

TENDER

FOR

FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)

Govt. of India

33 Block- GN, Sector-V, Bidhannagar,

Kolkata-700 091

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33 Block- GN, Sector-V, Bidhannagar,

Kolkata-700 091

PART OF: TECHNICAL BID

NOTICE INVITING TENDER

Tender No. CMD- 007.12.52(WORKS)/22-23/12

Creative Museum Designers invites sealed tenders under two-bid system from reputed and experienced agencies for **FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR** at the above address.

The interested agencies are required to submit the technical and financial bids separately. The bids in Sealed **Part-I/Envelope-I** containing “**Technical Bid**” and Sealed **Part-II/Envelope-II** containing “**Financial Bid**” should be placed in a third sealed cover superscribing “**FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR** along with the Tender No. **CMD- 007.12.52(WORKS)/22-23/12**” and should reach CMD by 03.00 PM on or before 21st September, 2022. The technical bids shall be opened on the same day at 04:00 PM at CMD.

The tender document containing eligibility criteria, the scope of work, terms & conditions and draft agreement can be downloaded from CMD’s website. **The bid security (EMD) of ₹75,000.00 (Rupees Seventy-five Thousand only) should be paid by acceptable mode of payment as prescribed in the Tender Document in favour of Creative Museum Designers, payable at Kolkata.**

The criteria of selection, as well as rejection, is defined in **Annexure– I and II** of the tender document.

The bid shall remain valid for 90 days from the date of opening of the Technical bid. Any future clarification and /or corrigendum(s) shall be communicated through the tender section on the CMD’s website <http://cmdncsm.in/>.

Note: This notice is a part of the Tender Document.

PART OF: TECHNICAL BID

PROJECT INTRODUCTION: -

CMD is entrusted with developing the office infrastructure of Geo Science Museum for Gwalior. CMD has already developed one thematic gallery based on the Geo Science Principle and now CMD is going to initiate the office infrastructure work consisting of FABRICATION, SUPPLY & installation of wooden partitions, glass partitions, false ceiling, electrical works, LAN works and Intercom works.

SCOPE OF WORK: -

office infrastructure work consisting of FABRICATION, SUPPLY & installation of wooden partitions, glass partitions, false ceiling, electrical works, LAN works and Intercom works.

- 1.* The Creative Museum Designers is a Section 8 Company guaranteed by National Council of Science Museums, Kolkata (*hereinafter referred to as the Company).
2. Sealed tenders are hereby invited from reputed and experienced Engineering/Technical contractors capable of carrying out the work of **“FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.”** with excellent finishing quality and having adequate past experience during the preceding five years in successfully executing works of similar nature to that referred hereinabove.
3. The place of work/Installation would be **GEO-SCIENCE MUSEUM GWALIOR OLD VICTORIA MARKET, JIWAJI CHOWK, GWALIOR, MADHYA PRADESH 474001.**
3. Estimated cost of the work is approximately **75 Lakh/- (Rupees Seventy-Five Lakhs only).**
4. Time for carrying out the work will be **60 days + 10 days** of mobilization from the date of award of the work.
5. Contract documents consist of NIT, one set of tender drawings with Technical Specifications, Special Conditions if any of the contract to be complied with by the persons whose tender may be accepted etc.
6. Tender document can be downloaded from **30th August, 2022 till 21st September, 2022** from CMD's website (<http://cmdncsm.in>), Kolkata. Duly Filled in tenders will be received up to **3.00 PM on 21st September, 2022**, Part-I of the tender will be opened on the same day i.e. on **21st September, 2022, at 4.00 p.m.** in presence of available Tenderers/bidders. Tenderers may note that opening of tenders in their presence or in the presence of their authorized representatives is not obligatory on the part of the consideration of the Company. In case the tenderers or their authorized representatives are not present, tenders will be opened as per

rules and on the scheduled time and date unless it is notified otherwise by the consideration of the company earlier. The Company reserves the right to alter the dates of issue, receipt and or opening of tenders etc. if so necessary. Tenders received after the due date and time shall not be accepted and will be rejected straightway without any further reference. **The date for opening Part-II containing Financial Bid will be intimated to the qualified tenderers separately.**

7. **Bidder Qualification Criteria:**

Bidders intending to participate shall fulfil the following qualification criteria:

A. Techno Commercial Criteria:

The bidders should have experience in executing similar work i.e. fabrication, supply & Installation of wooden partition/Glass partition/False ceiling/Electrical work/Lan work/ Intercom work/ wooden interior jobs etc. in Govt./Semi Govt./Public Sector/ Corporate offices, of having minimum contract value as indicated below in last 5(five) years reckoned from the due date for submission of the bid.

- a) One contract having a minimum value of Rs. 60 Lakh (Rupees Sixty Lakh Only).
- b) Two contracts each of minimum value of Rs. 35 Lakh (Rupees Thirty-Five Lakh Only).
- c) Three contracts each of minimum value of Rs. 25 Lakh (Rupees Twenty-Five Lakh Only).

B. Financial Criteria:

- a) The bidder must have a PAN issued by the Income Tax Department of India.
- b) Bidder should have GST, PF & ESI registration with the concerned authority.
- c) Average Annual Turnover for the last 5 (five) years must be equal to or greater than 20 Lakh.

- 8. The tenderers should quote their rate in figures as well as in words, the rates and amounts tendered by them.
- 9. Offers should be submitted in sealed cover along with the **Earnest money deposit of ₹ 75,000.00/- (Rupees Seventy-five Thousand Only) by way of crossed Demand Draft/Pay Order/ Banker's Cheque drawn from any Nationalized Bank / Scheduled Commercial Bank of India payable in favour of “Creative Museum Designers” payable at “Kolkata”**. Earnest Money Deposit in the form of a Bank Guarantee, bond or any other form shall not be accepted. Earnest Money Deposit in respect of such offers which are not accepted will be returned to the tenderers within 15 working days from the date on which the final decision is taken about the tender or within one month from the date of opening of the tender whichever is earlier. Earnest Money Deposit in respect of the successful tenderer will be retained with the Creative Museum Designers, Kolkata

as per terms of clause No. 08 of GTC of this document. If the successful tenderer fails to execute the order strictly as per the drawings and specifications, provided by the Creative Museum Designers, Kolkata, in full or in part within the stipulated period of the work order, or fails to accept the work after placement of the order or fails to take up the work within stipulated time as mentioned in the clause No.2 of GTC, the Earnest Money Deposit retained with the Creative Museum Designers shall be forfeited forthwith after cancellation of the concerned Work order. No interest will be paid on the Earnest Money Deposit by Creative Museum Designers, Kolkata.

10. Tenders which do not fulfil any of the above conditions or are incomplete in any respect are liable for summary rejection.
11. The consideration of the Company does not bind itself to accept the lowest tender and reserves to itself the authority to reject or partially accept any or all the tenders, tendered items or schedules received without assigning any reason whatsoever.
12. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the tenderers who resort to canvassing will be liable for rejection on that ground alone.
13. Tenders incorporating additional conditions are liable to be rejected.
14. The tenderer or tenderers must declare in writing that neither he nor any of them is in anyway related to any officer in the Creative Museum Designers, Kolkata, or any of its constituent units.
15. All taxes and duties on materials freight & transit Insurance F.O.R. site in respect of this contract will be payable by the successful tenders. Nothing extra will be payable for increase in such taxes or duties even if imposed or levied either before or after the tenders are opened or during the currency of the contract.
16. Before submitting the tender, the tenderer shall examine all specifications, drawings, and conditions of the contract and inspect the site if necessary.
17. Tender must be submitted in two separate sealed covers marked PART – I (Technical Bid) and PART – II (Financial Bid) superscribing **“FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR”** Bids of only the qualified tenderers/bidders shall be opened.
18. The contents of PART – I and PART – II will be as follows:

PART – I

This sealed cover shall contain: -

- a. The Tenderer/Bidder shall submit the self-attested copies of the following documents along with the tender documents:
 - a) Valid Labour Licence
 - b) Trade Licence

- c) Details of works of similar nature carried out in Central / State Govt. bodies / Department / PSUs / Autonomous bodies/industries/factories or other similar organisations. in the last 5 years ending on 31 March 2021.
 - d) Copies of Balance Sheet and Profit & Loss A/c of previous three financial years ending 31 March 2021 duly certified by CA.
 - e) List of Arbitration cases (if any)
 - f) Copies of GST and PAN.
 - g) Details of managerial, supervisory and other staff if available.
 - h) Copy of Last 3 years' ITR.
- b. Certificates provided for the works detailed in 'a.(c)' above shall clearly indicate the scope and nature of work undertaken and the value of various components of work as executed, in order to confirm conformity to the defined similar works.
- c. Forwarding letter clearly indicating the documents attached therein. The tenderer shall clearly state in the forwarding letter that **they have not put forward any extra conditions in the offer form in PART - II.**
- d. "General Terms and Conditions", "Technical specification for **"FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR."** and "Declaration" duly signed by the tenderer on all the pages along with official seal.
- e. **A Draft / Pay order/ Banker's Cheque for an amount of ₹75,000.00/- as Earnest Money Deposit.**
- f. Two Declarations (1 and 2) duly signed by the tenderer along with an official seal. (format provided)
- g. Tenderer/bidder shall submit details as per **Annexure-I.**
- h. Tenderer/bidder shall submit details as per **Annexure-II** along with Technical Bid.
- i. Additional/Counter Terms & conditions will not be accepted and also any additions/deletions or changes in our format will not be allowed.
- j. **The sealed tender should be dropped in the Tender Box kept on the 4th floor of Creative Museum Designers, NCSM Campus, Building-II, 33, Block-GN, Sector-V, Bidhannagar, Kolkata- 700 091.**
- k. **Tenders received late (including postal delay)/ in an open condition/ without EMD/ not meeting the tender condition / incomplete in any respect are liable to be rejected.**
- l. **Bidders are advised to study carefully the tender documents and the conditions before quoting their bid. All the pages of the tender document should be signed**

and stamped by the bidder as a token of acceptance. An incomplete bid in any respect is liable to be rejected.

- m. In exceptional circumstances, prior to the expiry of the bid validity period, CMD may request tenderers to extend the period of validity of their bids. The request and the responses shall be made in writing.

PART – II

- a. Part II sealed cover shall contain the “Offer Form”, duly filled in and signed with stamp and date on all its pages. The cover will have to be superscribed with the name of the work. No extra conditions whatsoever shall be put forward in Part II. If any such additional conditions are found in Part II, it will not be taken into consideration and the tender will be rejected.
 - b. The financial bids (Part-II) of the eligible tenderers shall be opened after the evaluation of technical bids (Part-I).
 - c. The rates should be indicated both in words and figures. In case of discrepancy between the figure(number) and words, the rates given in the words only will be taken as authenticate and no further clarification will be sought from the bidder.
 - d. All the pages of the Financial Bid should be signed and stamped by the bidder. An incomplete bid in any respect is liable to be rejected.
 - e. In exceptional circumstances, prior to the expiry of the bid validity period, CMD may request tenderers to extend the period of validity of their bids. The request and the responses shall be made in writing.
 - f. The date for opening Part-II containing Financial Bid will be intimated to the qualified tenderers separately.
- 19. For the purpose of opening of the tenders, it is clarified that only the sealed envelope marked Part I will be opened first. After the opening authority of the tender is satisfied with the documents in the envelope marked part I are in order, the other sealed cover marked Part II may be opened subsequently.
 - 20. Earnest Money is liable to be forfeited if the successful tenderer selected for the work fails to sign the formal agreement within 15 days from the date of issue of the Order Letter to them by the consideration of the Company.
 - 21. The work will be awarded to the overall lowest of the technically acceptable bidder for the work, as per prices quoted in the Offer Form.
 - 22. The validity period of the tender shall be at least 90 days from the date of opening of the Technical bid. This period may be extended with mutual consent if the decision regarding issue of order letter is delayed for any reason.

PARTICULARS**FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR**

Last Date for submission of Offer	:	21-09-2022 (3.00 PM)
Place for submission of Offer	:	Tender Box, 4th floor of Creative Museum Designers, 33, Block GN, Sector V, Bidhannagar, Kolkata- 700 091.
Tender Opening Date (Technical Bid)	:	21-09-2022 (4.00PM) (for Part-I)
Tender Opening Date (Financial Bid)	:	The date for opening Part-II containing Financial Bid will be intimated to the qualified tenderers separately.
Validity of the Offer	:	90 days from the date of opening of the Technical bid
Time Schedule for completion of work	:	60 days + 10 days of mobilization from the date of award of the work.
Security Deposit	:	10% of the total value of the work. It is to be retained during the defect liability period.
Site Address	:	GEO-SCIENCE MUSEUM GWALIOR OLD VICTORIA MARKET, JIWAJI CHOWK, GWALIOR, MADHYA PRADESH, 474001
Defect Liability Period	:	12 months from the approved date of completion.
Liquidated damage for non-completion of work in time	:	01% per week of the contract value, subject to a maximum 10% of the contract value of the work.
EMD	:	₹ 75,000.00/- (Rupees Seventy-five Thousand Only) by way of Demand Draft/Pay Order or Banker's Cheque of any Nationalised/ Scheduled Commercial Bank in favour of Creative Museum Designers payable at Kolkata.

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)

Govt. of India

*33 Block- GN, Sector-V, Bidhannagar,
Kolkata-700 091*

Tender No. CMD- 007.12.52(WORKS)/22-23/12

Instructions for Filling up the Tender

- 1 The instructions, specifications, drawings and General Terms and Conditions given herein will be strictly binding on the tenderers and deviation, if any, shall make the tender liable to be considered invalid. Tenders incorporating additional conditions by the tenderers are liable to be rejected.
- 2 Tender must be submitted in two separate sealed covers marked PART – I (Technical Bid) and PART – II (Financial Bid) superscribing “FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.” Bids of only the qualified tenderers/bidders shall be opened.
- 3 The tenderers shall fill up the enclosed “Offer Form” and submit the same along with the “General Terms and Conditions”, “Technical Specifications for FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR”, and “Declarations” in a sealed envelope duly signed and stamped on all pages as a token of their acceptance.
4. Incomplete offers i.e. offer received without prescribed “Offer Form” “General Terms and Conditions”, “Technical Specifications for FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR”, and “Declarations” duly signed with an official seal on all pages will be rejected straightway without any reference to the tenderers.
- 4 Telegraphic and the conditional offer shall not be accepted.
- 5 Tender document can be downloaded **from 30th August,2022 till 21st September, 2022** from CMD’s website (<http://cmdncsm.in>), Kolkata. Duly Filled in tenders will be received up to **3.00 PM on 21st September, 2022**, Part-I of the tender will be opened on the same

day i.e. on **21st September, 2022, at 4.00 p.m.** in presence of available Tenderers/bidders. Tenders received after the due date and time shall not be accepted and will be rejected straightway without any further reference. The date for opening Part-II containing Financial Bid will be intimated to the qualified tenderers separately.

- 6 **Overwriting** in the “Offer Form” is not permitted and shall be rejected straightway without any further reference.
- 7 Offers should be submitted in sealed cover along with the **Earnest money deposit of ₹75,000.00/- (Rupees Seventy-five Thousand Only) by way of crossed Demand Draft/Pay Order/ Banker's Cheque drawn from any Nationalized Bank / Scheduled Commercial Bank of India payable in favour of “Creative Museum Designers” payable at “Kolkata”**. Earnest Money Deposit in the form of a Bank Guarantee, bond or any other form shall not be accepted. Earnest Money Deposit in respect of such offers which are not accepted will be returned to the tenderers within 15 working days from the date on which the final decision is taken about the tender or within one month from the date of opening of the tender whichever is earlier. Earnest Money Deposit in respect of the successful tenderer will be retained with the Creative Museum Designers, Kolkata as per terms of clause No. 08 of GTC of this document. If the successful tenderer fails to execute the order strictly as per the drawings and specifications, provided by the Creative Museum Designers, Kolkata, in full or in part within the stipulated period of the work order, or fails to accept the work after placement of the order or fails to take up the work within stipulated time as mentioned in the clause No.2 of GTC, the Earnest Money Deposit retained with the Creative Museum Designers shall be forfeited forthwith after cancellation of the concerned Work order. No interest will be paid on the Earnest Money Deposit by Creative Museum Designers, Kolkata.

8 Tenderer should be in possession of: -

Trade License, PAN Card [in the name of firm/agency or proprietor], **P-Tax registration, Registration under the Shops & Establishment Act**, GST Registration. The agency or any of its partners /directors etc. should not have been blacklisted/ debarred by any of the government agencies or departments or should not have been found guilty of commission of acts of moral turpitude or convicted for any economic offence or for violation of any labour laws etc. by any court or any authority appointed to enforce any labour laws. Further no past contract of such agency should have been terminated in the past 3 years on account of violation of laws or deficiency of services or breach of contract.

- 9 Intending tenderers/bidders must read the terms and conditions of the tender carefully. They should submit their bid only if they consider themselves eligible as per the laid down criteria and if they are in possession of all the documents/registrations required.

10 The contents of PART – I and PART – II will be as follows:

PART – I

This sealed cover shall contain: -

- a. The Tenderer/Bidder shall submit the self-attested copies of the following documents along with the tender documents:
 - a) Valid Labour Licence
 - b) Trade Licence
 - c) Details of works of similar nature carried out in Central / State Govt. bodies / Department /PSUs /Corporate offices/ Autonomous bodies/industries/factories or other similar organisations. in the last 5 years ending on 31 March 2021.
 - d) Copies of Balance Sheet and Profit & Loss A/c of previous three financial years ending 31 March 2021 duly certified by CA.
 - e) List of Arbitration cases (if any)
 - f) Copies of GST and PAN.
 - g) Details of managerial, supervisory and other staff
 - h) Copy of Last 03 ITR.
- b. Certificates provided for the works detailed in ‘a.(c)’ above shall clearly indicate the scope and nature of work undertaken and the value of various components of work as executed, in order to confirm conformity to the defined similar works.
- c. Forwarding letter clearly indicating the documents attached therein. The tenderer shall clearly state in the forwarding letter that **they have not put forward any extra conditions in the offer form in PART - II.**
- d. “General Terms and Conditions”, “Technical specification” for “FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR” and “Declarations” duly signed by the tenderer on all the pages along with official seal.
- e. **A Draft / Pay order/ Banker’s Cheque for an amount of ₹75,000.00/- as Earnest Money Deposit.**
- f. Two Declarations (1 and 2) duly signed by the tenderer along with an official seal. (format provided)
- g. Tenderer/bidder shall submit details of organisations, where he/she has executed such similar work as per **Annexure-I.**
- h. Tenderer/bidder shall submit details as per **Annexure-II** along with Technical Bid.
- i. Additional/Counter Terms & conditions will not be accepted and also any additions/deletions or changes in our format will not be allowed.

- j. **The sealed tender should be dropped in the Tender Box kept on the 4th floor of Creative Museum Designers, NCSM Campus, Building-II, 33, Block-GN, Sector-V, Bidhannagar, Kolkata- 700 091.**
- k. **Tenders received late (including postal delay)/ in an open condition/ without EMD/ not meeting the tender condition / incomplete in any respect are liable to be rejected.**
- l. **Bidders are advised to study carefully the tender documents and the conditions before quoting their bid. All the pages of the tender document should be signed and stamped by the bidder as a token of acceptance. An incomplete bid in any respect is liable to be rejected.**
- m. In exceptional circumstances, prior to the expiry of the bid validity period, CMD may request tenderers to extend the period of validity of their bids. The request and the responses shall be made in writing.

PART – II

- a. Part II sealed cover shall contain the “Offer Form”, duly filled in and signed with stamp and date on all its pages. The cover will have to be superscribed with the name of the work. No extra conditions whatsoever shall be put forward in Part II. If any such additional conditions are found in Part II, it will not be taken into consideration and the tender will be rejected.
 - b. The financial bids (Part-II) of the eligible tenderers shall be opened after the evaluation of technical bids (Part-I).
 - c. The rates should be indicated both in words and figures. In case of discrepancy between the figure(number) and words, the rates given in the words only will be taken as authenticate and no further clarification will be sought from the bidder.
 - d. All the pages of the Financial Bid should be signed and stamped by the bidder. An incomplete bid in any respect is liable to be rejected.
 - e. In exceptional circumstances, prior to the expiry of the bid validity period, CMD may request tenderers to extend the period of validity of their bids. The request and the responses shall be made in writing.
 - f. The date for opening Part-II containing Financial Bid will be intimated to the qualified tenderers separately.
- 11 All the envelopes mentioned above should be submitted in an envelope, super-scribing the Tender for “FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.” within the due date.
 - 12 CMD reserves the right to accept or reject any bid in part or full without assigning any reason whatsoever.
 - 13 The authorities of Creative Museum Designers, Kolkata (CMD) do not bind themselves to accept the lowest tender and reserve the right to reject or accept any or all tenders wholly or partially without assigning any reason whatsoever.

