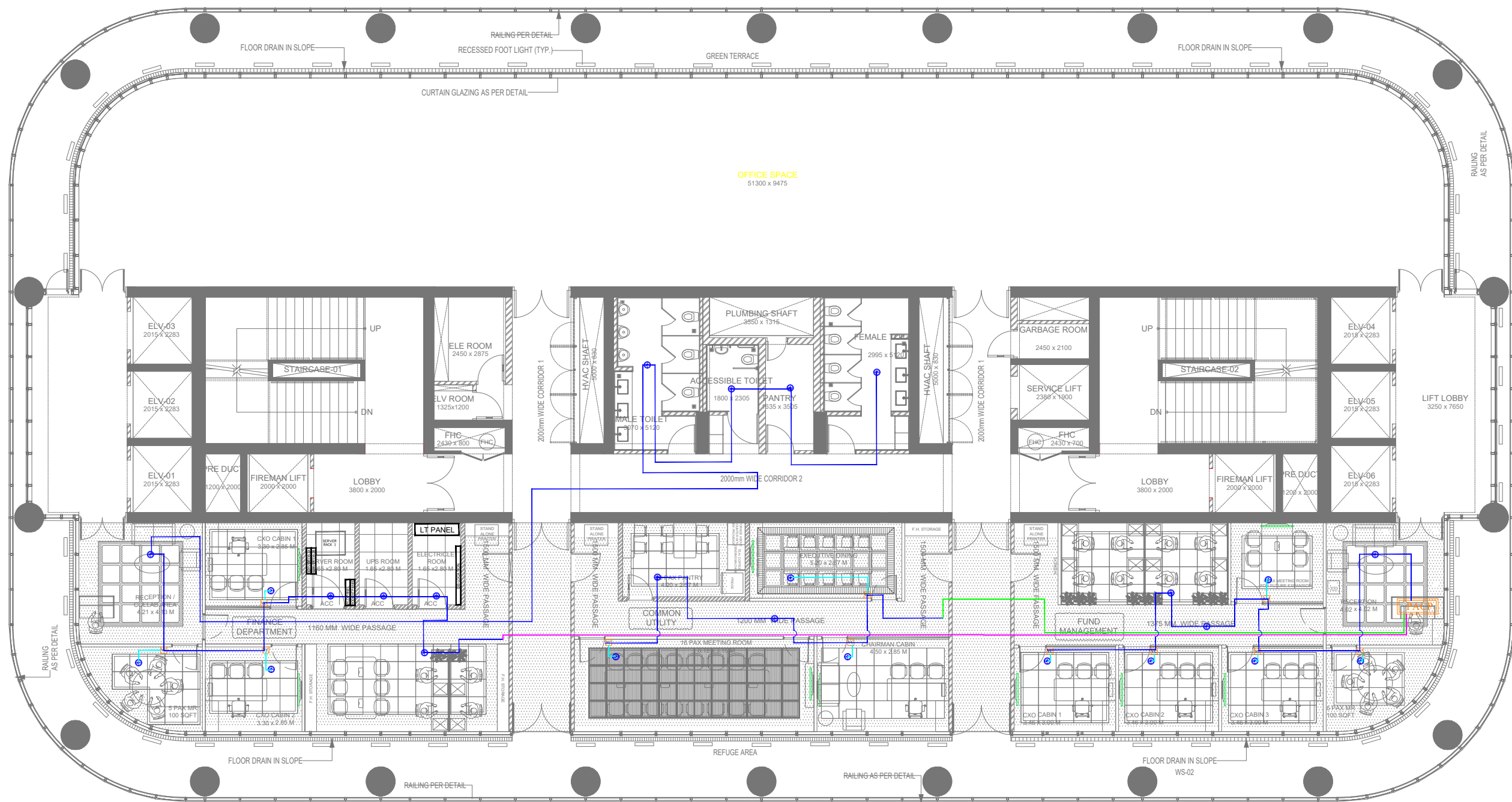
REVISION NO :

--

JOB NO.	SCALE	DATE	DWN.BY	CHK BY
	N.T.S.	25.08.2025	KOMAL	AR.GIRISH

CLIENT:-
NSE IFSC

ARCHITECTS:
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PUBLIC ADDRESSABLE SYSTEM -		
	RECESS MOUNTED SPEAKER - WHITE	25
	RECESS MOUNTED SPEAKER - WHITE	--
	SURFACE MOUNTED BOX SPEAKER - BLACK	--
	SURFACE MOUNTED BOX SPEAKER - BLACK	--
	VOLUME CONTROL UNIT	11
	SPEAKER CKT. (FOR LOOPING OF SPEAKER)	--
	40 W. 2 CORE SPEAKER CABLE	--
	SPEAKER CKT. (FROM FLOOR JB TO AMPLIFIER UNIT)	--
	70 W. 2 CORE SHIELDED CABLE	--
	MIC CKT	--
	14 W. 2 CORE SHIELDED CABLE	--
	PA CONTROL PANEL AMPLIFIER UNIT	01

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PROJECT ::
NABFID IFSC 9TH FLR

DRAWING TITLE :
PA SYSTEM LAYOUT

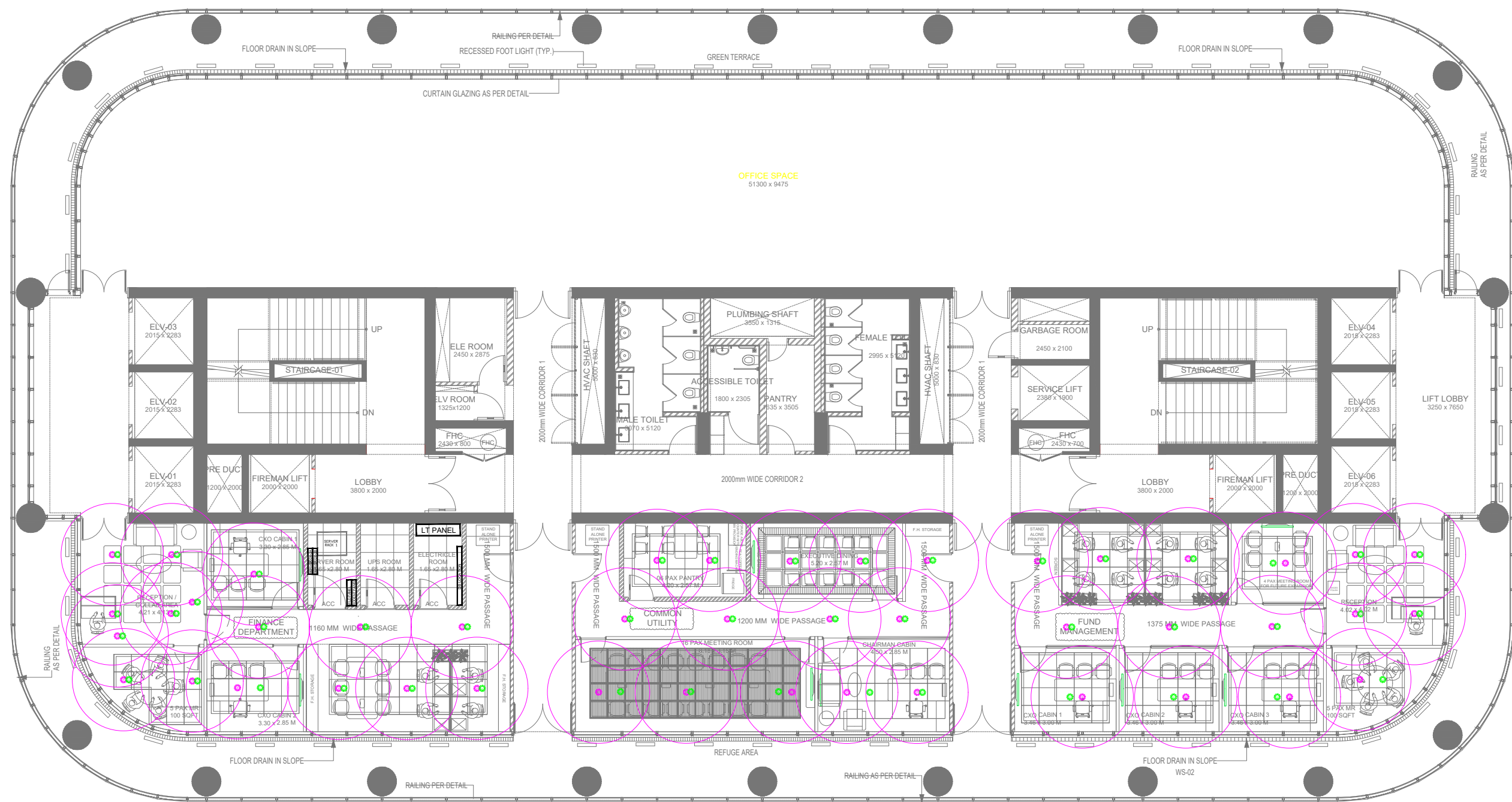
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Note- Check the existing sprinkler and reroute the same as per new sprinkler locations
(Piping shall be decided as per site requirements – levels given by architect)

SPRINKLER SYSTEM -	
● UPRIGHT SPRINKLER	45
● PENDENT SPRINKLER	45
— SPRINKLER PIPE	---
■ SIDE WALL SPRINKLER	---
○ BUTTERFLY VALVE	02
○ FLOW SWITCH	---
○ TAMPER SWITCH	---

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DRAWING TITLE :
SPRINKLER LAYOUT

REVISION NO :

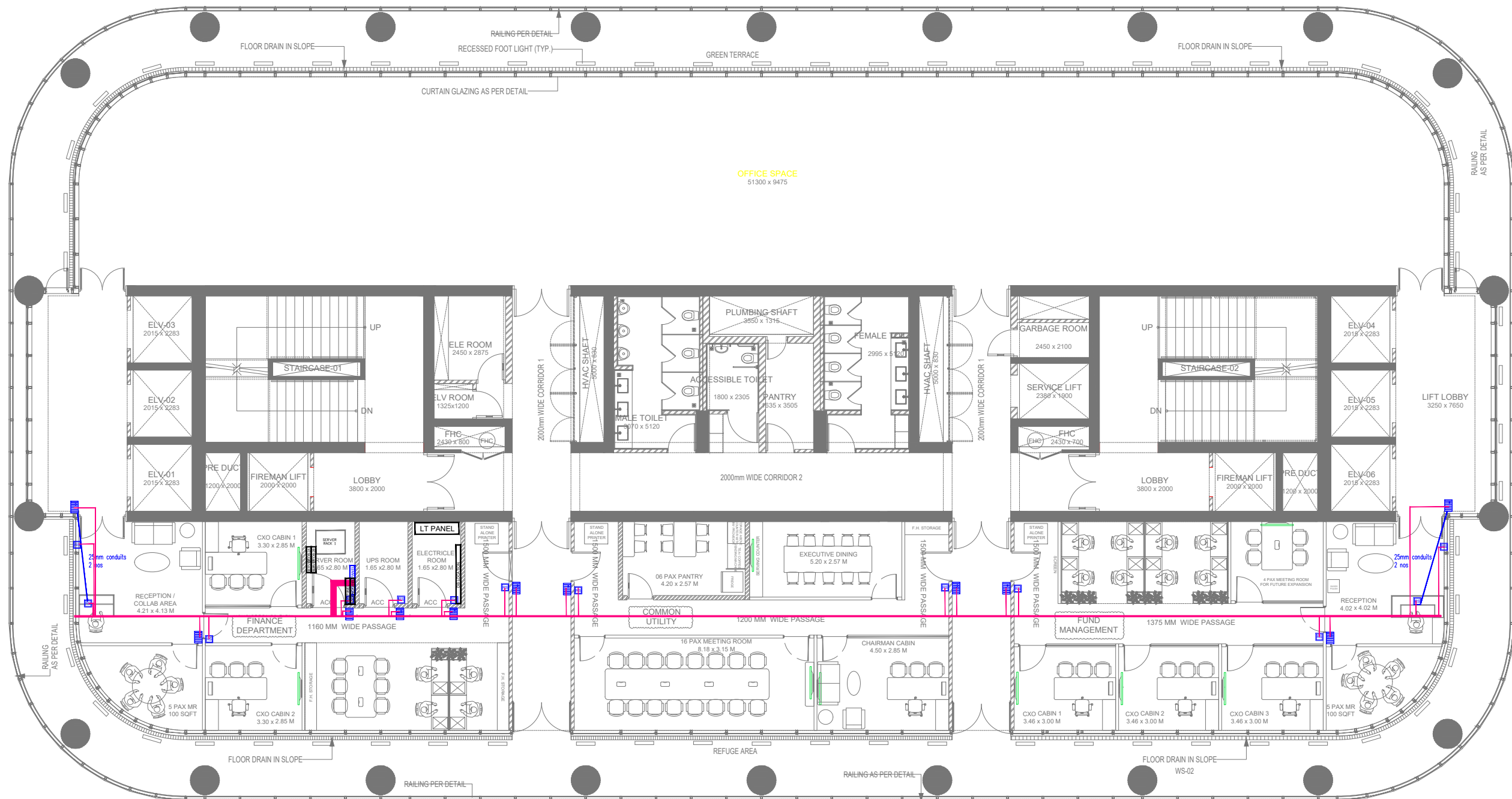
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- ACCESS Legends
- Figure/Face Reader + Card Reader
 - Proximity card Reader
 - Emergency exit break glass
 - Magnetic lock
 - Release switch
 - 2 x 8C x 1 Sqmm Shielded Arm cable + 1 x 4C x 1 Sqmm Shielded Arm Cable

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PROJECT :
NABFID IFSC 9TH FLR

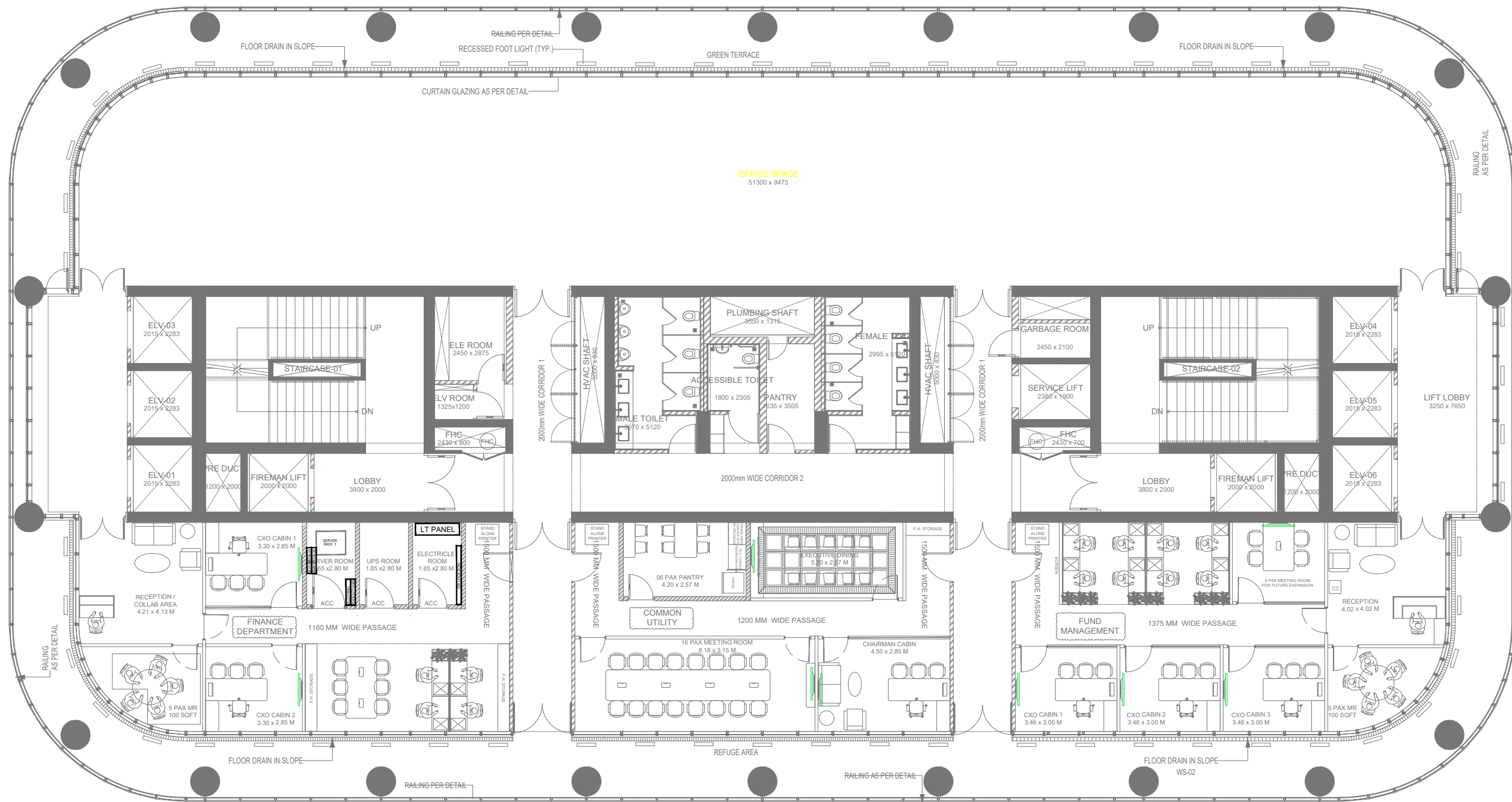
DRAWING TITLE :
ACCESS CONTROL LAYOUT

REVISION NO :

JOB NO.	SCALE	DATE	DWN.BY	CHK BY
	N.T.S.	25.08.2025	KOMAL	AR.GIRISH

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PROJECT :
NABFID IFSC 9TH FLR

DRAWING TITLE :
DB LOCATION LAYOUT

REVISION NO :

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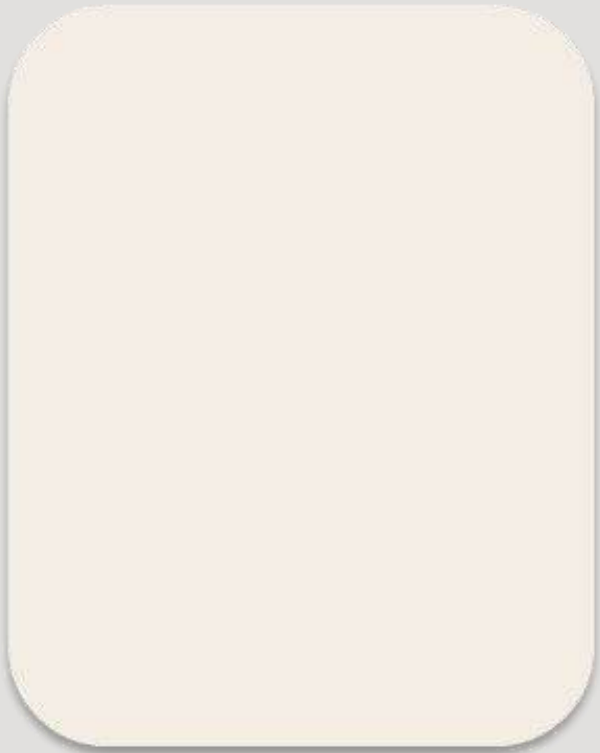
LOOK & FEEL

NaBFID Gift City Project Presentation

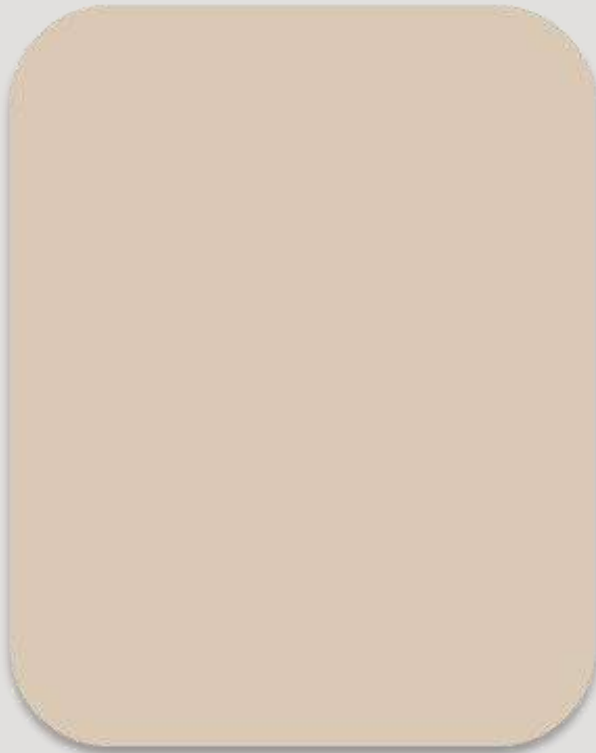


NaBFID | COLOUR PALETTE

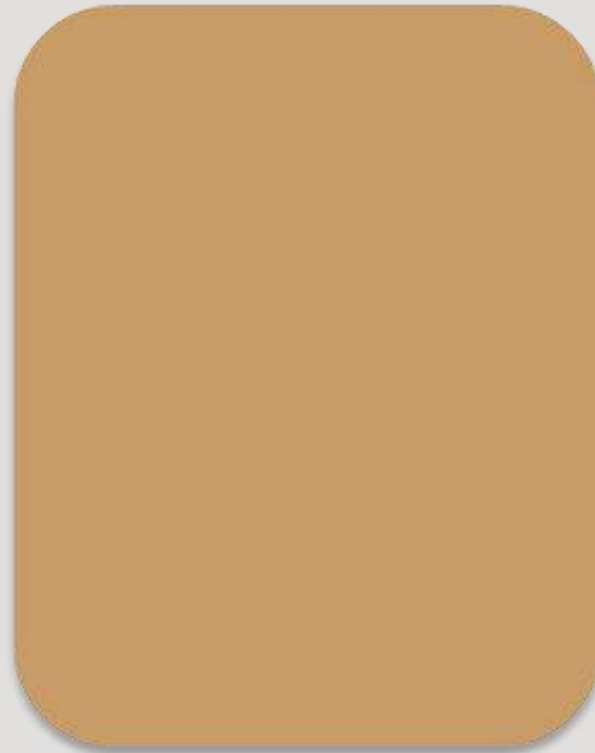
Warm Contemporary Corporate Interior

**WARM IVORY**

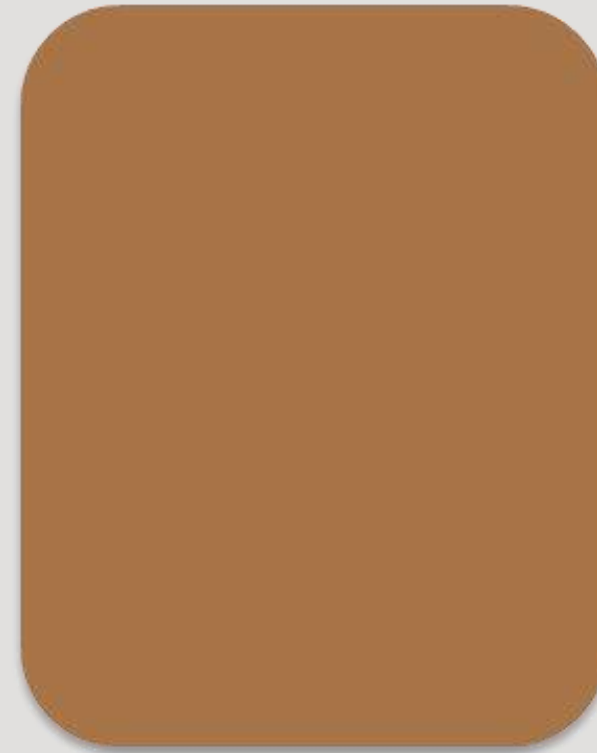
#F3EDE3
Primary wall / ceiling

**SOFT BEIGE**

#D9C9B5
Upholstery / feature finish

**NATURAL OAK**

#C99B67
Wood veneer / laminate

**WARM TEAK**

#A87548
Slatted wood accent

**TAUPE**

#716356
Furniture / neutral contrast

**NaBFID BLUE**

#0D4B9B
Branding / accent

Office Spaces

OFFICE SPACE DESIGN

Creating Productive & Inspiring Workspaces

A well-designed office is more than just a workplace. It is an environment that encourages productivity, collaboration, creativity, comfort, and employee well-being. Our approach focuses on creating functional and visually engaging spaces that reflect the organization's identity while supporting its day-to-day operations.

