



Republic of the Philippines
Department of Labor and Employment
EMPLOYEES' COMPENSATION COMMISSION

PHILIPPINE BIDDING DOCUMENTS

**Public Bidding for the Repair/Renovation of the
3rd Floor of the ECC Building
Ref. No.: PB-ECC-2023-10**

Government of the Republic of the Philippines

**Sixth Edition
July 2020**

Preface

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the “Works”) through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contract, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; and (iv) the obligations, duties, and/or functions of the winning Bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Works to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term “related” or “analogous services” shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria.

The IB should be incorporated into the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.



**Invitation to Bid for the Repair/ Renovation of the 3rd Floor
of the ECC Building
Ref. No.: PB-ECC-2023-10**

1. The *Employees' Compensation Commission (ECC)* through the **Corporate Operating Budget 2023** intends to apply the following amounts being the Approved Budget for the Contract (d) to payments under the contract for **Repair/ Renovation of the 3rd Floor of the ECC Building with Reference No. PB-ECC-2023-10**. Bids received in excess of the ABC shall be automatically rejected at bid opening:

Lot No.	Quantity	Item/ Description	ABC	Bidding Documents Fee
1	1 Lot	Repair/ Renovation of the 3 rd Floor of the ECC Building	₱ 17,995,391.29	₱25,000.00
Note		Amount of Bidding Documents Fee within the prescribed maximum amount as provided under Appendix 8 of the RIRR of R.A. No. 9184)		

2. The *Employees' Compensation Commission (ECC)* now invites bids for the above Procurement Project. The and schedule of the Bidding activities is as follows:

Advertisement/ Posting of Invitation to Bid/Start of availability of bid documents	October 31, 2023 (Tuesday) -all prospective bidders are required to provide soft-copies of their letter of intent/notice of participation and email addresses to the following email address of ECC-BAC-Secretariat: <u>chua_ac@ecc.gov.ph</u> ; supply@ecc.gov.ph)
Pre-Bid Conference	November 8, 2023 (Wednesday) 10:00 A.M. Face-to-Face and via Zoom App -bidders have the option to attend the prebid either face to face or via Zoom. Access link in the virtual pre-bid conference will be provided to prospective bidders via email at least one hour before the pre-bid conference
Deadline for Submission of Written Queries/ Clarifications by Prospective Bidders	November 13, 2023 (Monday) -pursuant to Section 22.5.1 of the RIRR of RA9184, requests for clarification(s) on any part of the Bidding Documents or for

	an interpretation must be in writing and submitted to the BAC of the Procuring Entity concerned <u>at least ten (10) calendar days</u> before the deadline set for the submission and receipt of bids.
Last day of Issuance of Bid Bulletin by the ECC BAC	November 16, 2023 (Thursday) -pursuant to Section 22.5.1 and 2, Bid Bulletins shall be issued by the BAC, <u>at least seven (7) calendar days</u> before the deadline for the submission and receipt of bids.
Deadline for Submission of Bids	November 23, 2023 (Thursday) 1:00 P.M.
Opening of Bids	November 23, 2023 (Thursday) 1:30 P.M. <i>(Bid Opening may also be viewed online via streaming in the ECC Official FB Account)</i>

Completion of the Works is required within **Four (4) Months, reckoned from the date of receipt of the Notice to Proceed (NTP)**. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

3. Bidding will be conducted through open competitive bidding procedures using non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information and/or acquire hard copies of the Bidding documents from the BAC Secretariat starting on, **October 31, 2023, (Mon-Fri: 8:00 AM-3:30 PM)** upon submission of a Letter of Intent/Notice of Participation and upon payment of non-refundable fee in the amount stated in **Item 1 of this Invitation to Bid. Payment of bid document fee shall be received at the 4th Floor ECC Cashier’s Office, Monday to Friday from 8:00 AM-3:30 PM.**
5. The Bidding Documents may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS: www.philgeps.gov.ph) and through the ECC website: <http://www.ecc.gov.ph>. All interested bidders are required to settle the prescribed fee for the said documents not later than the deadline of submission of bids. The Official Receipt (OR) for the payment of the fees shall be presented in person to the ECC BAC Secretariat.