14 Opening of Bids

Part - I will be opened on the date, time and at the venue already indicated. After finalization of the Technical Bid, CMD shall open the Part-II/Financial Bid of only those tenderers who have been declared technically qualified by CMD. The date for opening Part-II containing Financial Bid will be intimated to the qualified tenderers separately.

15 PRE-BID CONFERENCE AND CLARIFICATIONS

i. Pre-bid Conference

- a) CMD shall hold a pre-bid conference with the bidders on **12th September 2022 at 3.00 PM.**
- b) The bidders will have to ensure that their queries, if any, for the pre-bid conference should be sent to **cmd.ncsm.electronics@gmail.com and cmd.ncsm.edl@gmail.com** by **12.00 PM** on **12th September 2022.**
- c) The queries should necessarily be submitted in MS Word file in the following format:
- d) Any requests for clarifications submitted post the indicated date and time shall not be entertained by CMD.

Sl. No.	Reference(s) (Clause & Page No.)	Content requiring Clarification(s)	Points of Clarification
01.			

ii. Responses to Pre-Bid Queries and Issue of Corrigendum/Addendum (if any)

- a) CMD will endeavour to provide timely responses to all queries. However, CMD neither represents nor warrants the completeness or accuracy of any response made in good faith, nor does CMD undertake to answer all the queries that have been submitted by the bidders. At any time prior to the last date for receipt of bids, CMD may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the tender document by a corrigendum or addendum;
- b) Any such corrigendum/addendum shall be deemed to be incorporated into this tender document and shall form part of the tender document;
- c) In order to provide prospective bidders reasonable time for taking the corrigendum/addendum into account, CMD may, at its discretion, extend the last date for the receipt of the bids.

16 Language

The bid as well as all correspondence and documents relating to the bid to be exchanged by the bidder and CMD shall only be in English.

ANNEXURE-I
PART OF: TECHNICAL BID

DETAILS OF BIDDER PARTICIPATING IN THE TENDER

Sl.	Description	To Be Filled By The Agency
1.	Name of the Agency	
2.	Year of Establishment	
3.	Registered office with full address	
4.	Full Postal Address of communication	
5.	Telephone Number(s) of office	
6.	Contact Person Name with Mobile No.	
7.	Fax number	
8.	E-Mail ID	
9.	Website if any	
10.	Nature of Entity - Limited Company, Partnership etc. (attach a copy of partnership Deed/ Certification of incorporation as applicable) Date of Incorporation	
11.	Name (s) of Director / Proprietor / Partners with address and telephone nos. if any	
14.	<p>Qualification Criteria:</p> <p>A. Techno Commercial Criteria: The bidders should have experience in executing similar work i.e. Glass panelling, Wooden Paneling, i.e Various types of Partition work, interior jobs, False Ceiling work, Electrical Work etc. in Govt./Semi Govt./Public Sector/ Corporate offices, of having minimum contract value as indicated below in last 5(five) years reckoned from the due date for submission of the tender bid.</p> <p>I. One contract having minimum value of Rs. 60 Lakh (Rupees Sixty Lakh Only).</p> <p>II. Two contracts each having minimum value of Rs. 35 Lakh (Rupees Thirty-Five Lakh Only).</p> <p>III. Three contracts each having minimum value of Rs. 25 Lakh (Rupees Twenty-five Lakh Only).</p> <p>B. Financial Criteria: I. Average Annual Turnover for the last 5 (five) years II. Net worth</p>	
15.	PAN of Bidder	
16.	GSTIN of Bidder	

Details of other organisations where such contracts undertaken during the last five years (enclose supporting documents and completion certificate).

Sl.	Name & Address of the organization, contact No	Description of Work	Amount of Work	Whether Govt/semi Govt/Autonomous bodies/PSUs/Industries etc. (Pl. specify)
1.				
2.				
3				
4				
5				
6				
7				
8				
9				
10				

I/We hereby solemnly declare that all the information/statements are true to the best of my/ our knowledge. I/we also declare that my/our firm is not involved in any Litigation or Arbitration with any company for the last 5 years. I/We further declare that the decision of Creative Museum Designers regarding finalization of Empanelment of contractors shall be final and binding on me/us.

(Signature with date & seal)

N.B-1.: duly signed and stamped photocopies of all documents must be submitted along with the Technical Bid.

ANNEXURE-II
PART OF: TECHNICAL BID

CHECK-LIST (TECHNICAL BID)

Sl.	Description of requirement	Yes/No
1.	Copy of Labour Licence	Yes/No
2.	Copies of Balance Sheet and P&L A/c for the last 3 years duly certified by CA	Yes/No
3.	Copy of GST Registration	Yes/No
4.	Copy of PAN from Income Tax Department	Yes/No
5.	Annexure-I with supporting documents	Yes/No
6.	Proforma containing details of other organisations where such Work were/are undertaken (attach supportive documents)	Yes/No
7.	₹75,000/- as EMD	Yes/No
8.	Price bid proforma completed & sealed in a separate envelope	Yes/No
9.	List of Arbitration cases (if applicable) Do not leave it blank. If there are no such cases, write “Not Applicable”.	Yes/No/Notapplicable
10.	Acceptance of Terms and Conditions attached. Each page of terms and conditions is to be duly signed and stamped as a token of acceptance and submitted as part of the tender document.	Yes/No
11.	Copy of last 03 ITR	Yes/No
12.	Undertaking by the bidder to the effect that there is no police case pending against the proprietor/firm/parties relating to the previous service contracts.	Yes/No
13.	Office address in Kolkata, West Bengal.	Yes/No
14.	All Declarations	Yes/No

NOTE: Submission of all the documents mentioned above along with the declarations, is mandatory. Non-submission of any of the information above may render the bid to be rejected.

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)

Govt. of India

33 Block- GN, Sector-V, Bidhannagar,

Kolkata-700 091

Tender No. CMD- 007.12.52(WORKS)/22-23/12

GENERAL TERMS AND CONDITIONS (GTC) REGARDING SUBMISSION OF TENDER FOR FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.

1. Tenderer shall be required to take up the job for “FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.” as per the enclosed specification.
2. The successful tenderer shall submit the following documents within 7 (seven) days from the date of placement of the work order.
 - a. **Duplicate copy of the work order duly signed and stamped by the tenderer as a token of acceptance of the order.**
 - b. **Security Deposit as detailed in Clause no. 8 of General Terms and Conditions.**
3. **Price:**
 - i) The rates quoted/indicated shall include the cost of all materials, labour for fabrication, machining, assembling, testing, painting, polishing, finishing, supply, erection, installation, labour supervision and all working accessories, tools and tackles, reliable standard testing equipment etc. and including all handling charges to supply and deliver and install wooden structures strictly as per the drawings provided by Creative Museum Designers, Kolkata.
 - ii) The rates quoted in the Offer Form for the cost of fabrication should be tax exclusive. Taxes, duties etc. as applicable to be mentioned separately. **Price and rate quoted shall be firm and fixed for the entire period of execution of the work and no escalation of rate on any ground whatsoever shall be allowed.** All the statutory deductions such as GOVT. CESS/ TDS as per Income Tax Act at prevailing rates shall be deducted from the bill(s) of the contractor.
 - iii) The work will be awarded to the overall lowest of the technically acceptable bidder for the work, as per prices quoted in the Offer Form.

4. Time of Completion:

Time is the essence of this tender. The entire work viz. fabrication, supply, erection, and installation of wooden structures etc. as per enclosed specification and drawings after obtaining approval at different stages of work shall be completed within 60 days + 10 days of mobilization period from the date of placement of order.

- a. In the event of delay in execution of work wholly attributable to delay in supply of drawings/modified drawings by the Company (CMD) despite a request from the successful tenderer well in advance, he shall apply in writing to the Project In-charge/CMD within 07 days from the date of the hindrance on account of which he desires such extensions as aforesaid and the Project In-charge, with the consent of the consideration of the Company may (if the reasonable ground is shown) allow such extension of time, if any, be necessary or proper.
- b. In case of the total value of the work exceeds the total contract value of the tender owing to deviation in quantities or extra items, the successful tenderer will be entitled to ask for an extension of time in proportion to the increased value of work.
- c. No extension of time shall be given to the successful tenderer for non-supply or delay in the supply of requisite materials. The successful tenderer hereby agrees that the extension of time requested by him and granted by the consideration of the Company shall be treated as an extension of time allowed to them without any claim for compensation or damages for any reasons whatsoever including those for which the extension is granted.

5. Penalty Clause (Liquidated damage):

The successful tenderer shall strictly observe the time allowed for carrying out the works as detailed in clause no.4. The work shall, throughout the stipulated period of the contract, be proceeded with all diligence (time being deemed to be the essence of the contract) and the tenderer shall pay to the Creative Museum Designers, Kolkata an amount equal to 1% of the amount of the Contract value for every week that the work may remain incomplete as per delivery schedule as stipulated in clause no.4, subject to maximum compensation of 10% of the contract value after which period appropriate action will be taken by Creative Museum Designers as will be deemed fit. Over and above, in case of noncompliance with the strict time schedule for the project by the successful bidder, CMD will have the option of freezing any further payment.

6. Every effort shall be made to complete the work/job by the successful tenderer within the specified time schedule. In case the firm fails to comply with Clause No. 4 i.e. within the specified time schedule as per the finalized and accepted terms and conditions, Creative Museum Designers shall have the right to either impose penalty Clause or cancel the order or both at its discretion. Creative Museum Designers may get the un-

finished work at the risk and cost of the successful tenderer. The decision of Creative Museum Designers in this regard shall be final and binding on the successful tenderer.

7. Inspection:

Inspection may be carried out at any time during the process of fabrication, if desired by the officials of Creative Museum Designers, Kolkata. Any defect pointed out by the competent representative of the Creative Museum Designers during such inspections shall be promptly rectified to ensure the desired quality of work. It would be mandatory on the part of the successful tenderer to arrange an inspection and obtain approval at every stage of work failing which action will be taken as deemed fit by the CMD. The decision of CMD in this regard shall be final and binding on the successful tenderer.

8. Security Deposit:

The successful tenderer has to submit a Security deposit amounting to 10% of the gross value of the order. If the Security Deposit is not deposited before the commencement of the work, a deduction @ 10% shall be made from each Bill and the said amount shall be retained by CMD as Security Deposit (which includes the EMD submitted by the tenderer). CMD may retain the SD if the successful tenderer fails to rectify the defects pointed out by CMD during DLP. The Security Deposit of the successful tenderer shall be released after the expiry of the defect liability period (the defect liability period shall be 12 (twelve) months from the date of final completion of the work/job). No interest shall be paid on the security deposit retained with Creative Museum Designers, Kolkata.

9. Terms Of Payment:

No advance payment shall be made by Creative Museum Designers, Kolkata under any circumstances. One interim payment and one Final Payment shall be released as below:

- i) 50% of the payment will be released after 60% of the work is over (value of the awarded work).
- ii) Rest will be payable after the successful completion of the work.

Payment will be released within 30 (thirty) days from the date of receipt of Invoice/Bill duly supported by receipted challan and satisfactory inspection/work completion certificate from CMD authority for the entire job.

10. Defect Liability Period:

The defect liability period shall be 12 (twelve) months from the date of completion of the work. The successful tenderer will be responsible for all defects in the material supplied or non-supply of standard material as per tender, defective workmanship, use of defective materials, de-colouring of material, material breakage etc. for a period of 12 (twelve) months from the date of completion of the job.

11. Specifications of the items under tender are as given in the enclosed tender documents along with drawings. However, if any ambiguity in the specification is detected, it shall be promptly brought to the notice of Creative Museum Designers, Kolkata for clarification. No deviation from the approved specifications shall be made by the successful tenderer without the written approval of Creative Museum Designers, Kolkata.
12. The authorities of Creative Museum Designers, Kolkata reserve the right to amend, alter or modify the terms & conditions or quantities mentioned above if necessary.
13. The authorities of Creative Museum Designers, Kolkata, who do not bind themselves to accept the lowest tender, reserve the right to reject or accept any or all tenders wholly or partially without assigning any reason whatsoever.
14. The CMD shall not be liable for any kind of injury resulting in temporary or permanent disability or loss of life of any employee or worker who is deployed by the successful tenderer within/outside the Office Space of Geo Science Gallery, Gwalior site at the

time of execution of the said work.

15. The successful tenderer shall pay not less than minimum wages as prevalent in the concerned municipal area and shall abide by all and every kind of legislation that are incidental to and concerned with the engagement of persons for the time being for carrying out and execution of the work. CMD shall have no liability of any kind with regard to the workers employed/ deployed by the successful tenderer.
16. The successful tenderer shall ensure that all wages and allied benefits as per statutory norms are paid to their workers for the purpose of this contract. The Agency shall remain liable to the authorities concerned for compliance with respective existing rules and regulations of the Govt. for the purpose of this contract and shall remain liable for any contravention thereof. They shall keep CMD indemnified against any liabilities arising out of non-compliance with any of the acts, rules, or orders of the Govt./ Company on their part.
17. The Creative Museum Designers, Kolkata or its representatives shall, at all reasonable time, have free access to the works and/or to the workshops/factories or other places where materials are being prepared or fabricated for the contract and also to any places where the material is lying or from which they are being obtained and the successful tenderer shall provide assistance to them for inspection, examination and testing of the materials and workmanship. Except the representatives of Public Authorities and those mentioned above, no person shall be allowed in the working place at any time without the prior written permission of CMD, Kolkata.
18. The successful tenderer shall obtain necessary trade and other licenses as may be required to carry on the tendered job and shall also be responsible for compliance with all rules and regulations which may be in force from time to time by the appropriate authority at his/their own cost. They will also provide all necessary **Workmen's Compensation Insurance Policy** and **Labour Licence** for the workers engaged by the agency at the site.
19. CMD reserves the right to allow other team of personnel/contractors to work at the work site.
20. The successful tenderer shall ensure that, during the course of execution of the work under the present contract, no damage is caused to the existing property or structures. In case of any damage arising out of the contractor's work/ negligence, it has to be repaired by the agency or the same will be done by CMD at the cost of the contractor.

In case of any theft, loss of assets and/or disturbance adversely affecting day-to-day job etc., to the working place, the entire responsibility for recovery and legal actions starting with the lodging of F.I.R. with local police in consultation with the authorities of the CMD, up to the final recovery stage etc. will lie with the agency.
21. The successful tenderer should mandatorily maintain a **Hindrance Register** at the working site to record all hindrances encountered during the execution of the work. The

reason and item of work affected due to any hindrance shall be clearly recorded in the Hindrance Register and the Project-in-Charge/employee of CMD as well as the Contractor/representative of Contractor will sign on the register for the recorded hindrance. In case of several hindrances encountering simultaneously over a period of time affecting the same item or different items of the work, the period of hindrance will be worked out by CMD. The format of the Hindrance Register is provided hereunder:

FORMAT OF HINDRANCE REGISTER

Tender No. CMD- 007.12.52(WORKS)/22-23/12

Description of work:	Work Order No., Date:
Name of the Contractor:	Scheduled Completion Time:

Sl.	Nature of Hindrance	Items of work not executed due to hindrance	Date of start of hindrance	Date of end of hindrance	Period of Hindrance	Net hindrance day	Remarks
Signature of Contractor					Signature of Project-in-Charge		

22. Arbitration

In the case of any disputes or differences arising out of or in connection with, or concerning this Agreement, it shall be settled by arbitration. The arbitration shall be conducted by an expert as Arbitrator in the field acceptable to both the parties. In case of disagreement, it shall be through three experts in the field, one to be appointed by each party and the third presiding expert to be jointly appointed by the expert referred to. The arbitration shall be as per the provision of the Arbitration and Conciliation (Amendment) Act, 2015 and the decision of the panel so appointed shall be final and binding on both the parties to this Agreement. The place of arbitration shall be normally Kolkata or any other suitable place mutually agreed.

The provisions of the Arbitration and Conciliation Act 2015 or any statutory modification or re-enactment thereof and of the rules made thereunder for the time being in force shall apply to arbitration proceedings under this clause.

23. Force Majeure Event (FME)

If there is a delay in performance or other failures by the contractor to perform its obligation under its contract due to the event of a Force Majeure as mentioned hereunder, the contractor shall not be held responsible for such delays/failures. If a force majeure situation arises, the contractor shall promptly apply in writing to the Project In-charge/CMD within 07 days or as soon as it occurs and it cannot be claimed ex-post facto:

- a. by reason of any exceptionally inclement weather like Cyclone, severe flood etc.,

- normal monsoon shall not be considered a valid reason for the extension of time,
- b. by reason of proceedings taken or threatened by, or legal disputes with adjoining or neighbouring owners,
 - c. by reason of any epidemics, quarantine restrictions etc. declared by the Government,
 - d. due to delay in the work of other agencies or tradesman engaged or nominated by the consideration of the Company: if such delay is directly responsible for delay in execution of this work.by reason of any general strike or lockout affecting work, strike or any kind of labour trouble in successful tenderer's organisation shall not be a valid reason for the extension.
 - e. There may be a Force Majeure situation affecting the Tenderer (CMD) only, under which the Tenderer (CMD) shall have equal rights to claim relief under such Force Majeure situations.
24. The successful tenderer should furnish documentary proof in support of **GST number and PAN number** of their establishments. Payment will not be released till such certificate is furnished.
25. The successful tenderer must submit the following Registrations/Certificates to the office of CMD, Kolkata prior to execution of the agreement or within 07 days of issuance of LOI whichever is earlier. Failing which the order will be summarily cancelled:
- a. **Labour Licence** at Gwalior, Madhya Pradesh.
 - b. **Workman Compensation Insurance Policy** for labours engaged at the site.
26. The Agency shall make Police verification of the particulars of their personnel deployed and issue proper identity cards to those personnel/labour who are deployed by them at any point of time for the purpose of this contract in order to facilitate verification of their identity by the CMD. They shall always wear the photo identity card while inside the premises of the working place/site/centre. The details of the labourers deployed at the site must be submitted to CMD authority along with the proof of address and one copy of the passport-size photograph.
27. The Agency on completion of the contract or termination of the contract shall peacefully vacate the premises of the working place/locations/site/centre and remove all their persons and materials from the campus after handing over the charge to the new agency/Party.
28. The Agency shall be responsible for observance and compliance of different industrial laws as in force and they shall ensure that no demonstration/agitation of any kind takes place inside or near the premises of the working place/locations/site/centre by personnel engaged by the Agency.
29. The CMD shall pay to the Agency nothing more than the amount as may be due under the contract terms.

30. The contractor shall keep a qualified and experienced Engineer for supervision of work to ensure the best quality of work. The agency should ensure all the safety equipment like a helmet, safety glasses, gloves, shoes, etc. are used by the workers during the execution of the work.
31. The tenderer shall be responsible for arranging and maintaining at his/her own cost all materials, tools, tackles, machines required for fabrication, material handling equipment, ladders, benches, water, electricity access, and other facilities for workers and all other services required for executing the work.
32. **Whenever there is a duplication of clause either in the terms and conditions or in the tender document, the clause which is beneficial to CMD will be considered applicable at the time of any dispute/following any statutory rules.**

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)
Govt. of India
33 Block- GN, Sector-V, Bidhannagar,
Kolkata-700 091

Tender No. CMD- 007.12.52(WORKS)/22-23/12

TECHNICAL SPECIFICATIONS REGARDING “FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.”