Design Approach

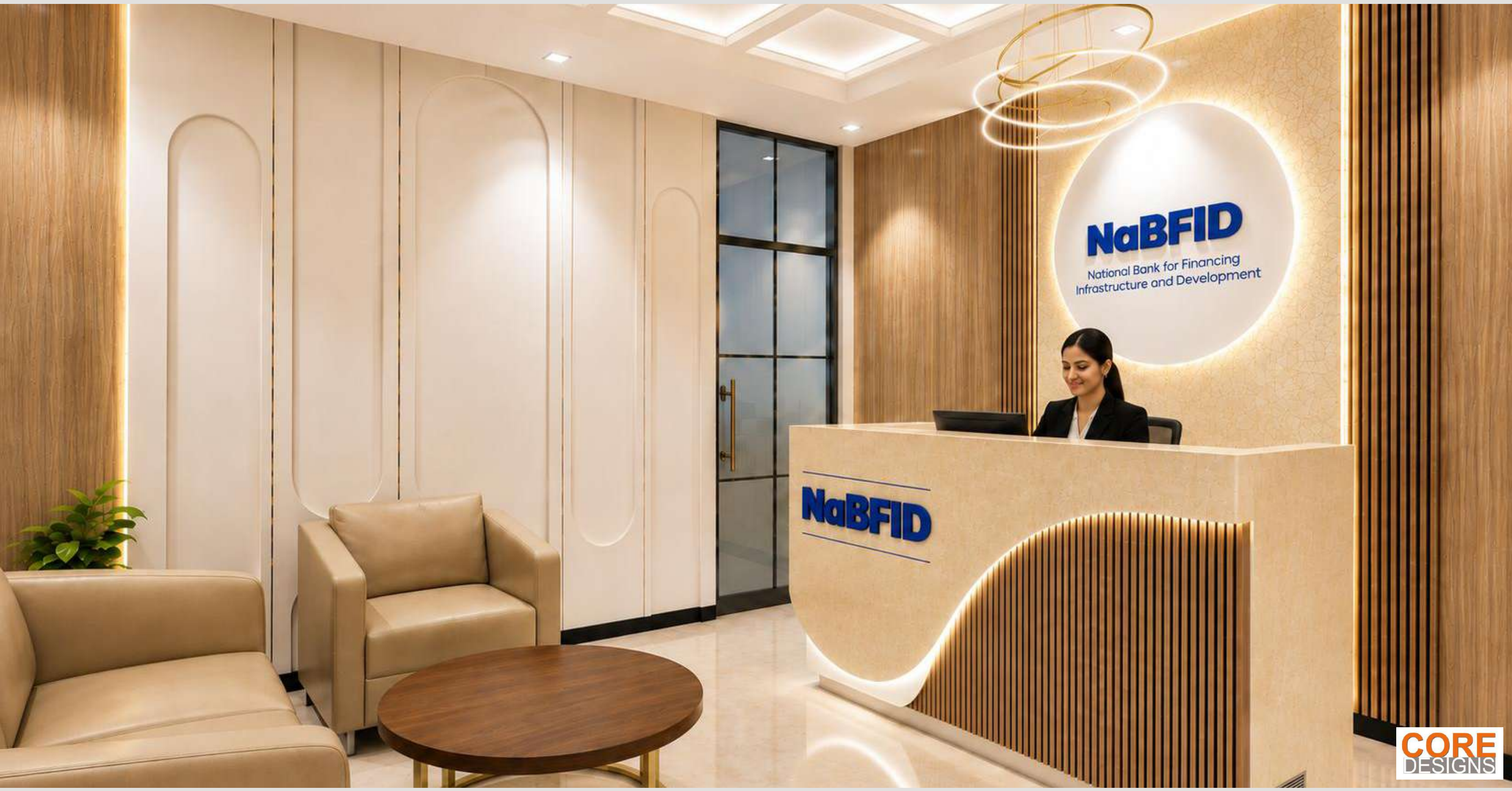
The office space is planned to achieve an effective balance between focused work, collaboration, meetings, interaction, and relaxation. Careful consideration is given to circulation, ergonomics, acoustics, lighting, technology integration, and flexibility to create an efficient workplace.

Space Planning Philosophy

Designing workplaces where people, functionality, technology, and brand identity come together to create an efficient and inspiring environment.













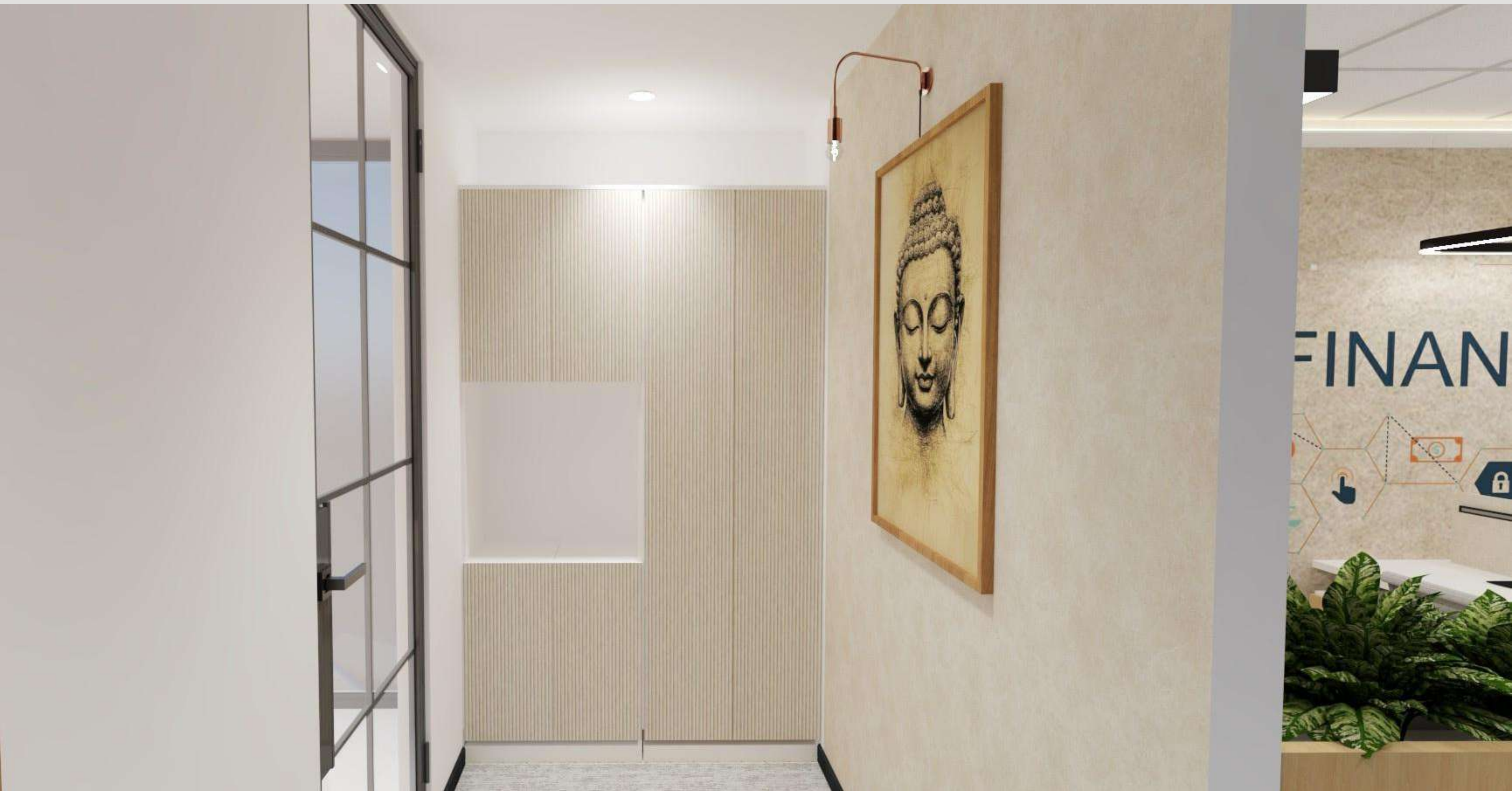


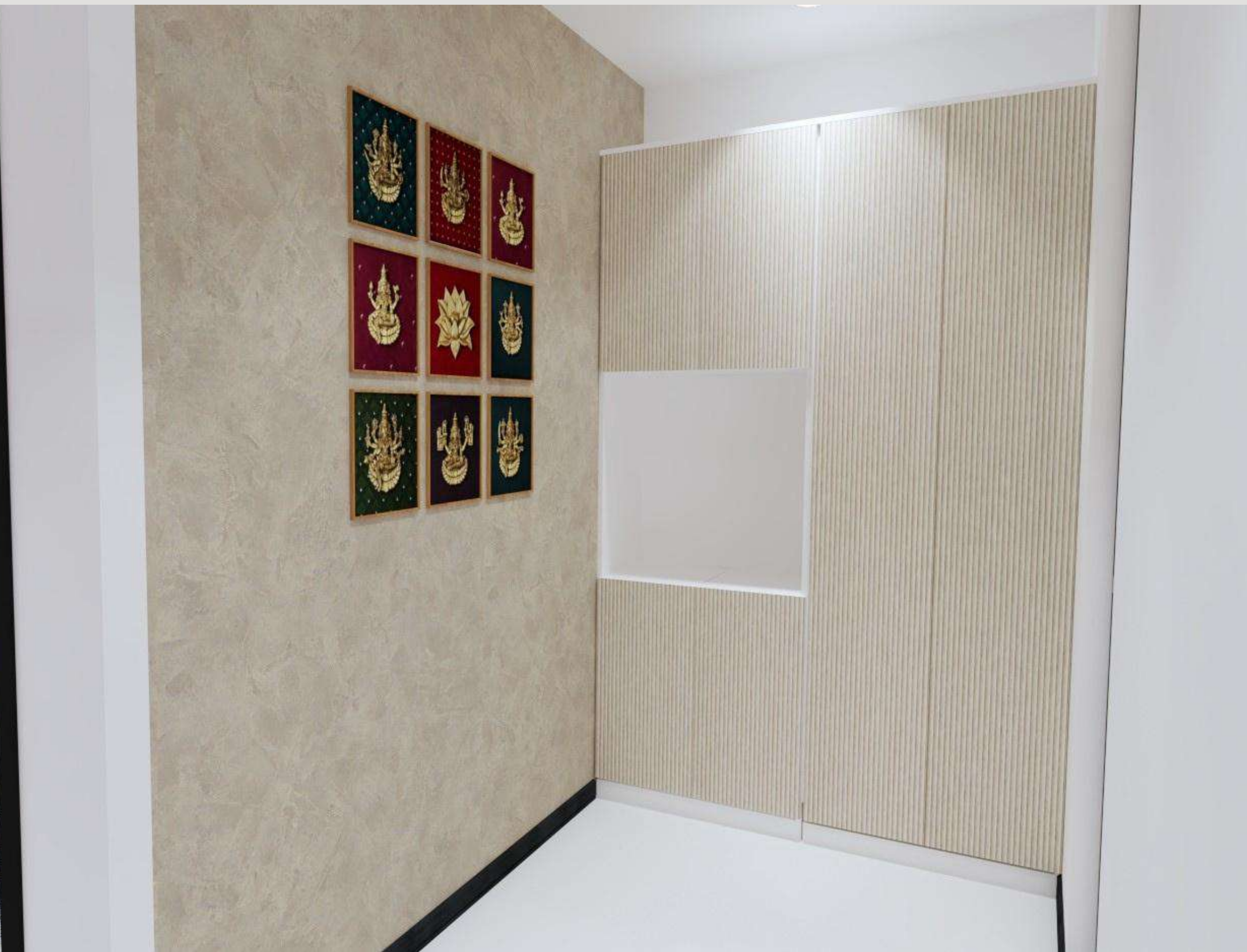


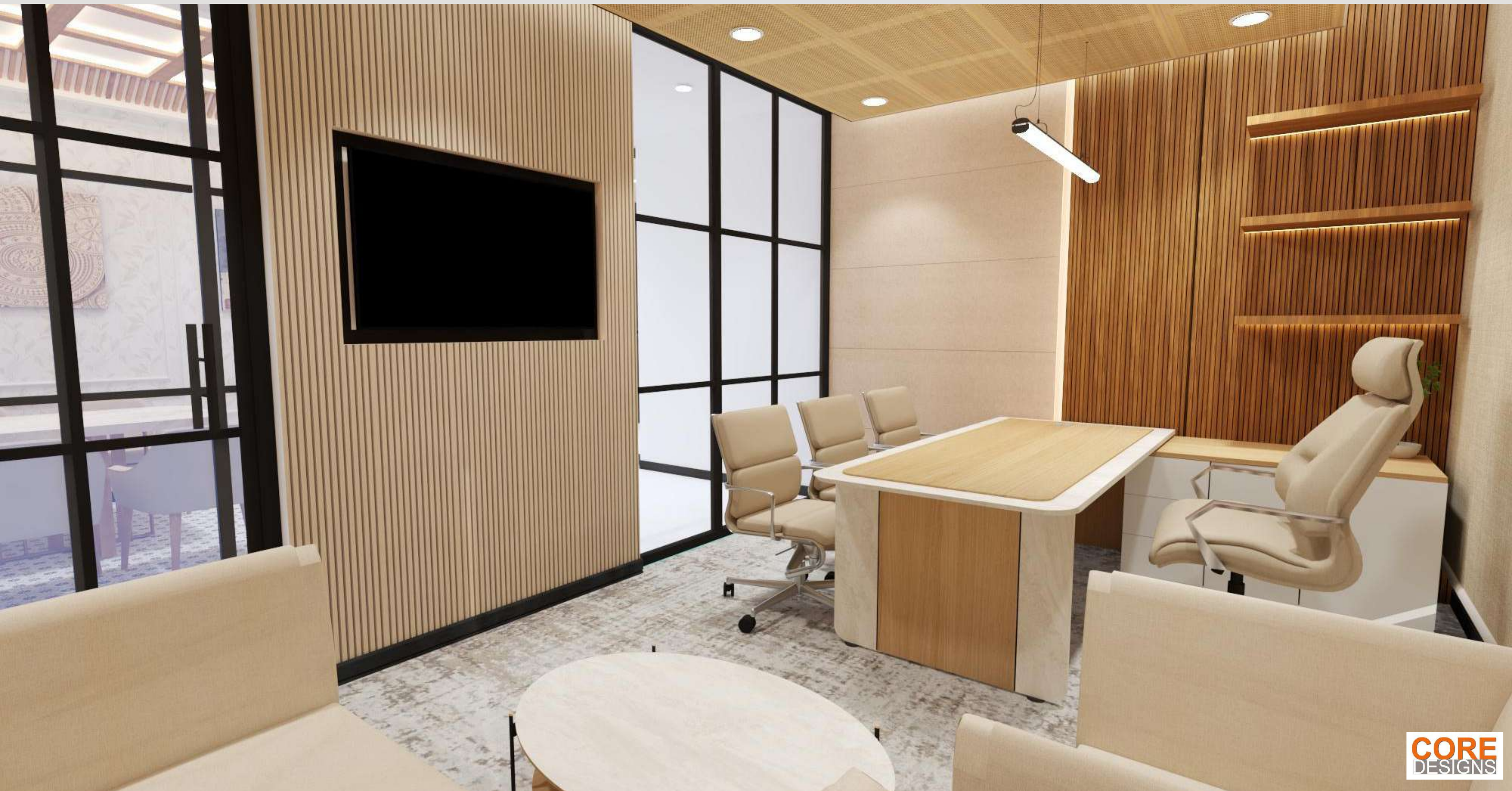
OPEN WORKSTATION AREA VIEW - FUND MANAGEMENT DEPT.