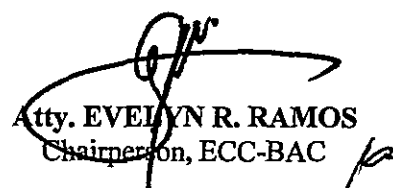
6. The ECC will hold a Pre-Bid Conference¹ on **November 8, 2023** at 10:00 A.M. at the **4th Floor DED Conference room**. Interested bidders may opt to attend the pre-bid either face to face or through video conferencing or webcasting *via Zoom Application or Google Meet*. The link shall be sent to the prospective bidders through email at least one (1) hour before the start of the conference.
7. Bids must be duly received by the BAC Secretariat through manual submission at the ECC Bldg. 355 Sen. Gil Puyat Avenue, Makati City, on or before **November 23, 2023, 1:00 P.M.** Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 16.
9. Bid opening shall be on **November 23, 2023, 1:30 P.M.** at the **ECC Bldg. 355 Sen. Gil Puyat Avenue, Makati City**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity and may also be viewed online via streaming in the ECC Official Facebook Account.
10. The ECC reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

The ECC BAC Secretariat
5th Floor, ECC Bldg. 355 Sen. Gil Puyat Avenue, Makati City
supply@ecc.gov.ph, chua_ac@ecc.gov.ph
02-88994251 local 215 or 204

12. You may visit the following websites:

For downloading of Bidding Documents:

www.ecc.gov.ph
www.philgeps.gov.ph


Atty. EVELYN R. RAMOS
Chairperson, ECC-BAC
25 October 2023

¹ May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a pre-bid conference.

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *Employees' Compensation Commission* invites Bids for the **Repair/ Renovation of the 3rd Floor of the ECC Building with Project Identification Number PB-ECC-2023-10**

The Procurement Project (referred to herein as "Project") is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *CY2023* in the amount of total amount of *Seventeen Million Nine Hundred Ninety-Five Thousand Three Hundred Ninety-One and 29/100 pesos* (₱ 17,995,391.29).

2.2. The source of funding is:

- a. the 2023 Corporate Operating Budget..

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.
- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

- a. Subcontracting is not allowed.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

14.2. *Payment of the contract price shall be made in:*

- a. Philippine Pesos.

15. Bid Security

15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

15.2. The Bid and bid security shall be valid until *[indicate date]*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. **Deadline for Submission of Bids**

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

18. **Opening and Preliminary Examination of Bids**

18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. **Detailed Evaluation and Comparison of Bids**

19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 shall be submitted for each contract (lot) separately.

19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. **Post Qualification**

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. **Signing of the Contract**

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause			
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: <i>Construction and renovation works of buildings and structures</i>		
7.1	<i>Sub-contracting is not allowed</i>		
10.3	<i>None</i>		
10.4	The key personnel must meet the required minimum years of experience set below:		
	Key Personnel	General Experience	Relevant Experience
	Project Manager	Design/ construction of buildings	Management & supervisory – minimum of 10 years
	Civil/ Site Engineer	Design/ construction of buildings	Supervision – minimum of 5 years
	Electronics Communication Engineer	Electronic Design	Supervision – minimum of 3 years
	Electrical Engineer	Electrical Design	Supervision – minimum of 3 years
	Mechanical Engineer	Mechanical Design	Supervision – minimum of 3 years
	Sanitary Engineer / Master Plumber	Plumbing and Sanitary	Supervision – minimum of 3 years
	Safety Engineer/ Officer	Design of building safety	Minimum of 2 years related work experienc
	General Foreman	Repair / construction of buildings	Supervision/ 10 years
	Masons	Repair / construction of buildings	1 Year
	Carpenters	Repair / construction of buildings	1 Year
	Master Electricians/ Electrician	Repair / construction of buildings	1 Year
	Tile Setters	Repair / construction of buildings	1 Year
	Plumbers	Repair / construction of buildings	1 Year
	Welders	Repair / construction of buildings	1 Year
	Aircon Installers/ Technicians	Repair / construction of buildings	3 Years
10.5	The minimum major equipment requirements are the following:		
	Equipment	Capacity	Number of Units
	Step Ladder		2 sets
	Electrical Tools		As necessary
	Carpentry Tools		5 sets
	Welding Machine		1 unit