(A) Material and Work specification for Partition Work:

1. Glass partitions should be single glazed partition with a tested sound reduction property of Rw 37dB) S/I of 10 mm tempered/ toughened glass of ht as per drawing, with all the holes made for the handles and hardware. Glass to have polish at the edges, slim line single Glazed System consisting of 50mm x 50mm Horizontal and 50mm x 50mm Vertical teak wood section will accommodate 10mm Thick Toughened Glass with Glass-to-Glass/ equivalent Joints complete with Rubber beading on all sides.
2. The complete design & elevation is as per drawing details. Note- rate to be inclusive of the detailing of the partition system as per manufacturer's details.
3. Providing and Fixing of 3M Transparent Vinyl Film (optically cleared)/ 3M 1 Way Mesh Vinyl (with 3M Edge Sealer)/ 3 Frosted Vinyl printed with 8 Colour Digital Print with UV Inks of approved shade and design.
4. Glass Door should be Provided & fixed by Style-less Glass doors of size as per Drawing with BOTTOMLINE Aluminium door frames of size 40x92mm. The frame finish shall be Anodized of 20 microns of approved colour. The hardware set shall be inclusive of matching heavy duty self-closing side hinges of Geze/ approved equivalent make - 4 nos. per door, side horizontal lever handle with lock, Door closer of matching finish (Slim pelmet-arm type of suitable load capacity), etc complete. Glass shall be 10mm thick toughened glass. Edges of glass shall be provided and fixed with Door Seal so as to provide acoustic sealing of the door opening.
 (900mm X 2400mm) Single Leaf- 3 Nos. (D1)
 (750mm X 2400mm) Single Leaf- 2 Nos. (D2)
 (1525mm X 2400mm) Double Leaf- 3 Nos. (D3)
 (1200mm X 2400mm) Double Leaf- 2 Nos. (D4)
 (1000mm X 2400mm) Double Leaf- 1No. (D5)
5. Both side Double-skinned Ply Partition with insulation of full-height as per Drawing using 50x50mm MS ERW Square section of 2.5mm guage thickness in both horizontal

and vertical directions with equidistance robust grid (900mm x 900mm), and with 12mm thick BWP Plywood on both sides. Inner portion should be filled with Polyester Wool insulation. The gallery side plywood of the partition shall be left unfinished on one side and on the other side (Office Side) is paint finish as per approved colour and shade. Provision of necessary rigidity and good quality Malaysian Sal wooden filling at corners and trims to receive hardware as necessary. The wood shall be treated with 2 coats of fire proof paint over a coat of anti-termite treatment / anti-corrosive primer to receive screws / anchor fasteners to fix Joinery frame in position etc. MS structures if any should be with primer and colour coated as approved by CMD

6. Polyester wool insulation Specification.
 - a) Thickness : 50 mm
 - b) Density : 20 kg / m³
 - c) Thermal Conductivity : 0.034 w/m.k
 - d) Acoustic insulation with NRC : 0.80
 - e) Fire retardant
 - f) Completely non toxic and itch free
 - g) Temperature range of – 15 to 120 degree C.
7. Both side Double-skinned Ply Partition without insulation of full-height as per Drawing using 50x50mm MS ERW Square section of 2.5mm gauge thickness in both horizontal and vertical directions with equidistance robust grid (900mm x 900mm), and with 12mm thick BWP Plywood on both sides. Both side of the plywood of the partition is paint finish as per approved colour and shade. Provision of necessary rigidity and good quality Malaysian Sal wooden filling at corners and trims to receive hardware as necessary. The wood shall be treated with 2 coats of fire proof paint over a coat of anti-termite treatment / anti-corrosive primer to receive screws / anchor fasteners to fix Joinery frame in position etc. MS structures if any should be with primer and colour coated as approved by CMD.
8. All the structures to be firmly grouted to the floor / walls etc. as per direction at site. As the project will be going on the heritage building so extra care should be taken during structure fixing. Fixing work must not be done on Arches. Before fixing the structure permission should be taken from the authority.
9. False Ceiling should be Provided and Fixed with Hunter Douglas Metal Ceiling - STRETCH METAL (LAY-IN/ LAY-ON) TILES of dimension 600 x 600 mm consisting of Square Mesh Panel-CLS3, Steel/Aluminium Channels fixed perpendicularly to form a cell of size 600mmx600mm and Hangers.
10. Providing & fixing Wall Panelling of 100 mm depth as per Drawings, in general, it shall be made out of aluminium box frame of size 50 x 25 mm x 1.5mm gauge thickness covered with 12 mm thick BWP Plywood clad with 9 mm ply finished with 6mm MDF board with PU matt finish paint as per approved shade.
11. Box Skirting should be provided and fixed with 100mm height L-Type Modular Box

skirting pg 12mm BWP Plywood with 1mm Laminate at Masonry walls & Partitions, and of approved shape & profile. Rate to include supply & installation of matching colour corner guards. Rate to include all hardware, etc complete.

12. Providing and Fixing ceiling hung Fire Exit Signages of size 150 x 400mm and Auto Glow type - double side.
13. Providing and Fixing of Door PUSH / PULL Signages set of S.S finish with Acid etched lettering of approved shade and of size 50 x 125 mm. The S.S signage shall be pasted using double-sided tape of 3M make on the Glass doors / Flush doors.
14. Supply and fixing of 100mm x 400 mm curved aluminium modular sign for cabins and other rooms, with plastic end caps and polycarbonate on the fascia as a protective layer for the the content printed with 3M vinyl. Names of rooms to be confirmed by Client. The signage shall be pasted using double-sided tape of 3M make on the Glass doors / Flush doors.
15. Providing and Fixing of "EVACUATION PLAN"-Autoglow Fire escape route map in clear acrylic glass and required glass studs supports etc. Indicating direction, Key plan, contact numbers etc. (The sample of the same need to be presented for approval before execution)... (Maximum size of the board A3) with necessary wall mount supports.
16. Providing and applying 0.5 mm thick Readymix Acrylic wall putty Asian Paints Acrylic Wall Putty in two to three coats, as required, over a coat of special grade alkali resistant primer - DWS Alkali Bloc Primer or equivalent on plastered surfaces finished smooth to correct line level, plain, plumb etc., including pre-preparation of the surface and smoothening the putty surfaces with emery paper complete as per manufacturers specifications, and drawing. Roller finish required.
17. Apply 2 to 3 coats (as approved by architect/consultant) of super premium Interior Emulsion with a soft sheen - Asian Paints Royale of approved shade, over a coat of special grade alkali resistant primer - DWS Alkali Bloc Primer or equivalent, complete as per manufacturers specifications and drawing. Roller finish required.
18. Unless specified, for all the frameworks for cabinets, fully seasoned good quality knot and crack free Teak Wood to be used. Use 25mm x 50mm Teak wood for vertical frame members and 25mm x 50mm for horizontal frame members and 50mm x 50mm for Base.
19. If demanded test certificate for Teak wood used has to be provided from any Govt. Test house within a week.
20. Agency must use seasoned, knot free, straight wooden battens for the work. If after installation the wooden structure develops a bend within the defect liability period, then the agency has to take up necessary modification work without causing any damage to the existing display system. Otherwise, the work shall be taken up by the company at agency's risk and cost and the amount will be deducted from the security deposit. The

penalty charges will be decided by CMD officials.

21. Use only new and latest stock of BWP plywood of Century make (Bond 710) / Greenply make (Green Ecotec Platinum 710) with minimum 15 years' warranty along with the test certificate from Govt. recognised body/institute. These are to be got approved before using in fabrication. Ply marked with Greenply/Century of specified grade only will be accepted. All curved surfaces should be made with 6mm flexible plywood of Century / Greenply make or equivalent.
22. All laminates will be 1mm thick of Century / Greenlam make unless otherwise specified. Agency should take approval from CMD regarding the shades before using for fabrication work.
23. Wherever the finish is to be done with veneer, it will be of exquisite and superior quality veneer which after polish will give the actual finish of texture. Before pasting of such veneer it has to be got approved by the authority of CMD. All veneer will be of 4mm thick Century / Green make.
24. Stainless steel structures if any must be of Grade 316, which are to be buffed and polished to produce matt/mirror finish as desired by CMD.
25. MS structures if any should be with primer and colour coated as approved by CMD.
26. All the visible surfaces of partition area should have laminated / painted/ veneered/ polished finish. Refer to specifications for laminated finish and paint finish as per details given in Section (B) and (C).
27. All the non-laminated portion on the back side of the cabinets should be painted with one coat of 1st quality wood primer. Wherever the surface is visible from front, it should be applied with 2 or more coats of paint to get even finish. In case the surface is not visible from lobby space, it may be applied with single coat of paint. The paint shall be synthetic enamel paint of Berger/Asian/ ICI make of approved colour.
28. Use Fevicol (SH) adhesive for frame joining; ply fixing on frames.
29. All wooden/plywood/laminated surfaces mandatorily are to be applied with anti-termite oil.
30. All wooden beadings used for fixing of Glass / acrylic / polycarbonate sheets shall be Teak Beading and polished finish / metallic paint finish.
31. All clear glass used in the cabinets should be only toughened float glass of Modi Guard or Saint Gobain make and should be clear, transparent, wrinkle and scratch free with approved thickness.
32. All glass mirror used in the cabinets should be of Modi Guard or Saint Gobain or equivalent make and should be wrinkle and scratch free with approved thickness.

33. Transparent polycarbonate, acrylic sheets and acrylic mirror free from any scratches or stains, shall only be used. Samples must be got approved before using in fabrication jobs.
34. All Dimensions given in the drawings are in millimetre unless otherwise specified.
35. Dimensions given in the drawings are indicative. The actual dimensions for fabrication may vary depending on site condition.
36. CMD may inspect/test any materials to be used/supplied by the agency for its genuineness from the registered laboratory.

(B) Specification for pasting assorted plain colour / decorative laminates/ veneer on wall panels:

1. The selected tenderer shall use latest stock of Century / Green make 1mm thick assorted plain colour decorative laminates and customised decorative laminates conforming to IS: 2046:1995 as per the colour scheme required for individual CABINETS.
2. The selected tenderer shall undertake pasting of laminates as per approved design that may be plain or designed using multiple colour shades.
3. All decorative laminates/ veneer shall be pasted with Fevicol SH only.
4. Edges of laminates if any shall be bevelled before pasting to avoid visibility of the edges etc. Sharp corners should be properly grounded.
5. Adequate measures shall be taken to ensure proper pasting of laminates to avoid any air bubbles, undulations etc.
6. In case workmanship of laminate pasting is found defective and unsatisfactory due to formation of air bubbles, undulation etc. during inspection, the successful tenderer shall arrange to replace the laminates at his/her own cost as per the approved shade and make.
7. All laminates to be pasted are maximum width of 600mm. Grooves in between two pasted laminates are to be filled with NC putty and paint finished. No undulation due to putty finish will be accepted.

(C) Material specifications for MRF/AkzoNobel make polyurethane paint with PU clear glossy/ matt finish on wooden & metallic surfaces, wherever required.

1. All paints, primers, filler materials and thinner only shall be supplied by the selected tenderer as per actual requirement.
2. The wooden / plywood surfaces shall be thoroughly cleaned with emery paper 60/80/120 to make the surface smooth before application of the penetration primer and

subsequent coats of knifing filler, soft cutting filler, glossy / metallic polyurethane paint and clear glossy/matt polyurethane paint. Manufacturer's specifications, applications, and application procedure shall be strictly followed to ensure the desired quality of finish.

3. The successful tenderer shall arrange to bring to their own spray gun, compressor for spray painting and tools and tackles required for the work.
4. Rest of the specifications are given in the enclosed drawings.

(D) No deviation on any of the following points will be accepted in any circumstances.

Brands as specified must be followed strictly.

1. All major dimensions are provided in hard copy of the drawings. The detail dimensions of any individual members or structures if required may be obtained from the Auto-cad drawings. In case of any clarification required, the agency may contact to this office before submission of the offer.
2. All Glasses are toughened clear glass.
3. Exact colour scheme of laminates/veneer and fixing pattern will be made available at the time of fabrication. Party has to arrange the required shade from either of the make as specified in the specification of laminates in clause no. (01) of technical specification, Section B.
4. Wherever needed Service door of minimum size should be provided with frame work and mortise lock. Locks are to be provided and fixed by the party.
5. The non-laminated pasted portion of structure including portion visible from service corridor should be paint finished using approved colour and shade of 1st grade Berger/Asian paints make first quality synthetic enamel in two or more coats on wood primer of similar make.
6. All the MS/Stainless Steel works are to be executed as per drawing. The entire SS surface is to be buffed and polish finished and MS structures should be with primer and colour coated as approved by CMD.

(D) Material and Work specification for Electrical, Lan and Intercom Work :

Intent of Specification

This specification is intended to cover the design, manufacture, assembly, testing at manufacturer's works, supply and delivery properly packed for transportation F.O.R. site at Geo Science Museum Gwalior, Madhya Pradesh installation, testing and successful commissioning of all equipment and

accessories required for internal electrification including Illumination, Power sockets, The specification also includes handling, unpacking, final check-up, commissioning and putting into successful commercial operation of the specified Internal Electrical System and handing over to the full satisfaction of the Owner.

Scope of Work

1.01. Scope of Supply & Installation

1.01.01 The work involves timely procurement and transportation and unloading to site in properly packed condition of all equipment, materials and miscellaneous item required to complete the internal electrification work of the buildings as mentioned above, putting into successful commercial operation and handing over to the full satisfaction of the Owner.

1.01.02 These equipment and materials shall include but not limited to the following:

- i) Main Distribution Boards
- ii) Distribution Boards/Sub-Distribution Boards/ Distribution Meter Board
- ii) Main Switches
- iii) Switchboards/Bell Pushes/Calling Bells
- iv) Lighting Fixtures
- vi) Wires, Cables
- vii) Receptacles/AC Starter Units
- viii) Junction Boxes, Pull Boxes
- ix) PVC conduit with accessories
- x) Earthing materials
- xi) Cable lugs and cable terminal block, etc.

Owner or his authorized representative shall have his full access to witness any or all tests/inspections to be carried out at manufacturer's shop. In case, the job is subcontracted, it will be Contractor's responsibility to make all arrangements so that Owner or his authorized representative can attend such tests at Sub-Contractor's premises. The Contractor shall give at least thirty (30) days advance notice of the date when tests are to be carried out.

2.00.00 GENERAL REQUIREMENTS

2.01.00 Codes and Standards

2.01.01 All equipment and materials to be furnished under this specification shall be designed,

manufactured and tested in accordance with the latest revisions of the relevant latest Indian Standard (IS).

2.01.02 The electrical installation shall meet the requirement of Indian Electricity Act, 1910 and Indian Electricity Rules 1956, applicable section of the latest revision of the relevant IS Code of Practice, National Building Code-2005 (NBC), National Electric Code (NEC) as amended up-to-date.

3.00.00 Annexure

3.00.01 All annexure appended to this specification shall form part of this specification and supplement the requirements specified herein.

3.00.02 This specification shall be read and construed in conjunction with the annexure and drawings.

3.00.03 The annexure for the Electrical work is in **Annexure EL**, for Lighting and Illumination Details is in **Annexure IL**, for Intercom and Lan work in **Annexure CC**.

4.00.00 Completeness of Supply

It is not the intent to specify completely herein all details of the equipment. Nevertheless, the equipment shall be complete and operative in all aspects and shall conform to highest standard of engineering, design and workmanship.

Contractor shall supply all brand new equipment and accessories as specified herein.

5.00.00 Deviation

The bidder shall not take any deviation from the requirement of the specification. If the bidder deviates from the specification, tendering condition, their offer shall be treated as cancelled.

6.00.00 Specific Requirements – Supply

6.01.00 Equipment and Material

6.01.01 Equipment and material shall comply with description, rating, type and size as detailed in this specification, drawings and annexure.

6.01.02 Equipment and materials furnished shall be complete and operative in all respect.

6.01.03 All accessories, which are necessary for safe and satisfactory installation and operation of the equipment shall be furnished.

6.01.04 All parts shall be made accurately to standard gauges so as to facilitate replacement and repair. All corresponding parts of similar equipment shall be interchangeable.

6.02.0 Distribution Boards

- i) Boards shall be sheet steel enclosed, double door construction, dust, and vermin proof.
- ii) Sheet steel used shall be of thickness not less than 1.2 mm (cold rolled), smoothly finished, levelled and free from flaws, stiffeners shall be provided whenever necessary.
- iii) The degree of protection of board shall be IP-42. Provision of direct acting KWH meters shall be kept in Main Switch, Distribution Board as shown in respective Single Line Diagram/Schedule of Items.
- iv) All Boards shall be provided with MCCB, 2/4 Pole RCCB or Miniature Circuit Breaker (MCB) as incoming and with MCCB or MCBs as outgoing as per DB Schedule/Schedule of items.
- v) Boards shall be constructed as to permit free access to connection of terminals and easy replacement of parts without disturbing others.
- vi) Boards shall be suitable for cable/conduit entry from top and bottom. Removable cable gland plate shall be of 3 mm thick at top and bottom. Tinned copper lugs for copper cables shall be provided.
- vii) All doors removable covers and plates shall be gasketed all round with neoprene gaskets. All door hinges shall be concealed type.
- viii) Boards shall be suitable for flush/semi-flush mounting on walls.
- ix) Boards shall be of dead front assembly provided with hinged doors.
- x) All Boards shall be complete with designation plates fixed on front cover and a directory plate fixed on inside of the front cover. The plates shall be of anodized aluminium with inscriptions indelibly attached on it.
- xi) Incoming and outgoing circuits shall be terminated in suitable terminal blocks.
- xii) Bus bar shall be electrolytic grade hard drawn copper colour coded for easy identification and designed for a maximum temperature of 85°C. Busbars shall be designed for the continuous current and short circuit rating as specified.
- xiii) Two ground pads with M10 G.I. bolts and nuts shall be provided on 3 phase Distribution Boards and Single ground pad with M10 G.I. bolt and nuts shall be provided on 1 phase Distribution Boards for connection to earth conductors.
- xiv) Each board shall be provided with Neutral link and continuous GI earth bus.

6.03.00 Lighting Wires

- i) Wires shall be 1100V grade, single core, PVC (70°C rating) insulated with stranded copper conductor.
- ii) The wires shall conform to IS-694 with latest amendment.

iii) The minimum size of wire shall be 1.5 Sq.mm stranded copper conductor or as mentioned in schedule of items.

iv) Lighting wires shall be single core with colour coded as below:

RED for R-Phase	BLACK for Neutral
YELLOW for Y-Phase	WHITE for '+Ve D.C.
BLUE for B-Phase	GREY for '-Ve D.C.

6.03.04 Switch & Switch Board

- i) Switch board for modular type switches shall be as per schedule of items of this specification. Modular type switches, MS box and modular cover plate for the switch board shall be supplied by the contractor.
- ii) Switch boards/boxes located shall be flush mounted type on the panel with only the switch knob projecting outside.
- iii) Switchboards/boxes shall have conduit knockouts on the sides. Adequate provision shall be made for ventilation of these boxes.
- iv) Flush type receptacles where provided shall be so located that only the plug projects outside.
- v) The position and location of each switchboard is as per the attached drawings in **Annexure EL**.
- vi) Mounting position of the switch board will be as per the attached schedule in **Annexure EL**.

6.03.05 Conduits

- i) All rigid conduit pipes shall be of PVC and be ISI marked,
- ii) The number of wires per conduit shall not be exceeded. Conduit sizes shall be selected accordingly in each run.
- iii) No conduit less than 20mm in diameter shall be used.
- iv) The conduit wiring system shall be complete in all respects, including their accessories.

6.03.06 Lighting Fixtures

- i) All lighting fixtures shall be supplied strictly in accordance with Schedule of items complete with ballast, internal wiring, lamp holder, lamps, starters, capacitors, ignitor etc.
- ii) Lighting fixtures shall be design for minimum glare. The surface finish shall be smooth, unobtrusive and scratch resistant. Reflector shall be of aluminium anodized and to be provided a better metallic support for maximum heat dissipation.

- iii) All fluorescent lamp fixtures shall be provided with electronic magnetic ballast.
- iv) Fluorescent lamps shall be tubular, Energy Efficient type.
- v) All the light fixtures will be installed at a height of 10 feet from the ground.
- vi) All the light fixture will be pendant type and hung from the top ceiling which is nearly at a height of 22 feet
- vii) The type of lighting fixtures which are to be installed is as per the the schematic attached in the **Description no 4** .
- viii) The locations of the light fixture will be as per the plan drawing attached in **Annexure IL**.
- ix) All the lighting fixture should be as per the attached drawing, layout and make mentioned in **Description no 4** and **Annexure IL**.

6.04.00 SPECIFIC REQUIREMENT: SERVICES AND INSTALLATION

6.04.01 Installation, Testing & Commissioning

- i) Services to be furnished by the Contractor under this Specification.
- ii) The detailed schedule for Electrical work will be as per the **Table no. 1**.
- iii) The detailed schedule for Network related work will be as per the **Table no. 2**.
- iv) The detailed schedule for Intercom related work will be as per the **Table no. 3**.
- v) All the Electrical work, Illumination work, Networking work and Intercom related work will be as per the drawings, schematics and position attached in **Annexure EL**, **Annexure IL** and **Annexure CC**.
- ii) All equipment and accessories shall be stored by the Contractor safely at site with suitable weather protection.
- iii) The Contractor shall repair minor damages, clean before erection and apply anti-corrosive paint after cleaning, wherever necessary.
- iv) The Contractor shall assemble parts, mount and wire-up loose equipment, fitting and accessories; complete all connections in consultation with the Owner as per approved drawings.
- v) The Contractor shall arrange by himself all necessary tools and tackles and testing kit required for installation, testing and commissioning.

6.04.02 Wiring

- i) Wiring installation shall conform to IS 732 with latest revision.