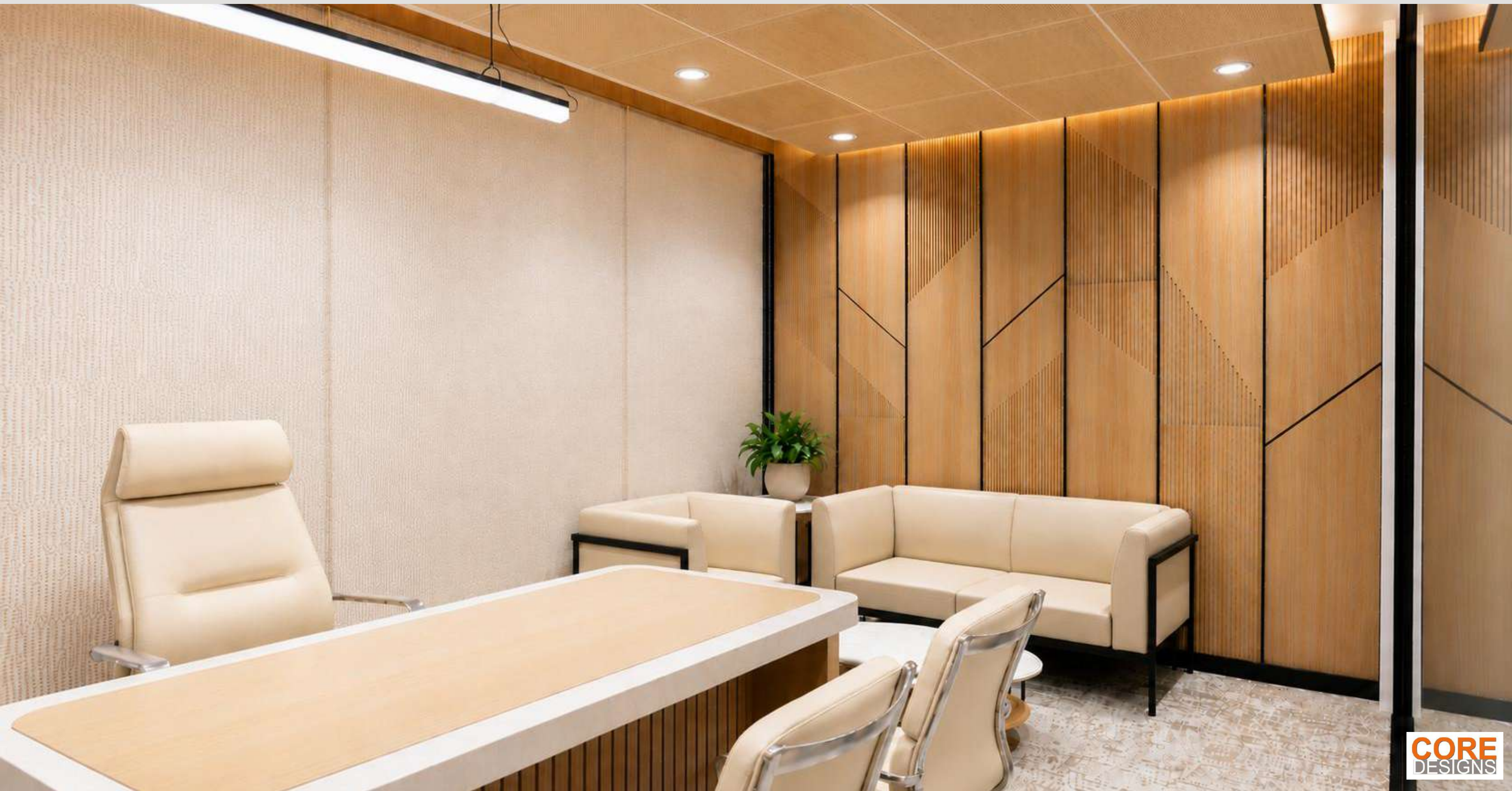






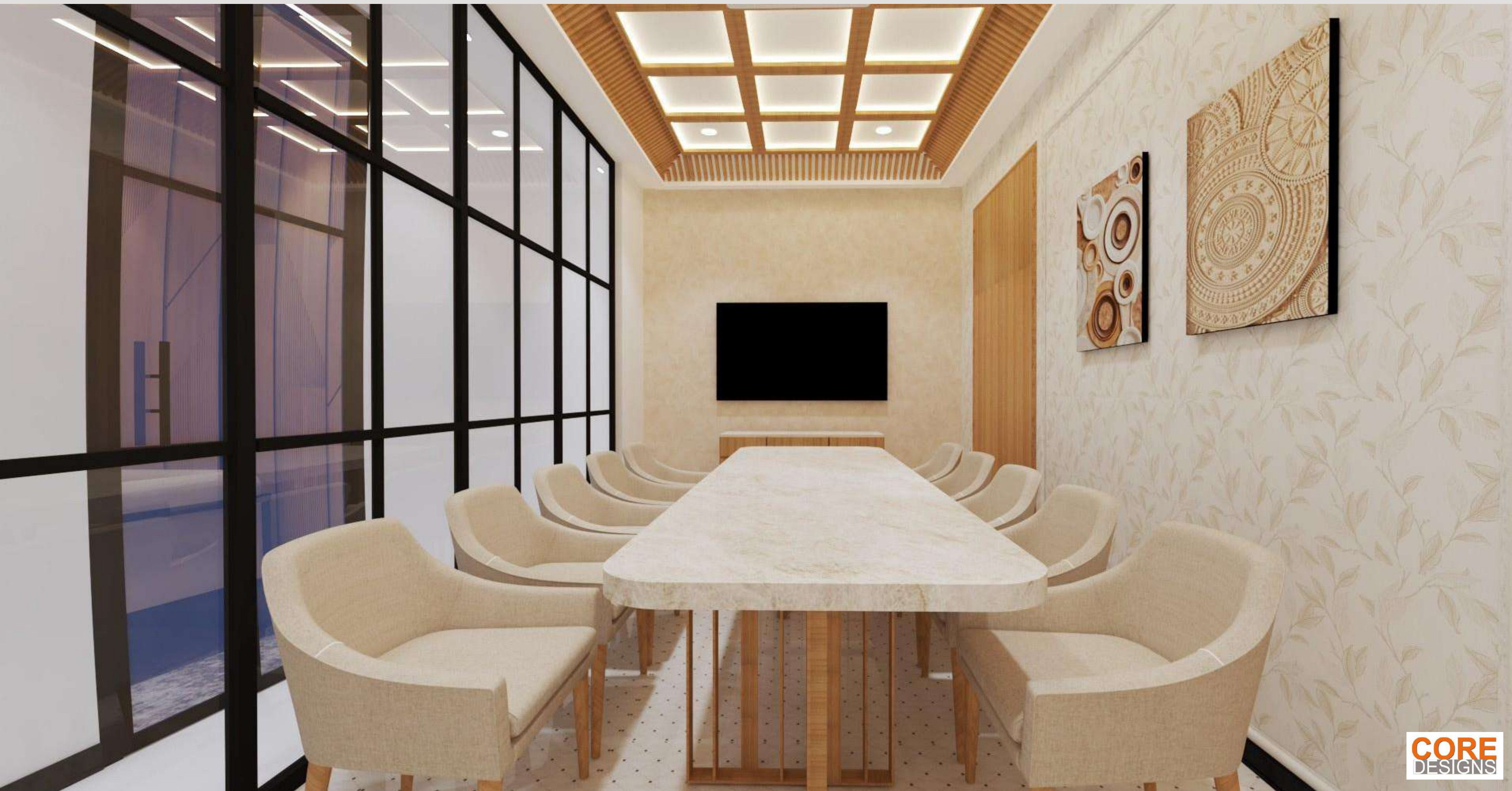


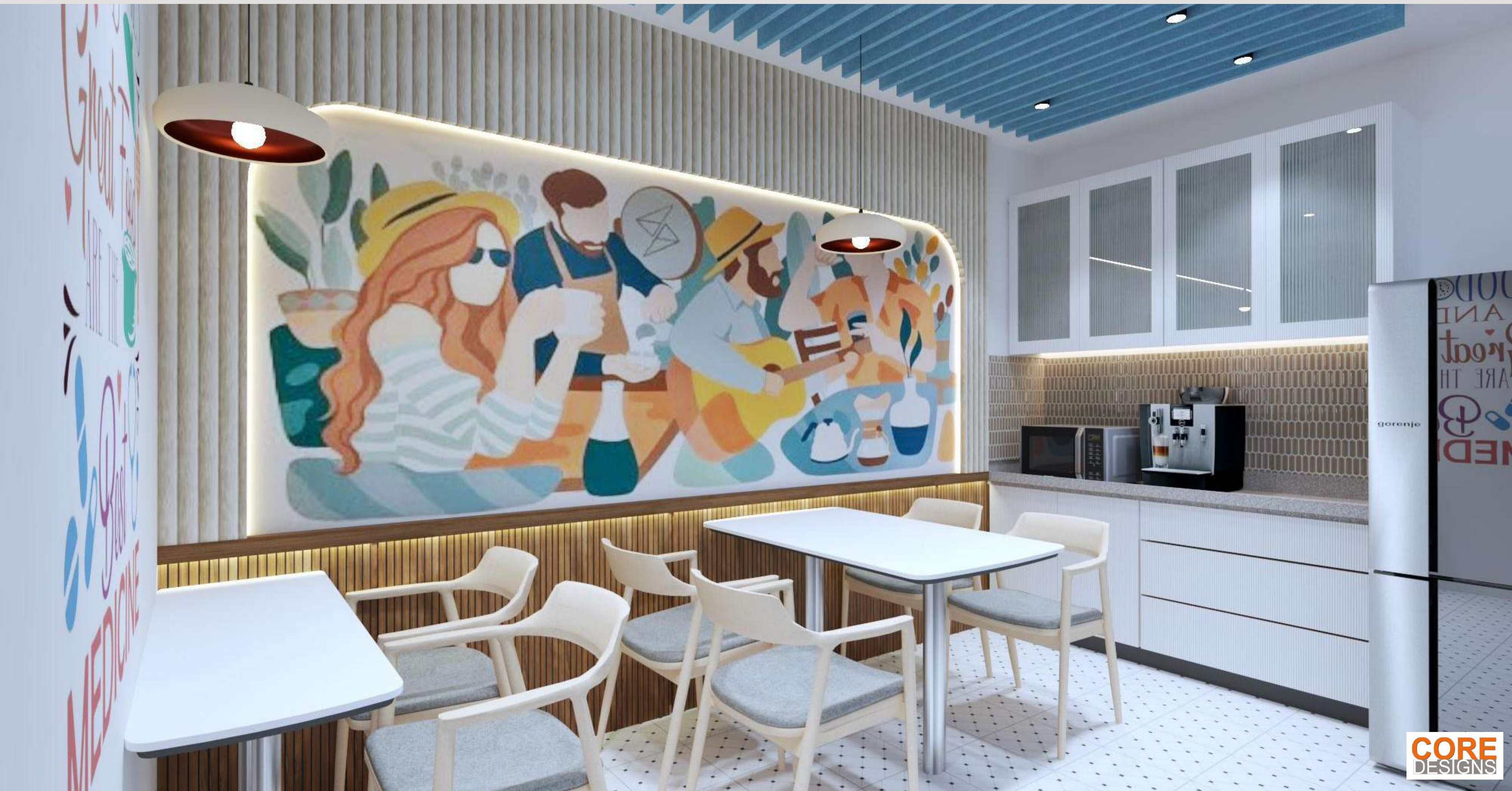














PRICE BID

INTERIOR FIT-OUT WORKS		
SUMMARY		
SR.NO	DESCRIPTION	AMOUNT
A	INTERIOR CIVIL, CARPENTRY & ALLIED WORKS	
B	MODULAR FURNITURE	
C	LOOSE FURNITURE	
D	ELECTRICAL WORK	
E	ELV WORKS	
F	HVAC WORKS	
G	NETWORKING	
	GRAND TOTAL (BASIC)	
	GST will be as per actual	
	Notes:	

BOQ OF CIVIL-CARPENTRY & ALLIED WORKS							
Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
	<u>Interior Civil Works</u>						
1	<u>Demolition & removal</u>						
1.01	<u>Dismantling</u>	Removal of Debris & carting the same away from the site to designated municipal dumping grounds, landfills.	Truck	15			
1.02	<u>Pest control</u>	Providing Pest Control & Anti Termite Treatment by appointing a specialised agency as per the specifications mentioned by the bureau of Indian Standards Specifications for General Civil,Plumbing /Drainage & Timber / Carpentry Works,Including atleast 3 year guarantee etc, complete as directed.(Mode of measurement to be on carpet area of floor and not the area of surface treated)	SQFT	3200			
3	<u>Masonry work</u>						
3.01	<u>ACC block wall</u>	Providing and erecting 100mm thk Solid masonry blocks (Make: Siporex/ Magicrete/ Aerocon) at locations. Rate to be inclusive of RCC stiffener at every 1.2 mt level with 2 nos 6mm dia reinforcement bars in 1:2:4. RCC binders to be at every 1.2 meter interval from floor level, including cost of reinforcement and form work, scaffolding, all labour, hire and fuel charges etc. all complete and as per proper cover blocks for reinforcement and all other incidental charges etc., all complete and as directed. The rate to be inclusive of fixing chicken mesh at the junction of masonry and RCC members at least 150 mm wide as directed.	SQFT	375			Critical Rooms & Pantry
3.03	<u>Cement plaster</u>	Providing & applying in one coat 12mm thick plaster on internal surface of RCC brick/block wall in cement mortar 1:6 finished rough to take on POP punning. Rate shell include for scaffolding, making grooves, sills, pattas, curing, surface partion before the application of plaster.	SQFT	375			Single Side
3.04	<u>Gyp Plaster</u>	Providing & applying average 13mm thick universal gypsum plaster N1,Product code SUP 0101 as manufactured by INDIA GYPSUM,inclusive of surface preparation,etc.complete as per theb manufacture's specifications.the rate to be including all incidentals, making grooves 6mm wide as directed,pattas,sills,etc.complete.the finished surface should be smooth and in perfect level so as to avoid unevenness and ready to take paint.	SQFT	750			Both Side
3.05	<u>Core-cutting</u>	Providing core cutting of required diameter in the slab employing a specialized agency for the same.					
	<u>a</u>	4" dia	No.s	3			If Required, as per site condition
	<u>b</u>	6" dia	No.s	3			If Required, as per site condition

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
4	Flooring & Cladding						
4.01	<u>Vitrified tile flooring - Large size: 1600 x 800mm.</u>	Providing & Laying Vitrified flooring Tiles with Double Charge Nano Technology on 25mm thick bed of cement mortar,1:6, including surface preparation, cutting & fitting, applying neat cement float,giving necessary slopes, cleaning joints and grouting them in neat white cement paste with pigmented additives to match shade of the tiles. etc.complete. Cost to include single layer of PVC bubble sheet floor guard, as a protection covering for the tiles. Basic cost of tile - 120/- Rs per Sft. Size of Tile:-1600mm x 800mm, avg. 8mm thk.	SQFT	1050			Both Receptions
4.02	<u>Mosaic Tile Flooring - size: 600 x 600mm.</u>	Providing & Laying Vitrified flooring Tiles with Double Charge Nano Technology on 25mm thick bed of cement mortar,1:6, including surface preparation, cutting & fitting, applying neat cement float,giving necessary slopes, cleaning joints and grouting them in neat white cement paste with pigmented additives to match shade of the tiles. etc.complete. Cost to include single layer of PVC bubble sheet floor guard, as a protection covering for the tiles. Basic cost of tile - 95/- Rs per Sft. Size of Tile:-600mm x 600mm, avg. 8mm thk	SQFT	290			Pantry & Executive Dining
4.03	<u>Dado Tiles</u>	Providing & fixing dado cladding in 600mm x 600mm vitrified tiles of approved make in pattern as per detailed drawings in cement paste on a backing coat of cement mortar 1:3. The rate should be inclusive of cleaning joints and grouting them with neat white cement paste with pigmented additives to match shade of the tiles etc.complete. Basic Cost of vitrified tile Rs.75/- per sft.	SQFT	20			Pantry - above counter
4.04	<u>PCC</u>	Providing and laying 50-100mm thick cement concrete flooring with 1:2:4 (1 unit - cement, 2 unites - sand,4 unites - coarse aggregates) cement concrete laid in panels of size 2m X 4m or as approved, to proper level and slope including compection, finishing smooth with rich cement mortar 1:1 of sufficient minimum thickness.	SQFT	3200			Office
4.05	<u>False Floor</u>	Flexi 800 lbf Access Floor Panels having dimensions of 600 x 600 mm shall be all Steel welded construction with an enclosed bottom pan of 64 hemispherical cones. The Top plain Sheet is fuse welded to the bottom pan at 144 Locations to form a Panel of an overall thickness of 30 mm. The panel after required pre-treatment is coated with 40 - 60 micron epoxy coat and is heated to achieve maximum adhesion to the panel surface and corrosion resistance. The Panel after required pre-treatment is epoxy coated to a thickness of 40 to 60 Microns epoxy coating to ensure corrosion resistance. The inner empty core of the Panel is injected with a light weight, non-combustible cementitious compound at high pressure to fill in all the crevices of the Panel and ensure support of not less than 90% of the top surface area of the Panel. Panel shall be capable of withstanding 800 lbf point load tested as per Cisca and conforming to Masterspecs, with the height of 150 mm from floor finish.	SQFT	120			Server, UPS
4.06	<u>Granite Counter</u>	Providing & fixing 600mm wide Granite counter fabricated out of 19mm Indian Marble undercarriage base with mortar bedding to fix Polished Granite slab as top with 50mm front fascia, incl. wall skirting upto 75mm ht. Height of the counter will be 800mm from finished floor level. All exposed edges to be polished, cost to include cut-out for Pantry Sink, complete as per details. Basic Cost of Granite-220/Sqft	RFT	12			For Pantry & Executive Dining

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
4.07	<u>Granite Skirting</u>	Providing, supplying and fixing engineered quartz stone skirting/upstand, 20 mm thick and of required height, in approved make, colour, shade and finish, fixed to wall/back surface using approved adhesive. The work shall include machine cutting to required sizes, edge polishing, mitred/joint finishing wherever required, colour-matched epoxy/resin joint filling, silicone sealing at junctions, levelling, alignment, cleaning and finishing complete. Rate shall include material, cutting, polishing, wastage, transportation, loading/unloading, labour, adhesive, consumables, tools and tackles, complete as per approved drawings, samples and Architect / Client's instructions. Basic Cost of Granite-220/Sqft	RFT	10			Above Granite counters
4.08	<u>3" Vitrified Tile Skirting -</u>	Prvoding & fixing of 75 mm high Vitrified Tiles, of approved sample in pattern as per the drawing on cement paste with a backing coat of cement mortar 1:3. Basic cost of tile - 120/- Rs per Sft.	RFT	60			Both Receptions

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
7	False Ceiling						
7.01	<u>Gyp False Ceiling</u>	Providing and fixing Gypsum false ceiling of india Gypsum make which includes G.I.Perimeter channels of size 0.55mm thick (having One Flange of 20mm. And another flange of 30mm and a web of 27mm) along with perimeter of ceiling, screw fixed to brick wall/partition with the help of Nylon sleeves and screws at 610mm centres. Then suspending G.I.intermediate channels of size 45 mm (0.9mm thick with 2 flanges of 15mm each) from the soft at 1220mm centres with ceiling angle of which 25mmx10mmx0.55mm thick fixed to soffit with G.I.cleat and steel expansion fasteners.Ceiling section of 0.55mm thick having khurled web of 51.5mm and 2 flanges of 26 mm each with lips of 10.5mm are then fixed to the intermediate channel with the help of connecting clips and in direction perpendicular to the intermediate channel at 450 mm centres. Cost to include shadow Groove profile 10mm thk. at junctions between vertical walls / partitions and ceiling.	SFT	1500			Office
7.02	<u>Cove in Gypsum ceiling.</u>	Providing 4" or 6" 'L' shape Cove with vertical in Gypsum ceiling for indirect light provision.	RFT	850			Office
7.03	<u>Modular Perforated Grid false ceiling</u>	Providing and fixing modular ceiling system with fiber board ceiling tiles as per following specificatons. Rate to include all fastening accessories with approved finishes. Ceiling tiles shall be Suprema RH 99 (Armstrong) make) tegular edge tiles of size 600mm x 600mm . Tiles shall render a NRC Level of 0.5.Suspension system shall be manufacturer specification exposed gird system with 15mm wide silhouette black reveal grid, Installation to comprise of main runners spaced at 1200mm center securely fixed to the structural soffit by approved hangers at 1200mm maximum centers and not more then 150mm from spliced joints. The last at the end of each main runner should not be greter than 600mm from the adjacent wall	SFT	800			Open office
7.04	<u>Danoline Designer Gyp Ceiling</u>	Providing and fixing Solopanel with perforations extending to the edge of the panel of Danoline make, complete with joint filling, surface preparation ready to receive paint finish.	SFT	500			All cabins, MRs
7.05	<u>Modular Wooden Grid false ceiling</u>	Providing and fixing Modular Armstrong Wooden False Ceiling comprising 600 × 600 mm mineral fibre/acoustic ceiling tiles of approved make (Armstrong or equivalent) and approved texture, suspended on a hot-dip galvanized exposed T-grid suspension system consisting of main runners, cross tees, wall angles, suspension rods, and adjustable hangers. The work shall include all perimeter trims, necessary cut-outs for light fixtures, AC diffusers, sprinklers, smoke detectors, access panels, complete levelling, alignment, installation, and finishing as per manufacturer's specifications and approved drawings.	SFT	210			Chairman's Cabin
7.06	<u>Modular Metal Grid false ceiling</u>	Providing and fixing modular ceiling system with 15mm 'T' grid and laid with pre-painted metal perforated ceiling tiles of 600 x 600mm size.	SFT	175			UPS, Server, Electrical
7.07	<u>Wooden False Ceiling with Fluted Border</u>	Providing and fixing decorative wooden false ceiling comprising 12 mm plywood fixed over GI suspension framework with approved hangers, finished with 1.0 mm wood-grain laminate of approved make and shade. The ceiling shall include decorative exposed wooden battens (box mouldings), and fluted wooden slats at the perimeter, edge trims, grooves, and all necessary framing, supports, fasteners, adhesives, and finishing. The rate shall include cut-outs for light fixtures, AC diffusers, sprinklers, smoke detectors, access panels, complete installation, and finishing as per approved drawings and Architect's instructions.	SFT	150			Executive Dining

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
7.08	<u>Designer False Ceiling with Cove Lighting</u>	Providing and fixing decorative stepped using Gypsum & MDF false ceiling combine together comprising GI suspension framework with 12.5 mm gypsum board, finished with acrylic wall putty, primer, and two coats of emulsion paint. The ceiling shall incorporate multiple rounded rectangular recessed coffers with smooth curved edges in MDF board, concealed LED cove lighting provisions, perimeter recesses, and cut-outs for recessed light fixtures, smoke detectors, sprinklers, AC diffusers, access panels, etc. The rate shall include all GI framing, hangers, screws, joint treatment, finishing, scaffolding, complete installation, and making good as per approved drawings and Architect's instructions.	SFT	200			Both Receptions
7.09	<u>Decorative False Ceiling with Wooden Rafters</u>	Providing and installing a contemporary decorative false ceiling comprising a gypsum board ceiling with recessed wooden-finish rafters/battens arranged in a grid pattern, including necessary framework, suspension system and supports. The ceiling shall incorporate continuous recessed linear LED lighting, concealed cove lighting along the perimeter, and required cut-outs for HVAC diffusers, sprinklers and other MEP services. Wooden elements shall be finished in approved natural veneer finish, complete with all accessories, edge finishing and installation as per approved design and drawings.	SFT	290			Conference Room

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
8	Partitions:						
8.01	<u>Double Skin Gypsum Partitions (One layer of normal Gypsum + 1 layer of Habito board)</u>	Providing & fixing Double skin gypsum partition with G.I. frame, avg. 100mm thk Gypsum Partition (Gyproc Ultra/ Saint Gobain) with horizontal & vertical sections (ultra series/ Saint Gobain/ Prando) at 400mm c/c, tapered edge with 1 boards of 12 mm thick Gypboard (conforming to IS 2095 - 1982 & 2542 - 1981) on either side of approved make screw fixed with 25 mm dry wall screw at 300 mm centres including finishing square and tapered edges of the boards, jointed to have a flush look, gypsum edge guard with staggered joint, filling and finishing with jointing compound, joint paper tape and two coats of drywall top coat suitable for Gypboard (as per manufacturers specifications) including rockwool in-fill with fibre bags inside, etc. complete as per detail drawing.	SFT	1800			All Dry Partitions
8.02	<u>Full height - Single Segmented Glass Partitions</u>	Supply of Modular Aluminium single glazed partitioning frame 45mm System 45mm x 25mm, as top channel, wall starter and bottom channel. Partition Dimension – 45mm x 25mm. Providing, fabricating and fixing full-height single glazed segmented glass partition comprising 10 mm thick clear toughened glass panels, divided into segments as per approved elevation/design and fixed within slim aluminium/MS framework of approved section and size. Framework shall be finished with approved powder-coated / anodized / metallic finish, including necessary floor, ceiling and vertical sections, glazing channels, EPDM/neoprene gaskets, silicone sealant, glass connectors, brackets, fasteners and all required accessories. All glass edges shall be machine polished, including necessary cutting, holes and notches carried out prior to toughening. Partition shall be properly aligned, levelled and securely fixed to floor, ceiling and adjoining surfaces, complete as per approved shop drawings, manufacturer's specifications and Architect's instructions. Glass type- 8mm, 10mm, 12mm & 12.52mm thk toughened glass OR Laminated Toughened Glass*. Acoustic performance STC 28 TO 32DB. (Windor, Cubic, Skyhub make)	SFT	425			All Cabins, MRs & Executive Dining
8.03	<u>Single Skin Gypsum Partition</u>	Providing & fixing SINGLE skin partition with 50 x 50mm aluminium frame with 1 layers of Duraline gypsum board with rockwool insulation in between (rockwool to be wrapped in fibre bags). The partition to be made in Plumb & level & finished neatly as per details. Make: India Gypsum	SFT	930			Above Ceiling
8.04	<u>Reinforced Partition (For TV Screens)</u>	Providing and fixing full-height AV screen partition comprising 50 x 50 mm MS box section framework at maximum 600 mm c/c, securely anchored to floor, ceiling/slab and adjoining walls. Providing 12 mm thick plywood cladding over the framework, with additional 18 mm thick plywood backing at AV screen mounting locations. Provide adequate MS support members to safely carry the weight of the LED/TV screen and mounting brackets.	SFT	100.00			Conference Room
8.05	<u>MDF Skining</u>	Providing and fixing of 10mm thk MDF skinning on existing framework, Ply or wall surface in line and plumb with tapered joints to get a smooth and even finish, complete as per the instructions of the Architect.	SFT	300			Partition & Ceiling-Reception
8.06	<u>Door Portal</u>	ALUMINIUM ACCESS PORTAL 104MM X300MM Supply and Installation of Modular Aluminium Access Portal Using 104mm x 300mm Finish – Mid night Black Anodized finish, Portal length 2700 mm	Nos	3			for Meeting Scheduler, if required

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
9	Panelling & Boxing						
9.01	<u>Laminate Panelling</u>	Providing and fixing 1.0mm thk Satin Finish Laminate including of approved make, color and shade over ply paneling / partitions etc. cost to include making grooves & Hat sections in between Gypsum Partition & Paneling as per the details & instructions of the Architects. Basic Cost of Laminate : ₹105 /sq.ft.	SFT	1200			Reception, CXO cabin, Meeting Room, Executive Dining.
9.02	<u>Ply boxing for window sill in Laminate finish.</u>	Providing and fixing window boxing using ' L' shaped of Avg. size 200 mm x 150 mm made out of 18mm Comm. Plywood with laminate finish along walls and partition with necessary supporting framework. The rate to be inclusive of all accessories & supporting members. Basic Cost of Laminate : ₹105 /sq.ft.	SFT	200			Peripheri of the glass façade
9.03	<u>Marble-Finish Charcoal Decorative Wall Paneling</u>	Providing and fixing premium-quality charcoal decorative wall panels in beige/cream marble finish, having natural stone/Italian marble-inspired texture and subtle veining, fixed over properly prepared plywood using approved adhesive and fixing system. Rate shall include cutting, edge finishing, grooves/joints, corner treatment, necessary adhesives, wastage, labour and complete installation as per approved design, shade, sample and manufacturer's specifications. Basic Cost Charcoal Panel : ₹250 /sq.ft.	SFT	300			Reception Backdrop
9.04	<u>Charcoal Fluted Paneling</u>	Providing and fixing Charcoal sheet paneling 8mm thk as per approved design, to be stuck using silicon adhesive in line and level as per Architect's instructions. Basic Cost of Charcoal Fluted :250 Rs./ sq.ft.	SFT	500			Reception, Meeting Room, Chairman's Cabin, Conference Room
9.05	<u>Grooved Acoustic Paneling</u>	Providing & Fixing 10mm / 12mmThk. PET plain Acoustic board paneling with Grooving as per design. Basic Cost Grooved Acoustic :190 Rs./ sq.ft.	SFT	500			Conference Room, Chairman Cabin, Meeting RM, CXO Cabin
9.06	<u>Printed Acoustic Paneling</u>	Providing & Fixing 9mm Thk. PET printed Acoustic board paneling as per design. Basic Cost Printed Acoustic :175 Rs./ sq.ft.	SFT	150			Pantry
9.07	<u>Pelmets</u>	Providing and fixing pelmets' U' shaped of size 450 mm x 150 mm with vertical made of 19mm Comm. Plywood along walls and partition with necessary supporting framework. The rate to be inclusive of all accessories & supporting members. Basic Cost of Laminate : ₹105 /sq.ft.	RFT	210			Glass Facade
9.08	<u>Glass Writing Board</u>	Providing and fixing Glass board panel of size as per drawing consisting of 8mm thick backpainted toughened extra clear glass of modifloat or equivalent make , supported on 25mm dia brushed SS studs with necessary 12mm thick commercial ply reinforcement inside in back partition for strong support to take glass weight. Basic Cost :220 Rs./ sq.ft.	SFT	150			Open Office, CXO cabin
9.09	<u>Soft Board</u>	Providing and fixing Fabric wrapped soft board panels 12mm thick of size and profile as per details in 19mm x 50mm 6mm ply backing The rate should include approved fabric (Basic price Rs. 350/-Rmt) foam infill as per approved specification with necessary 12mm thick commercial ply reinforcement in the partition. Note the fabric shall be stretched uniformly along the direction of weave and shall be wrinkle free PVC Gripper to be included in the cost. Basic Cost of Fabric :120 Rs./ sq.ft.	SFT	150			CXO Cabin
9.10	<u>Live Plants with Pots</u>	Providing & Supplying Live Planters with pots.	Nos	10			Office-whenever required.