	Powertools (drills, grinder, etc)		As Necessary
	Plumbing Tools		2 Sets
12	<i>No further instructions.</i>		
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:		
	Lot No. & Description	ABC	Cash / Cashier's/ Manager's Check, Bank Draft/ Guarantee or Irrevocable Letter of Credit (2% of ABC)
	Repair/Renovation of the 3 rd Floor of the ECC Building	₱17,995,391.29	₱359,907.83
			Surety Bond (5% of ABC)
			₱899,769.56
19.2	Partial bids are not allowed.		
20	<i>1. Valid Philippine Contractors Accreditation Board (PCAB) license and registration, at least Medium A Category B</i>		
21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.		

Xqw

Section IV. General Conditions of Contract

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. Possession of Site

4.1. The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC**, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.

4.2. If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

5. Performance Security

- 5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the SCC supplemented by any information obtained by the Contractor.

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the SCC.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the SCC, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in ITB Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex “E” of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the **SCC**, the Dayworks rates in the Contractor’s Bid shall be used for small additional amounts of work only when the Procuring Entity’s Representative has given written instructions in advance for additional work to be paid for in that way.

11. Program of Work

11.1. The Contractor shall submit to the Procuring Entity’s Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.

11.2. The Contractor shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor’s accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex “E” of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity’s Representative/Project Engineer. Except as otherwise stipulated in the **SCC**, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

15.1. If required, the Contractor will provide “as built” Drawings and/or operating and maintenance manuals as specified in the **SCC**.

- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the SCC from payments due to the Contractor.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
2	<i>No further instructions</i>
4.1	<i>The intended completion date of the project is within four (4) months reckoned from the date of receipt of the Notice to Proceed.</i>
6	The site investigation reports are: <i>None</i>
7.2	Warranty is One (1) year which shall be covered by ten (10) percent retention money. The retention money will be released after one (1) year reckoned from the date of final acceptance.
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within Ten (10) days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is (1/10) of one percent (1%) per day of delay
13	The amount of the advance payment shall not exceed 15% of the total contract price and schedule of payment upon written request of the Contractor subject to the condition/s provided under R.A. 9184 and its IRR.
14	<p>Materials and equipment delivered on the site but not completely put in place shall not be included for payment.</p> <p>Progress payment shall be as follows:</p> <p>Advance Payment – 15% 1st Progress Payment -15% 2nd Progress Payment – 15% 3rd Progress Payment – 15% 4th Progress Payment – 30% Retention Money - 10%</p>
15.1	Operating and/or maintenance manuals for Airconditioning Equipment is required.
15.2	Not applicable

Section VI. Specifications

Notes on Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying or conditioning their Bids. In the context of international competitive bidding, the specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of economy, efficiency, and fairness in procurement be realized, responsiveness of Bids be ensured, and the subsequent task of bid evaluation facilitated. The specifications should require that all goods and materials to be incorporated in the Works be new, unused, of the most recent or current models, and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

Samples of specifications from previous similar projects are useful in this respect. The use of metric units is mandatory. Most specifications are normally written specially by the Procuring Entity or its representative to suit the Works at hand. There is no standard set of Specifications for universal application in all sectors in all regions, but there are established principles and practices, which are reflected in these PBDs.