- ii) Type of wiring shall be of concealed type.
- iii) The wiring shall be done from a distribution system through main and/or branch distribution boards. The system design and location of boards will be properly worked out.
- iv) Each main distribution board and branch distribution board shall be controlled by an incoming circuit breaker/linked switch with fuse. Each outgoing circuit shall be controlled by a circuit breaker/switch with fuse.
- v) Only MCCB/MCB/HRC type DBs shall be used. Rewirable type fuses- shall not be used.
- vi) Power wiring shall be kept separate and distinct from light wiring, from the level of circuits, i.e., beyond the branch distribution boards. Conduits for light/power wiring shall be separate.
- vii) Essential/non-essential/UPS distribution each will have a completely independent and separate distribution system starting from the main.
- viii) Generally, no switchboard will have more than one source of incoming supply. More than one incoming supply will be allowed only at main board 'with proper safety and interlocking so that only one source can be switched on at a time.
- ix) Each MDB/DB/Switch Board will have reasonable spare outgoing ways for future expansion.
- x) Balancing of 3-phase circuit shall be done.
- xi) The necessary tags and markers shall be supplied by the Contractor.
- xii) The inside surface and ends of conduits and fittings shall be smooth, cut uniform and free from burrs and all other defects. Reamer shall be used on the ends of all conduits and brass or P.V.C. bush to be provided for the protection of wires from any damage of insulation at the end.

6.04.03 Looping-in System.

Distribution wiring in conduit to light, fan, plug points etc. shall be done in looping system. In this system no joints or connections shall be made anywhere of the system except at terminating points such as at terminals of switches, ceiling roses, etc. and in case of socket outlet at the socket terminals.

6.04.04 Laying of cables

- i) Cable shall be laid on walls/ceiling/structure, unless specified otherwise, with M.S. brackets and suitable trunking or with aluminium cleats fixed on M.S. brackets, spaced not more than 1'- 6" apart. Bolts of suitable sizes are to be grouted on the wall properly for fixing the brackets.
- ii) Low voltage cable shall be segregated from extra low voltage circuits/cable.
- iii) Low voltage cable shall be segregated from extra low voltage circuits/cable.
- iv) Where an installation comprises circuits for tele communication, fire alarm or emergency lighting systems, as well as circuits operating at low voltage and connected directly to a

mains supply system, precautions shall be taken, in accordance to prevent electrical contact (and for fire-alarm circuits and emergency lighting circuits, physical contact) between the cables of the various types of circuit.

6.04.05 Terminations of cables

- i) Every connection at a cable termination or joint shall be mechanically and electrically sound, be protected against mechanical damage and any vibration liable to occur, shall not impose any appreciable mechanical strain on the fixing of the connection, and shall not cause any harmful mechanical damage to the cable conductor. Joints in non-flexible cables shall be made by soldering, brazing, welding, or mechanical clamps, or be of the compression type. All mechanical clamps and compression type sockets shall securely retain all the wires of the conductor.
- ii) Terminations and joints shall be appropriate to the size and type of conductor with which they are to be used.
- iii) Terminations and joints shall be suitably insulated for the voltage of the circuits in which they are situated.

6.04.06 Earthing

- i) The earthing installation shall generally be carried out in accordance with the Indian Electricity Rules, 1956, Nation Building Code (NBC), National Electric Code (NEC) as amended from time to time and in conformity with the requirement included in the latest Indian Standard/Code of Practice for earthing IS 3043.
- ii) Contractor shall supply, lay, terminate all the earthing conductor from various equipment to the nearest earth bus in electrical room.
- iii) Electrical equipment shall be provided with two (2) separate and distinct earth connections each complete with necessary accessories for termination.
- iv) The Contractor is to carry out the grounding of the entire illumination and small power installation under the scope of this specification. Distribution board, junction boxes, joint boxes, switch boards, lighting fixtures, receptacles etc. conduits, and all non-current carrying metallic parts shall be earthed.

6.04.04 Testing

- i) The Engineer shall arrange for joint inspection of the installation for completeness and correctness of the work. Any defect pointed out during such inspection shall be promptly rectified by the Contractor.
- ii) The installation shall then be tested and commissioned in presence of the Engineers of Contracting agency.
- iii) The Contractor shall provide all men, material and equipment required to carry out the tests.

iv) All rectifications, repairs or adjustment work found necessary during inspection, testing and commissioning shall be carried out by the Contractor without any extra cost.

6.05.00 Taking Over

- i) On successful inspection, testing and commissioning of the installation and on carrying out necessary rectification work the Engineer will take over the installation either wholly or in part as the case may be.
- ii) Till handing over the installation to Owner, the Erection Contractor shall fully be responsible for all equipment and materials under the Scope of Work awarded.

6.06.00 Special Instruction

6.06.01 Supervision

- i) The Contractor's Engineer shall have the overall responsibility of coordination of the work. However, If the Owner wishes, his direction shall be final,
- ii) Such direction and supervision, however, shall not relieve of Contractor's responsibilities for correctness and quality of workmanship and or other obligation under the Contract.

6.06.02 Safety Procedure

- i) The detailed instructions on safety procedures given in B.I.S. Code No. 5216-1982 "Code of Safety Procedures and Practices in Electrical Works": shall be strictly followed.
- ii) **Schematic diagram**
It shall be responsibility of Engineer to ensure that for each building, a comprehensive schematic diagram is prepared starting from the main board up to the final DBs. All such boards are to be duly marked and numbered.
- iii) Keep premises clean:
- iv) No inflammable materials shall be stored in places other than the rooms-specially constructed for this purpose in accordance with the provisions of Indian Explosives Act.
- v) Electrical wiring and control switches should be periodically inspected and an defective wiring, broken parts of switches which will expose live parts, should be replaced immediately to make the installations safe for the user.

- vi) No work shall be undertaken on live installations, or on installations-, which could be energized unless- another person is present to immediately isolate the electric supply in case of any accident and to render first aid, if necessary.
- vii) No work of live L.T switch board in the sub-stations should be handled by a person below the rank of a Wireman and such a work should preferably be done in the presence of the Junior Engineer (E) in charge of the work.
- viii) When working on or near live installations; suitably insulated tools should be used, and special care should be taken to see that those tools accidentally do not drop on live terminals causing shock or dead short.

Table no: 1

Schedule of Electrical Work and Description of work

Schedule of Quantity				
for INTERNAL ELECTRICAL WORK EXCLUDING THE LIGHT FIXTURE				
Item No.		Description of Item	BOQ Qty.	Unit
1.00		<u>Main Distribution Board, Sub Distribution Board</u>		
1.03		<u>S/F prewired MCB with Enclosure for UPS</u>		
		Supplying and fixing TP sheet steel enclosure on surface/ recess along with 16/25/32 A 415 V "C" curve TP MCB complete with connections, testing and commissioning etc. as required. Make: LNT/Schneider/ABB/Siemens	2	Each
1.05		<u>S/F 'C' series, MCB:</u>		
		Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Make: LNT/Schneider/ABB/Siemens		
	a	Double pole	1	Each
	c	Four pole	1	Each
2.00		<u>Circuit/Submain Wiring in PVC Conduit:</u>		
		Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. Make: Polycab/Havels/Anchor/Gloster/Mescab		
	a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire for light point wiring	338	RM

	b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire for Switch board Power Plug wiring	400	RM
	c	2 X 4 sq. mm + 1 X 4 sq. mm earth wire for Power Plug wiring	250	RM
2.01		<u>PVC Conduit:</u>		
		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. Make: Precision/ Supreme/A.K.G/Anchor/Polycab		
		25mm size	450	RM
2.02		<u>Point Wiring</u>		
		Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. Make: Polycab/Havels/Anchor/Gloster/Mescab		
	i	Group A	2	Point
	ii	Group B	2	Point
	iii	Group C	2	Point
2.03		<u>Group wiring 12Mtr. Long</u>		
		Group wiring from switchboard for light/fan by supplying and laying of 1.1kV grade 2-1.5 sq.mm + 1-1.5 sq.mm (for earthing) PVC insulated, FR stranded copper wire through concealed PVC conduit in wall/surface with JB as required, with all necessary accessories (around 3-7 points approx.) Make: Polycab/Havels/Anchor/Gloster/Mescab	7	Set
2.04		<u>Group wiring 16Mtr. Long</u>		
		Group wiring from switchboard for light/fan by supplying and laying of 1.1kV grade 2-1.5 sq.mm + 1-1.5 sq.mm (for earthing) PVC insulated, FR stranded copper wire through concealed PVC conduit in wall/surface with JB as required, with all necessary accessories (around 3-7 points approx.) Make: Polycab/Havels/Anchor/Gloster/Mescab	7	Set
3.00		<u>Supply & Fixing of Modular Box with plate</u>		
		Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required. Make: Crabtree/Legrand/Schneider		
	a	1 or 2 Module (75mmX75mm)	9	Each
	b	3 Module (100mmX75mm)	2	Each

	c	4 Module (125mmX75mm)	20	Each
	d	6 Module (200mmX75mm)	21	Each
	e	8 Module (125mmX125mm)	10	Each
4.00		<u>Supply & Fixing of Switch & Socket</u>		
		Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Make: Crabtree/Legrand/Schneider		
	a	5/6 A switch	113	Each
	b	15/16 A switch	2	Each
	c	3 pin 5/6 A socket outlet	98	Each
	d	6 pin 15/16 A socket outlet	2	Each
	e	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	25	Each
5.00		<u>Supply and Installation of Light Fixtures</u>		
	a	Supplying, Installation, testing and commissioning of pre-wired, fitting of all types, complete with all accessories and tube/lamp etc. directly on ceiling/ wall, including connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required. Make: Philips/ Led Lum/ Lafit/ Wipro Note: The lighting installation plan will be as per attached Annexure II.	2	Each
	b	Supplying, Installation, testing and commissioning of pre-wired fitting of all types, complete with all accessories and tube/lamp etc., including supplying and fixing ball and socket arrangement, 2 Nos. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required. Make: Philips/ Led Lum/ Lafit/ Wipro Note: The lighting installation plan will be as per attached Annexure II	34	Each
	c	Installation, testing and commissioning of pre-wired, fitting of all types, complete with all accessories after cutting the false ceiling. Make: Philips/ Led Lum/ Lafit/ Wipro Note: The lighting installation plan will be as per attached Annexure II	18	Each
6.00		<u>Installation of Earthing System:</u>		
6.01		<u>P/F 6 SWG GI loop earthing wire in surface / recess:</u>		

		Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	40	Meter
6.02		<u>P/F 6 SWG GI loop earthing wire in surface / recess:</u>		
		Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	25	Meter

Table no: 2

Schedule of Network related Work (LAN) and Description of work

Schedule of Quantity				
for LAN Work				
Item No.		Description of Item	BOQ Qty.	Unit
		LAN Work		
1.00		LAN NETWORKS ACTIVE HARDWARE		
		Supply, installation, testing and commissioning of UL/CUL/TUV/ L2 Distribution Switch Layer-2 with 24*10/100/1000 Base-T ports and additional 4*1G Base-X ports accommodate SM/MM FO ModuleD-link Similar to D-Link DGS-1024C	3	Each
		PASSIVE LAN SYSTEM		
2.00		Supply, laying, testing and commissioning of Cat 6A-UTP Solid copper Patch Cords 3 Ft, LSZH, User end Make: D Link/ Molex/ TP Link	55	Nos
3.00		Supply, laying, testing and commissioning of Cat 6A-UTP Solid copper Patch Cords 3 Ft, LSZH, Rack end Make: D Link/ Molex/ TP Link	55	Nos
4.00		Supply, laying, testing and commissioning of Category 6 U/UTP Patch Panel, 24 port 1U with rear cable management, intelligent upgradable, UL listed	3	Nos
5.00		Supply, laying, testing and commissioning of 9 U Rack, Glass door, wall mount with all standard accessories Make: Valrack/ Netrack	2	Nos
6.00		Supply & Installation of RJ45 Jack Make D-link including Configuration for each point Make: D Link/ TP Link	55	No.
7.00		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. Make: Precision/Supreme/A.K.G/Anchor/Polycab/Presto		

		25mm size	440	Mtrs
8.00		Supply and Fixing of PVC Cable Duct on Wall or Ceiling with screw & Wooden guli and other accessories as required similar to L&T Type- B40x60 section PVC Duct	5	Mtrs
9.00		Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required. 1 run of cable Make: D Link/ Molex/ TP Link	1100	Mtrs
10.00		Supply & Fixing Modular type RJ45 sitable for CAT6 cable (Brand approved by EIC) on existing PVC board and top cover plate on wall and making necessary connections as required Make: D Link/ Molex/ TP Link/ Anchor	55	Each
11.00		<u>Supply & Fixing of Modular Box with plate</u>		
		Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required. Make: D Link/ Molex/ TP Link /Anchor		
	a	1 or 2 Module (75mmX75mm)	55	Each

Table no: 3

Schedule of Intercom related Work and Description of work

Schedule of Quantity				
for Intercom Work				
Item No.		Description of Item	BOQ Qty.	Unit
1.00		Supply,Installation of EPBAX system complete with 24 intercom line & 4 nos lines along with communication controller with all necessary accessories. Similar To Panasonic, NS-300 PBX	1	Set
2.00		Supply, installation, testing and commissioning of 50 Pair 16 SWG sheet steel hot dip galvanized MDF equipped with IPM Similar to Krone.	1	No.
3.00		Commissioning of EPABX system with necessary configuration	1	Set
4.00		Supply, instalation, testing & commissioning of KTS system for Call transfer & forwarding Similar To Panasonic NS 543 KTS	1	Set

5.00		Supply, installation, testing and commissioning of TDM Phone setshaving Last number redial, manual pause, dual tone ringer, volume adjustability, muting etc facility. Similar To Beetel Basic	13	No.
6.00		Supplying & Drawing 25-pair Telephone cables with high density polyethylene insulated solid annealed high conductivity bare copper of dia 0.5mm in prelaid PVC rigid conduit/ in polythene pipe embeded in wall.	15	Mtrs
7.00		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. Make : Precision/Supreme/A.K.G/Anchor/Polycab/Presto		
		20mm size	250	Mtrs
8.00		Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required. 2 Pair . Make: FENOLEX/Delton	260	Mtrs
9.00		Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Telephone socket outlet. Make: D Link/ Molex/ TP Link/ Anchor	13	Each
10.00		<u>Supply & Fixing of Modular Box with plate</u>		
		Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required. Make: D Link/ Molex/ TP Link/ Anchor		
	a	1 or 2 Module (75mmX75mm)	13	Each

DESCRIPTION NO: 4

Schedule of Illumination and Lighting Fixtures

1. Type: Pureline slim

Make: Philips or equivalent

Model: SP780P or equivalent

Wattage: 25 Watt

Quantity: 40

Light colour: Cool White

Features:

- Superior efficacy of 110 lm/W
- Suitable for Standalone & Continuous Mounting
- Up-Down lighting distribution
- Uniform & volumetric light distribution
- Comfortable Light - CRI of 80 to ensure better color rendering.
- Minimum Bezel and 50mm wide
- Lifetime: 50,000 Hrs. @ Ta45°C, BIS Approbation - Safe and Reliable performance
- THD<10% - Higher power factor, lower peak currents, and higher efficiency.
- Flicker Free Lighting Effects - New light platform and optical design with ripple < 5%.
- Lighting solution with high uniformity provides comfort in office lighting experience.
- Connected ready(Dali/interact) versions available for Smart offices/workspaces
- Multiple Lumen Packs & CCT - For different office applications and mounting heights.



2. Type: Circular Pendant type

Make: Philips or equivalent

Model: ECRU Apollo 41231 or equivalent

Wattage: 20 W

Quantity: 26

Light colour: Cool White

Features:

- Body Colour: White
- Bulb Included
- Body Material: Metal
- Number of Lamp: 1
- Holder Type: E-27
- Product Dimensions in mm: 40 X 400 X 1500



Note: Fixing of all the Light Fixtures will be as per the illumination plan in **Annexure II**.

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)

Govt. of India

33 Block- GN, Sector-V, Bidhannagar,

Kolkata-700 091

Tender No. CMD- 007.12.52(WORKS)/22-23/12

DECLARATION - 1

We, do hereby accept the General Terms and Conditions as provided by the **FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR** and also undertake to execute the job strictly as per the drawing and specifications as provided along with the tender documents in the event of placement of any work order on us.

Signature of the tenderer / Constituted Attorney.

(With date and Official Seal)

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)

Govt. of India

33 Block- GN, Sector-V, Bidhannagar,

Kolkata-700 091

Tender No. CMD - 007.12.52(WORKS)/22-23/12

DECLARATION - 2

OF NON-RELATIONSHIP

It is certified that I/We, the undersigned, do not have relationship with any of the employees working at Creative Museum Designers.

The above statement is true and is submitted against the Tender No. CMD-007.12.52(Works)/22-23/12 of Creative Museum Designers.

Signature of the tenderer / Constituted Attorney.

(With date and Official Seal)

FORMAT OF ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT made at **Kolkata** this **Tenth** day of **September, 2022** between the **Creative Museum Designers** at NCSM Campus, CRTL Building- II, 33, Block GN, Sector - V, Bidhannagar, Kolkata- 700091 (Registered under Section 25 of the erstwhile Companies Act, 1956) and a wholly owned Company of National Council of Science Museums (a Society registered under the Societies Registration Act of West Bengal 1961) hereinafter referred to as the CMD which expression shall include its successors and assigns on the one part and **M/s. ABCD Private Limited** having its registered office at **XYZ**, hereinafter referred to as the Successful Tenderer which expression shall include his/their respective heirs, executors, administrators and assigns on the other part.

WHEREAS the CMD is desirous of getting the work of "**FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.**" therein done and has caused Notice Inviting Tender (Including appendix), schedule of quantities and specifications describing the work and conditions of contract prepared by **Creative Museum Designers, 33, Block – GN Sector –V, Bidhannagar, Kolkata – 700091.**

AND WHEREAS the said NIT (including appendix), specifications and the conditions of contract have been signed by or on behalf of the parties hereto.

AND WHEREAS the Successful Tenderer has deposited in Demand Draft a sum of Rupees Sixty Thousand only with the CMD as Initial Security for the due performance of this Agreement as provided in the said conditions of contract.

NOW IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. In consideration of the payment to be made by the CMD to the successful tenderer as hereinafter mentioned, the successful tenderer hereby covenants with the CMD to perform execute and complete the work in conformity in all respects with the provision of the contract (**STRICTLY WITHIN 60 days + 10 days of mobilization period** from the date of the issue of Letter of Intent and as per the Technical Specification in Tender Document and detailed drawings).
2. CMD hereby covenants to pay the successful tenderer in consideration of the execution and completion of the work such sum as shall become payable hereunder at the time and in the manner prescribed in the said conditions and payment schedule.
3. Time is the essence of this Agreement and the Successful Tenderer shall pay or allow the CMD the sum equivalent to one per cent of the total cost of work awarded per week subject to a limit of 10% of the total cost of work as penalty for the period during which the said work shall remain incomplete beyond the time allowed in Clause-1 above or beyond the time duly extended in writing as per said conditions. The CMD may deduct such amount from any money due to the Successful Tenderer.
4. The Notice Inviting Tender (including Appendix if any), general terms and conditions of

Contract, corrigendum (if any), addendum (if any), scope of work, drawings and technical specifications shall form the basis of this agreement and the decision of the CMD in reference to all matters or dispute as to material and workmanship shall be final and binding on the Successful Tenderer.

5. The CMD reserves to itself the rights of altering the drawings and of adding to or omitting any item of work or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall not vitiate this agreement.
6. This agreement comprises the work above and all subsidiary work connected therewith, even though such work may not be shown on the drawing or described in the said specifications.

ARBITRATION

In the case of any disputes or differences arising out of or in connection with, or concerning this Agreement, it shall be settled by arbitration. The arbitration shall be conducted by an expert as Arbitrator in the field acceptable to both the parties. In case of disagreement, it shall be through three experts in the field, one to be appointed by each party and the third presiding expert to be jointly appointed by the expert referred to. The arbitration shall be as per the provision of the Arbitration and Conciliation (amendment) Act, 2015 and the decision of the panel so appointed shall be final and binding on both the parties to this Agreement. The place of arbitration shall be normally Kolkata or any other suitable place mutually agreed.

The provisions of the Arbitration and Conciliation Act 2015 or any statutory modification or re-enactment thereof and of the rules made thereunder for the time being in force shall apply to arbitration proceedings under this clause.

FORCE MAJEURE EVENT (FME)

If there is a delay in performance or other failures by the Successful Tenderer to perform its obligation under its contract due to the event of a Force Majeure as mentioned hereunder, the Successful Tenderer shall not be held responsible for such delays/failures. If a force majeure situation arises, the Successful Tenderer shall promptly apply in writing to the Project In-charge/CMD within 07 days or as soon as it occurs and it cannot be claimed ex-post facto:

- g. by reason of any exceptionally inclement weather like Cyclone, severe flood etc., normal monsoon shall not be considered a valid reason for the extension of time,
- h. by reason of proceedings taken or threatened by, or legal disputes with adjoining or neighbouring owners,
- i. by reason of any epidemics, quarantine restrictions etc. declared by the Government,
- j. due to delay in the work of other agencies or tradesman engaged or nominated by the consideration of the Company: if such delay is directly responsible for delay in execution of this work,
- k. by reason of any general strike or lockout affecting work, strike or any kind of labour trouble in successful tenderer's organisation shall not be a valid reason for the extension.
- l. There may be a Force Majeure situation affecting the Tenderee (CMD) only, under which the Tenderee (CMD) shall have equal rights to claim relief under such Force Majeure situations.