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
10	Doors						
10.01	<u>Single Glass Segmented Doors Size- 3'0" X 9'0"</u>	Supply of Modular Aluminium single leaf door frame of 45mm System, using 45mm x 35mm, segmented glass door of size 950 mm (W) x 2700 mm (H), comprising 10 mm thick toughened clear glass divided into approved segments/panels with slim aluminium/MS framework finished in approved powder-coated/metallic finish, complete as per approved design and shop drawings. Door Frame Dimension – 45mm x 35mm. Shutter - 60 x 35mm Using glass bead horizontal bottom with 10mm thk. toughened glass having rubber gasket. The door shall include heavy-duty floor spring/patch fittings or approved pivot mechanism, top and bottom pivots, necessary patch fittings, SS/approved finish pull handle, lock, stopper, gaskets, seals, fasteners and all required hardware suitable for the door height and weight.	Nos	9			for Meeting Rooms & CXO Cabins, Chairman Cabin, Executive Dining & Office Entrance from Reception
10.02	<u>Solid Flush Doors size -3'0" X 9'0"</u>	i) Solid Flush Door	Nos	4			Meeting Rm behind reception & Conference RM
		ii) Solid Door with glass vision panel.	Nos	1			Pantry
10.03	<u>Wooden Fire-rated door avg. size. 3'0" X 9'0"</u>	Supply & installation of 120min fire rated wooden doors with laminate finish, complete with all accessories like hinges, lock, door closer, handle etc.	Nos	3			All Critical RMs
11	Storages	Note : 1) All locks within individual work spaces to be matched 2) Tower bolts will be fitted on shutter without locks 3) all lockable shutters to be provided with magnetic ball catches 4) All surface inside & outside of storages in laminate finish.					
11.01	<u>Full Ht. Storages</u>	P/f Storage made out of 19mm comm. Ply, with exterior surface finished in 1.5mm decorative fluted laminate and internal surface with 0.8mm laminate, incl. shelves at approx. 14" ht. including all hardware like dead locks, handles, stopper chains, tower bolt, hinges etc. (Depth upto 18")	SFT	40			
11.02	<u>Low Height Storage</u>	Providing and fixing full & Low height Storage of depth 460 mm finished in 1.00mm thk laminate of approved shade and color as per the selection & design of the architect.	SFT	20			Conference RM
11.03	<u>Overhead storage</u>	Providing and fixing overhead Storage of depth 460mm same as above but finished in 1.00mm thk laminate of approved shade and color as per the selection/design(s)/detail(s) of the architect.	SFT	20			Pantry
11.04	<u>DB & Fire panel Storage</u>	P/f Storage made out of 19mm comm. ply Shutters to have Aluminium grill louvers for ventilation panel. Shutters will be provided with Glass vision panels as required for Fire panels. (Depth upto 1100mm)	SFT	70			
11.05	<u>Customized Trap door</u>	Providing and fixing Trap doors made of ply in the false ceiling with all necessary hardwares etc. complete.	SFT	50			
11.06	<u>Under counter Shutters</u>	Providing and fixing undercounter shutters in 19mm comm. Ply with external decorative laminate as per approved design & balancing internal laminate in 0.8mm thk white or grey shade as per	SFT	45			Pantry
11.07	<u>Service Counter</u>	Service Counter Storage made out of 18mm comm. Ply with approved Veneer finish, top to be made in 12mm thk. Acrylic surface. (Depth 450mm)	SFT	30.00			Executive Dining
11.08	<u>Wooden Ledge</u>	Providing and Fixing wooden ledge along the external glazing made out of 18mm comm. Ply approx. size 400mm x 150mm finished with approved laminate.	RFT	20			CXO Cabin & Chairman's cabin

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
12	Painting Works						
12.01	<u>Plastic -Acrylic emulsion for Ceiling.</u>	Providing and applying three coats of plastic emulsion paint of Asian/ICI/ Dulux make to all internal walla/ceilings of approved colour over a coat of water based primer including preparation of surface by thorough cleaning and wetting and applying ready made putty fully to give a smooth and even surface before painting and curing.	SFT	2000			Ceiling
12.02	<u>Luster Paint</u>	Providing and applying three coats of Luster enamel paint of desired shade.of Asian/ICI/ Berger make to all internal wall surface wherever required at all heights to give an even and uniform shade, applied over a coat of primer and putty fully to give a smooth and even surface including throughly brushing the surface free from water.	SFT	5000			All Wall & Solid Partitions
12.03	<u>Texture Paint</u>	Providing and applying three coats of Texture paint of desired shade.of Asian/ICI/ Berger make to all internal wall surface wherever required at all heights to give an even and uniform shade, applied over a coat of primer and putty fully to give a smooth and even surface including throughly brushing the surface free from water. Basic Cost :90 Rs./ sq.ft.	SFT	500			All Wall & Solid Partitions wherever Required
12.04	<u>PU Paint</u>	Providing and applying PU (Polyurethane) paint finish of approved make, colour, shade and sheen over MDF surfaces, including proper surface preparation, filling of joints and imperfections, application of suitable MDF sealer and primer, followed by required coats of PU paint to achieve a smooth, uniform and premium finish, including intermediate sanding between coats, complete as per approved sample, manufacturer's specifications and design requirements. Basic Cost PU Paint :150 Rs./ sq.ft.	SFT	100			Reception
13	Miscellaneous works						
13.01	<u>Frosted Film</u>	Providing and fixing frosted film of 3M Sparkle on Glass Partitions with laser cutting design/printed graphics in pattern as per drawings complete. Basic cost 180/- Sft.	SFT	450			
13.02	<u>Roller Blinds</u>	Providing & Fixing Blackout Blinds & Perforated Blinds					
i)	<u>Perforated Blinds</u>	Providing & fixing roller blinds comprising of polymer coated fibre fabric with minimum openness factor. The roller mechanism shall be a moulded unit made from engineering grade plastic polymer with steel spring support.The fabric shall be finished on the sides with edge tape duly welded for waviness control. The fabric shall be attached to the roller tube with high quality self adhesive tape. Basic cost 120/- Sft	SFT	2100.00			Glass Façade
ii)	<u>Blackout Blinds</u>	Providing & fixing blackout roller blinds comprising of polymer coated fibre fabric. The roller mechanism shall be a moulded unit made from engineering grade plastic polymer with steel spring support.The fabric shall be finished on the sides with edge tape duly welded for waviness control. The fabric shall be attached to the roller tube with high quality self adhesive tape. Basic cost 140/- Sft	SFT	750.00			Conference Room & Executive Cabin
iii)	<u>Motor & Remote for Blinds</u>	Providing & Installing Somfy Quiet Motor ALTUS 50 RTS 6/32 230V 50HZ 120 W IP44 suitable for blind controls in Board Room and Hall.	NOS	3.00			Conference Room & Executive Cabin
13.03	<u>Aluminum Skirting</u>	Providing & fixing Anodised Aluminum Skirting 75mm Ht., complete with fixing screws and rubber gasket.	RFT	160			
13.04	<u>Corner Guards</u>	Providing and fixing 25 x 25mm aluminium anodized corner guards in desired location.	RFT	55			
13.05	<u>Hat -Sections</u>	Providing and fixing 10mm aluminium anodized hat sections in desired location.	RFT	250			

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
13.06	<u>Laminated wooden flooring</u>	Providing & Fixing 8mm thk. laminated wooden flooring with foam underlay as per approved design for Collab Area.	SFT	250			
13.07	<u>Carpet</u>	Providing and fixing Nylon fibre Carpet of min. 20 oz density in approved shade and color. Basic Cost of Carpet Rs. 145/-	SFT	2500			
13.08	<u>Painting Artwork</u>	Providing & fixing Painting Artwork in canvas with wooden framing as per selection of Architect. Basic rate Rs. 35,000/-	No.				
13.09	<u>Signage</u>	Providing & Fixing signages for various rooms as per approved design and specifications. Rate shall be inclusive of supply & installation.					
	a)	Company Logo - Backlit with Acrylic letters as per design	Nos.	2			
	b)	Pantry / Meeting rooms / Cabins / Server / Ele / UPS / Executive dining / Conference RM in SS finish	Nos.	16			
	c)	Push Pull Pair	Nos.	26			including fire exit doors
	d)	Evacuation map	Nos.	6			
	e)	Exit signage in Flourecent Autoglow.	Nos.	6			
	f)	Fire Extiguisher	Nos.				
13.10	<u>Readymade Trap door</u>	Providing and fixing Readymade Knauff make Trapdoors					
	a)	450mm x 450mm	Nos.	5			
13.11	<u>Transition Profile</u>	Providing and fixing SS Transition Profile Grade 304 Hairline 6mm high for carpet and marble joint	RFT	15			

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
14	Customized Furniture						
14.01	<u>Reception Table</u>	Providing and fixing custom-made curved reception counter as per approved design and detailed drawings, comprising suitable plywood framework and backing, finished externally with beige solid-surface finish of approved shade and texture with decorative vertical wooden fluted panelling in approved laminate finish, formed to the required curved profile. Providing concealed warm-white LED strip lighting with aluminium profile and diffuser along the curved feature edge and at the bottom/toe-kick portion to create indirect illumination. Basic Cost of Charcoal Fluted:250 Rs./ sq.ft, Solid-surface Corian 6 mm Basic Cost : ₹700 /sq.ft. & Basic Cost of Laminate : ₹105 /sq.ft.	Nos	2			
14.02	<u>Chairman Table</u>	Executive cabin table size approx. 2100mm (L) x 750mm (W) x 750mm (H) made in 18/25mm commercial plywood withwith required internal supports. Table Top: 25–36 mm thick commecial plywood with veneer finish.Top to have rounded corners and smooth profiled edges. Outer Border: Beige/ivory marble-look finish Solid Surface around the perimeter, with seamless rounded corner detailing as shown. Central Top Finish: Natural light-oak wood veneer, with grain direction maintained uniformly. Side Supports / Legs: Box-type solid side supports in matching beige marble-look Solid Surface finish, with curved external corners. Front Modesty Panel: Full-height modesty panel finished in Charcoal Futed Panel, matching the tabletop. Construction: 18 mm commercial plywood or high-density engineered board with necessary internal reinforcement to provide adequate stability. Edge Finish: All exposed edges to be machine-finished with matching edge band and smooth rounded profiles. Cable Management: Provision for concealed wire manager, cable routing and power/data box, Soft-close hinges, telescopic channels, handles – Hafele/Hettich/Blum/Ebco/equivalent, wherever required. Hardware: Premium-quality concealed hardware, brackets, connectors and adjustable levellers from approved make. Finish: All finishes, grain, shade, joint pattern and edge details to be as per approved shop drawing and physical sample.	Nos	1			
14.03	<u>16 Pax Conference Table</u>	Providing, fabricating and installing custom-made large conference table as per approved design, dimensions and shop drawings, comprising the following:	Nos	1			

Nos	Item	Specification	Unit	Quantity	Rate	Amount	Locations / Area
		Table Top: Fabricated from 19 mm commercial plywood suitably to achieve the required finished thickness, with rounded corners and smooth water curved edges. Main top surface finished in approved light oak/ash natural veneer with PU polish. Central Feature Panel: Providing continuous recessed off-white/beige solid-surface (Corian) central strip running along the length of the table, neatly integrated flush with the tabletop. AV & Electrical Provision: Providing multiple recessed pop-up-type connectivity boxes within the central strip for power sockets, USB charging, HDMI, LAN/data and other AV connections as per AV consultant's requirements. Cable Management: Providing concealed horizontal cable raceway / tray below the tabletop, with vertical cable routing through table supports/base to floor boxes. All cables shall remain concealed and accessible for maintenance. Table Edge: Providing approximately 50–75 mm thick finished edge profile, with matching veneer finish and smoothly rounded corners as shown in the approved design. Base: Providing sturdy box-type pedestal supports at suitable intervals, fabricated from plywood with necessary internal reinforcement and finished in approved off-white laminate. Supports shall be positioned to provide adequate legroom for users. Structural Support: Necessary concealed MS members shall be provided below the tabletop wherever required to prevent sagging and ensure stability for the complete table length. Finishing: All exposed edges, joints, corners and junctions shall be neatly finished. Veneer surfaces shall receive approved PU matt polish after proper sanding and surface preparation. Complete Installation: Rate shall include plywood, veneer, laminate, Corian central strip, internal ms members, edge finishing, adhesives, hardware, cable-management provisions, cut-outs and installation, complete as per approved drawings and sample. Basic Rate of Veneer - Rs.250/- per sq.ft. , Basic Cost Fluted Panel:400 Rs./ sq.ft.,solid-surface Corian 6 mm Basic Cost : ₹700 /sq.ft. & Basic Cost of Laminate : ₹105 /sq.ft.					
14.04	Executive Dining Table	Providing, fabricating and fixing custom-made premium executive dining table as per approved design and shop drawings, comprising 20mm thick rectangular beige Italian marble tabletop with softly rounded corners and thick finished edge profile, supported on a custom-fabricated decorative wooden base to have approximately 40–50 mm finished visual thickness, including matching Italian marble fascia treatment as per approved design. Providing custom-made solid wood structural base and vertical support members, arranged in a decorative linear pattern as shown in the approved design, with necessary cross members and concealed reinforcement for stabilit. All exposed wooden surfaces to be finished with approved laminate. Including cutting, edge polishing, carpentry, joinery, finishing, transportation, assembly and installation, complete in all respects as per approved drawings and Architect's instructions.Solid-surface Corian 6 mm Basic Cost : ₹700 /sq.ft. & Basic Cost of Laminate : ₹105 /sq.ft.	Nos	1			
		TOTAL			Rs.		

BOQ OF LOOSE FURNITURE

Sr. No.	Description of Item	Reference Image	Qty	Rate	Amount
1	LINEAR WORKSTATIONS WORKSTATION SIZE: 1200L x 600D x 1200mmht TABLE TOP : 25 MM thk. Prelaminated particle board with 2mm PVC Edge band on all side. Table top at 750mm height from floor level. Cut-out provision for wire manger as required. Table edges will be in reverse waterfall detail. UNDERSTRUCTURE : Splayed (Slant) Legs made up of 40x40MM MS pipe finished in Powder coating. Cross members made up of 40x40MM MS Section finished in Powder coating are connected to Legs with Brackets for table support. WIRE MANAGMENT : Continuous single tier raceway finish in Powder coating with provision of electrical leg / vertical duct at intermediate distance to take out cable from floor to raceway. PRIVACY SCREEN 300 MM ht. : 10MM Thk.glass with Special Aluminium Powder coated Decorative Trim. MODESTY (FOR NON SHARING WORK STATIONS ONLY) 450 MM HT.: MS Perforated modesty finish in powder coating.	 	12		
2	CXO CABIN TABLE- (SWITCH 40) MAIN TABLE SIZE: 2100mm L X 750mm D X 750mm HT RETURN COMBO STORAGE: 1050mm L X 450mm D X 750mm HT Specificaions: Table top - Made of 25mm thick prelaminated particle board of approved shade confirming to E1 norms. All the edges of workstation surface provided with machine pressed 2mm thick pvc edge banding. Under-structure - MS powder coated Switch 40 x 40 Square Angular legs with levelers and supporting MS cross beams (40X20mm) Modesty : Pre Laminated Modesty Panel of 450Ht (300mm above floor) Wire Management : PVC cable tray for power and data, Switch plate to mount the switches / sockets as per requirement. Vertical wire entry cover with removable metal cover for wire uptake to PVC Cable Tray from floor and 350mm Aluminium Flip Up for switch access.		5		

BOQ OF LOOSE FURNITURE

Sr. No.	Description of Item	Reference Image	Qty	Rate	Amount
3	6 SEATER MEETING TABLE Table Size : 2100mm L x 1050mm D x 750mm HT Specifications Table Top: 25mm thick Pre laminate particle board with 2mm PVC edge lipping on all exposed edges Support: End Legs: MS powder coated Switch 40 x 40 Square Angular legs with levelers. Intermediate Legs: MS podwer coated 60X40mm legs and supporting MS cross beams (40X20mm) Wire Management:* Continuous PVC Cable Tray with provision to mount switches and sockets as per client requirement.* Vertical wire entry cover for wire uptake from floor to cable tray and 450mm Aluminium Flip Up for swicth access		1		
4	4 PAX MEETING TABLE Table Size : 1650mm L x 1050mm D x 750mm HT Specifications Table Top: 25mm thick Pre laminate particle board with 2mm PVC edge lipping on all exposed edges Support: End Legs: MS powder coated Switch 40 x 40 Square Angular legs with levelers. Intermediate Legs: MS podwer coated 60X40mm legs and supporting MS cross beams (40X20mm) Wire Management: Continuous PVC Cable Tray with provision to mount switches and sockets as per client requirement.* Vertical wire entry cover for wire uptake from floor to cable tray and 450mm Aluminium Flip Up for swicth access.		1		
5	Product : Storages with Planter Boox SIZE: 1200L X 450D X 1200HT (1050 + 150HT PLNTER BOX) Specifications: Top & Sides: 18mm Thk Pre Lminated particle board Back: 9mm Thk pre laminated particle board Edge: All exposed area with 2mm thick PVC edge lipping Handle: Finger groove handle Lock: Regular lock		4		

BOQ OF LOOSE FURNITURE

Sr. No.	Description of Item	Reference Image	Qty	Rate	Amount
6	PLB MOBILE PEDESTAL WITH (2D+1F) Size: 400mm L x 450mm D x 600mm Ht Specifications - Sides: 18mm Thk pre laminated particle board Back: 9mm Thk pre laminated particle board Edge: All exposed area with 2mm thick PVC edge lipping Handle: Finger groove handle Lock: Regular lock		12		
7	CAFE TABLE Table Size : 1200mm L x 750mm D x 750mm HT Specifications Table Top: 18mm HDHMR TOP Support: End Legs: MS powder coated Prong Base.		1		
8	CAFE TABLE Table Size : 1200mm L x 400mm D x 750mm HT Specifications Table Top: 18mm HDHMR TOP Support: End Legs: MS powder coated Prong Base.		1		
9	5 PAX MEETING TABLE Table Size : 1200mm DIA x 750mm HT Specifications Table Top: 25mm thick Pre laminate particle board with 2mm PVC edge lipping on all exposed edges Support: End Legs: MS powder coated Bell Base.		2		
BASIC TOTAL					-

PROJECT:- NABFID IFSC GIFTCITY

BOQ OF LOOSE FURNITURE

S.no.	Description	Specifications	Unit	Quantity	Rate	Amount
	<u>Loose Furniture</u>					
a	<u>Two Seater Sofa</u>	Supply and Installation of Cushioned sofa in leatherite finish with wooden frame and metal legs as per approved design (1650L x 750mm D)	Nos.	3		
b	<u>Single Seater Sofa</u>	Supply and Installation of Cushioned sofa with wooden frame and metal legs as per approved design. (750mm L x 750mm D)	Nos.	3		
c	<u>Centre Table</u>	Supply and Installation of Centre tables with metal legs as per approved design.Size-1200mm x 650mm	Nos.	3		
d	<u>Corner Table</u>	Supply and Installation of Corner tables with metal legs (550mm Dia) as per approved design	Nos.	3		
e	<u>Meeting Room chair</u>	Supply and Installation of meeting room chair Base shall be ss finish - Revolving wheel chair with Hydraulic adjustable base in S.S. finish, Seat and back shall be cushioned in high density Foam upholstered with head rest in approved fabric. (Basic Rate: 12500/-) .	Nos.	14		
f	<u>Staff Chair</u>	Supply and Installation of staff chair Base shall be ss finish - Revolving wheel chair with Hydraulic adjustable base in S.S. finish, Seat and back shall be cushioned in high density Foam upholstered in approved fabric. Godrej Make & Equivalent. (Basic Rate: 10,500/-)	Nos.	45		
g	<u>CXO Chairs</u>	Supply and Installation of High-back chair Base shall be ss finish - Revolving wheel chair with Hydraulic adjustable base in S.S. finish, Seat and back shall be cushioned in high density Foam upholstered in approved fabric. Godrej Make & Equivalent. (Basic Rate - Rs.12,000/-)	Nos.	3		

PROJECT:- NABFID IFSC GIFTCITY

BOQ OF LOOSE FURNITURE

S.no.	Description	Specifications	Unit	Quantity	Rate	Amount
9	Chairman's High-Back Executive Chair	Providing and supplying premium high-back Chairman/Executive revolving chair with ergonomically designed high backrest, integrated adjustable headrest and lumbar support, upholstered in premium quality beige leather/leatherette of approved shade and finish. Chair shall be provided with high-density moulded foam cushioning, contoured seat and back, upholstered armrests, synchronized reclining/tilting mechanism with locking facility, pneumatic height adjustment and 360° swivel mechanism. Providing heavy-duty five-star metal/aluminium base in approved finish with smooth-running heavy-duty twin-wheel castors, including all necessary mechanisms, hardware and accessories, complete as per approved sample and manufacturer's specifications.Basic cost of chair - Rs. 25000 / No	Nos.	1		

PROJECT:- NABFID IFSC GIFTCITY

BOQ OF LOOSE FURNITURE

S.no.	Description	Specifications	Unit	Quantity	Rate	Amount
h	<u>Executive Cabin Visitor Chair</u>	Providing and supplying premium mid-back visitor revolving chair with ergonomically designed contoured cushioned seat and backrest, upholstered in premium quality beige leather/leatherette of approved shade and finish. Chair shall be provided with high-density moulded foam cushioning, supportive backrest, sleek polished aluminium/metal armrests, 360° swivel mechanism with suitable tilt/recline and height adjustment mechanism as applicable. Providing heavy-duty five-star polished aluminium base with smooth-running twin-wheel castors, including all necessary mechanisms, fittings, hardware and accessories, complete as per approved sample and manufacturer's specifications. Basic cost of chair - Rs. 18000 / No	Nos.	3		
i	<u>Boardroom Chairs</u>	Providing and supplying premium high-back Chairman/Executive revolving chair with ergonomically designed high backrest, integrated adjustable headrest and lumbar support, upholstered in premium quality beige leather/leatherette of approved shade and finish. Chair shall be provided with high-density moulded foam cushioning, contoured seat and back, upholstered armrests, synchronized reclining/tilting mechanism with locking facility, pneumatic height adjustment and 360° swivel mechanism. Providing heavy-duty five-star metal/aluminium base in approved finish with smooth-running heavy-duty twin-wheel castors, including all necessary mechanisms, hardware and accessories, complete as per approved sample and manufacturer's specifications. Basic cost of chair - Rs. 25000 / No	Nos.	16		