There are considerable advantages in standardizing General Specifications for repetitive Works in recognized public sectors, such as highways, ports, railways, urban housing, irrigation, and water supply, in the same country or region where similar conditions prevail. The General Specifications should cover all classes of workmanship, materials, and equipment commonly involved in construction, although not necessarily to be used in a particular Works Contract. Deletions or addenda should then adapt the General Specifications to the particular Works.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for goods, materials, and workmanship, recognized international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that goods, materials, and workmanship that meet other authoritative standards, and which ensure substantially equal or higher quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the SCC.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted

subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

These notes are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final Bidding Documents.

TECHNICAL SPECIFICATION

Employees' Compensation Commission

Third Floor Renovation

Employees Compensation Commission
Building 355 Gil Puyat Avenue
Makati City, Makati, Philippines

OCTOBER 2023

Section VI. Technical Specifications

A. GENERAL CONDITIONS

- A. 1.** The Project Title is **Employees' Compensation Commission Third Floor Renovation** located at **Employees' Compensation Commission Building, 355 Gil Puyat Avenue, Makati City, Makati, Philippines.**
- A. 2.** The scope of the work covered within this specification is the complete construction of the **ECC Third Floor Renovation** including the supply of all materials, equipment, and systems, as well as the performance of all necessary labor and processes, in accordance with the Plans and Specifications furnished by the Architect, with the rules, regulations and restrictions implemented by ECC, and with the laws and regulations mandated by the Local and National Authorities.
- A. 3.** This specification is intended to cooperate with the Plans and drawings. In case of doubt or any discrepancies found in the figures or drawings, they shall be brought to the attention of the Architect for clarification and final decision.
- A. 4.** Should the contractor fail to verify or clarify discrepancies, errors, conflict or omission in the drawings and specifications, it shall be deemed that the contractor has included in the preparation of his bid the necessary works, materials or items needed to satisfy the general scope of works.
- A. 5.** The General Contractor shall be responsible in checking all items and units as indicated on the Plans and Specifications and its supply and installation. Any substandard material non-conforming to the specification shall not be accepted.
- A. 6.** The General Contractor shall strictly follow the standard protocol for the supply and installation of specified materials such that the Manufacturer's Direction shall be the primary reference to be followed.
- A. 7.** The General Contractor is not limited to the scope of works listed. They should verify all plans and actual conditions for the necessity of work.

B. SCOPE OF WORKS

B.1. MEPF CONSULTANCY AND DESIGN

B.1.1. Mechanical Engineer

- a. Consultation for Mechanical Design and layout of ECC Third Floor Renovation

- b. Provision of necessary Mechanical Plans, Specifications, and Computations for permit application and reference of Architect, Engineers and General Contractor

B.1.2. Electrical Engineer

- a. Consultation for Electrical Design and layout of ECC Third Floor Renovation
- b. Provision of necessary Electrical Plans, Specifications, and Computations for permit application and reference of Architect, Engineers and General Contractor

B.1.3. Electronics and Communications Engineering

- a. Consultation for Electronics and Communication layout of ECC Third Floor Renovation
- b. Provision of necessary Electronics and Communication Plans, Specifications, and Computations for permit application and reference of Architect, Engineers and General Contractor

B.1.4. Plumbing & Sanitary Engineer

- a. Consultation for Plumbing & Sanitary layout of ECC Third Floor Renovation
- b. Provision of necessary Plumbing and Sanitary Plans, Specifications, and Computations for permit application and reference of Architect, Engineers and General Contractor

B.1.5. Fire Protection Engineer

- a. Consultation for Fire Protection Design and layout of ECC Third Floor Renovation.
- b. Provision of necessary Fire Protection Plans, Specifications, and Computations for permit application and reference of Architect, Engineers and General Contractor

B.2. SITE WORKS

B.2.1. Mobilization

The General Contractor shall conduct thorough inspection of the existing job site conditions and shall apply for all pertinent permits before the onset of mobilization works for the ECC Third Floor Renovation.