LANGUAGE

All correspondence and documents relating to/relevant to this Agreement shall be in writing and only in English language.

In witness whereof the parties have set their respective hands the day and the year hereinabove written:

Signed by for and on behalf of the CMD.....
(With official seal)

In presence of

(1).....

(2).....

Signed by the said Successful Tenderer.....
(With official seal)

In presence of

(1).....

(2).....

Creative Museum Designers

(A Section 8 Company Guaranteed by National Council of Science Museums)

Govt. of India

33 Block- GN, Sector-V, Bidhannagar,

Kolkata-700 091

OFFER FORM

Tender No. CMD - 007.12.52(WORKS)/22-23/12

FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR.

I/We have read, understood and accepted all the General Terms and Conditions for FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR as per CMD's specifications as laid down in drawings by Creative Museum Designers, Kolkata.

I/We hereby offer my/our rates for the said tender: -

1. Name of the Tenderer :

2. Permanent address (in case of :
Firm/Company, address of the
registered office including jurisdiction
of the police station should be given)

3. Telephone Nos.
 - a) Office :
 - b) Workshop/Factory :
 - c) Mobile :
4. Name of the Bankers and their address :

05. PRICE OFFER

COST OF FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR

Sl. No.	Reference	Drawing Ref Number	No. of Dwgs.	Qty. in Sqft./Pc.	Amount/Sq. ft./Pc. (₹)	Total Amount (₹)
01.	Glass Partition as per Drawing	GSI/ID/226-A GSI/ID/226-B GSI/ID/226-C	3	3500 Sqft.		
02.	Double Skin both side ply partition with insulation as per Drawing	GSI/ID/227-A GSI/ID/227-B	2	1200 Sqft		
03.	Double Skin both side ply partition without insulation as per Drawing	GSI/ID/228	1	1300 Sqft		
04.	Glass Door as per specification	GSI/ID/229	1	(900mm x 2400mm) Single Leaf- 3 Nos. (D1)		
				(750mmx2400mm) Single Leaf- 2Nos. (D2)		
				(1525mm x 2400mm) Double Leaf- 3 Nos. (D3)		
				(1200mmx2400mm) Double Leaf- 2 Nos. (D4)		
				(1000mm X 2400mm) Double Leaf- 1 Nos. (D5)		
05.	False Ceiling as per specification	GSI/ID/229	1	400 Sqft.		
06.	Box Skirting as per specification	GSI/ID/229	1	3000 Sqft.		
07.	Wall Panelling as per specification	GSI/ID/229	1	1600 Sqft.		

08.	Putty Work as per specification	GSI/ID/227-A GSI/ID/228	1	2500 Sqft		
09.	Painting Work as per Specification	GSI/ID/227-A GSI/ID/228	1	2500 Sqft		
10.	Electrical Work	GSI/ID/231-A GSI/ID/231-B GSI/ID/231-C GSI/ID/231-D	4	As per table no.1 and Annexure - EL		
11.	Network Work (LAN)	GSI/ID/230-A GSI/ID/230-B	2	As per table no.2 and Annexure - CC		
12.	Intercom Work	GSI/ID/230-A GSI/ID/230-B	2	As per table no.3 and Annexure - CC		
13.	Light Fixtures	GSI/ID/232-A GSI/ID/232-B	2	As per the description no.4 and Annexure - IL		
SUB TOTAL						
GST @_____ %						
GRAND TOTAL						

06. EXTRA WORK

Sl. No.	Scope of work	Unit	Qty.	Rate	Total Amount
1	Glass Partition as per Drawing	Square feet	100		
2	Double Skin both side ply partition with insulation as per Drawing	Square feet	100		
3	Double Skin both side ply partition without insulation as per Drawing	Square feet	100		
4	False Ceiling as per specification	Square feet	100		
5	Box Skirting as per specification	Square feet	100		
6	Wall Panelling as per specification	Square feet	100		
7	Putty Work as per specification	Square feet	500		
8	Painting Work as per Specification	Square feet	500		
9	Glass Door as per Specification	Nos.	02		

10	MS Work	kg	100		
11	SS Work	kg	100		
12	Aluminium Structure	Sq. ft.	100		
13	Clear Transparent toughened glass of various approved thickness and Glass Mirror of Various thickness	Sq. ft.	100		
14	Circuit/Submain Wiring in PVC Conduit: 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire for light point wiring	RM	100		
15	Circuit/Submain Wiring in PVC Conduit: 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire for light point wiring	RM	100		
16	Circuit/Submain Wiring in PVC Conduit: 2 X 4 sq. mm + 1 X 4 sq. mm earth wire for light point wiring	RM	60		
17	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required. 1 run of cable Make: D Link/ Molex/ TP Link	RM	150		
18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required. 2 Pair Make: FENOLEX/Delton	RM	100		
19	<u>S/F prewired TP&N MCB DB</u>				
	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
19.1	4 way (4 + 12), Double door Make: L&T/Schneider/Legrand/Siemens	Qty	01		
19.2	6 way (4 + 18), Double door Make: L&T/Schneider/Legrand/Siemens	Qty	01		
20	<u>S/F prewired VTPN MCB DB</u>				

	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, nclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required				
20.1	4 way (4 + 12), Double door Make: L&T/Schneider/Legrand/Siemens	Qty	01		
21	<u>S/F MCCB</u> Supplying and fixing of 415 V, 4P MCCB 30 KA in existing DB with all accessories as required Make: LNT/Schneider/ABB/Siemens				
21.1	63 Amp	Qty	01		
22	<u>S/F 'C' series, MCB:</u> Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Make: LNT/Schneider/ABB/Siemens				
22.1	Single pole	Qty	01		
22.2	Three pole	Qty	01		
23	<u>S/F RCCB</u> Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. Make: LNT/Schneider/ABB/Siemens				
23.1	25 A	Qty	01		
23.2	40 A	Qty	01		
Sub Total					
GST @____%					
Grand Total					

NOTE:

For the above table of extra work, items, as described, will be executed as per the site requirement and condition and payment will be made as per the actual measurement.

However, the drawings may be changed according to the site measurement and exhibit requirements and will be updated accordingly.

The payment will be made as per actual measurement at the site.

Before quoting please see the drawings enclosed and survey the site at Geo Science Museum, Gwalior and may obtain clarification on any point from the authority before submission of rates.

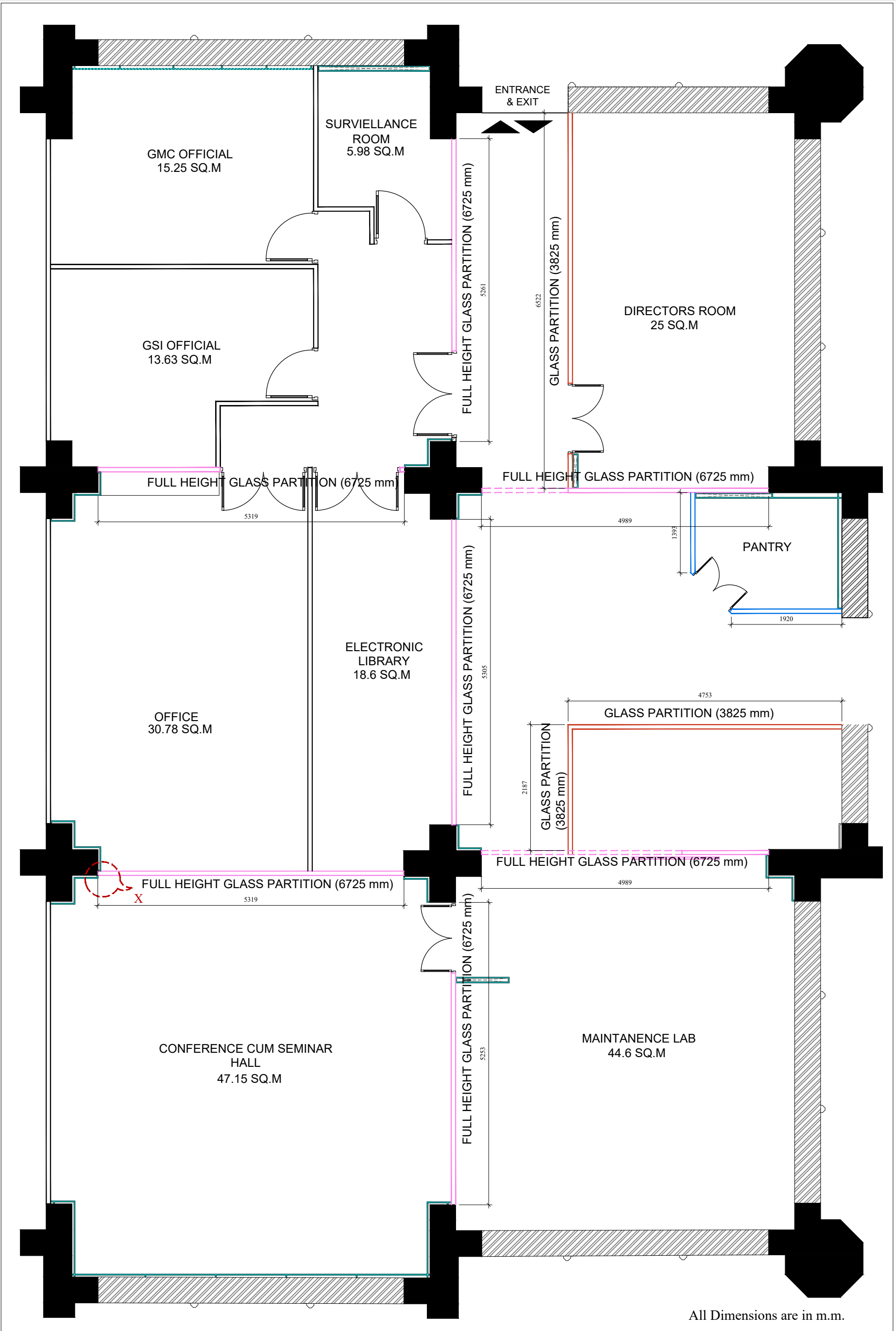
The above rates quoted by us for **FABRICATION, SUPPLY & INSTALLATION OF WOODEN PARTITIONS, GLASS PARTITIONS, FALSE CEILING, ELECTRICAL WORK INCLUDING ILLUMINATION, LAN AND INTERCOM WORKS FOR OFFICE INFRASTRUCTURE OF GEO SCIENCE MUSEUM, GWALIOR** are strictly in accordance with the CREATIVE MUSEUM DESIGNERS, KOLKATA specifications and drawings and as per GTC.

Validity of offer: Validity of offer will remain up to 90 days from the date of opening of the Technical bid.

Date:

Signature of the Tenderer/Authorised Attorney

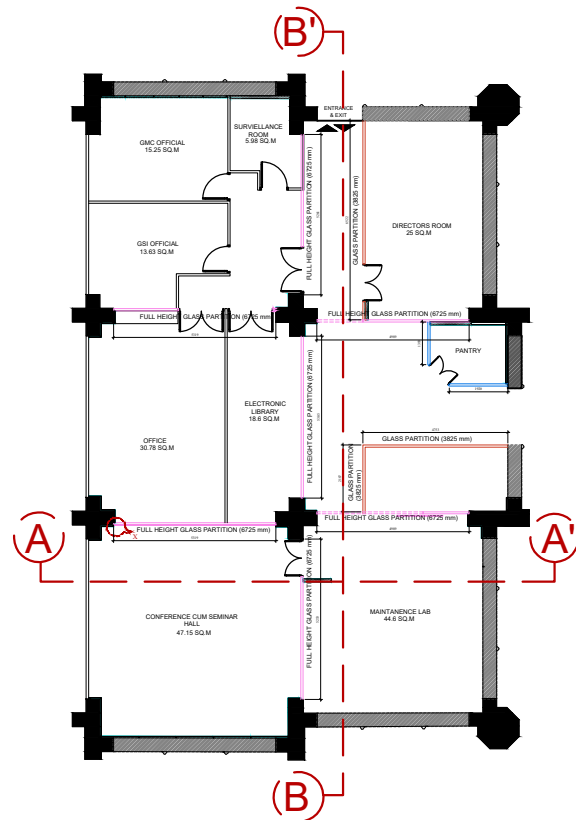
Official Seal



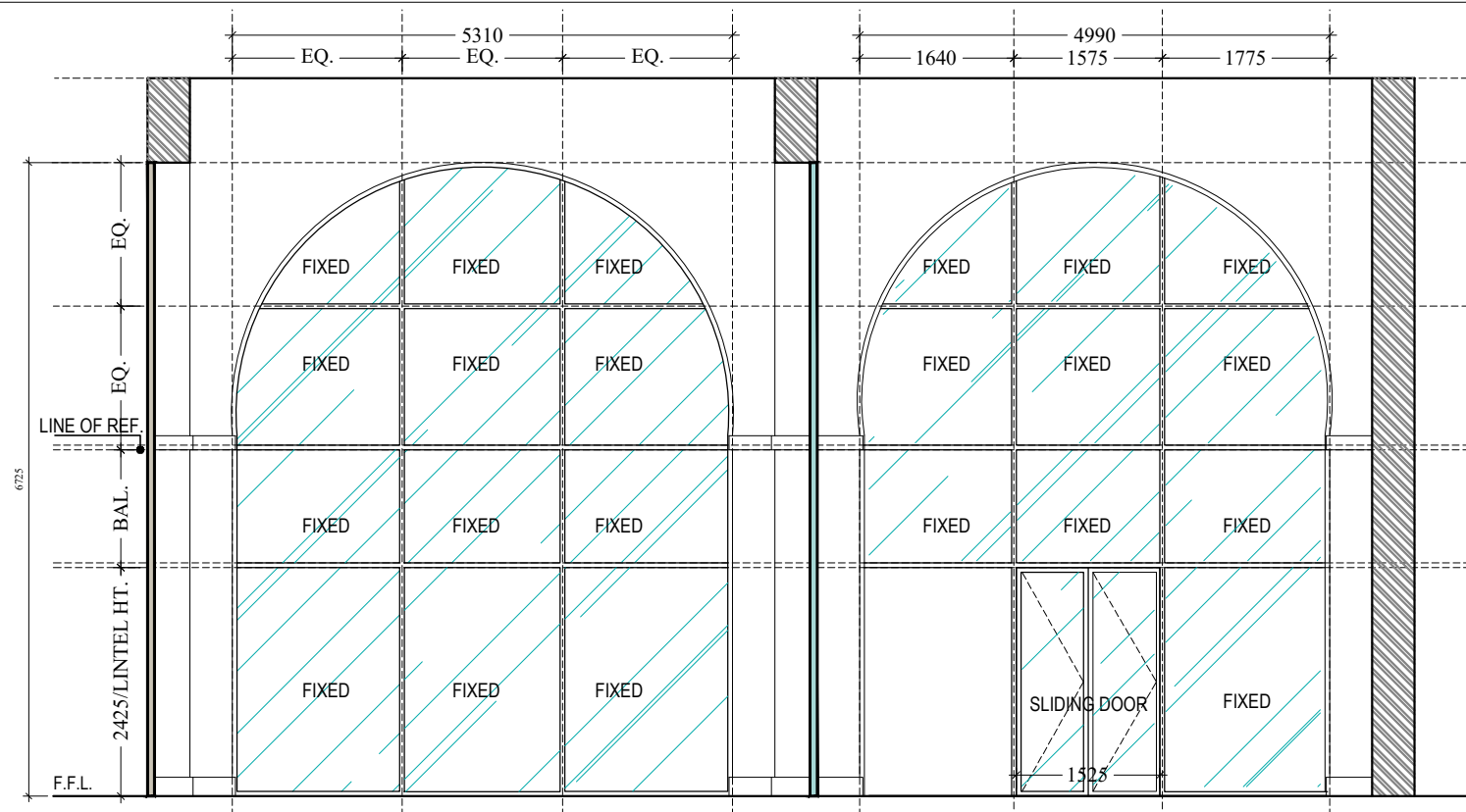
All Dimensions are in m.m.

SL. NO	SYMBOL	DESCRIPTION
1.		FULL HT. GLASS PARTITION
2.		LINTEL HT. GLASS PARTITION
3.		GLASS PARTITION UPTO HT. 3825

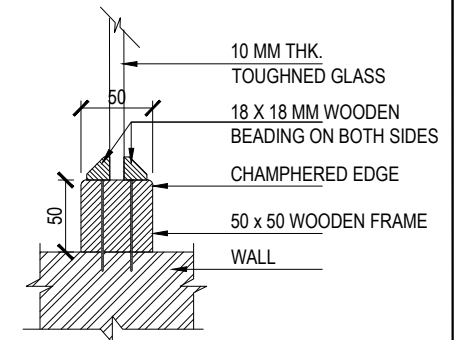
Creative Museum Designers			
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/226-A	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE GLASS PARTITION LAYOUT			NO OFF 1 OF 3
Drawn By Swapan Das	Checked By Susanta Shaw	Approved By K.S. Murali	