PROJECT:- NABFID IFSC GIFTCITY

BOQ OF LOOSE FURNITURE

S.no.	Description	Specifications	Unit	Quantity	Rate	Amount
j	<u>Executive Dining Chair</u>	Providing and supplying premium executive dining armchair with ergonomically designed curved upholstered backrest with integrated armrests, fabricated with a sturdy hardwood/plywood internal frame and cushioned with high-density moulded foam for comfortable seating. Seat, backrest and armrests to be fully upholstered in approved premium beige textured fabric, including suitable lining, stitching and finishing. Chair to be supported on four tapered solid wooden legs finished in approved natural oak/ash wood tone with matt PU polish, including protective floor pads and all necessary fittings and hardware. Basic cost of chair - Rs. 12000 / No	Nos.	10		
k	<u>Pantry Chair</u>	Providing and supplying premium pantry/cafeteria armchair with contemporary slim-profile design, comprising a sturdy solid wood/engineered wooden frame with ergonomically curved backrest and integrated arm supports. Chair shall have a comfortable cushioned seat with high-density foam, upholstered in approved grey/beige textured fabric. Exposed wooden frame and four tapered legs shall be finished in approved wood tone with matt PU polish, including necessary joinery, hardware and protective floor pads. Chair shall be sturdy, lightweight and suitable for regular commercial use, complete as per approved design, upholstery shade, finish and Architect's approved sample Basic cost of chair - Rs. 4500 / No	Nos.	6		
TOTAL AMOUNT						0.00

SUMMARY OF ELECTRICAL WORKS

Sr No	Description	Total
A	DB & PANELS	
B	CABLE & WIRING	
C	LIGHT FITTINGS	
	TOTAL AMOUNT	

BOQ FOR DB & PANELS					
Sr. No	Description	Quantity	Unit	Rate	Amount
A	PANEL & DBs				
1	Supply, Installation, Testing & Commissioning of Following Panels as per below specs.				
	Floor/wall mounted cubicle type panel, Fabricated from 14/16G CRCA sheet steel ,Totally compartmentalized, 7 tank powder coating treatment for rust proofing, with separate busbar chamber & cable chambers ,Front /Back access for switchgears, connectors etc.Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,50 Deg Celcius ambient temp,Class 1 Type with 15VA burden, Provisionn for control wiring diagram, 3 MM openable gland plate on top and bottom of panel, 75 MM height channel base frame to panel. Proper labeling shall be done all chambers of panel showing feeder rating and location				
1.1	MAIN LT PANEL	1	Nos		
	100A 4P MANUAL C/O SWITCH				
	100A 4P MCCB, 25 KA- 1 nos , 100A 4Pole				
	ALUMINIUM busbar- 100A, RYB, ON OFF TRIP LAMPS with control MCB ,load manager with RS 485, 10ma to 10A - ELR with CBCT, 35KA TVSS with control MCB				
	APFC BANK 20 KVAR, 6 Stage as per SLD				
	63A 4P MCCB 16KA - 1 nos with load manager with CT				
	63A 4P MCB- 6 nos				
	40A 4P MCB- 3 nos				
	40A DP MCB- 2 nos				
	32A DP MCB- 2 nos				
1.2	UPS OP DB-(10KVA)	1.00	Nos		
	63A 2P MCB- 1 nos				
	CU busbar- 63A ,				
	40A SP MCB- 4 nos				
1.3	63A 4P RCBO 100ma with box IP 65	-	Nos		
1.4	25A 2P MCB and industrial socket	2.00	Nos		
1.4	32A 3pin ,IP44 NEMA sockets for server rack with male and female connector and box	2.00	Nos		
1.6	63A/40A/32A 4P MCB with box IP 65	2.00	Nos		
1.7	32A 2P MCB with box	2.00	Nos		

BOQ FOR DB & PANELS					
Sr. No	Description	Quantity	Unit	Rate	Amount
2	Supply, Installation, Testing & Commissioning of Distribution Boards complete with MCBs/Isolators/ Bus bars and interconnections. No fabricated DBs shall be allowed. Only DBs of specified makes as per list of materials shall be used all MCB 10 kA. (All DB will have MCB numbering, DB chart, DB number), DB should be fixed with Anchor fastner to wall with proper GI L angle fixed to wall. Proper earthing should be provided to DB body at 2 places.Cable tray , raceway used for DB drop,shall be earhed to DB earthing with 12 SWG CU wire and lugs				
a	TPN as follows (LDB)- Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination-for Terrace	1.00	each		
	Incomer 40A 4P MCB C Curve				
	40A DP RCCB , 30ma- 3 nos C Curve				
	Outgoing 10/16A SP MCBs -24 Nos. C Curve				
b	TPN as follows (RDB)- Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	1.00	each		
	Incomer 63A 4P MCB C Curve				
	63A DP RCCB , 100ma- 3 nos C Curve				
	Outgoing 16/20/25 A SP MCBs -24 Nos. C Curve				
c	TPN as follows (HVAC DB)- Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	1.00	each		
	Incomer 40A 4P MCB C Curve				
	40A DP RCCB , 100ma- 3 nos C Curve				
	Outgoing 16/20/25 A SP MCBs -18 Nos. C Curve				
d	SPN as follows (UDB)- Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	1.00	each		
	Incomer 40A DP MCB- 1 No. D Curve				
	Outgoing 16A/20A SP MCBs -14 Nos.D Curve				

BOQ FOR DB & PANELS					
Sr. No	Description	Quantity	Unit	Rate	Amount
e	SPN as follows (SERVER DB)- Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	1.00	Sets		
	Incomer 40A DP MCB- 1 No. D Curve				
	Outgoing 32A SP MCBs -4 Nos.D Curve				
f	SPN as follows (EM LDB)- Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	1	Sets		
	Incomer 32A DP RCBO 30mA- 1 No. D Curve				
	Outgoing 10A SP MCBs -10 Nos.D Curve				
	TOTAL AMOUNT				-

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
B	CABLE & WIRING				
1	LT XLPE FRLS CABLES-SITC of Aluminum / Copper armoured XLPE ,FRLS Grade PVC Insulated cables as per IS 1554 to be fixed to walls, ceilings, on trays with suitable GI clamp, cable tie at every 450 mm or to be laid in ready-made trench . Cable tagging shall be done at both the ends of cable. Arrow marking shall be done at panel end to show flow direction of current.				
a	3.5 Core 240 sq. mm. A2XFY XLPE	-	Mtrs		
b	3.5 Core 150 sq. mm. A2XFY XLPE	-	Mtrs		
c	3.5 Core 95 sq. mm. A2XFY XLPE	20.00	Mtrs		
d	4 Core 16 sq. mm. A2XFY XLPE	15.00	Mtrs		
e	4 Core 10 sq. mm. A2XFY XLPE	30.00	Mtrs		
f	4 Core16sq. mm Cu Arm YWY XLPE	-	Mtrs		
g	4 Core10sq. mm Cu Arm YWY XLPE		Mtrs		
h	3 Core 10sq. mm Cu Arm YWY XLPE	30.00	Mtrs		
i	4 Core 4 sq. mm Cu Arm YWY XLPE	-	Mtrs		
j	4 Core 6 sq. mm Cu YWY XLPE	25.00	Mtrs		
k	3 Core 6 sq mm Cu YWY XLPE	20.00	Mtrs		
l	3 Core 4 sq mm Cu YWY XLPE	30.00	Mtrs		
m	3 Core 2.5 sq mm Cu YWY XLPE	50.00	Mtrs		
n	4 Core 2.5 sq. mm Cu YWY XLPE		Mtrs		
o	1cx 10 sqmm cu flex frls cable with FRLS pvc pipe	40.00	Mtrs		
p	1cx 25 sqmm cu flex frls cable with FRLS pvc pipe	-	Mtrs		
2	SITC of cables with Heavy duty Alu/ Cu. Lugs & Brass cable glands. All Cable should be Double compression gland for 16 Sqmm and Above cables.The glands should be earthed along with brass clips for Earthing.Bimetallic washers shall be utilise for Aluminium cables for terminations with cu busbar.				
a	3.5 Core 240 sq. mm. A2XFY XLPE	-	nos		
b	3.5 Core 150 sq. mm. A2XFY XLPE	-	nos		
c	3.5 Core 95 sq. mm. A2XFY XLPE	4.00	nos		
d	4 Core 16 sq. mm. A2XFY XLPE	2.00	nos		

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
e	4 Core 10 sq. mm. A2XFY XLPE	4.00	nos		
f	4 Core16sq. mm Cu Arm YWY XLPE	-	nos		
g	4 Core10sq. mm Cu Arm YWY XLPE	-	nos		
h	3 Core 10sq. mm Cu Arm YWY XLPE	2.00	nos		
i	4 Core 4 sq. mm Cu Arm YWY XLPE	-	nos		
j	4 Core 6 sq. mm Cu YWY XLPE	4.00	nos		
k	3 Core 6 sq mm Cu YWY XLPE	8.00	nos		
l	3 Core 4 sq mm Cu YWY XLPE	4.00	nos		
m	3 Core 2.5 sq mm Cu YWY XLPE	4.00	nos		
n	4 Core 2.5 sq. mm Cu YWY XLPE		Mtrs		
o	1cx 10 sqmm cu flex frls cable with FRLS pvc pipe	16.00	Mtrs		
p	1cx 25 sqmm cu flex frls cable with FRLS pvc pipe	-	Mtrs		
3	SITC of 1.6 mm thick GI Perforated type cable Trays of Asian /Profab / Equivalent make The cable tray shall be fixed to the ceiling/ wall with suitable size of GI clamp, appropriate dia threaded rod & 35mmx2mm thick GI slotted 'C' channel Patti OR suitable size of MS angle support (MS support to be painted with two coats of red oxide & two coats of enamelled paint).Supports to be provided at an interval of 800mm or lesser depending upon the location. The rate shall include the cost of GripeSupports/ GI rods and MS angle support .				
a	Cable Tray=100mm wide x75 mm height. IBMS works, DATA works, Electrical works in passage		Mtrs		
b	Cable Tray=150 mm wide x75 mm height. IBMS works, DATA works, Electrical works in passage	20.00	mtrs		
c	Cable Tray=200 mm wide x75 mm height. IBMS works, DATA works, Electrical works in passage		mtr		
d	Cable Tray=300 mm wide x75 mm height. Electrical works, IBMS , data inside shaft works	90.00	mtr		
e	Cable Tray=450 mm wide x75 mm height. Electrical works, IBMS , data inside shaft works	-	mtr		

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
4	SITC of Powder coated 100mmx 75mm GI Trunking 2mm thick with cover to be used for running the wires/cables near Db and DB drop . Trunking to be fixied on Wall or flooring with suitable size of GI clamp, appropriate dia threaded rod & 35mmx2mm thick GI slotted 'C' channel Patti OR suitable size of MS angle support (MS support to be painted with two coats of red oxide & two coats of enamelled paint). The rate shall include the cost of Supports . Trunking should have knock outs on both side at each 600mm distance as per site requirents.	20.00	mtr		
5	SITC of Powder coated 300mmx 75mm GI Trunking 2mm thick with cover to be used for running the wires in server room below floor .Trunking to be fixied on flooring with suitable size of GI clamp, appropriate dia threaded rod & 35mmx2mm thick GI slotted 'C' channel Patti OR suitable size of MS angle support (MS support to be painted with two coats of red oxide & two coats of enamelled paint). The rate shall include the cost of Supports . Trunking should have knock outs on both side at each 600mm distance as per site requirents.	10.00	Mtrs		
6	SITC of Powder coated RED AND BLUE 100mmx 125mm GI Trunking 2mm thick with cover to be used for running the wires in server room below floor .Trunking to be fixied on flooring with suitable size of GI clamp, appropriate dia threaded rod & 35mmx2mm thick GI slotted 'C' channel Patti OR suitable size of MS angle support (MS support to be painted with two coats of red oxide & two coats of enamelled paint). The rate shall include the cost of Supports . Trunking should have knock outs on both side at each 600mm distance as per site requirents.	-	Mtrs		
7	Fabrication in MS .The rate shall include the cost for painting with 3 Coats of enameled / metal applied after rust treatment of two coats of red oxide. The colour of the paint & cable trays shall be as approved by Architect.	-	Kgs		

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
8	SITC of Light Point wiring through 20/25 mm PVC FRLS conduits with all required accessories with main circuit 2 Nos of 2.5 sqmm & 1 no of 2.5 sqmm (for earth) PVC insulated Copper FRLS wires with Modular type switches complete with all accessories as detailed in the specifications. The switch boxes shall be flush mounted with partition /walls works or as directed by the consultants and shall be done in co-ordination with furniture works. The rate shall include 5A switch, faceplate with back box and wiring from SB to light points with 2 Nos of 1.5 sqmm & 1 no of 1.5 sqmm (for earth) Copper conductor PVC insulated FRLS Wire , conduit, back box, switch plate and modular type switch included in point . Conduit shall be fixed on wall / trays or ceiling with spacers & saddles. The wires will be terminated in a separate connector before fixtures. All phase neutral and earthing wire shall be terminated in SB level. No direct looping of Neutral and earthing shall be done. Contractor shall provide ferrule on both ends and shall have lugs on both end. Circuit and point wire shall have same colour code. Switch board have proper stickering showing DB and circuit number. wall chasing and back filling will be in scope of electrical contractor wherever required.				
a	Primary light points (Switch control) 3 x 1.5 Sqmm Cu FRLS PVC insulated wire- Switch to first light point including 5A switch- Main circuit 2.5 sqmm from DB included in cost	42.00	Nos		
b	Secondary light points with 3 x 1.5 Sqmm FRLS wires PVC insulated wire (Loop points after primary points)	78.00	Nos		
c	DB MCB controlled primary point with 3 x 2.5 Sqmm Cu FRLS PVC insulated wire - circuit wiring from MCB to first light point included -Main circuit 2.5 sqmm from DB included in cost	10.00	Nos		
d	Secondary light points with 3 x 1.5 Sqmm Cu FRLS PVC insulated wire (Loop points after MCB controlled primary points)	30.00	Nos		
e	Wiring for PIR sensor from cabin SB to sensor and till first light point	12.00	Nos		
f	Primary light points (Switch control) 3 x 1.5 Sqmm Cu FRLS PVC insulated wire for emergency lights-Switch to first light point including 6A switch- Main circuit 2.5 sqmm from DB included in cost	24.00	Nos		
g	Secondary light points with 3 x 1.5 Sqmm Cu FRLS PVC insulated wires .for emergency lights	6.00	Nos		

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
h	DB MCB controlled primary point with 3 x 2.5 Sqmm Cu FRLS PVC insulated wire for emergency lights-circuit wiring from MCB to first light point included	6.00	Nos		
i	Secondary light points with 3 x 1.5 Sqmm Cu FRLS PVC insulated wire for emergency lights	12.00	Nos		
j	Primary Fan points (Switch control) 3 x 1.5 Sqmm Cu FRLS PVC insulated wire - Switch to fan point including 6A switch and 6A step fan regulator with cost of circuit wiring and D hook required for fan		Nos		
C	POWER OUTLETS				
1	Supply, Installation , Testing & Commissioning of following Power Sockets mounted with specified switchgear inside the specified enclosure confirming to .The rate to include termination of incoming wires/cables with appropriate size of lugs & applicable PVC/Brass cable glands				
a	Supply & Fixing of RG 6 TV socket with Approx 35 Mtrs cable in GI conduit	2.00	Nos		
2	SITC of modular type shuttered power sockets, data-outlets, telephone sockets complete with chrome-plated mounting box. The switch box shall be fixed in partition works. The rate shall be inclusive of connecting of switches / sockets. . Proper care to be taken while passing wires from bends, wire entry from floor JB to modular, bends in module. Contractor shall use PVC Sleeves to avoid damage of wire. All sockets shall have label with DB and circuit number. All main circuits shall have numbered ferrules. All circuit and looping wire color code shall be same.				
a.1	3 Nos of sockets 6A round pin sockets controlled by 6A switch (for UPS Power) for workstations / BMS. Double cover type face plate with back box	24.00	set		
a.2	2 Nos of sockets 6A round pin sockets controlled by 6A switch (for UPS Power) for workstations / BMS. Double cover type face plate with back box	12.00	set		
b	1 No. of 6A Switch & 6 A sockets combine for with back box for workstation power. Double cover type face plate	65.00	Set		

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
c	1 Nos of sockets 6A sockets controlled by 6A switch Power Switch Socket combine with indicator Complete with G.I. mounting box for VAV Boxes, FCU , AV points, Low voltage equipments.	24.00	set		
d	1 Nos of sockets 16A 3pin controlled by 16A switch Power Switch Socket combine with indicator complete with G.I. mounting box for Convenience sockets. Double cover type face plate	40.00	set		
e	32A 3pin ,IP44 NEMA sockets for server rack with male and female connector and box	-	Set		
f	Back boxes required for data voice outlets boxes on wall or partitions	15.00	Nos		
g	Moduler floor box with 16A 4switch & 4 socket with provision for networking & AV cable	-	Nos		
5	SITC of Circuit Mains wiring for work station and cabins Power sockets direct from DB and then looped with nearest socket .				
a	Circuit wiring - 3R x 2.5 sq.mm. Cu conductor PVC insulated FRLS wires for UPS points on table , workstaion, cabin furniture - UPS-6 points per circuit	1,100.00	Mtrs		
b	Circuit wiring - 3R x 2.5 sq.mm. Cu conductor PVC insulated FRLS wires for RAW points on table , workstaion, cabin furniture - RAW-8 sockets per circuit	900.00	Mtrs		
c	Circuit wiring - 3R x 2.5 sq.mm. Cu conductor PVC insulated FRLS wires in 25 MM pvc frls conduit in ceiling, partitions, floor for RAW points , UPS points	750.00	Mtrs		
d	Circuit wiring - 3C x 6 sq.mm. Cu conductor PVC insulated FRLS wires for UPS points - server and hubroom sockets	-	mtrs		
D	MISCELLENOUS WORK				

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
1	This item is inclusive of making necessary temporary arrangement lighting with fixtures to attain a minimum 200 Lux lighting level for area of 6000 Sqft Floor & provision of substantial number of power points for welders ,carpenters, electricians & others . The supply should be routed through MCB DB having ELCB of suitable rating. Cost of energy meter at main incoming to be considered (if required by client).Contractor to provide multiple DBs & services being multiple services. This items includes cost of supply & installations of main DB with energy meter,Small DBs at each levels, Its cabling,Temp wiring for Lighting fixtures & Power sockets. Lighting Fixtures, Power sockets ,required hardware & associated material.Also vendor shall maintain the same till completion of project. All temp light material shall be removed and taken back by electrical contractor.	1.00	Job		
2	EB meter related , application works and documenation - Co ordination to get final required power for premises	1.00	Job		
3	SITC of 1Cx 16 sq mm COPPER flexible cable for earth in PVC Conduit inside the building premises.	50.00	mtrs		
4	SITC of 1Cx 10 sq mm COPPER flexible cable for earth in PVC conduit	50.00	mtrs		
5	SITC of 1Cx 6 sq mm COPPER flexible cable for earth along with the supply cable in PVC Conduit	60.00	mtrs		
6	SITC of 1C x 2.5 sq mm COPPER flexible cable with for earth along with brass clips for termination	60.00	mtrs		
	Item no.8 to 14 The rate shall inclusive of Termination at Both Ends.				
7	Supply installation testing and commissioning of earth pit comprising of specially designed	-	No		
	Ashlok/"SEE' brand Earth Electrode system 3.00 meter long- 50mm dia GI electrode and 50KG chemical compound for each earthing				

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
	including necessary materials like side fill compound etc.				
	as required with standards brick masonry chamber				
	with hinged cover and watering arrangement				
	model SEE-60/C with SFC-20/Equivalent				
8	Supply,installation,testing & commissioning of GI earth bus of size 50 mm x6mmx 600 mm (WxBxL) mounted on insulators , Driectly on wall or channel or flooring as directed . Bus should have 10 nos of holes with GI nut bolts of suitable size	2.00	No		
9	Supply,installation,testing & commissioning of copper earth bus of size 25 mm x 3 mmx 600 mm (WxBxL) mounted on insulators ,in suitable size MS Powder Coated box (Acrylic to be provided on front cover to view termination). Bus should have 10 nos of holes with brass nut bolts of suitable size	2.00	No		
10	Supply & Installation of Metallic caution/Danger boards of voltage grade as given below with red colour base & white painted in English, Hindi & local language. Grade Caution Boards. 150 x 150 mm size with 2 Hrs radium light				
	a. 415 V	1.00	No		
	Supply & Installation of rubber mats of 2000 L x 1000 mm. width & thickness of 10mm				
11	1.1 KV Voltage grade.	1.00	Nos		
12	Supply & Installation of shock treatment chart in English & local language. Shock treatment chart to be printed & glass framed.	1.00	No		
13	11KV Hand gloves	1.00	Nos		
14	Supply & Installation of first aid kit with wall mounting wooden stand.	1.00	No		
15	SITC of Following sizes of Earthing bare conductor wires with clamps,/saddles /brass clips etc.				
a	8 SWG GI Wire for AC earthing and outdooe USE	60.00	mtrs		

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
b	12 SWG CU Wire for DB earthing and indoor USE	60.00	mtrs		
b1	25 x 3 mm GI Strip for earthing	50.00	Mtrs		
b2	25 x 3 mm CU Strip for earthing	30.00	Mtrs		
E	RACEWAYS & WIRING				
1	Floor preparation and cutting for raceway laying-Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. The rate shall include preparation of trenches upto 450 mm wide by carefully cutting with groove cutting machine, removing the floor tiles / IPS & malwa below the tiles/ IPS for laying Raceways/conduits . The depth of the trenches shall be at least 3 inches from the finished floor level or upto RCC of the slab. The rate shall also include the activity of clearing the debris generated at designated area by PM and throwing outside premises at BMC designated area with proper receipt of debris disposal . (Breaking and back Filling the same with PCC 1:2:3 with metal wiremesh not part of electrical contractor scope. Contractor shall take prior permission before execution of this work wherever required)	-	RMT		
1.1.	Supply and laying Raceways / Conduits Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. Raceway and JB shall be closed properly with plastic bags to avoid entering of cement mortar. All JB and raceway to be earthed at each contact point and at DB level with 16 SWG cu wire.				
a	100 x 40mm x 1.6mm aluminium raceway	260.00			
b	25mm PVC conduits of wall thickness of 2 mm thick	200.00	mtr		
c	25mm Flexible PVC conduits of wall thickness of 1.6 mm with Gland	100.00	mtr		
2	Junction Boxes				