- a. Preparation of logistics of contractor's equipment and tools.
- b. Transportation & communication necessary for the delivery of materials, equipment and tools.
- c. Setting up of Temporary Facilities within the vicinity of ECC, if necessary.
- d. Setting up of necessary water and power lines required for the project.
- e. Proper and safety storage of materials and equipment.

B.2.2. Demolition

The General Contractor shall proceed with caution all demolition activities and report any conflict that may occur in the actual situation for clarification with ECC

Building Administration. The precautionary measures on the safety of workers during the demolition works shall be in accordance with the Occupational Safety and Health Administration (OSHA) Standard requirements

- a. Verify and examine the site of work and the existing condition that may affect the demolition work.
- b. Furnish material and equipment and perform labor required for the demolition of walls, acoustic ceiling panels, and utilities subject for removal and terminate in a manner conforming to the nationally recognized code covering the specific utility and satisfactory to the Project Inspector. See As-built Plans and Construction Plans for the extent of demolition work required.
- c. Provide adequate protective measures and temporary coverings on exposed areas to protect materials, men and adjoining property. The General Contractor shall be responsible for all injury to persons or damages to properties caused by the work or by his men and shall be liable for any claims against the Owner as a result of this injury and/or damages. Any damages to property shall be replaced or repaired at the expense of the Contractor.
- d. All noise-related demolition work should be performed at non-operational hours of the building (before 7am and after 5pm).
- e. Take appropriate actions to check spread of dust and to avoid the creation of nuisance in the surrounding area. Vacuum and dust the work area at least daily or more frequently as needed or directed.

B.2.3. Demobilization

The General Contractor shall be responsible in the removal and legal disposal of all demolition and construction waste materials and in maintaining the cleanliness and orderliness of the project site.

- a. During the renovation period, cleaning of construction site and removal of dust, rubbish and debris from the site shall be done in a daily basis unless otherwise directed; do not allow accumulations inside or outside the building.
- b. Removal and hauling of debris shall be performed during the non-operational hours of the building (before 7am and after 5pm).
- c. Removal and hauling of materials, tools, equipment and temporary facilities from the project site.
- d. Final deep cleaning and disinfection of all surfaces or unit of work on project site by reputable building maintenance company is pre-requisite to final acceptance.

B.3. Architectural Works

The General Contractor shall construct Architectural works in accordance with the Plans and Specifications.

- a. Supply and installation of all wood, metal and finishing works including the drywall partitions in standard metal stud support, drop ceiling in standard metal furring support, built-in cabinets, wallpaper finishing and wood plastic composite wall panels.
- b. Supply and installation of Acoustic Rockwool insulation on drywall partitions as indicated in the plan.
- c. Application of painting on all interior walls, partitions, ceiling, and built-in cabinets at least (3) layers of coating
- d. Supply and installation of wood doors including door jambs, door accessories and hardware as specified in Door Schedule
- e. Preparation of window trims for glass wall partition and window installation (supply and installation of Glass Doors and windows not included)
- f. Floor correction, rectification and preparation, ready to accept SPC floorings to overlay on the existing vinyl flooring (supply and installation of SPC flooring not included)
- g. Supply and installation of all floor and wall tiles including waterproofing in toilet and pantry
- h. SPC Flooring shall be owner supplied materials.
- i. Glass Doors and Windows shall be owner supplied materials.

B.4. Mechanical Works

The General Contractor shall construct Electrical works in accordance with the Plans and Specifications.

- a. Supply and installation of complete ventilation system of supply, return and exhaust
- b. Testing and Commissioning
- c. Airconditioning Units shall be owner supplied materials.
- d. All items which are shown on the Plans and not mentioned in the Specification shall be included.

B.5. Electrical Works

The General Contractor shall construct Electrical works in accordance with the Plans and Specifications.

- a. Supply and installation of complete electrical system as shown on plan or as specified by architect and/or owner's representative; wiring devices, switches and outlets, wall receptacles, plates and accessories.
- b. Lighting Fixtures shall be owner furnished contractor installed (OFCL) materials.
- c. Testing and Commissioning
- d. All items which are shown on the Plans and not mentioned in the Specification shall be included

B.6. Electronics and Communications Works

The General Contractor shall construct Electronics and Communication works in accordance with the Plans and Specifications.