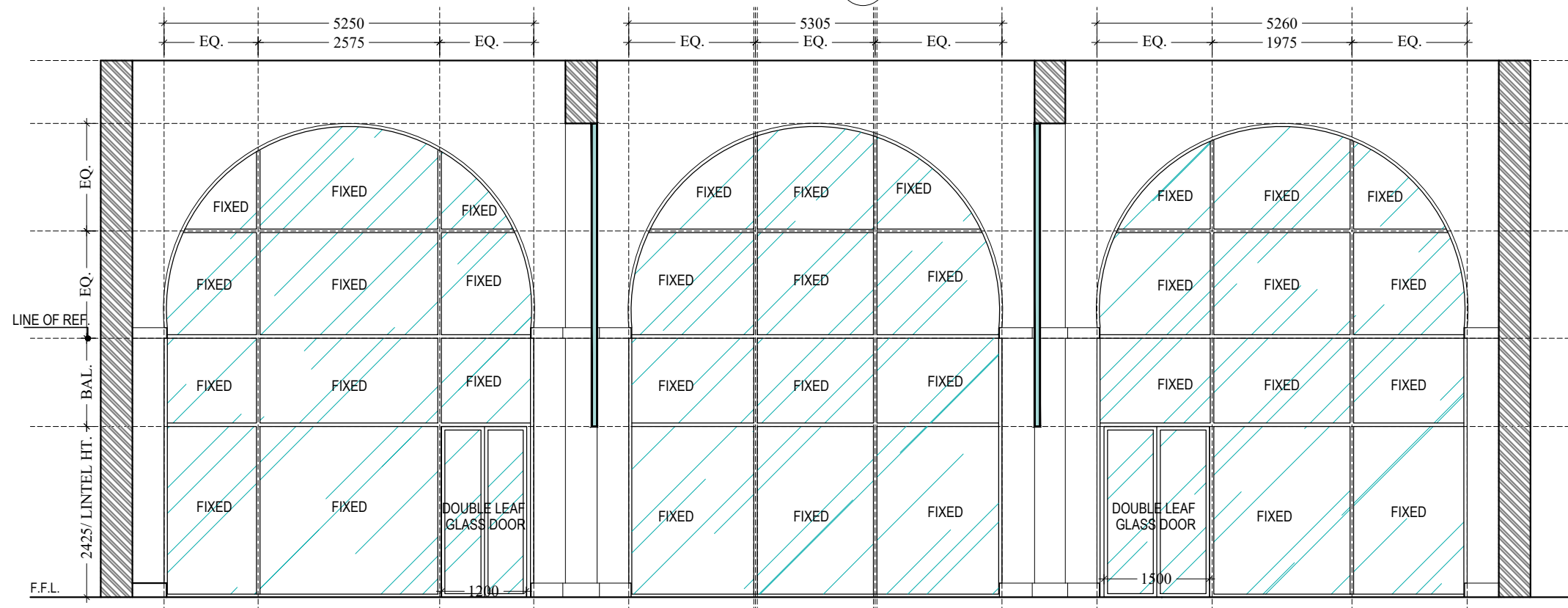
01 KEY PLAN
SCALE- N.T.S



02 SECTION AT A-A'



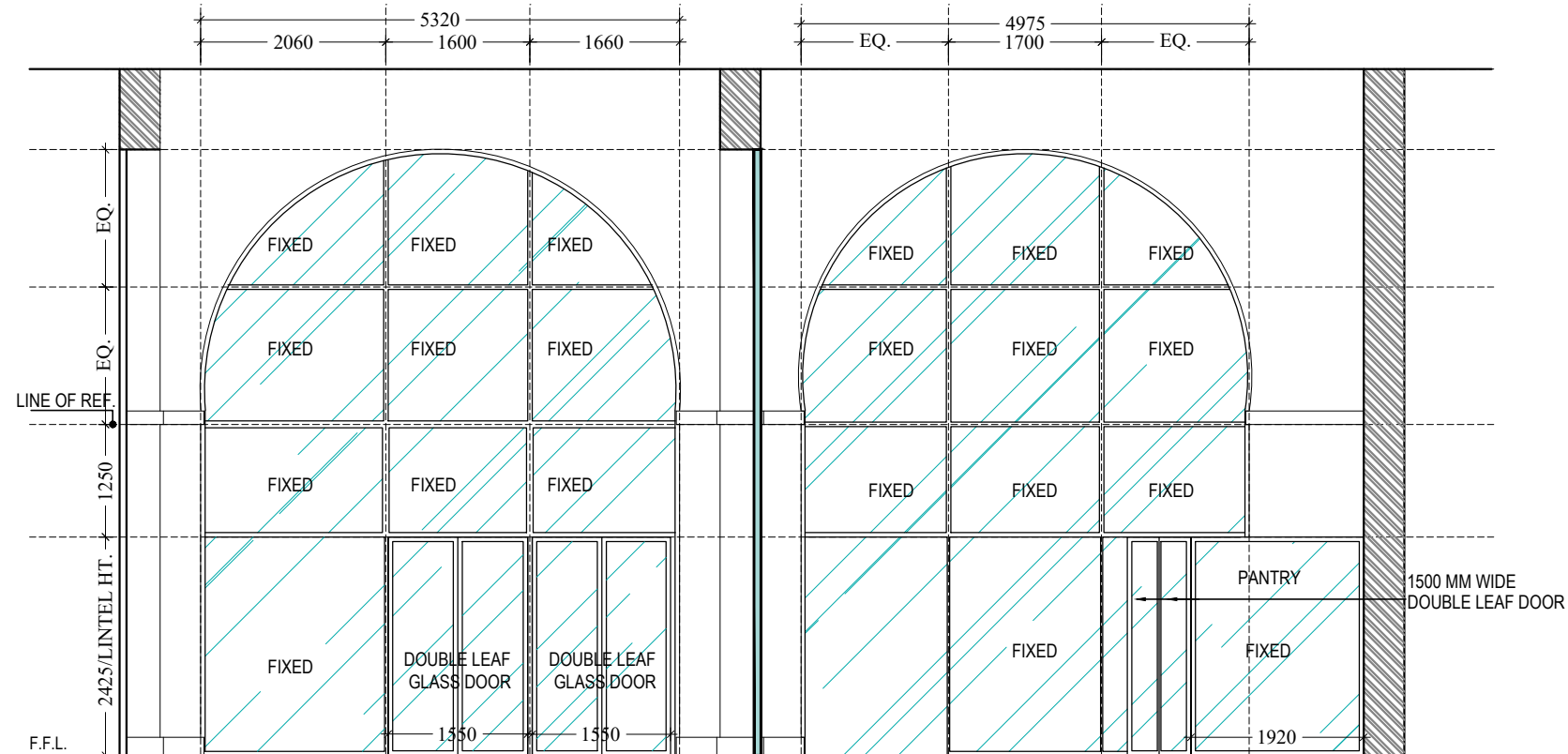
04 DETAIL AT - X
SCALE- 1:5



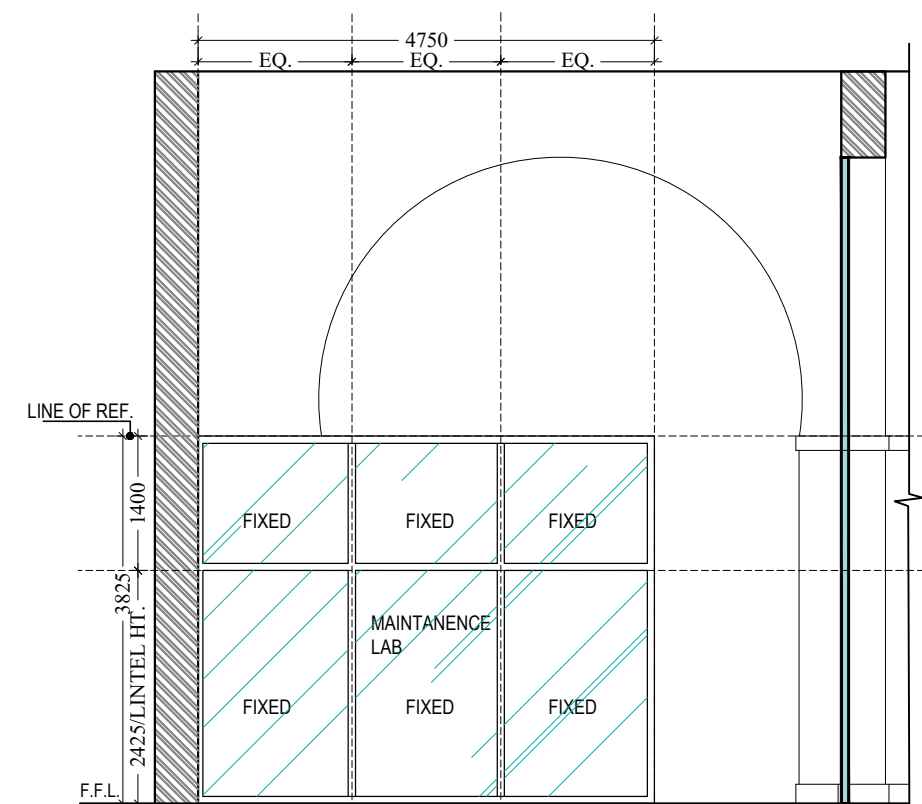
03 SECTION AT B-B'

All Dimensions are in m.m.

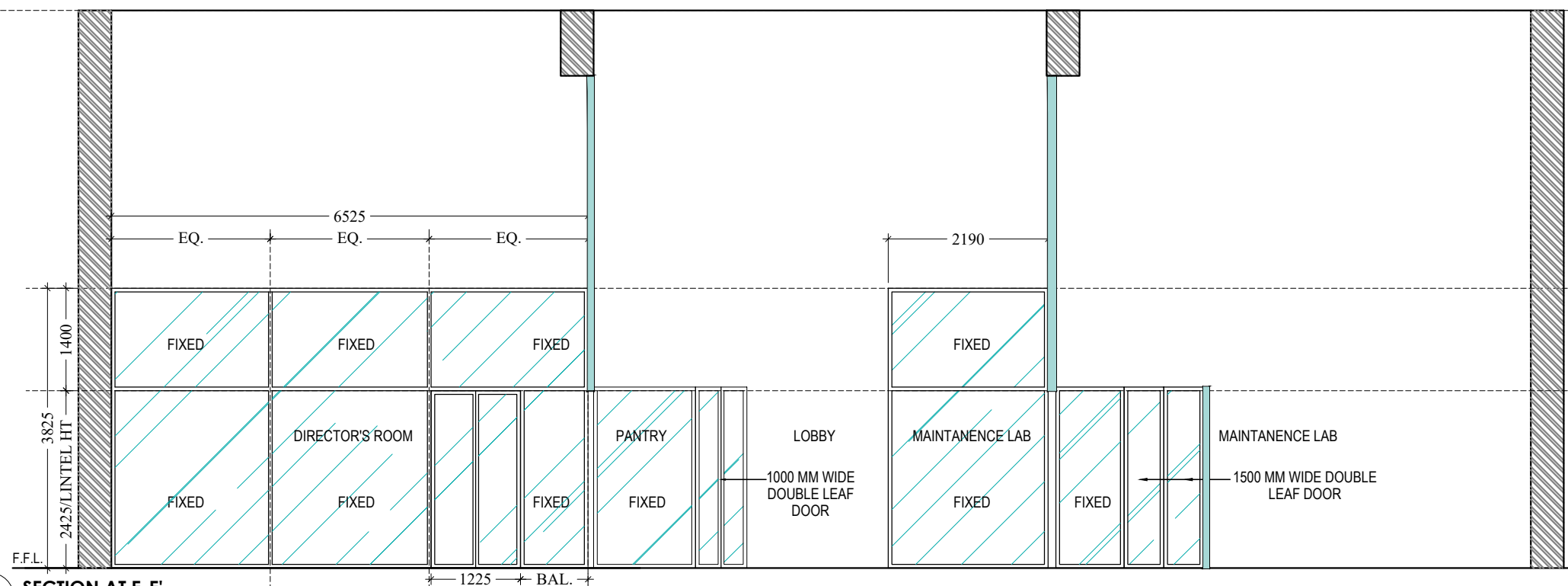
Creative Museum Designers			
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/226-B	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE GLASS PARTITION LAYOUT-SECTION & ELEVATIONS			NO OFF 2 OF 3
Drawn By Swapan Das	Checked By Susanta Shaw	Approved By K.S. Murali	



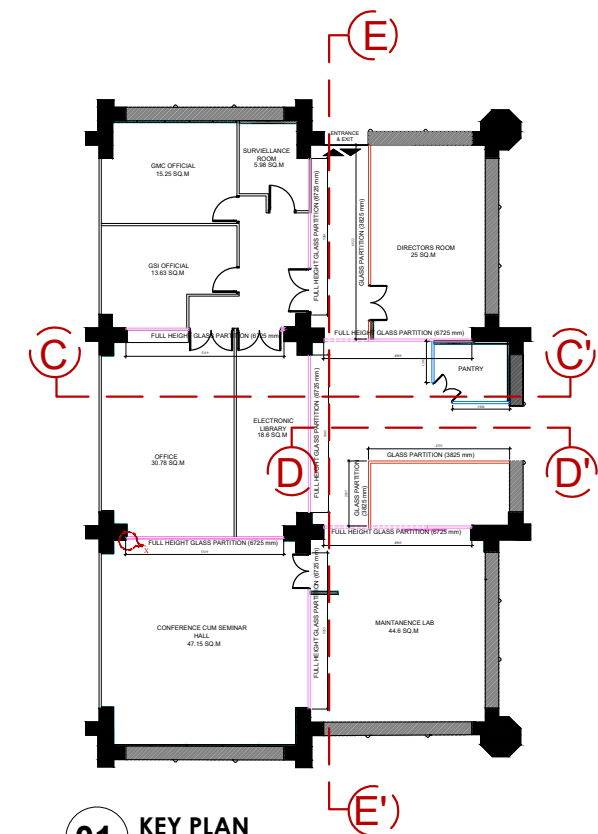
02 SECTION AT C-C'
SCALE- 1:75



03 SECTION AT D-D'
SCALE- 1:75



04 SECTION AT E-E'
SCALE- 1:75



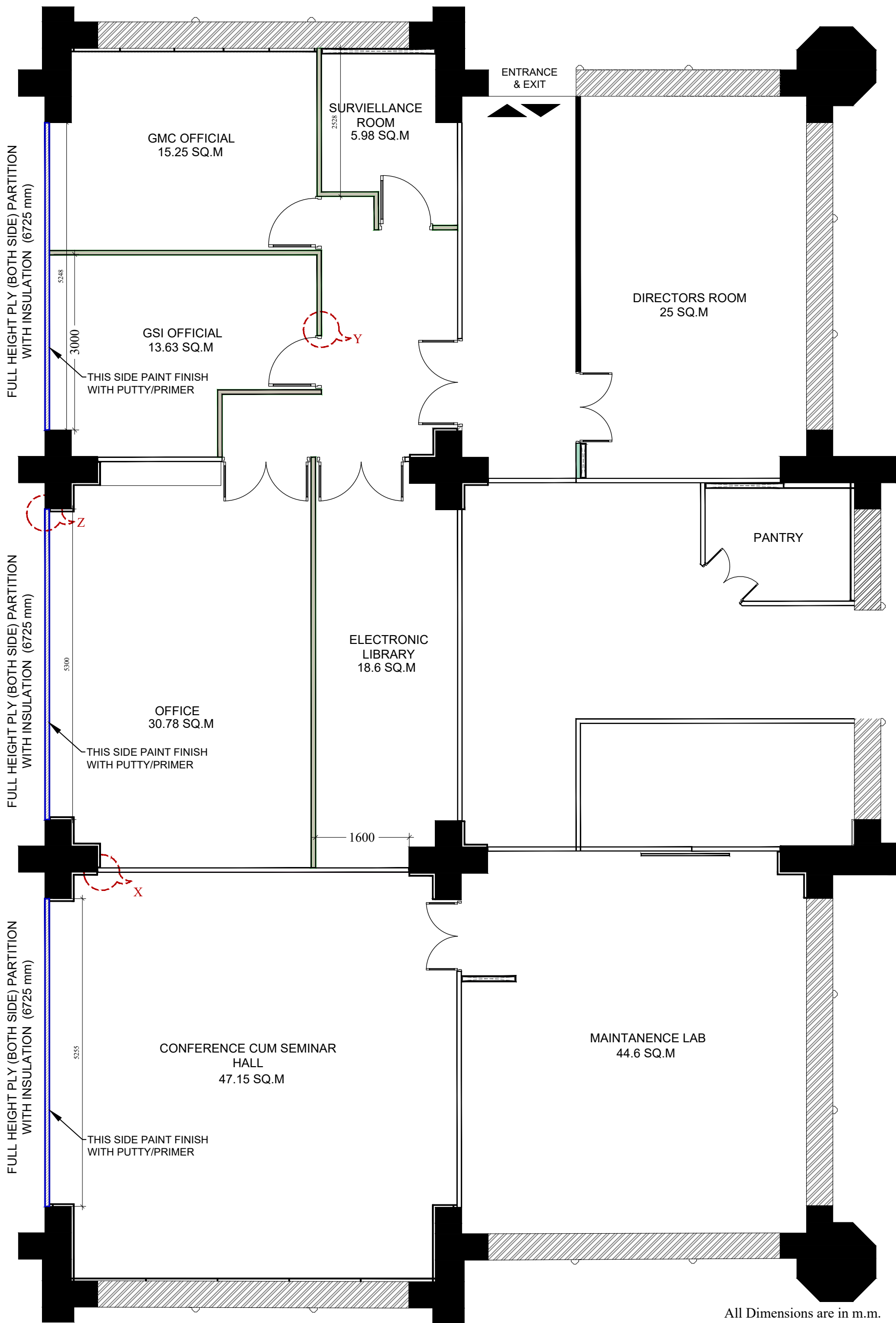
01 KEY PLAN
SCALE- N.T.S

All Dimensions are in m.m.

Creative Museum Designers



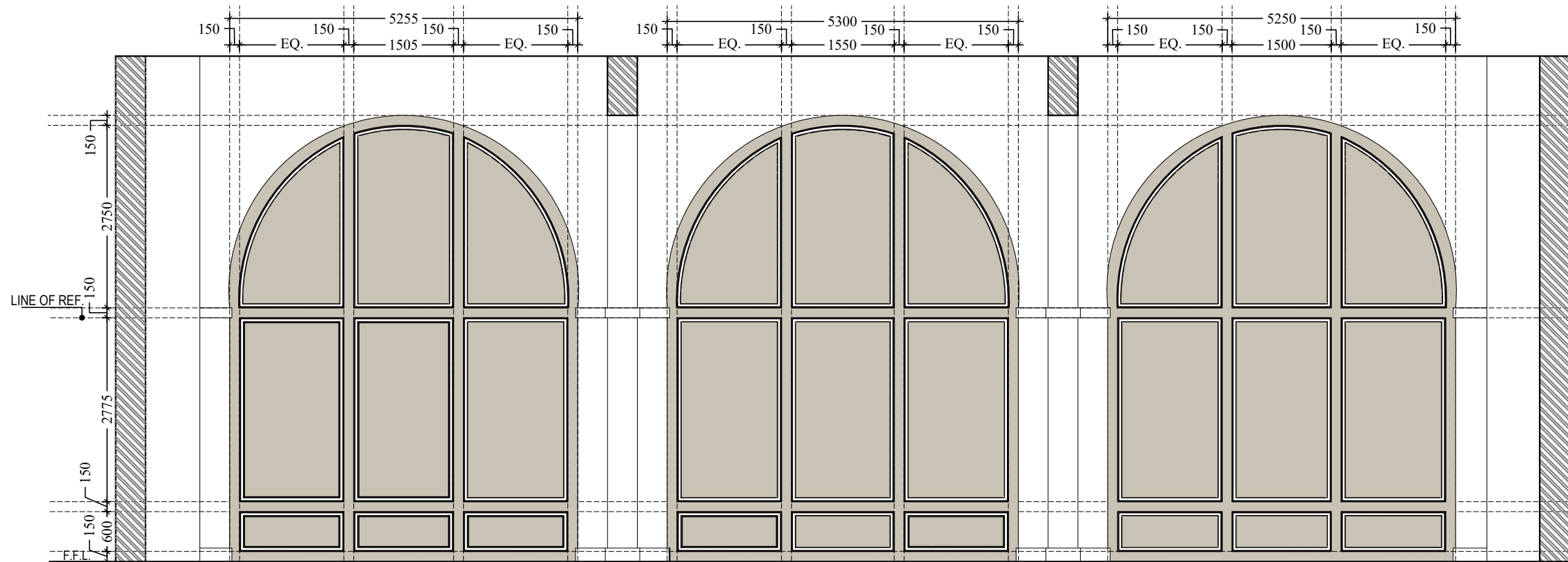
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/226-C	DATE 25/08/2022	SCALE NTS	TOLERANCE	
TITLE GLASS PARTITION LAYOUT- SECTION & ELEVATIONS				NO OFF 3 OF 3
Drawn By Swapan Das		Checked By Susanta Shaw		Approved By K.S. Murali



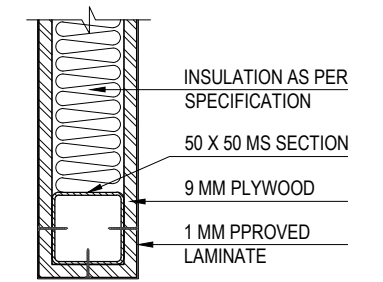
All Dimensions are in m.m.