BOQ OF CABLE & WIRING					
Sr. No	Description	Quantity	Unit	Rate	Amount
a	Supplying and fixing 350 mm x 350 mm x65mm deep GI finish . The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With stainless steel cover Plate. The knock out shall be removed at site as per requirements. Junction boxes shall be leveled at the time of installation. Junctions boxes shall be earthed with raceway with 18 Swg cu wire. Junction boxes and raceway shall be covered with plastic bags during back filling of concrete work.	5.00	Nos		
b	Supplying and fixing 250 mm x 250 mm x65mm deep GI finish . The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With stainless steel cover Plate. The knock out shall be removed at site as per requirements. Junction boxes shall be leveled at the time of installation. Junctions boxes shall be earthed with raceway with 18 Swg cu wire. Junction boxes and raceway shall be covered with plastic bags during back filling of concrete work.	4.00	Nos		
c	Supplying and fixing 150 mm x 150 mm x65mm deep GI finish . The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With stainless steel cover Plate. The knock out shall be removed at site as per requirements. Junction boxes shall be leveled at the time of installation. Junctions boxes shall be earthed with raceway with 18 Swg cu wire. Junction boxes and raceway shall be covered with plastic bags during back filling of concrete work.	34.00	Nos		
TOTAL AMOUNT					-

BOQ OF LIGHT FITTINGS					
Sr. No	Description	Quantity	Unit	Rate	Amount
E	LIGHT FITTINGS & FIXTURES (VENDOR TO PROVIDE LIGHTS AS PER PHASE 2)				
A	Supply, Installation, Testing & Commissioning of the following fixtures complete with all tubes, lamps, HF electronic ballast with THD less than 10%, , fixing arrangements ball and sockets and suspension conduits connections, earthing complete with all hardware, clamps, etc as per specification & as per architects approved colour temperature. All fittings shall be suitable for dimming.				
1	Supply, Installation, Testing & Commissioning 15 w LED down light with heat sink on backside . For passage (light shall give avg 150- 200 lux on Passage and 300 Lux on workstations)	120	Nos		
2	Supply, Installation, Testing & Commissioning of 2 x 2 mm recessmounted , 30-34 W (system wattage)LED light , with full diffuser 84% transerancy 6000k color temp and CRI >80%. The fitting shall be fixed with chain ,screws etc. The fitting shall be recessed mounted suitable for gypsum Ceiling , with full acrylic diffuser and delivered lumens 95 lumen> per watts , The rate shall include connection with 3 core 1.5 sqmm. flexible copper cable with Flexible Conduit. The brief specification of Fixture is as under : LED chip used. cost to include linking metal strips, wires, connectrors, and hardware material. Vendor shall order end light fitting in each row is per site requirment(light shall give avg 300- 350 lux on workstation)	3	Nos		
3	30 W Decorative Suspended 600MM DIA DOME lights. Temp-4K	2	Nos		
4	Supply Installation of EXIT Signage's with LED lamp with 90 minutes battery backup type & LED lamps as per NFPA standard. These signages may be mounted on wall OR can be fixed on ceiling with gear wire /recessed.	4	Nos		
6	36 W/ meter - liner suspended lights - 1800 mm x 50 mm with all fixing hardware and wires. Temp-6K	2	Nos		
7	12W COB light concealed spot -as per architect requirments. Temp-6K	15	Nos		

BOQ OF LIGHT FITTINGS					
8	30W Decorative suspended linear light - Basic rate Rs.12000/-of Length - 1800mm.Temp-6K	5	Nos		
9	30W Decorative suspended rectangular light - Basic rate Rs.25000/-of Size - 1800mm x 600mm. Temp-6K	3	Nos		
10	30W Decorative suspended rectangular with dimmable light including driver- Basic rate Rs.75000/- of Size - 5500mm x 950mm. Temp-6K	1	Nos		
11	10W per Meter LED strip dimmable cove lights with driver.	50	RMT		
12	PIR Occupancy sensors - with range of 600 sqft	10	Nos		
13	10W per Meter LED strip lights with driver- cove light	350	RMT		
14	100W IP 65 outdoor flood light with wall brackets - street light - DG and AC ODU area		Nos		
Total Amount					-

SUMMARY OF ELECTRICAL WORKS			
Sr No	Description	Amount	Remarks
A	FIRE ALARM	-	
B	FIRE SPRINKLER	-	
C	PA	-	
D	ACCESS CONTROL	-	
E	CCTV	-	
F	FIRE EXTINGUISHER	-	
G	UPS	-	
H	NETWORK	-	
	TOTAL AMOUNT	-	

BOQ OF FIRE DETECTION SYSTEM					
Sr.No.	Description	Quantity	Unit	Rate	Amount
	Note- Vendor shall include cost of integration with BMS, Access, PA and Elect system. All cables and hardware required for the same.				
1	1 Loop addressable fire alarm panel with 99 devices per loop with 2 hrs in built battery backup - UL listed and FM approved	1	Nos		
2.1	SITC of Addressable Multi Sensor detector with base with Binary coded address setting. Dual LED's for 360° visibility. Sleek low-profile housing design. Regular 100mm (Below false ceiling) base. IP Rating : IP - 42. Approval: UL Listed ,		Nos		
2.2	SITC of Addressable Smoke detector with base with Binary coded address setting. Dual LED's for 360° visibility. Sleek low-profile housing design. Regular 100mm (Above false ceiling) base. IP Rating : IP - 42. Approval: UL Listed ,	71	Nos		
3	SITC Addressable Heat Detectors with base with Binary coded address setting. Dual LED's for 360° visibility. Polarity free, Sleek low-profile housing design. Regular 100mm base(Below False ceiling) . IP Rating : IP - 42. Approval:	3	Nos		
4.1	SITC Addressable Beam Detectors with base and required control module	0	Nos		
4.2	SITC Addressable Reflector with base	0	Nos		
5	SITC Addressable Manual Pull Station - Single Action -	6	Nos		
6	SITC of Addressable Monitor Module/ control module- Approval:		Nos		
7	SITC Addressable Relay Module. Approval: UL Listed ,	4	Nos		
8	SITC Sounder / Hooter with Strobe with minimum Db level of 90db at 10 feet height with required control module	6	Nos		

BOQ OF FIRE DETECTION SYSTEM					
9	SITC of Addressable Control Module for conventional sounder . Binary Coding Setting - Approval: UL Listed,	2	Nos		
10	Supply of Fault Isolator with base	3	Nos		
11	SITC of Response Indicator indicator having twin LED flush mounted on false ceiling/wall	35	Nos		
12	SITC of 2 Core x 1.5 mm2, Multistranded AT Copper, FRLS Armoured cable, RED in Colour. The cable shall be laid on surface with GI saddle-spacers every 0.3 meters. Complete with GI Junction Box, lugs, cable glands, cable tags and Ferruling as required.	400	Mtr.		
13	Fire blankets with inclosure	1	nos		
14	INTEGRATION PART - Vendor shall include cost of integration with BMS, Access, PA, Elect system and building FA and PA integration scope. All cables and hardware required for the same.	1	LOT		
15	Water leak detection system with control panel and hooter for serverroom- Area for server room - 80 sqft and area	1	lot		
16	Rodent system for Server and UPS room- 80 sqft and area for UPS room 100 sqft	2	Nos		
BASIC VALUE SUBTOTAL (A) >>>>					-
	MAKE- Notifier / Simplex/ Honeywell				

BOQ OF FIRE SPRINKLER SYSTEM					
Sr.No.	Description	Quantity	Unit	Rate	Amount
A	AUTOMATIC SPRINKLER SYSTEM				
1.0	Supplying, installing, testing and commissioning of G.I. " C " class Pipes conforming to IS 1239 Heavy grade with Screwed / welded fittings such as flanges, elbows, tees, reducers etc laid above ground according to the technical specifications and drawings. Rates shall be inclusive of painting, rigid structural supports, anchor fasteners, bolts, nuts (Galvanised), clamps, "U" bolts, etc. The quoted rate shall also include for chasing / chipping walls, making bore holes in walls / floor and making them good with filler material and finished in cement mortar etc. complete. All Pipes shall be painted with 2 coates of primer and 2 coats of red Enamel fire rated paint (anti rust oil paint)				
a	150mm NB	Rmt	-		
b	125mm NB	Rmt	-		
c	100mm NB	Rmt			
d	80mm NB	Rmt	-		
e	65mm NB	Rmt			
f	50mm NB	Rmt			
g	40mm NB	Rmt	20		
h	32mm NB	Rmt	30		
i	25mm NB	Rmt	80		
2.0	Supplying, installing, testing and commissioning conventional, standard response sprinkler head, quartzoid bulb type with 15mm screwed end connection of temperature rating 68°C and "K" Factor 5.6 complete as per Technical Specifications and Drawings. Sprinkler shall be of brass construction, chrome finish with orifice not less than 6mm.Sprinklers shall be UL Listed / FM approved)				
a	Pendent type 68°C	Nos.	0		
b	Pendent type 79°C	Nos.			
c	Concealed type 68°C	Nos.	45		
d	Upright type	Nos.	0		

BOQ OF FIRE SPRINKLER SYSTEM					
e	Side wall type	Nos.			
f	BALL VALVE & DRAIN CONNECTION	Nos.	3		
3.0	Supplying and fixing of approved type MS powder coated rosette plates with rof supports for sprinklers below false ceiling area. as approved by architects / clients.	Nos	45		
4.0	Supplying, installing, testing and commissioning of stainless steel corrugated flexible drop pipe for connecting sprinklers on false ceiling. Flexible pipe shall 25mm dia with screwed inlet of 25mm dia and screwed outlet of 15mm dia. The flexible pipe shall be compitable with system pressure and length shall be 1500 mm / suitable for the site requirement. The unit shall be complete with all necessary fittings and fixing accessories.	Nos.	45		
5.0	Obtaining fire NOC for new sprinkler works as per mall requirments- Co ordination and required documentaion / form 4 / all required services for mall and fire offices	JOB	0		
6.0	Charges for pressure test as per FIRE NORMS requirments	JOB	1		
	TOTAL AMOUNT				-

Above ceiling sprinklers shall be retained as upright points

Makes-

Sprinkler- Tyco UL and FM approved

Pipe- Jindal / Tata

BOQ OF PUBLIC ADDRESS SYSTEM					
Sr.No.	Description	Quantity	Unit	Rate	Amount
	Note- Vendor shall include cost of integration with BMS, Access, PA and Elect system. All cables and hardware required for the same.				
1	SITC of Dual Tone Ceiling mounted speaker with all requisite mouting accessories to mount the speaker on False Ceiling / True Ceiling.				
i)	6 Watts ceiling mounted-speakers Make-Honeywell/ Bosch/ AHUJA	25.00	Nos		
2	SITC of Power Amplifier 200 W with in built mic provision and Preamplifier/ Mixer with inbuilt bluetooth USB connectivity Make-Honeywell/ Bosch/ AHUJA	1.00	Nos		
3	SITC of Call Station With 6 Zone Selection Switch with wired mic	1.00	Nos		
4	SITC of 6 W Volume Control , with ON/OFF	11.00	Nos		
5	SITC of ISI Marked FRLS Armoured 2 core x 1.5 mm², Multistanded Copper Conductor , PVC sheathed Cable with The cable shall be laid on surface with GI saddle-spacers every 0.3 meters. Complete with GI Junction Box, lugs, cable glands, cable tags and Ferruling. Make	280.00	Mtrs		
6	25MM PVC FRLS CONDUIT	80.00	Mtrs		
BASIC VALUE SUBTOTAL (A) >>>>					-
	Make-Honeywell/ Bosch/ AHUJA				

BOQ OF ACCESS CONTROL SYSTEM					
Sr.No.	Description	Qty	Unit	Rate	Amount
1.1	Fingure+card reader with in built controller with cat 6 connectivity as per specification suitable for mounting on Gypsum/metal surface/metal frames or wooden frames/ wall or as required based on site conditions including all accessories and civil works. for attendace system	8.00	Nos		
1.2	Supply, installation, testing & commissioning of EXIT Proximity card+ finger readers as per specification suitable for mounting on Gypsum/metal surface/metal frames or wooden frames/ wall or as required based on site conditions including all accessories & modules etc and civil works.	8.00	Nos		
2	Supply, installation, testing and commissioning of electromagnetic Lock (fail safe type) of 600lb holding force, with Door Feedback & door ajar alarm buzzer for the following type doors : Locks shall be suitable for Glass door & metal fire doors with required clamps and hardware				
a	Double leaf Door with ZL Bracket	2.00	Nos		
b	Single leaf Door with ZL Bracket	6.00	Nos		
c	magnetic contacts	8.00	nos		
5a	I5 Processor with mobo,8GB dd3 kingston RAM ,Keyboard & Mouse,Cabinet circule,CD Drive with Dell screen 18.5" 1 TB HDD with windows installed	-	Nos		
5b	BASIC Multiple User licensed time attendance soft ware	1.00	Nos		
	Capability to map multiple companies within the Enterprise, and Various departments within a Company. Vendor to understand the exisiting software and provide the simmlar of higher version.				

BOQ OF ACCESS CONTROL SYSTEM					
Sr.No.	Description	Qty	Unit	Rate	Amount
	Should have capablity for generating extensive customised reports.				
6	SITC of Armored Copper flexible Cable,PVC insulated, shielded PVC Sheathed cable.The cable shall be laid on surface with GI saddle-spacers every 0.3 meters. Complete with GI Junction Box, lugs, cable compression glands, cable tags and Ferruling.				
a	8 c x 1.0 Sq.mm for locks and exit switch	300.00	Mtrs		
b	4c x 1.0 Sq.mm for locks and exit switch	150.00	Mtrs		
c	CAT 6 flexible Cable (305Mtr. Bundle- 5Nos.)	50.00	Mtrs		
d	25mm PVC FRLS CONDUIT	80.00	Mtrs		
7	Supply, installation, testing and commissioning of Proximity cards as per client specification. 32 bit/ 64 bits	50.00	Nos		
8	Supply , installation, testing and commissioning of Push Button for Exit- SS plate type	-	Nos		
9	Note :- Emergency break glass	9.00	nos		
10	Supervision, Field Support, Testing, Integration, Commisioning including required hardware/ software programs, converters etc. to integrate system with fire panel , Central data management system	1	nos		
TOTAL AMOUNT					-

Make- Matrix - Digicom security / Sectra / Or equivelent make as per client approval

BOQ OF ACCESS CONTROL SYSTEM					
Sr.No.	Description	Qty	Unit	Rate	Amount
1.1A	SITC of 5 MP IP BASED fixed lense dome camera STQC certified IP dome camera with audio & visual feature equipped with a 1/3" progressive scan CMOS imager to capture 2304x1296 (20 fps)/Full HD 1080p (25/30 fps) images; a 3.6mm to 8mm as per requirments ; and a waterproof (IP66) enclosure, true day/night solution, camera shall use Smart IR technology and provide up to 100 ft (30 m) of IR illumination, 12 V DC power input. vendor to include camera mounting back box and MS fixing bracket 6 -8 feet long x 20mm rod from slab/ wall bracket with all required supports and fixing hardware	12	Nos		
2.1	SITC of 32 CH NVR, 4 SATA HDD Slot (4 x Max 10 TB), ATX Power,Realtime Recording Resolution (32 Channels @5 MP),Realtime Local Playback,Multiplex Operation,H.264 High profile,BNC/VGA/HDMI output, main profile, baseline,HDD Redundancy,Free DDNS,Network backup, USB HDD, USB writer, SATA writer,1 RS485, support 18 kinds of PTZ protocols,ONVIF 2.0,1 channel Audio Input and Output,32Ch Alarm Input and 32 Ch Alarm Output- Free software supply and installation . 4 SATA HDD slots NVR shall be network compatible and remote access shall be available through IP	1	Nos		
3	10 TB SATA HDD	4	Nos		
4	16 port PoE network Switch	1	Nos		
5	8 port PoE network Switch		Nos		
6	Cat 6 cable in FRLS PVC CONDUIT- Quote all inclusive rate for cable + conduit+ IO + Box + patch cord+ crimping on both the ends	12	mtr		
7	6U rack for POE switch	1	Nos		
8	32INCH LED SCREEN (SAMSUNG/LG)	1	Nos		
8	42INCH LED SCREEN (SAMSUNG/LG)	-	Nos		
9	Licenses for CCTV camera- basic license	1	Nos		
10	15U rack for MAIN RACK	-	Nos		
BASIC VALUE SUBTOTAL (A) >>>>					-

Makes- Matrix - Digicom security / Or equivelent make as per client approval

SERVER RACK-NETRACK

cable- TYCO/ SYSTEMAX/D LINK

BOQ OF FIRE EXTINGUISHER					
Sr.No.	Description	Qty	Unit	Rate	Amount
1	Supply & Installation of Co2 fire extinguishers for elect room, reception and cafeteria - 4.5KG with floor stand	2.00	No		
2	4 KG ABC fire extinguisher with stand	5.00	Nos		
3	2 KG Dry clean agent fire extinguisher with stand	1.00	Nos		
4	4 KG K-Type fire extinguisher with stand		Nos		
5	Fire extinguisher sinage on wall and safety sinages 200 x 200 mm size, with 2Hrs. radium	6.00	Nos		
6	Fire exit route map with Glass frame and fixing on wall	4.00	Nos		
7	Automatic 2 KG celing suspended fire extinguisher - CLEAN AGENT for Server Room	1.00	nos		
8	Automatic 10 KG celing suspended fire extinguisher - Co2 fire extinguisher for Electrical Room	2.00	nos		
TOTAL AMOUNT					-

MAKE- KANEX/ CEASE FIRE/ SAFEPRO

BOQ OF UPS				
Sr.No.	Description	Unit	Rate	Amount
1	SITC 10 KVA online IGBT BASED UPS with 20 min battery back up on full load SMF BATTERY , 3ph input and 1 ph output. Including battery rack, battery links , battery isolators, ups to battery cables and terminations etc. INCLUDE REQUIRED CABLE AND HARDWARE.BMS CARD Provisional -LED touch screen display required for UPS, UPS shall give alarm sound and LED light alarm on fault case condition, include PRS card and BMS card with cable works. UPS shall have inbuilt protections againts voltage and current spikes / Surges	1		
2	SITC 3 KVA INVERTER WITH SMF BATTAAERY with 30 min battery back up on full load , 1ph input and 1 ph output. Including battery rack, battery links , battery isolators, ups to battery cables and terminations etc. INCLUDE REQUIRED CABLE AND HARDWARE.BMS CARD Provisional -	1		
	TOTAL AMOUNT			-
	Makes			
	UPS- VERTIVE/SCHNEIDER			
	Inverter- Sukam/ Meghatech/ luminous			

WORKSTATION +
SERVER

EMERGENCY LIGHT

BOQ OF NETWORKING					
Sr.No.	Description	Quantity	Unit	Rate	Amount
	SITC of Data /Voice Cabling BOQ				
1	Cat-6 UTP Cable - 305 mtrs per box	14	Boxes		
2	Cat-6 Information Outlet	105	Nos		
3	1 port face plate	20	Nos		
4	2 port face plate	44	Nos		
5	4 port face plate	10	Nos		
6	Network rack side installation work	1	racks		
7	24 port jack panel with loaded with IO	4	Nos		
8	42 U rack with power strips and assesories	1	Nos		
9	Testing and certification for all points	1	Job		
10	18 U rack	0	Nos		
11	1MTR patch cords field side and server side	105	Nos		
12	2MTR patch cords field side and server side	105	Nos		
15	EPABX system - 50 extentions- Panasonic	1	Nos		
	TOTAL AMOUNT				-

Note- cabeling routing, installation ,terminations, testing included in cabeling vendor vendor scope
Vendor to include cable tie, ferrule, welcro tapes and misc material in cost of cable and terminations

MAKE- SYSTEMAX/ As per IT team approval

RACK -As per IT team approval

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
1	AIR HANDLING UNITS (CHILLED WATER BASED)				
	Supplying, Installing, testing and commissioning of Factory built Floor Ceiling Suspended Air Handling Units (AHUs), Double skin type with thermal break profile and complete with DIDW Backward Fans AMCA certified, 40 mm thick panels consisting of GI casing of thickness 0.8mm outside & inside layer with factory injected PUF (density-40 kg/m3) between them, outlet velocity not exceeding 2000 FPM, velocity across cooling coil less than 500 FPM, TEFC, IE-3 motor with VFD and suitable for 415 ± 10% volts , 50Hz,3 Phase AC supply, drive system, limit switch,with dampers for supply air duct connection, fire resistance flexible canvass connection, off coil temperature sensor with thermostat, wired temperature sensor to be connected to fan motor VFD ,with DP switch, UV light , drain connections, stainless steel (18G) drain pan with Nitrile rubber insulation, 150 mm dia. dial type pressure gauges (2 nos.)and industrial type thermometers (2 nos.) at the inlet and outlet of coil, auto purge valve, drain valve wherever required. etc. conforming to specifications with all the necessary mounting accessories as required for complete installation.				
	AHRI Certified as per test standard AHRI-410, minimum 8 row deep cooling coil, Coil Casing/ Blank offs - GI, Material of Tube - Copper, Tube Dia (mm/inch) - 12.7 mm/ 1/2" O.D., Thickness of tube (SWG/) - 24 SWG, No. of Fins per inch (FPI) - 11/12.				
	Max. noise level shall be 65 dBA at 1.5 meter				
	AHU shall be provided with Standalone VFD cum bypass Starter panel with DRY/ NO/NC contact for trip against Fire, If Multiple VFD/Starter are there then single imcomer with multiple VFD/Bypass starter shall be provided, earthing and (power & control) cabling 10 Rmt each, terminations with necessary lugs and glands, etc. Variable Frequency Drives (VFD) with suitable bypass starters shall be considered.The Starter Panel shall have DRY Contact to trip AHU against FIRE Signal.				
	Pre-filter sections,MERV 8 rating having minimum 90% efficiency down to 10 microns & Fine Filter sections, MERV 13 rating having minimum 95% efficiency down to 5 microns. Velocity across filters less than 500 fpm.				
	Commissioning Filters (Disposable) also to be provided.				
	Chilled Water inlet/ outlet temperature - 5.5 Deg. C/ 12.5 Deg. C; ADP of Coil - 12.22 Deg. C.While available at our tap off will be @ 8 Deg C with 7 Deg Differential temp.				

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
	The scope of work shall include Disassembling & Reassembling at site, Lifting, shifting & positioning of the equipment at location shown on the drawing.				
	2.0 TR / 800 CFM (CSU)		1		
	3.0 TR / 1200 CFM		2		
	4.0 TR / 1600 CFM		0		
	5.5 TR / 2200 CFM				
	8.5 TR / 3400 CFM				
	11 TR / 4400 CFM				
1.1	CHILLED WATER CASSETTES				
	Design, Supply, Lifting & Shifting at actual proposed location of site, Installation, Testing, Commissioning and Field Performance Validation of Eurovent certified Ceiling suspended Chilled Water based 4 way flow Cassette type AC / BLDC Fan Coil Units with Single Phase 3 speed motor / Filter section with prefilters 90% dt 20 micron / Coil section with minimum 4 Row and minimum 13 FPI Chilled Water Cooling Coil / factory fitted pair of brass ball valve with "Y" strainer set / Insulated Drain Pan / supplied with factory fitted matching size 2 way Pressure independent on/off cum balancing valve of PN25 rating fixed on FCU Cu piping with required couplings and ends flanged to fit CHW field In / Out piping; Unit shall be supplied with BMS compatible Digital Group Controller and Gateway with interface Bacnet/Modbus protocol (230V operating / Power On/Off provision, 3 speed fan switch & Temp Edit facility / Digital Temp Display) and supplied with cable from Controller to FCU as required. Units shall be self-diagnostic type with relevant safety interlocks. APPROVED MAKES – Trane / Midea / York.				
	1.27 TR / 400 CFM		8		
	1.5 TR / 600 CFM		2		
	2.0 TR / 800 CFM		3		
	2.5 TR / 1000 CFM		0		
	3.0 TR / 1200 CFM		0		
	3.7 TR / 1500 CFM				
	CHILLED WATER CASSETTES				

BOQ OF HVAC									
Sr.No.	Description					Unit	Quantity	Rate	Amount
1.2	CHILLED	WATER	BASED	HI	WALL	UNITS	MAKE-		
	KUBIC/MIDEA/DAKIN/EDGETECH/ZECO/CITIZEN								
	Design, Supply, Lifting & Shifting at actual proposed location of site, Installation, Testing, Commissioning of Decorative High Wall Mounted type Chilled Water based High Wall type Fan Coil Units with energy efficient 3 speed motor, ABS plastic decorative casing, Low noise fan-motor combination, Filter with 70% dt 20 micron, Hydrophilic Al fins and Copper Chilled Water multi step Cooling Coil section with minimum 2 Row and minimum 13 FPI Chilled Water Cooling Coil, an in-built 2 or 3 way On/ Off control valve of minimum PN16 rating duly connected and wired, with combination of pair of brass ball valve with "Y" strainer set fixed outside FCU, Cu piping with required couplings to fit CHW field In / Out piping; All piping are to be insulated with closed cell elastomeric rubber insulation. Unit shall be equipped with self diagnostic function, temperature display and supplied with Digital Display type cordless remote with 3 speed fan switch & Temp Edit facility & Digital Temp Display, supplied with relevant power supply cable from nearest point to to FCU as required								
a	1.0 TR /400 CFM for Server Room/UPS Room/Battery Room					Nos	5		
2.0	WATER DISTRIBUTION SYSTEM								
2.1	INSULATED CHILLED WATER PIPING (Nitrile rubber insulation)								
	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastomeric nitrile rubber of minimum 45 Kg/ m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect.As per technical specifications with all the necessary mounting accessories as required for complete installation.The pipes shall be provided/stick with fire retardant fibrecloth								

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
	Note : The Pipes of sizes 150 mm & below shall be M.S. 'C' class (heavy class) as per IS : 1239 and pipes size above 150 mm shall be welded black steel pipe 'C' class (heavy class) as per IS: 3589, from minimum 6.35mm thick M.S. Sheet for pipes from 200 mm dia to 350 mm dia., from minimum 8 mm thick MS sheet for pipes from 400 mm dia to 600 mm dia, from minimum 10 mm thick MS sheet for pipes above 600 mm dia.				
1.0	100 mm dia. (32 mm thick insulation)	Mtrs	0		
2.0	80 mm dia. (32 mm thick insulation)	Mtrs	0		
3.0	65 mm dia. (32 mm thick insulation)	Mtrs	20		
4.0	50 mm dia. (32 mm thick insulation)	Mtrs	18		
5.0	40 mm dia. (32 mm thick insulation)	Mtrs	18		
6.0	32 mm dia. (32 mm thick insulation)	Mtrs	15		
7.0	25 mm dia. (25 mm thick insulation)	Mtrs	60		
8.0	20 mm dia. (25 mm thick insulation)	Mtrs	80		
2.1.1	Modification of existing Pipes provided by Base Builder at tap off level.	Lot	0		
2.2	INSULATED VALVES (Nitrile Rubber Insulation)				
	Supplying, fixing, testing and commissioning of following valves, strainers, gauges in the chilled water plumbing duly insulated to the same specifications as the connected piping and adequately supported as per technical specifications with all the necessary mounting accessories as required for complete installation.				
2.2.1	BUTTERFLY VALVE (MANUAL) with C I body SS Disc, Nitrile Rubber Seal & O- Ring PN 16 pressure rating for chilled water/hot water circulation as per technical specifications with all the necessary mounting accessories as required for complete installation.				
1.0	100 mm dia	Nos.	0		
2.0	80 mm dia	Nos.	0		
3.0	65 mm dia	Nos.	0		
4.0	50 mm dia	Nos.	6		
5.0	40 mm dia	Nos.	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
2.2.2	Supply, Installing, testing and Commissioning of following sizes with PN-16 pressure rating Ball valves , bronze forged body, chrome plated bronze ball and control level etc. in position complete for chilled / hot water circulation as per technical specifications with all the necessary mounting accessories as required for complete installation.				
	Dia. 32 mm	Nos.	10		
	Dia. 25 mm	Nos.	6		
2.2.3	BALANCING VALVE WITH BUILT IN MEASURING FACILITY with C I body flanged construction with EPDM coated disc with long pitch with protected out pipe insulation & PN 16 pressure rating for chilled / hot water circulation as per technical specifications with all the necessary mounting accessories as required for complete installation.				
1.0	80 mm dia	Nos.	0		
2.0	65 mm dia	Nos.	0		
3.0	50 mm dia	Nos.	2		
4.0	32 mm dia	Nos.	2		
2.2.4	Y - STRAINER of Ductile CI Body flanged ends with stainless steel strainer & PN 16 pressure rating for chilled / hot water circulation including insulation as per technical specifications with all the necessary mounting accessories as required for complete installation.				
2.2.4.1	80 mm dia	Nos.	0		
2.2.4.2	65 mm dia	Nos.	0		
2.2.4.3	50 mm dia	Nos.	0		
2.2.4.4	32 mm dia	Nos.	2		
2.2.4.5	25 mm dia	Nos.	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
2.2.5	Supply, Installation, Testing and Commissioning of following sizes electronic, self-balancing, (PIBCV) pressure independent type dynamic balancing valve with integrated 2 way modulating control valve in a single body. The actuator shall be capable of accepting up to 10V DC and up to 20 mA electric signal and shall provide similar transduced feedback output to control system. Maximum close off pressure shall not be less than 6 Bar for up to 50 mm valves and 7 Bar for 65 mm & above. Valves should have pressure rating of 25 Bar minimum including insulation as per technical specifications with all the necessary mounting accessories as required for complete installation to suit the following pipe sizes:				
2.2.5.1	80 mm dia	Nos.	0		
2.2.5.2	50 mm dia	Nos.	0		
2.2.5.3	32 mm dia	Nos.	0		
2.2.6	Supply, Installing, testing and commissioning of PN 16 rating Flexible Pipe Connections (Expansion bellows) with connecting rod & Nitrile rubber insulated covered with 24G aluminium sheet box, in position complete with flanges,bolts,nuts, including gaskets etc.conforming to specifications (1 Set = Supply/Return each)				
2.2.6.1	80 mm dia	Set	0		
2.2.6.2	65 mm dia	Set	0		
2.2.6.3	50 mm dia	Set	0		
2.2.6.4	32 mm dia	Set	0		
2.2.6.5	20 mm dia	Set	0		
	SET PER AHU				
2.2.7	Providing & fixing in position Drain valve for equipment/ Chilled Water pipe				
a	50 mm dia	Nos.	3		
b	40 mm dia	Nos.			
c	32 mm dia	Nos.	2		
2.2.8	Supply & Installation of BTP (Binder test point)	Nos.	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
2.2.9	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves with needle valve for above test point (Glycerene filled)	Nos.	4		
2.2.10	Providing & fixing in position the mercury in glass industrial type thermometers.	Nos.	4		
2.2.11	Auto air vents				
	Supply, Installing, testing and commissioning of Automatic Air Vents including fittings & socket and complete as per technical specifications with all the necessary mounting accessories as required for complete installation.				
	15 mm dia. with 15mm ball valve	Nos.	4		
2.2.12	Drain piping: Providing and fixing of Hard PVC drain water piping with fittings, support and insulated with 9 mm thick closed cell elastomeric nitrile rubber insulation complete as per specifications				
2.2.12.1	Dia. 25 mm	Metre	60		
2.2.12.2	Dia. 32 mm	Metre	120		
2.2.12.3	Dia. 40 mm	Metre	0		
2.2.12.3	Dia. 50 mm	Metre	0		
2.2.13	DRAIN PUMP - Supply, Installation of Condensate drain pump with working/stand by arrangement including cistern,water level sensors & control wiring				
1.0	for 6000 CFM AHU	Nos	0		
2.0	for 2000 CFM PACs	Nos	0		
3.0	For 1200 CFM CSUs	Nos	0		
4.0	For 1.0 TR/2,0 TR Hi-Wall	Nos	5		
2.2.14	BTU METERS.				

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
	BTU meter shall include the following Heat Meter Integrators & Flow meters. Heat Meter Integrators: Shall include matched pair temperature sensor [Pocket for insertion to be included].Shall have the features of Battery Backup up to 10 Years, Data logging for up to 15 years, 230V AC power supply provision, 8 Digit LCD display, Protection category of IP54, BACnet / Modbus O/P card and vendor to furnish the country of origin of these meters. Flow meters: The flow meter shall include screwed / Flanged meters incorporate with multi-jet vane wheel impellers type that are mounted perpendicular to the flow. The meters shall use a magnetic transmission system between the impeller and the totalising register. The BTU Meters shall be integrated with Builder existing BTU Meter/Metering systems.				
2.2.14.1	100mm (4") Dia	Nos	0		
2.2.14.2	80mm (3") Dia	Nos	0		
2.2.14.3	65mm (3") Dia	Nos	0		
3.0	AIR DISTRIBUTION SYSTEM				
3.1	SHEET METAL DUCTING SMACNA STANDARDS factory made Ducting System with System Components from OEM				
3.1.1	Supply, fabrication, installation and testing of GSS Rectangular metal ducts as per IS-277 (120 GSM both sides, LFQ & confirming to Class VIII) for GS Sheets and IS-655 for fabrication of following thicknesses including necessary G.I. hangers/ supports, volume control duct dampers, accessories, vanes, 3 mm neoprene rubber gasket etc. complete as per specifications in accordance with the approved shop drawings. No slip joints shall be allowed. Flanges shall be Rolamate or equivalent and ducts shall be with rigid supports as per technical specifications./Ducts to be sent in Factory Fabricated and Fully Boxed Form at the jobsite. The factory fabricated ducts shall be as per approved make list only. gaskets, GI fully threaded rods, G.I. supports / hangers etc.				
	Make:- Jindal/Tata/SAIL				
	Duct Pressure Class - 2 inch W.G with intermediate bracing @ every 1200 mm		0		
a)	1 - 750mm & 751 -1000mm 24 G TDF	Sq.Mtrs	100		
b)	1001 - 1200mm & 1201 - 1500mm 22 G TDF	Sq.Mtrs	25		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
c)	1501 - 1800mm 20 G Pre G.I.Flange	Sq.Mtrs	5		
d)	1801 - 2150mm 18 G Pre G.I.Flange (for Ahu Plenum shall be provided with MS angle stiffeners)	Sq.Mtrs	0		
3.1.2	Factory fabricated Rectangular GSS Rectangular ducting complete with elbows, turning vanes, volume control duct dampers, neoprene / PVC gaskets, GI fully threaded rods, G.I. supports / hangers etc.				
a)	24 G GI Ducting	Sq.Mtrs	20		
b)	22 G GI Ducting	Sq.Mtrs	15		
c)	20 G GI Ducting	Sq.Mtrs			
3.1.3	Supply, fabrication, installation and testing of Flat Oval Spiral metal ducts as per IS-277 (120 GSM both sides, LFQ & confirming to Class VIII) for GS Sheets and IS-655 for fabrication of following thicknesses including necessary G.I. hangers/ supports, volume control duct dampers, accessories, vanes, 3 mm neoprene rubber gasket etc. complete as per specifications in accordance with the approved shop drawings. No slip joints shall be allowed. Flanges shall be Rolamate or equivalent and ducts shall be with rigid supports as per technical specifications.The duct shall be lined with 10 mm Nitrile rubber insulation.The cost all include OVAL damper and accessories (The ducts shall be provided with Gripple supports)				
a.	1.2mm thk Plenum (18G) 1200-1500 MM	SQ.MT.	0		
b.	1.0mm Ducting (20G) 950-1200 MM	SQ.MT.	0		
c.	0.8mm Ducting (22G) 600- 900 MM	SQ.MT.	0		
d.	0.63mm Ducting (24G) upto 600 MM	SQ.MT.	0		
3.1.4	Supply, fabrication, installation and testing of GSS metal Round ducts as per IS-277 (120 GSM both sides, LFQ & confirming to Class VIII) for GS Sheets and IS-655 for fabrication of following thicknesses including necessary G.I. hangers/ supports, volume control duct dampers, accessories, vanes, 3 mm neoprene rubber gasket etc. complete as per specifications in accordance with the approved shop drawings. No slip joints shall be allowed. Flanges shall be Rolamate or equivalent and ducts shall be with rigid supports as per technical specifications.(including 13 mm thick nitrile rubber class "O". insulation inside the round duct)				
a)	600 mm dia	Rmt.	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
b)	450 mm dia	Rmt.	0		
c)	400 mm dia	Rmt.	0		
d)	350 mm dia	Rmt.	0		
e)	300 mm dia	Rmt.	0		
f)	250 mm dia	Rmt.	0		
g)	200 mm dia	Rmt.	0		
h)	150 mm dia/125 mm dia.	Rmt.	0		
i)	100 mm dia	Rmt.	30		
3.1.5	Supply, Installation, Testing and Commissioning of insulated flexible ducts. The insulated flexible duct shall have inner core made of double lamination of metalized polyester film permanently bonded to a coated spring steel wire helix. / The insulated flexible duct should be fire retardant type. Limit Flexible Duct to not more than 3 Ft Length for Diffuser Connection				
	Make:- Caryaie / UP twiga				
a)	400 mm dia	Rmt.	0		
b)	350 mm dia	Rmt.	0		
c)	300 mm dia	Rmt.	0		
d)	250 mm dia	Rmt.	0		
e)	175mm/200 mm dia	Rmt.	0		
f)	150 mm dia/125 mm dia.	Rmt.	24		
3.1.6	Supply installation of Z-piece cross talk attenuator for transfer of return air from enclosed spaces. The z pieces shall be of below mentioned sizes. It should be acoustcally treated with 15 mm thick open cell nitrile rubber insulation. The Z peice cost must include the cost of suitable sized grille along the face of the partition		0		
a	450mm X 250 mm	Nos	0		
b	650mm X 250 mm	Nos	0		
3.1.7	DUCO PAINT (For Exposed Duct)				
	Supply and Application of minimum two coats of Duco of colour and shade as approved by the Architects for exposed ducts. Quoted price shall be inclusive of primer before paint and all necessary arrangement as required for providing the paint over duct.	Sq.Mtrs	0		
3.1.8	DAMPERS				

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
a)	Make:- COSMOS / DYNACRAFT	Sq.Mtrs			
b)	Supply, Installation, testing and commissioning of Low Leakage dampers within Rectangular ducts suitable for ON/OFF operation for MANUAL control of air flow and in accordance with the specification, IS, drawings & site condition.	Sq.Mtrs	3		
	Supply, Installation, testing and commissioning of Low Leakage dampers Oval type within ducts suitable for ON/OFF operation for MANUAL control of air flow and in accordance with the specification, IS, drawings & site condition.	Sq.Mtrs	3		
c)	FIRE DAMPERS				
	Supply, installation, testing and commissioning of GI Multi - frame motorized fire dampers complete with extended sleeves with frame, 1.6 mm thick blades, etc.. With Temperature Sensor (ON/OFF TYPE for FIRE SEPERATION.) (Fire and smoke dampers meeting and exceeding specifications with control closure and fail safe operations. Smoke Fire Dampers should have extra long sleeves to take care of civil work (Torque selection as required) a) Certification - Complete assembly and accessories as per UL 555 / 555 S b) Leakage - Class 1 c) Casing - GSS - min 16 G Dimensions in mm. d) Temp ratings - 300 Deg C / 2 Hrs e) Factory mounted sleeve and frames f) Actuators - factory mounted with thermo-electric tripping device - BMS compatible g) Remote control panel for operation and testing)	Nos	2		
	Vendor to include No of Actuators (Actuators - factory mounted with thermo-electric tripping device - BMS compatible)				
d)	FUSIBLE TYPE FIRE DAMPER				
	Supply, installation testing commissioning of Fusible Link Type Fire dampers	Sq.Mtrs	0		
	Fusible Link Fire dampers for Return air with min 120 minutes fire rating.	Nos.	3		
	No. of Links				
e)	COLLAR DAMPERS				
	Supply, Installation, testing and commissioning of (Collar Dampers within ducts suitable for ON/OFF operation for MANUAL control of air flow and in accordance with the specification, IS,.,	Sq.Mtrs	3		
f)	NON RETURN DAMPER				
	Supply, Installation, testing and commissioning of Non Return dampers within ducts suitable for ON/OFF operation for MANUAL control of air flow and in accordance with the specification, IS, drawings & site condition.	Sq.Mtrs	2		
g)		Nos	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
	Supply, Installation of Motorised Dampers with actuator for 500 x 400 MM Duct with controller and Co2 Sensor.				
3.1.7					
	GRILLS / DIFFUSERS				
a)	Make:- COSMOS / DYNACRAFT				
1.0	SITC of Aluminum extruded Supply Air Square diffuser size of 600 X 600 mm with volume control dampers				
2.0	600 x 600- 350 NS with VCD	Nos	0		
b)	600 x 600- 350 NS without VCD	Nos	0		
i)	SITC of Aluminum extruded Supply Air Round diffuser with VCD and top inlet connection and proper fixing arrangement considering Open ceiling.The diffuser shall be approved against sample only.	Nos.	0		
ii)	Overall 375 MM Dia and 300 Dia Neck size connection	Nos.	0		
iii)	Overall 300 MM Dia and 225 Dia Neck size connection for Overall Office	Nos.	0		
iv)	Overall 200 MM Dia and 150 Dia Neck size connection	Nos.	0		
iv)	SITC of Aluminum extruded Return Air sted down diffuser swithout VCD and the same replica of SA Diffusers	Sq.Mtrs	16		
	Supply & Installation of SA/RA Grill for Return air over the Cabins	Sq.Mtrs	5		
c)	LINEAR DIFFUSER PLENUM				
i)	Supply & Fixing of Factory made Plenum duly insulated having 400-45 mm H having round connection at Intlet with Burrtyfly damper or spigot connections for designed air flow	Nos.	0		
ii)	600mm x 3 slots (Inlet Connection- Dia-200mm)	Nos.	0		
iii)	900mm x 3 slots (Inlet Connection- Dia-200mm)	Nos.	0		
	1200mm x 3 slots (Inlet Connection- Dia-200 mm)				
iv)	Linear diffusers with found side flage and Plenum on TOP	Nos.	0		
v)	600mm x 3 slots (Inlet Connection- Dia-200mm)	Nos.	0		
vi)	900mm x 3 slots (Inlet Connection- Dia-200mm)	Nos.	0		
	1200mm x 3 slots (Inlet Connection- Dia-200 mm)		0		
d)	LINEAR SLOT DIFFUSER				
	3 Slot Diffusers (19 mm gap)In Extruded Aluminum Sections with Vane Air Pattern Controllers including mitred corners & End flanges as shown in the drawings. Supply Air Slot Diffusers shall be including of factory made plenums duly insulated.	Rmt	0		
e)	Supply and fixing of extruded aluminum duly powder coated continuous/Spot grill with four side flange wherever required.	Nos.	0		
i)	150 mm x 150 mm Exhaust Grille with Damper	Nos.	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
ii)	350 mm x 350 mm with 250 MM Neck Size For Pot Wash Exhaust	Nos.	0		
iii)	250 x 250 mm with 200 Neck Size with VCD for Cafeteria Exhaust	Nos.	0		
iv)	300 x 300 mm with 250 Neck Size with VCD for Cafeteria Fresh Air	Nos	0		
v)	350 x 150 mm with VCD for General Supply air	Nos	0		
f)	Supply, installation and adjusting of disc valves suitable for Supply of Fresh air / exhausting foul air ,comprising of an adjustable centre cone and coupling sleeve made of Aluminum sheet duly epoxy painted with approved color. The disc valve shall be fitted with a galvanised steel installation frame and the sleeve shall incorporate a foam-rubber gasket for airtight sealing. The centre cone should be adjustable for balancing and with a locking arrangement to maintain the desired flow rate.				
i)	200 Dia with 150 Neck size	Nos	0		
3.1.9	INSULATION				
	Make:-Armaflex/Thermobreak/Armasound/K-Fonic				
i)	Duct Acoustic Lining.		0		
	Supply, fabrication and installation of acoustic lining of supply and return air ducts as specified and shown on the drawing complete with suitable 10 mm thickness Open Cell Foam Insulation - (antimicrobial protection) with Thermal conductivity 0.045 W/m deg.K / density 140~180 kg/m3 confirming to Class '1', with manufacturer recommended adhesive complying with LEED requirement. (First 5 RMT of SA Duct coming out of plenum box shall be internally insulated with acoustic insulation, RA Duct / RA Duct cowls shall be acoustically lined)	Sq.Mtrs	15		
ii)	Thermal Insulation	Sq.Mtrs	0		
	Supply, fabrication & Installation of thermal insulation on GI ducts complete with Closed Cell foam anti microbial insulation (Nitrile Rubber) with minimum density of 40 Kg/m3 with minimum R Value 4.1/inch & thermal conductivity -0.035 w/mok, confirming to Class 'O' & the inner side stuck to the outer facia of the GI ducts with recommended / Proprietary adhesive bonding inline with LEED requirements & installed as per manufacturers recommendation. The insulation joints shall be sealed with 3" wide Black Tape. (10 mm thick)	Sq.Mtrs	90		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
iii)	Acoustic Insulation of AHU Room Walls & Trap Door				
a	Supply, fabrication and installation of Acoustic insulation of Walls as specified and shown on the drawing complete with 25 mm thick acoustic insulation with Armasound Open Cell Foam Insulation - antimicrobial product protection with Thermal conductivity 0.045 W/m deg.K / density 140~180 kg/m3, Stuck to trap doors in ceiling with manufacturer recommended adhesive inline with LEED requirement.	Sq.Mtrs	0		
b	Supply, fabrication and installation of Acoustic insulation on AHU Room walls facing office side as specified and shown on the drawing complete with:	Sq.Mtrs	0		
	a) Aluminium frame work 1000 x 1000				
	b) Synthetic adhesive bonding				
	c) 48 kg/cu.m. Rigid board Rock Wool with RP tissue/Glass cloth				
	d) 26 G Perforated Aluminium cladding				
	50 mm thick acoustic insulation [2 layers x 25mm thick]				
	`				
3.1.12	Duct Static Pressure Sensor				
	Supply air duct mounted duct static pressure sensor and controller (DP sensor for VFD control) with suitable fittings and cabling with GI conduit to connect to respective Fresh air Fan VFD. DP sensor to be provisioned in each SA duct connected with Fan. 2~3 nos DP sensor & a controller shall be considered as 1 set.Controller suitable for accepting multiple signals from duct static pressure sensor(s) - upto 3~4 nos. and provides signal to VFDs for ramp-up/down the speed based on average / lower of the readings to be provisioned necessary accessories, control cabling etc to be included.	Nos	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
3.1.13	SITC of Mechanical Constant Air Volume (Fresh Air) Regulator — in-line duct-mounted, self-regulating mechanical airflow controller with pressure-compensating membrane / diaphragm that maintains preset constant airflow ($\pm 5\%$) irrespective of upstream duct static pressure variations (typically 40–300 Pa operating range). Non-powered, maintenance-free, corrosion-resistant construction, factory-preset to design airflow (nominal 100–250 CFM per unit — selected to match fresh-air demand of each cassette-served zone). Includes GI end flanges / sleeve for connection to spiral or rectangular duct, gaskets, and mounting accessories. One regulator per occupied zone served by a Chilled Water Cassette. Make: Systemair (CRU / CRT / K-Aldes ZRT series) / Aldes / Approved Equivalent.	Nos	14		
4.0	VENTILATION FANS				
4.1	VENTILATION AND FRESH AIR EXHAUST:				
	Inline Ducted Circular / Rectangular fans shall be direct driven type with all accessories etc. complete as per specifications & drawings shall be included.				
	Quoted cost shall include control & starter panel, OLP, SPP, ON/OFF push buttons with ON indications, 2 nos. non polarised NO-NC contacts for BMS connection etc. Fans shall be able to be controlled from remote location by suitable arrangement.				
	Cabling: Power cabling of copper armoured cable from control panel to motor with double compression gland. Cabling and earthing limited to 10 RMT max. Control cabling for hook up to BMS is not included here.				
	(Installation of fans shall mean unloading, lifting-shifting, positioning, levelling & installation in place)				
	EXHAUST FAN				
4.1.1	EF-1400 CFM / 15 mm ESP (Rectangular Inline)	Nos	0		
4.1.2	EF-2400 CFM / 15 mm ESP (Rectangular Inline)	Nos	0		
4.1.3	EF-1800 CFM / 15 mm ESP (Rectangular Inline)	Nos	0		
4.1.4	EF-300 CFM / 15 mm ESP (Rectangular Inline) Battery Room exhaust Fan explosion proof type electric connection	Nos	0		
4.1.5	EF-250 CFM / 15 mm ESP (Round Inline)	Nos	0		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
	FRESH AIR FAN				
4.2	FA-1600 CFM / 15 mm ESP (Rectangular Inline)	Nos	0		
4.4	BATTERY ROOM EXHAUST				
4.4.1	Battery Room exhaust :Inline type Exhaust 200 CFM Fan shall be completed with speed control and starter panel with gravity louver, 1 phase drive motor, anti vibration mounts suitable for floor mounting having capacities as follows as per specifications: Starter panel shall have BMS Terminals provided [either on unit or in Panel] (Potential free contact for On/ Off Control and Monitoring for the fan.) Additionally it should have a PF fire relay for Auto power cut off in case of fire.	Nos	1		
4.4.2	SITC of Hydrogen sensor. The sensor must be capable of measuring in range: 0-100% 4 – 20 mA OR (0) 2 – 10 V The sensor must be BMS compatible and must be able to get analog signal output. The sensor must be able to have a selective range within the range defined. The cost shall include the cost of supplying, laying of communication cable from sensor to the PLC panel. The cost shall also include the cost of Power cable from the nearest power point provided by the electrical contractor.	Nos	1		
4.4.3	Supply and installation of Programmable Logic controller including timer, Aux.Relays, contactor as required with auto/manual selector switch, push button, indicating lamp, etc. Exhaust Fan with fire damper shall operate only when H2 level reaches upper limit set point. This will keep H2 level within acceptable limits. PLC shall be provided potential free contact for BMS/ Fire Panel.	Nos	1		