SL. NO.	SYMBOL	DESCRIPTION
1.		LINTEL HT. DOUBLE SKIN PARTITION
2.		FULL HT. INSULATED DOUBLE SKIN PARTITION
3.		WALL PANELING

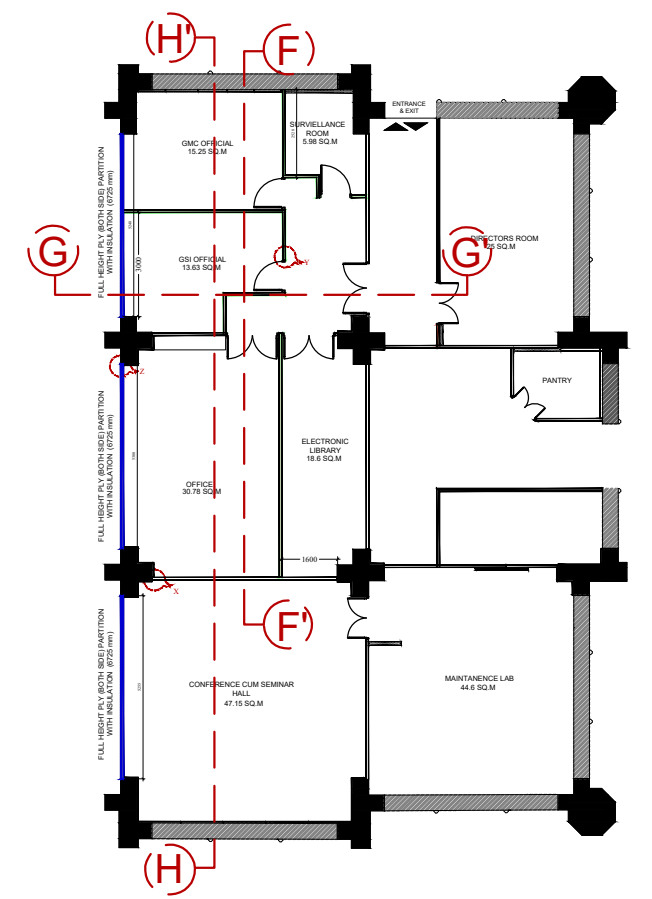
Creative Museum Designers			
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/227-A	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE: PLY PARTITION LAYOUT (both side), SECTION & ELEVATIONS WITH INSULATION			NO OFF 1 OF 2
Drawn By Swapan Das	Checked By Susanta Shaw	Approved By K.S. Murali	



04 SECTION AT H-H'
SCALE- 1:75




06 DETAIL AT - Z
SCALE- 1:5

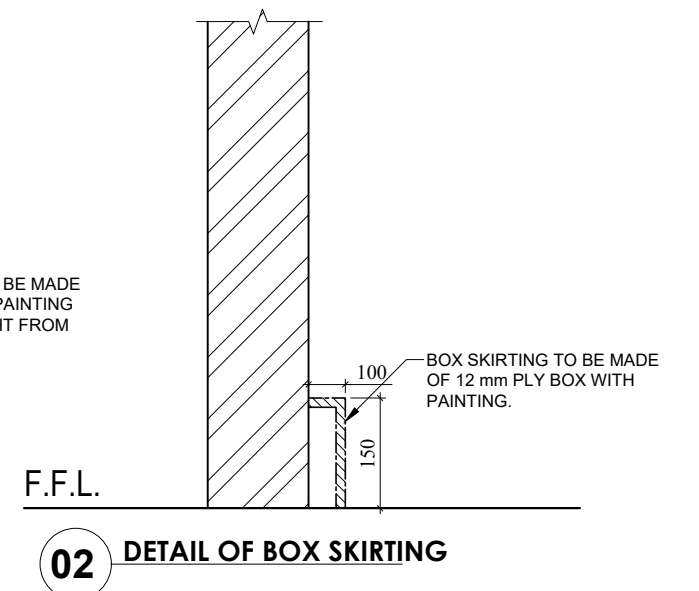
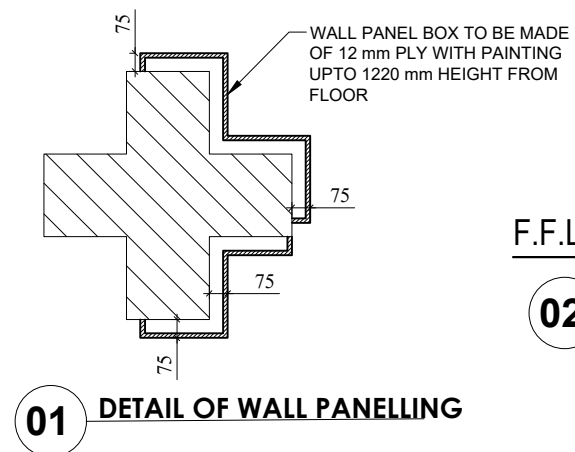
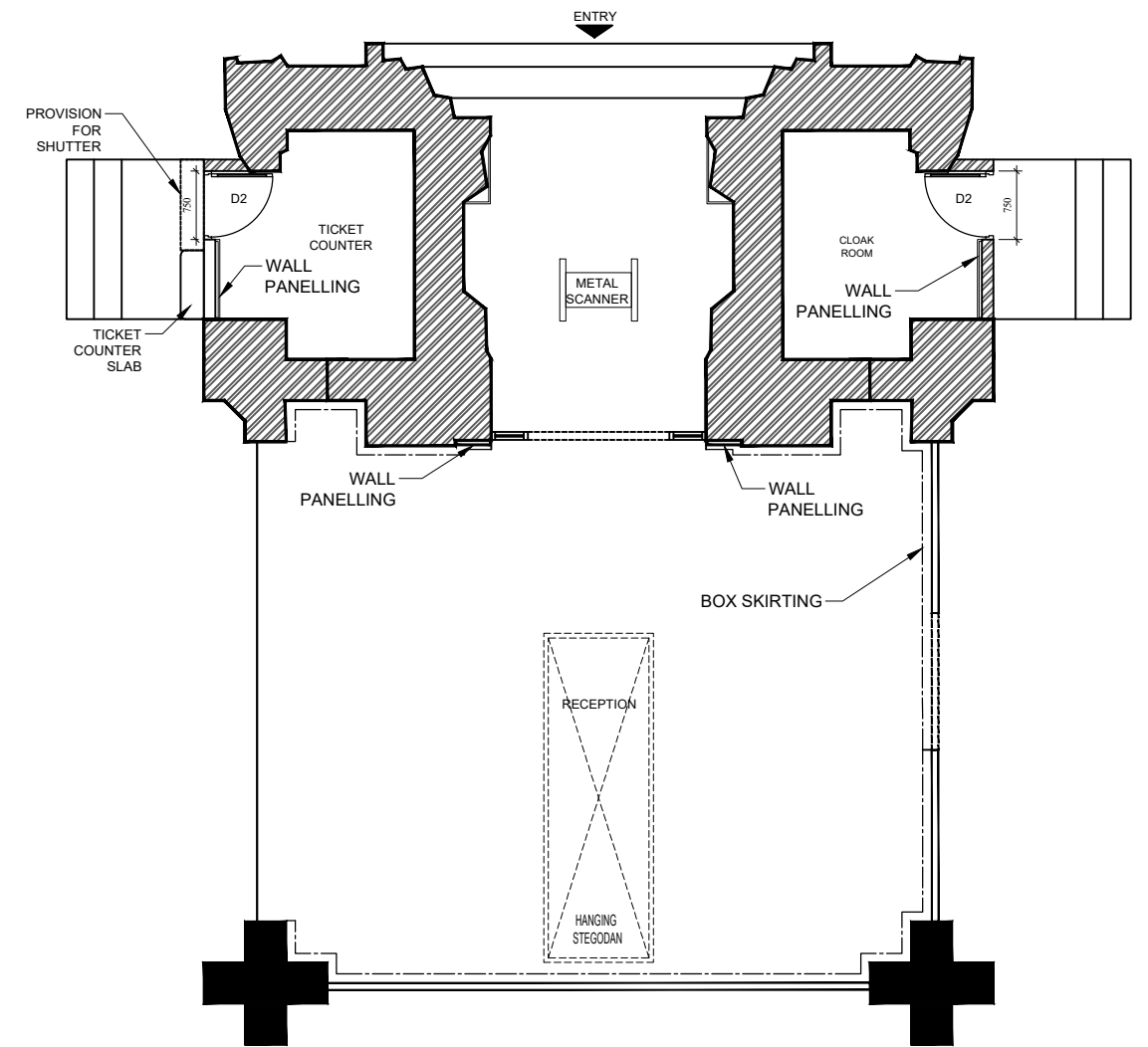
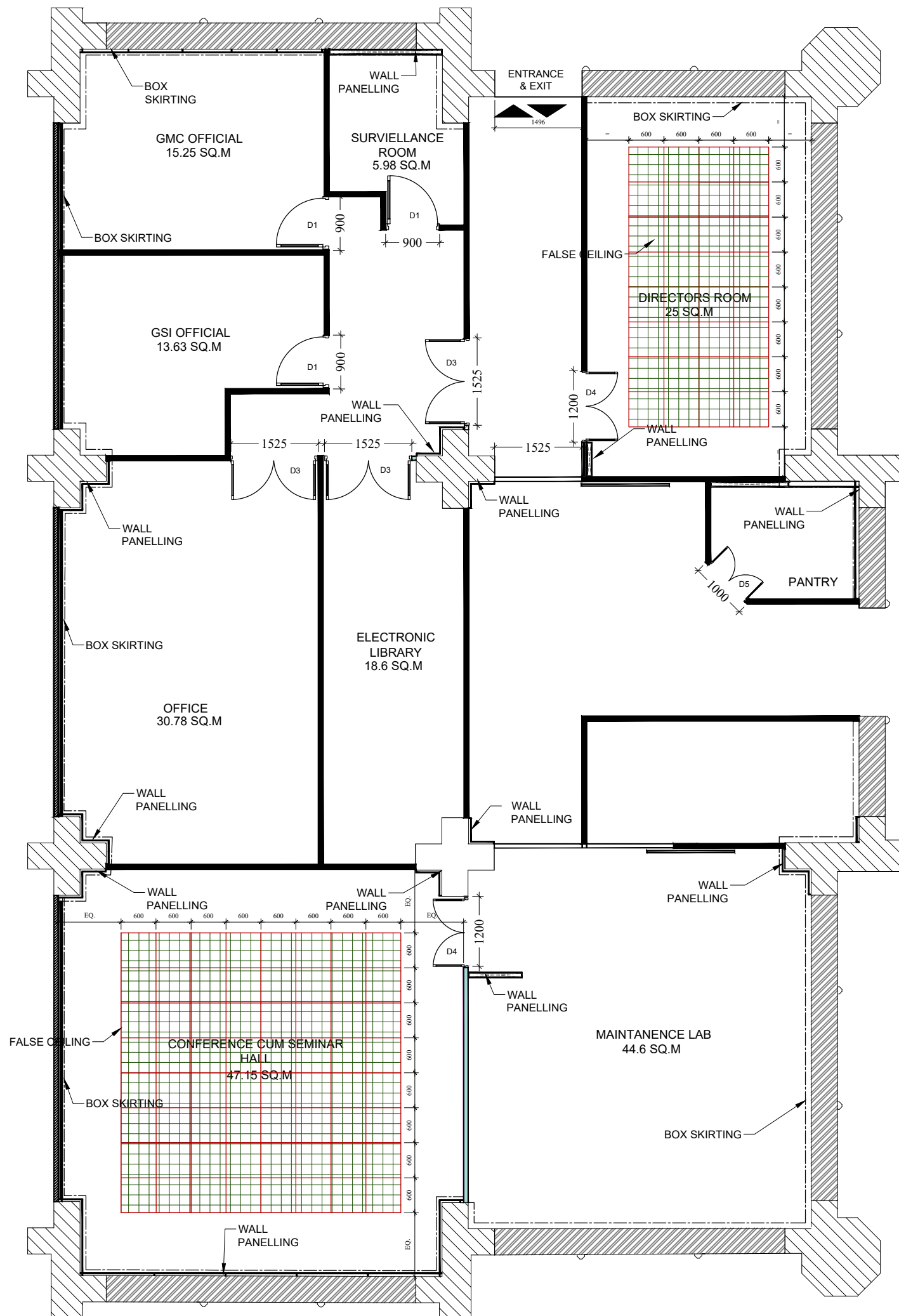


01 KEY PLAN
SCALE- N.T.S All Dimensions are in m.m.

SL. NO	SYMBOL	DESCRIPTION
1.		LINTEL HT. DOUBLE SKIN PARTITION
2.		FULL HT. INSULATED DOUBLE SKIN PARTITION

Creative Museum Designers			
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/227-B	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE:- PLY PARTITION LAYOUT(both side), SECTION & ELEVATIONS WITH INSULATION			NO OFF 2 OF 2
Drawn By Swapn Das	Checked By Susanta Shaw	Approved By K.S. Murali	

<h1 style="text-align: center;">Creative Museum Designers</h1>				
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/228	DATE 25/08/2022	SCALE NTS	TOLERANCE	
TITLE:- PLY PARTITION LAYOUT (both side), SECTION & ELEVATIONS WITHOUT INSULATION			NO OFF 2 OF 2	
Drawn By Swapan Das	Checked By Susanta Shaw	Approved By K.S. Murali		



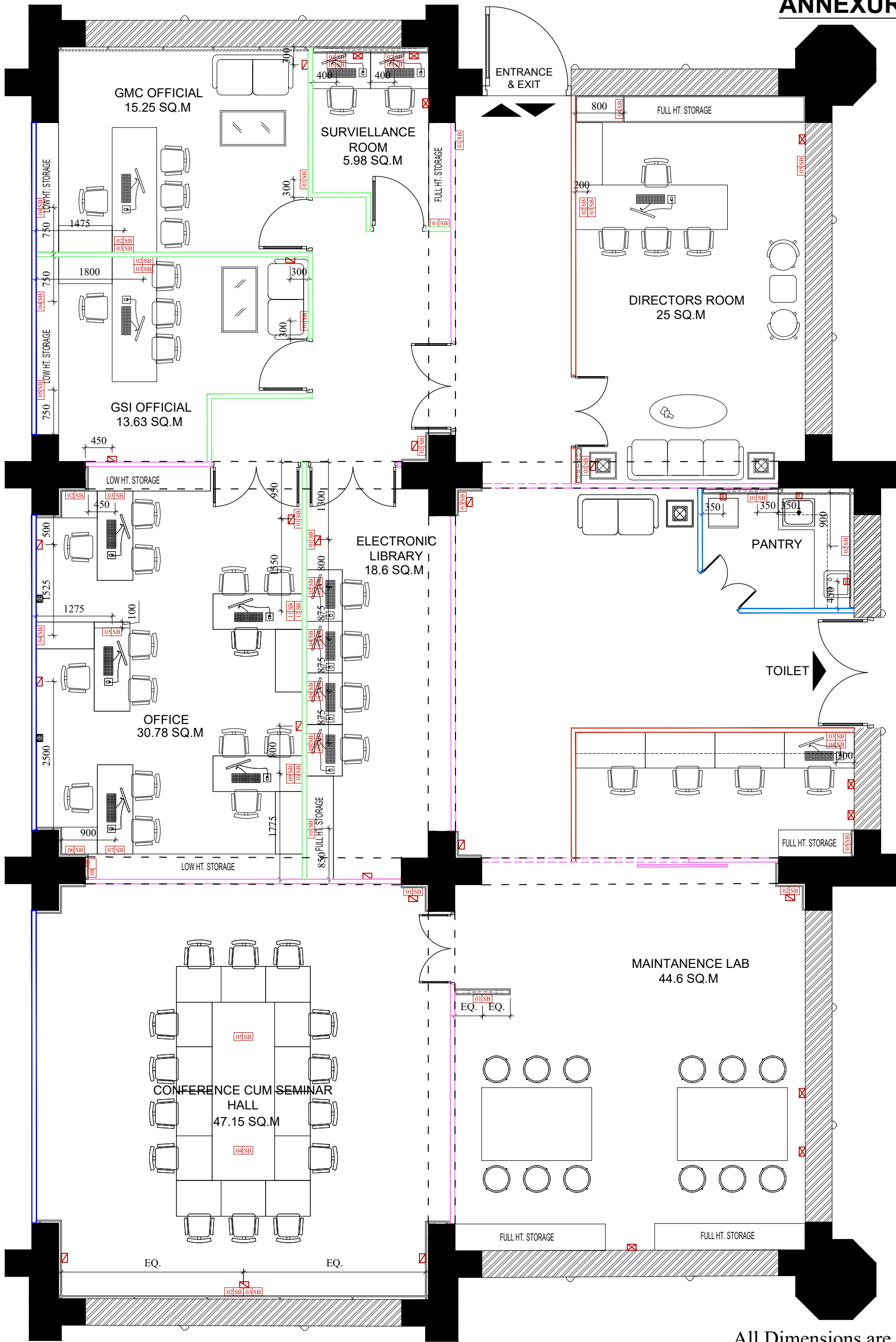
SL. NO.	SYMBOL	DESCRIPTION
1.		WALL PANELLING
2.		BOX SKIRTING

Creative Museum Designers




UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/229	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE:- GLASS DOORS, WALL PANELLING, BOX SKIRTING & FALSE CEILING PLAN			NO OFF 1 OF 1
Drawn By Swapan Das	Checked By Susanta Shaw	Approved By K.S. Murali	

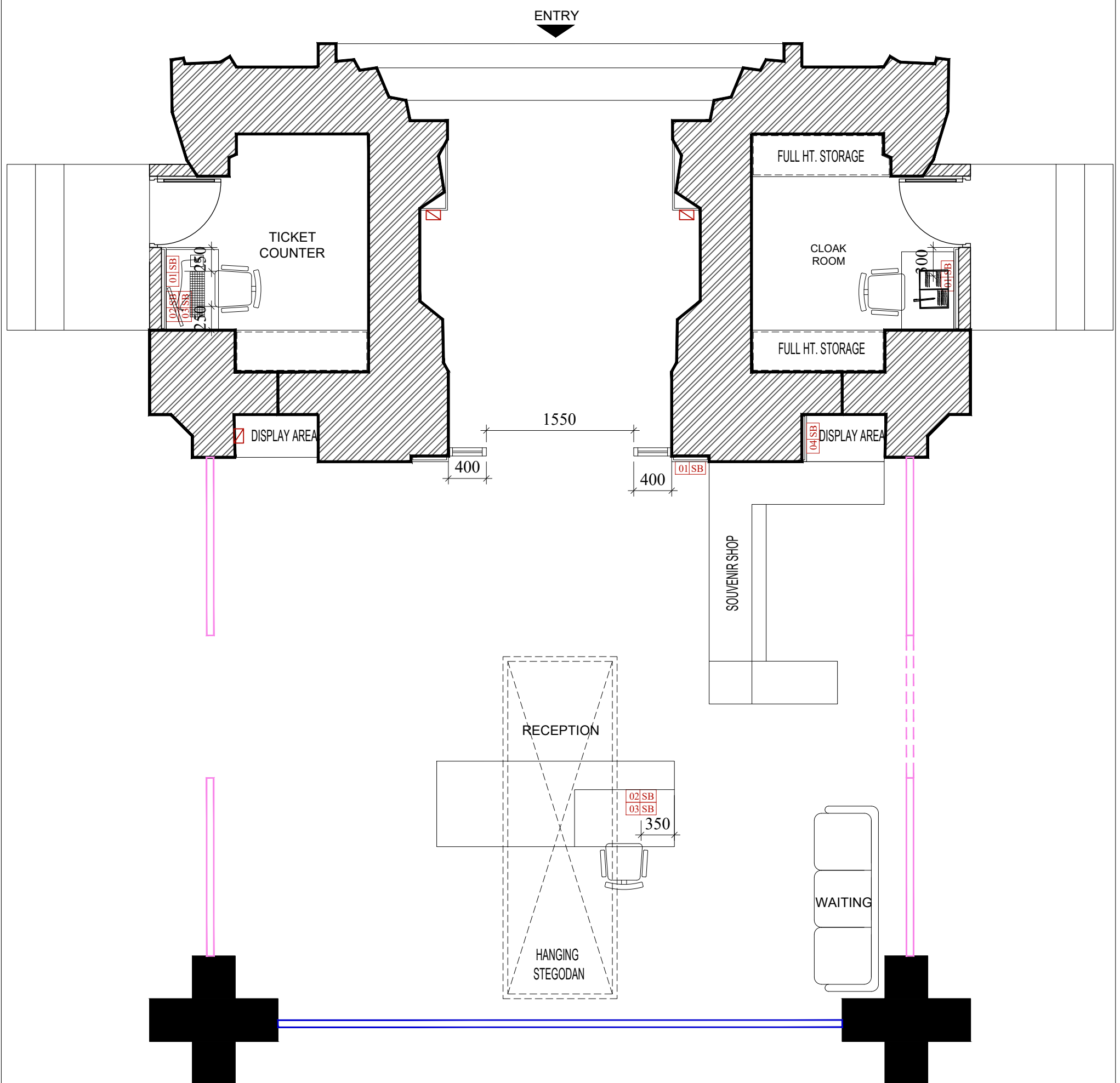
ANNEXURE-EL




All Dimensions are in m.m.

Creative Museum Designers					
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)			
DRG.NO. CMD- GSI/ID/231-A	DATE 25/08/2022	SCALE NTS	TOLERANCE		
TITLE:- ELECTRICAL SWITCH BOARD LAYOUT			NO OFF 1 OF 4		
Drawn By Swapan Das	Checked By Ayon Bhowmik		Approved By K.S.Murali		

ANNEXURE-EL



All Dimensions are in m.m.

Creative Museum Designers					
UNIT: Design Section			PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/231-B	DATE 25/08/2022	SCALE NTS	TOLERANCE		
TITLE:- ELECTRICAL SWITCH BOARD LAYOUT				NO OFF 2 OF 4	
Drawn By Swapnan Das		Checked By Ayon Bhowmik		Approved By K.S.Murali	

SURVEILLANCE ROOM

01. SWITCH BOARD AT 1050MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 1PC.

02. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

05. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

GMC OFFICIAL

01. SWITCH BOARD AT 1050MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

02. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

GSI OFFICIAL

01. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

02. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

05. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

CONFERENCE ROOM

01. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

02 - 15. SWITCH BOARD AT 750 MM TABLE MOUNT (8 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.
- USB POINT 1PC.
- COVER 1PC.

16. SWITCH BOARD AT 750 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.

17. SWITCH BOARD AT 750 MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

OFFICE

01. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

02. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

05. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

06. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

07. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

08. SWITCH BOARD AT 825 MM (4 MODULE)
- 6/10AMP. SWITCH 1PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

09. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

10. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

11. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

12. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

ELECTRONIC LIBRARY

01. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

02. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

05. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

06. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

07. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

08. SWITCH BOARD AT 825 MM (4 MODULE)
- 6/10AMP. SWITCH 1PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

10. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

11. SWITCH BOARD AT 825 MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

MAINTENANCE LAB

01. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

02. SWITCH BOARD AT 1050 MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

03. SWITCH BOARD AT 750 MM TABLE MOUNT (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

04. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

05. SWITCH BOARD AT 825 MM (3 MODULE)
- 6/10AMP. SWITCH 1PC.
- 6/10AMP. SOCKET 1PC.

DIRECTOR'S CABIN

01. SWITCH BOARD AT 1050MM (3 MODULE)
- 6/10AMP. SWITCH 3PC.

02. SWITCH BOARD AT 750 MM TALE MOUNT (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM ON FURNITURE (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

LOBBY

01. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.

02. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.