BOQ OF HVAC					
Sr.No.	Description	Unit	Quantity	Rate	Amount
4.4.5	Upon completion of construction (including installation of woodwork, doors, acoustic tiles, paints, carpets, movable furnishings and other interior finishes), a building air flush is performed while maintaining an indoor temperature of at least 15 °C [59 °F] and relative humidity below 60%, as per Tender Specification. Flush-out with 14,000 cu.ft. of outdoor air per sq.ft. prior to occupancy - Maintain temperature between 60 F to 80 F (15 C to 27 C) - Keep relative humidity no higher than 60%	AHU Systems	1		
4.4.6	TESTING & COMMISSIONING & AIR BALANCING SYSTEM FOR COMPLETE HVAC SYSTEM:	Lot	1		
4.4.7	Chemical passivation, flushing & pre-commissioning cleaning of complete Chilled Water piping system (supply & return) — includes alkaline degreasing wash, acid pickling (inhibited), neutralisation, passivation with sodium nitrite / phosphate based inhibitor to form protective oxide layer, thorough flushing, water quality testing (pH, TDS, turbidity, iron content), and final charging with treated water conforming to ASHRAE / OEM standards. Includes all chemicals, temporary pumps, hoses, disposal of spent chemicals as per environmental norms, before hand-over to client / builder BMS system. Complete as required.	Lot	1		
TOTAL AMOUNT					0

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Project	NABFID
Site	GIFT CITY GANDHINAGAR
Sub	Abstract for Make List

S.no.	Description	MAKES
A	CIVIL/INTERIOR WORKS	
1	Cement	Ambuja/Birla/ACC/Ultratech/JK (Sarva Shaktiman)
2	Vitrified Flooring/Ceramic Flooring	Johnson/Kajaria/Nitco/Somany/Varmora
3	Wall Tiles	Johnson/Kajaria/Nitco/Somany/Varmora
4	Waterproofing Chemical	Dr. Fixit/ISI Make/Sunanda
5	Construction Blocks	Red brick, Magicrete, Siporex
6	Paint	Asian/Nerolac/Dulux
7	Vinyl Flooring	Vista/Wonder floor/Responsive/Wellspun
8	GI Pipes and fittings	Jindal/TATA/Zenith/ISI Make
9	CI Pipes	Neco/Zico
10	PVC Pipes and fittings	Prince/Supreme/ISI Make
11	Pantry Sink	Nirali
12	Sanitary Fixtures & Fittings	Jaquar / Hindware /Kohler/ Grohe

B	CARPENTRY	
1	Commercial Plywood	Century/Anchor/Samrat/Kitply/Archid
2	Wood for door frame/Partition wood framing	SAG/SAL Wood/Rubber Wood
3	Flush Door (Pine wood)	Anchor/Century
4	Block board	Guna/Kenwood/Greenply/Kit ply/ Samrat/ Uni
5	MDF (6mm and 4mm thk.)	Samrat/Green/ISI Make
6	Pre-Laminate Particle Board	Novapan/Novateak/Bhutan Board/ISI Make
7	Veneer	Samrat/Timex/Green
8	Laminate	Greenlam/Merino/Century/ Royal Touche
9	Drawer Telescopic Channels (If not Modular)	Solo/Hitech/ Ozone
10	Locks	Hemco/Godrej/Vijayan/Doorset/windor
11	Floor Spring,Door Closer,Handle	Ozone/Enox/Kitch/Windor
12	ScREW/Nails	Nettle Fold,JKW,Power Fastners
13	Adhesives	Fevicol/Jivanjor/Araldite
14	Bonding Resin	Araldite
15	Fire rated metal door	Matrix/Shakti Door/Global
16	Panic Hardware	Matrix/Dorma/Stanley
17	Glass (Toughned or Non Toughned) Back Painted Glass and Mirrors	ASAHI/MODI/Saint Gobain
18	Anti-Termite Paint	Wood guard/Termiseal/Bison by British Paint
19	Aluminium Partition sections (Modular)	Vedic/Matrix/Windor/ Otic
20	False Flooring	Unitile
21	False Ceiling	AMF / Armstrong
22	Solid Acrylic Surface	LG/Samsung/Durlax/ Corian
23	Blinds	Vista/Softlite/Roll-on
24	Frosted Film	3M/ Lumar
25	Carpet	Milliken, Shaw, Interface, Mohawk

C	GYPSUM/MODULAR FALSE CEILING/PUNNING	
1	Gypsum Board Sheet	Gyproc, Danoline
2	Section	Gyproc
3	Gypsum Bag	Stuco, India Gypsum
4	Grid Ceiling	AMF/Armstrong
5	POP Putty	Diamond/Superfine/ISI Mark
6	G.I. Section frames,Extrusions,Profiles,Sections	G.I. Sections ESSAR/ISI Mark/Everest/Equivalent
7	Cement Board	Everest, Bison
8	Skirting Profiles,Wall Trims	Matrix/ Vedic/ Windor
9	Glass Wool Insulation	Saint Gobain/Twiga/U.P. Twiga

D	MODULAR	
1	Workstations,Cabin Tables,Meeting Tables,Storage Cabinets.	Danco, Featherlite, Spacewood
2	Chairs	Godrej / Featherlite
3	Toilet Cubicals	Innerspace / Merino / Greenlam / S-Cube
4	Loose Furniture	Amardeep, Spacewood, Albans, Workplace.
5	Glass Partition	Windor, S-Cube, Otic

NOTE- Contractor should take prior approval for any changes in makes or technical specification from Client and Consultant. Client has all rights to change the makes and specifications as per requirements of site

LIST OF APPROVED MAKES

Project: Chilled Water based HVAC – NABFID GIFT City, Gandhinagar

Note: Vendor shall use only the makes listed below. Any deviation requires prior written approval from the Consultant/Client. Minimum three makes are indicated for each item; vendor may propose equivalent makes.

S. No.	BOQ Ref.	Item / Equipment	Approved Makes
	1.0	INDOOR UNITS & AIR HANDLING	
1	1.0	Air Handling Units (AHU) – Double Skin, Floor / Ceiling Suspended	VTS/Zeco/Edgetech
2	1.1	Chilled Water Cassette FCUs – 4-way Flow	Kubic/Trane / Midea / York / Daikin / Carrier
3	1.2	Chilled Water Hi-Wall FCUs (Server / UPS / Battery Room)	Kubic / Midea / Daikin / Edgetech / Zeco / Citizen
4	1.0	VFDs / Variable Frequency Drives (for AHU / Fans)	Danfoss / ABB / Schneider Electric / Siemens / Delta
5	1.0	Starter Panels / Bypass Starter Panels	Adlec / Neptune / Advance / Milestone / L&T
6	1.0	Fan Motors (TEFC, IE-3)	ABB / Siemens / Crompton Greaves / Kirloskar / Bharat Bijlee
7	1.0	AHU Filters (Pre / Fine – MERV 8 / MERV 13)	Camfil / AAF / Thermadyne / Purolator / Spectrum
8	1.0	UV Lights for AHU	Sanuvox / Steril-Aire / Philips / Atlantic UV / American Ultraviolet
	2.0	CHILLED WATER PIPING & INSULATION	
9	2.1	MS 'C' Class Pipes (IS 1239 / IS 3589)	Jindal (Hisar) / Tata / SAIL / Surya Roshni / APL Apollo
10	2.1	Pipe Fittings (Elbows, Tees, Reducers)	Jindal / Tata / VS Forgings / Sant / Zoloto
11	2.1	Nitrile Rubber / Closed-Cell Elastomeric Pipe Insulation	Armacell (Armaflex) / Aeroflex / K-Flex / Thermobreak / Superlon
12	2.1	Fire-Retardant Fibre Cloth / Cladding	Armacell / Aeroflex / K-Flex / 3M / Owens Corning
	2.2	VALVES, STRAINERS & ACCESSORIES	
13	2.2.1	Butterfly Valves (Manual, PN16, CI body, SS disc)	Advance / Audco (L&T) / Intervolve / Zoloto / Castle / Kirloskar
14	2.2.2	Ball Valves (PN16, Bronze forged body)	Zoloto / Advance / Leader / Castle / RB (Racer Bronze)
15	2.2.3	Balancing Valves (with in-built measuring facility, PN16)	Danfoss / Honeywell / TA Hydronics / Belimo / Frese / Oventrop
16	2.2.4	Y-Strainers (Ductile CI Body, PN16, SS strainer)	Zoloto / Advance / Castle / Sant / Kirloskar / Emerald
17	2.2.5	PIBCV – Pressure Independent Balancing & Control Valves	Belimo / Danfoss / Honeywell / Frese / TA Hydronics / Siemens
18	2.2.6	Flexible Pipe Connections / Expansion Bellows (PN16)	Easyflex / Resistoflex / Kanwal / Flexpert / Metraflex
19	2.2.7	Drain Valves	Zoloto / Advance / Leader / RB / Sant
20	2.2.8	Binder Test Points (BTP)	Danfoss / Honeywell / TA Hydronics / Frese / Belimo
21	2.2.9	Pressure Gauges (Glycerine filled, 150 mm dial)	H Guru / Fiebig / Wika / Waaree / Baumer / Bourdon
22	2.2.10	Industrial Type Thermometers (Mercury-in-glass)	H Guru / Fiebig / Wika / Baumer / Waaree
23	2.2.11	Automatic Air Vents	Danfoss / Honeywell / Sant / Zoloto / Spirax Sarco
24	2.2.12	Hard PVC Drain Piping & Fittings	Supreme / Astral / Prince / Finolex / Ashirvad
25	2.2.13	Condensate Drain Pumps	Grundfos / Little Giant / Sauermann / Aspen Pumps / Diversitech
26	2.2.14	BTU Meters (Heat Meter Integrators + Flow Meters)	Krohne / Kamstrup / Danfoss / Endress+Hauser / Belimo / Siemens
	3.0	AIR DISTRIBUTION – DUCTING, INSULATION & DAMPERS	
27	3.1.1	GSS Sheets for Ducting (Class VIII, 120 GSM)	Jindal / Tata / SAIL / JSW / Bhushan Steel
28	3.1.1	Factory Fabricated Rectangular Ducts (TDF / Pre-GI Flange)	Rolastar / Zeco / Air Master / ATCO / Duro Air / Western Airconditioning
29	3.1.3	Flat Oval Spiral Ducts	Rolastar / Zeco / ATCO / Duro Air / Spiro
30	3.1.4	GSS Round Ducts (Spiral)	Rolastar / Zeco / ATCO / Duro Air / Spiro
31	3.1.5	Insulated Flexible Ducts (Fire Retardant)	Caryaire / UP Twigia / Anemos / Ravistar / Atco
32	3.1.6	Z-piece Cross Talk Attenuators	Caryaire / Anemos / Ravistar / Cosmos / Dynacraft
33	3.1.7	Duco Paint (for Exposed Ducts)	Asian Paints / Berger / Nerolac / Jotun / Dulux
34	3.1.8	Volume Control Dampers (VCD – Rectangular / Oval)	Cosmos / Dynacraft / Caryaire / Ravistar / Air Master / Anemos
35	3.1.8 c	Motorized Fire Dampers (UL 555, 300°C / 2 Hr)	Ruskin Titus / Caryaire / Dynacraft / Cosmos / Systemair / Greenheck
36	3.1.8 d	Fusible Link Fire Dampers	Cosmos / Dynacraft / Caryaire / Ruskin Titus / Anemos
37	3.1.8 e	Collar Dampers	Cosmos / Dynacraft / Caryaire / Ravistar / Anemos

38	3.1.8 f	Non-Return Dampers	Cosmos / Dynacraft / Caryaire / Ravistar / Anemos
39	3.1.8 g	Motorised Dampers with Actuator + CO2 Sensor	Belimo / Honeywell / Siemens / Schneider / Johnson Controls
40	3.1.7	Grilles & Diffusers (Supply / Return / Linear)	Cosmos / Dynacraft / Caryaire / Ravistar / Air Master / Anemos
41	3.1.7 f	Disc Valves (Fresh Air / Exhaust)	Caryaire / Cosmos / Dynacraft / Anemos / Systemair
42	3.1.9	Duct Thermal Insulation (Nitrile Rubber, Class 'O')	Armacell (Armaflex) / Thermobreak / Aeroflex / K-Flex / Armasound / K-Fonic
43	3.1.9 i	Duct Acoustic Lining (Open Cell Foam)	Armacell / Armasound / K-Fonic / Aeroflex / Superlon
44	3.1.9 iii	AHU Room Wall Acoustic Insulation (Rock Wool 48 kg/m³)	Rockwool / Owens Corning / Lloyd Insulations / U P Twiga
45	3.1.12	Duct Static Pressure Sensor & Controller	Honeywell / Siemens / Belimo / Dwyer / Setra / Johnson Controls
46	3.1.13	CAV (Constant Air Volume) Fresh Air Regulator	Systemair / Aldes / K-Aldes / Trox / Halton
	4.0	VENTILATION, FANS & SPECIAL SYSTEMS	
47	4.1	Inline Ducted Exhaust / Fresh Air Fans	Kruger / Systemair / Nicotra Gebhardt / Greenheck / Fantech / Caryaire
48	4.2	Cabinet Type Exhaust Air Fans (Double Skin, Outdoor Duty)	Kruger / Nicotra Gebhardt / Systemair / Greenheck / Ostberg
49	4.3	Dry Scrubber (Electrostatic Precipitator)	Trion / Statiflo / United Airsystems / Enviro Tech / Smog-Hog
50	4.4.1	Battery Room Exhaust Fan (Explosion Proof)	Kruger / Systemair / Nicotra / Greenheck / Airflow
51	4.4.2	Hydrogen Sensors	Honeywell / MSA / Draeger / RKI / Trolex
52	4.4.3	PLC / Programmable Logic Controllers	Siemens / Schneider Electric / Allen Bradley / Mitsubishi / Delta
	5.0	CONTROLS, CABLING & MISCELLANEOUS	
53	—	BMS / Thermostats / Temperature Sensors / Actuators	Honeywell / Johnson Controls / Siemens / Schneider Electric / Trane / Belimo
54	—	Programmable Timer / 12-Hr Changeover Switch (Server/UPS)	Legrand / Schneider / Havells / L&T / Anchor by Panasonic
55	—	Power / Control Cables (Copper Armoured)	Polycab / Havells / Finolex / KEI / RR Kabel
56	—	MCB / RCCB / Isolators / MCCBs	L&T / Schneider Electric / Legrand / ABB / Siemens / Havells
57	—	Cable Trays / Ladders / Perforated Trays	Profab / Legrand / Indiana / MEM / Slotco
58	—	Vibration Isolators / Anti-Vibration Mounts	Kanwal / Resistoflex / Dunlop / Getzner / Mason Industries
59	—	Flexible Canvas Duct Connections	Duro Dyne / Trelleborg / Ventflex / Anemos / Kanwal
60	—	SS Drain Trays (18G, Insulated) – for Server/UPS Units	Jindal SS / Salem Steel / Outokumpu (as raw material) fabricated by Rolastar / Zeco / ATCO
61	4.4.7	Water Treatment / Passivation Chemicals	Ion Exchange / Nalco / Thermax / Chemtreat / BAND
62	—	GI Threaded Rods / Clamps / Supports	Hilti / Fischer / Jindal / Chilly / Sundram Fasteners
63	—	Anchor Fasteners	Hilti / Fischer / Bosch / Wurth / Chilly

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS			
Sr	ITEM DESCRIPTION	LIST OF MAKES	Quoted by Contractor
1	PVC FRLS CONDUITS & ACCESSORIES	PRECISION ,VIP	
2	G.I/ MS .CONDUITS ISI MARK	BEC, AKG	
3	FRLS WIRES: 1100V/660V GRADE	POLYCAB, KEI, RR,APAR	
4	1.1KV LT FRLS CABLES and WIRES	POLYCAB, KEI, RR	
5	CABLE GLANDS & LUGS	BRACO, DOWELLS,COMET	
6	DISTRIBUTION BOARDS, MCB's	SCHNEIDER / Legrand	
7	ELCB/RCCB/RCBO -30mA,100mA,300mA.	SCHNEIDER / Legrand	
8	ELETRICAL LIGHT FITTINGS	Wipro / Phillips	
9	Dimmable balast	Wipro / Phillips	
10	FANS AND EXHAUST FANS	CROMPTONS, USHA	
11	6A / 16A MODULAR SWITCHES & SOCKETS, ISI MARK	Legrand/ Schneider	
12	INDUSTRIAL SOCKETS	LEGRAND,SCHNEIDER	
13	G.I. B-CLASS PIPES (ISI)	ITC, PRAKASH,TATA	
15	HRC SWITCH FUSE UNITS	L&T, SIEMENS, ABB, SCHNEIDER (MERLIN GERIN)	
16	CONTACTORS	L & T, SCHNEIDER (MERLIN GERIN), LEGRAND	
17	ACB / MCCB	SCHNEIDER (MERLIN GERIN), L & T,ABB,	
18	C.T	INDCOIL, MECO,AE	
19	CAPACITOR	SUBODHAN,EPCOS, VIJAY	
20	P.F. RELAY	TRINITY, ENERCON, SECURE, L&T	
21	ALUMINIUM RACEWAYS	JINDAL/BHANSALI/MAH EXTRUSION	
22	MANUAL CHANGE OVER SWITCH	L & T,SCHNEIDER (MERLIN GERIN),SOCOME	
23	RG59 OUTLETS	M.K.INDIA, CLIPSAL	
24	RG59 COAXIAL CABLE	FINOLEX, POLYCAB, RR	
25	RACEWAYS / CABLE TRAYS	PROFAB,ASIAN,LEGRAND	
26	PANEL ACCESSORIES	L&T, SIEMENS, MG,GE	
27	LOAD MANAGERS / MEASURING INSTRUMENT	ENERCON,SCHNEIDER,CONZERV	
28	GI PIPES	TATA, JINDAL, PRAKASH	
29	BUS DUCT TRUNKING	Schneider , ABB, RR	
30	ATS	Emerson, ASCO, socomech	
31	SPD	LEGRAND,SCHNEIDER (MERLIN GERIN),HAGER	
32	LT POWER PANELS AND CAPACITOR BANKS	sv power systems - mumbai	
		GM Engg- Mumbai	
		SHIVAM - mumbai	
		RAMPO CONTROL-BANGALORE -9845186546	
		CPRI Approved equivalent panel manufacturer	

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS			
33	LED TYPE INDICATING LAMPS	TECKNICS/L&T/GE/SIEMENS	
34	COMPACT SUBSTATION	ABB, SCHNEIDER, SIEMENSE	
35	HT SWITCHGEAR AND RMU	ABB, SCHNEIDER, SIEMENSE	
36	HT CABLE JOINTING KIT	RECHEM,JAINSON	
37	UPS SYSTEM and static switch	Schneider, VERTIVE	
38	DG SYSTEM	CUMMINS,Powerica, KOEL green, SG, GEMCO	
39	EMERGENCY LIGHT INVERTER	MEGATECH,PROLITE,DUBASH	
40	PA/ MUSIC SYSTEM & SPEAKERS	BOSCH/ Honeywell	
41	FIRE SYSTEM	Honeywell / GST	
42	RODENT REPELLANT SYSTEM	MASER,RCAT,STAR	
43	ACCESS CONTROL	Spectra	
44	CCTV SYSTEM	Matrix , Honeywell	
45	IBMS SYSTEM AND SOFTWARE	Honeywell	
46	Fire Extingusher	Cease fire, Safex, MINIMAX, Kanex, SAFEpro	
47	Network system	AS PER IT TEAM requirments / Systemax	
NOTE- Contractor should take prior approval for any chages in makes or technical specification from Client and Consultant. Client has all rights to			