03. SWITCH BOARD AT 1050MM (2 MODULE)
- 6/10AMP. SWITCH 2PC.























PANTRY

01. SWITCH BOARD AT 1050MM (6 MODULE)
- 6/10AMP. SWITCH 1PC.
- 16/50AMP. SWITCH 2PC.
- COVER 1PC.

02. SWITCH BOARD AT 900 MM (6 MODULE)
- 6/10AMP. SWITCH 2PC.
- 6/10AMP. SOCKET 2PC.

All Dimensions are in m.m.

Creative Museum Designers				
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/231-C	DATE 25/08/2022	SCALE NTS	TOLERANCE	
TITLE:- ELECTRICAL SWITCH BOARD LAYOUT			NO OFF 3 OF 4	
Drawn By Swapan Das	Checked By Ayon Bhowmik		Approved By K.S.Murali	

STANDARD HEIGHTS FOR ELECTRICAL POINTS			
NO.	DESCRIPTION	SYMBOL	HEIGHT
1.	FAN		BOTTOM OF CEILING
2.	EXHAUST		2100 mm
3.	WALL FAN		2250 mm
4.	BRACKET WALL LIGHT		2250 mm
5.	ELECTRICAL D.B.		TOP HEIGHT LINTEL LEVEL
6.	JUNCTION BOX (COMMUNICATION)		TOP HEIGHT LINTEL LEVEL
7.	SWITCH BOARD WITH 6 AMP. SOCKET OUTLET & SWITCH NOTE: 'Y'- SWITCH BOARD NUMBER 'Z'- SWITCH BOARD HEIGHT IN 'MM'		AS MENTIONED
8.	INTERCOM		750 mm
9.	GEYSER		2150 mm
10.	AQUA GUARD		1500 mm FROM COUNTER TOP
11.	SPLIT A.C.		
12.	SPILT AC STARTER		AS REQUIRED
13.	LIGHT PANEL		ON-FLASE CEILNG
14.	LIGHT POINT IN FURNITURE		AS REQUIRED
15.	POINT FOR ELECTRONIC CURTAINS		AS REQUIRED
16.	ELECTRIC POINT ON CEILING		ON CEILING
17.	REFRIGERATOR / DISH WASHER / CHIMNEY POINT		ON WALL AT 450/900/1200/2150/2450
18.	1 SWITCH 1SCOKET 6AMP. (4 MODEL)		AT 450MM / AT 900MM
19.	1 SWITCH 1SCOKET 16AMP. (3 MODEL)		AT 1050MM
20.	INROUND UPLIGHT (FLOOR LIGHT)		
21.	SUSPENDED BAR LIGHT		BOTTOM OF CEILING
22.	SUSPENDED LIGHT		BOTTOM OF CEILING
23.	SUSPENDED PROFILE LIGHT		BOTTOM OF CEILING

RECEPTION

01. SWITCH BOARD AT 1050MM (4 MODULE)
- 6/10AMP. SWITCH 5PC.
- COVER 1PC.

02. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

04. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 1PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

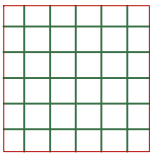
TICKET COUNTER

01. SWITCH BOARD AT 1050MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

02. SWITCH BOARD AT 825 MM (8 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 2PC.
- COVER 1PC.

03. SWITCH BOARD AT 450 MM (4 MODULE)
- 6/10AMP. SOCKET 2PC.

FALSE CEILING LEGENDS



FALSE CEILING AT A DROP OF 3550 MM
FROM TRUE CEILING

CLOAK ROOM

01. SWITCH BOARD AT 1050MM (6 MODULE)
- 6/10AMP. SWITCH 3PC.
- 6/10AMP. SOCKET 1PC.
- COVER 1PC.

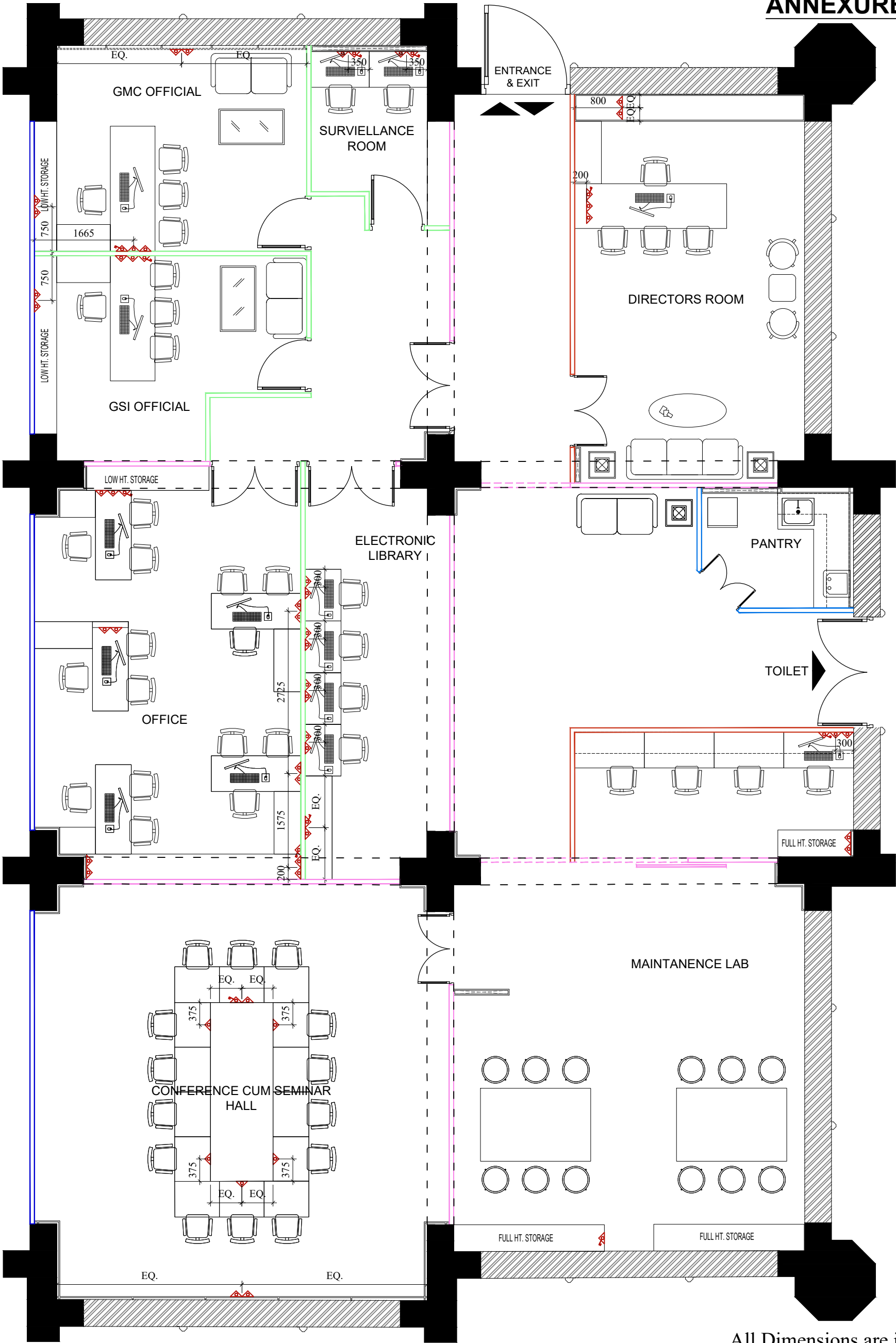
All Dimensions are in m.m.

Creative Museum Designers



UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/231-D	DATE 25/08/2022	SCALE NTS	TOLERANCE	
TITLE:- ELECTRICAL SWITCH BOARD LAYOUT				NO OFF 4 OF 4
Drawn By Swapan Das		Checked By Ayon Bhowmik		Approved By K.S.Murali

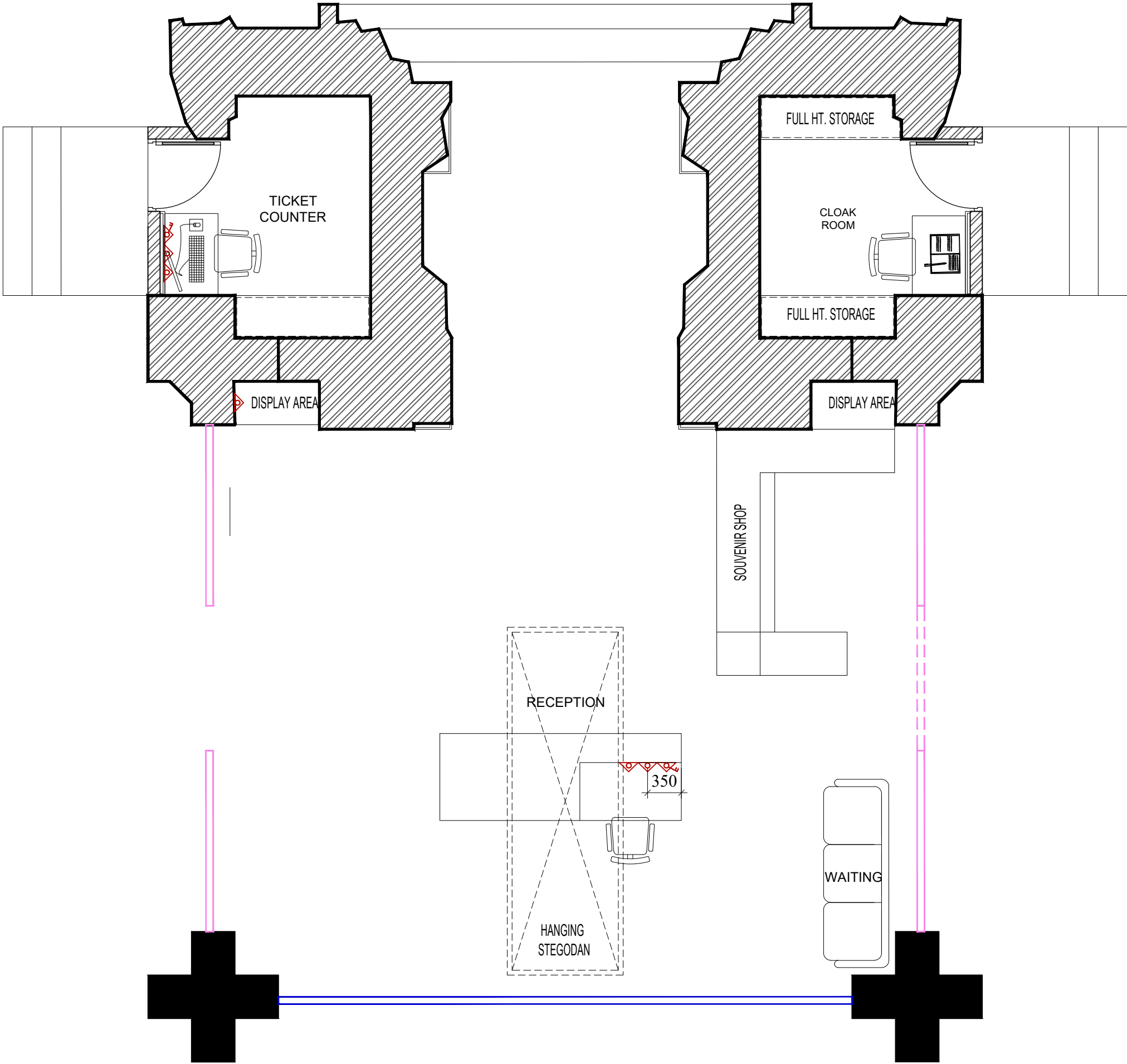
ANNEXURE-CC



	PORT FOR LAN
	PORT FOR INTERCOM

All Dimensions are in m.m.			
Creative Museum Designers			
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/230-A	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE:- COMMUNICATION LAYOUT			NO OFF 1 OF 2
Drawn By Swapn Das	Checked By Ayon Bhowmik	Approved By K.S.Murali	

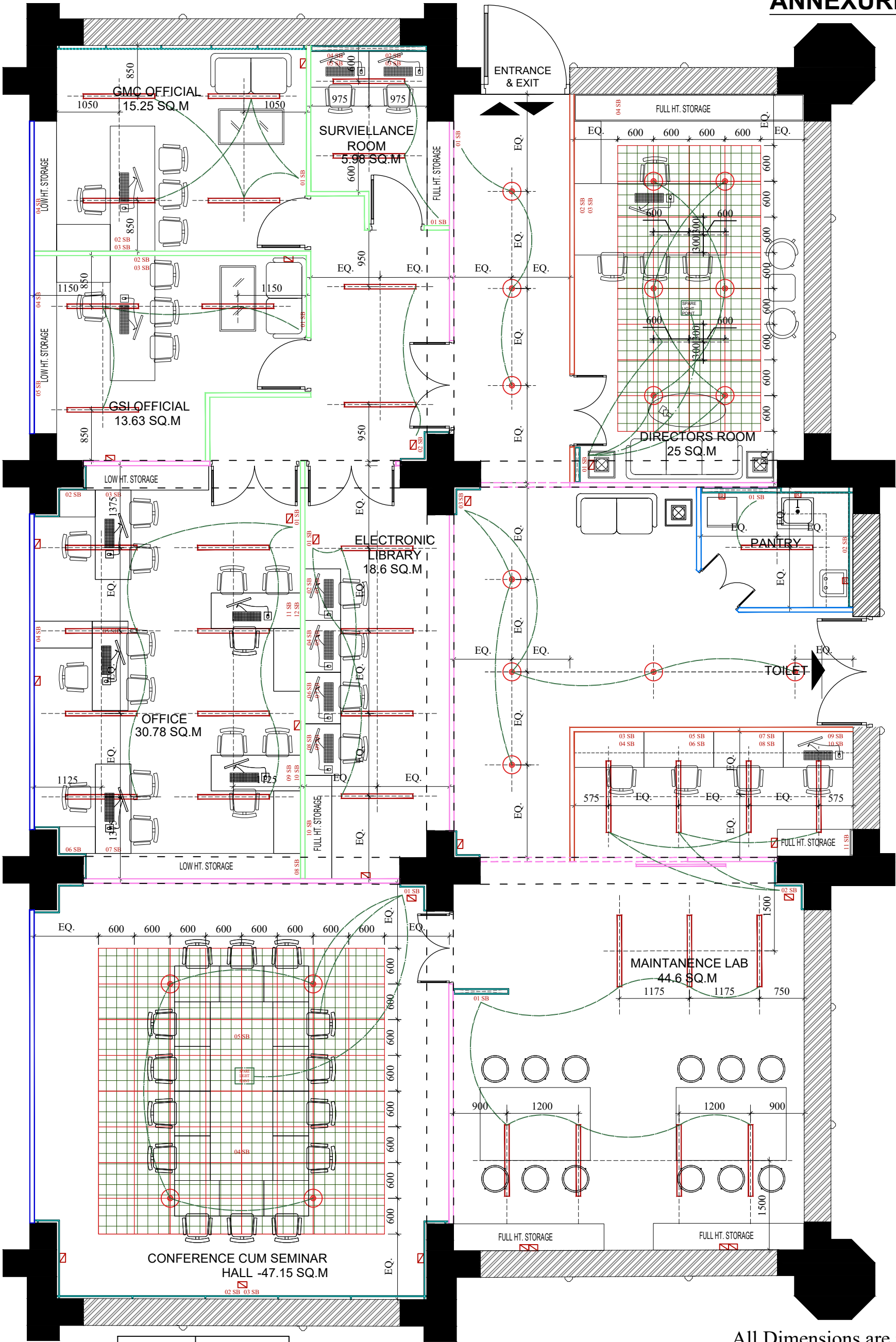
ENTRY





	PORT FOR LAN
	PORT FOR INTERCOM


All Dimensions are in m.m.

Creative Museum Designers			
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)	
DRG.NO. CMD- GSI/ID/230-B	DATE 25/08/2022	SCALE NTS	TOLERANCE
TITLE:- COMMUNICATION LAYOUT			NO OFF 2 OF 2
Drawn By Swapn Das	Checked By Ayon Bhowmik	Approved By K.S.Murali	

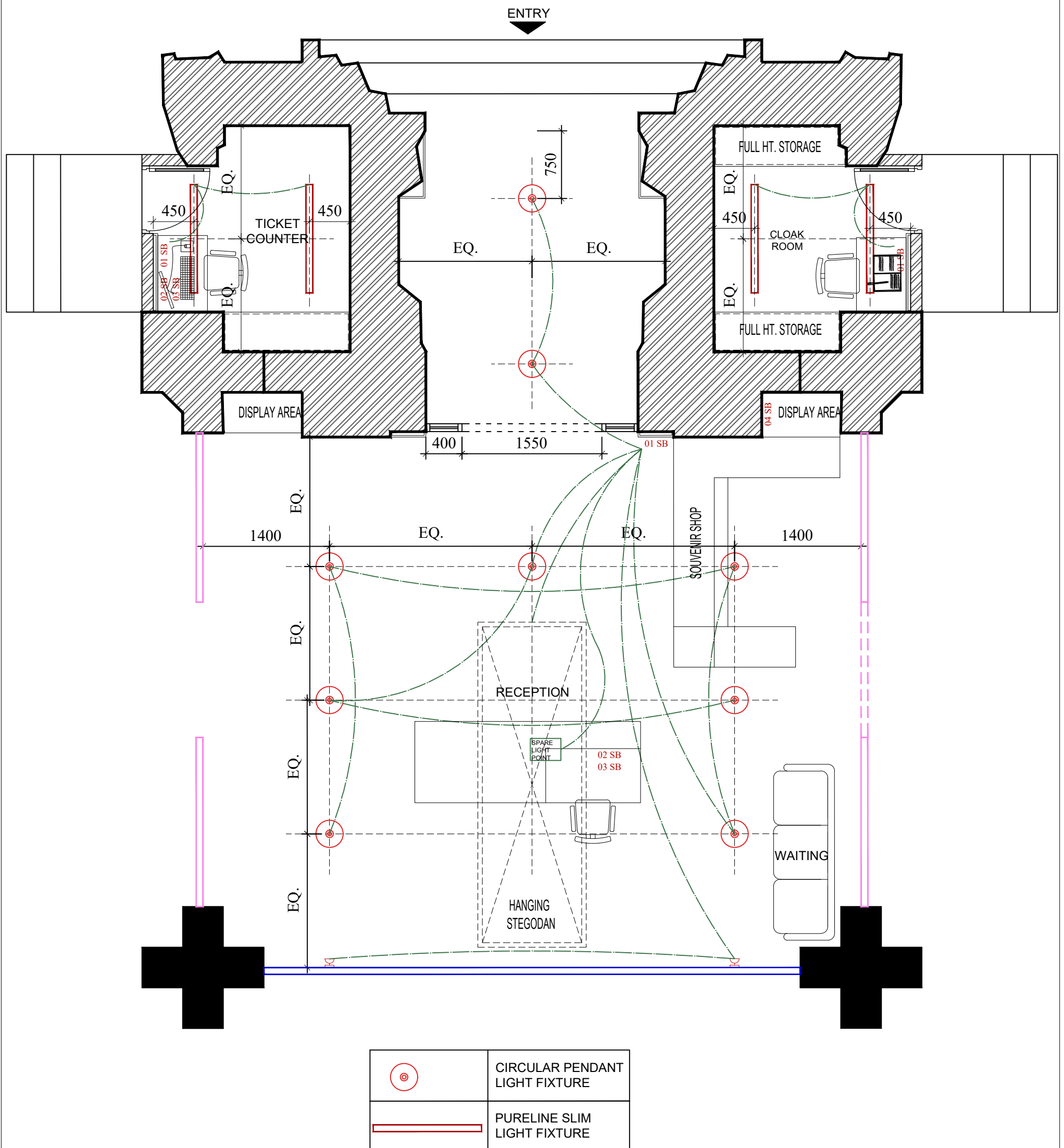


	CIRCULAR PENDANT LIGHT FIXTURE
	PURELINE SLIM LIGHT FIXTURE


All Dimensions are in m.m.

Creative Museum Designers				
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/232-A	DATE 25/08/2022	SCALE NTS	TOLERANCE	
TITLE:- ELECTRICAL ILLUMINATION LAYOUT				NO OFF 1 OF 2
Drawn By Swapan Das	Checked By Ayon Bhowmik	Approved By K. S. Murali		

ANNEXURE-IL



All Dimensions are in m.m.

Creative Museum Designers				
UNIT: Design Section		PROJ: GEO SCIENCE MUSEUM AT GWALIOR (CMD 007.12.52)		
DRG.NO. CMD- GSI/ID/232-B	DATE 25/08/2022	SCALE NTS	TOLERANCE	
TITLE:- ELECTRICAL WIRING LAYOUT			NO OFF 2 OF 2	
Drawn By Swanan Das	Checked By Avon Bhoymik		Approved By K. S. Murali	