- a. Supply and installation of telecommunication line, Closed-Circuit Television (CCTV) and cellular data network (Wi-fi).
- b. Testing and Commissioning
- c. All items which are shown on the Plans and not mentioned in the Specification shall be included.

B.7. Plumbing and Sanitary Works

The General Contractor shall construct Plumbing and Sanitary Works in accordance with the Plans and Specifications.

- a. Supply and installation of all water supply and drainage system including the plumbing fixture, accessories, and fittings.
- b. Testing and Commissioning
- c. All items which are shown on the Plans and not mentioned in the Specification shall be included

B.8. Fire Protection Works

The General Contractor shall construct Fire Protection works in accordance with the Plans and Specifications.

- d. Supply and installation of fire detection and alarm system, standby fire-suppression lines, and building exit signages.
- e. Testing and Commissioning
- f. All items which are shown on the Plans and not mentioned in the Specification shall be included.

C. SPECIFICAT IONS

C.1. Drywall

C.1.1. Gypsum Drywall Systems

❖ Performance Requirements

A. Refer to Supplier's technical specifications for description, required equipment, application and testing procedures, etc. Submit sample for Architect's approval.

B. Mounting Accessories:

- i. Hangers: 6mmØ fully threaded hanger with expansion shield
- ii. G.A. 22 Metal Furring and Wall Angles
- iii. G.A. 20 carrying channel, verify dimensions with Manufacturer.

C. Fasteners:

- i. Angle to concrete Wall: Drive pins by use of power driven tools.
- ii. Board to Framing: Type S Bugle Head for use with power driven tools.
- iii. Sealant and Caulking: As recommend by ceiling board manufacturer.

D. Corner and Edge Trim:

Metal: G.A. 24 (0.635) mm minimum steel, electrolytic galvanized zinc-coated, treated for maximum cement and paint adhesion. Surfaces to receive bedding cement knurled for maximum bonding.

E. Joint Compound:

- i. Best grade or type recommended by Board Manufacturer and meeting requirements of ASTM C 475.
- ii. Use Taping Compound for first coat to embed tape and accessories.
- iii. Use Taping Compound or All-Purpose Compound for subsequent coats except final coat.
- iv. Use Finishing Compound for final coat and for skim coat.
- v. Do not use fiber-glass mesh reinforcing tape or no-tape reinforcing systems.
- vi. Joint Reinforcing: Paper reinforcing tape acceptable to Board Manufacturer.

F. Primer/surfacer under surfaces to receive texturing.

G. Primer under surfaces to receive wall covering:

White, self-sizing, water based, all-purpose wall covering primer or approved equal by Architect.

H. Fasteners:

Bugle head screws meeting requirements of ASTM C 1002; or proprietary screws as allowed for the specified suspended ceiling system

- i. Type W: For fastening gypsum board to wood members.
- ii. Type S: For fastening gypsum board to steel framing and ceiling suspension members.
- iii. Of length to penetrate wood framing 5/8 inch 16 mm minimum.
- iv. Of length to penetrate steel framing 3/8 inch 10 mm minimum.

❖ Delivery, Storage, and Handling

- A. Deliver materials in original packages, containers, or bundles bearing brand name, applicable standard designation, and Manufacturer's name.
- B. Store material under roof and keep dry. Stack gypsum board flat and protect from damage.

❖ Execution

A. General

- i. Install so trim and reinforcing tape are fully backed by gypsum board. No hollow spaces between pieces of gypsum board over 1/8 inch (3mm) wide before taping are acceptable.
- ii. Rout out backside of gypsum board to accommodate items that extend beyond face of framing, but do not penetrate face of gypsum board, such as metal door frame mounting brackets, etc.

B. Substrate, Surface Preparation

- i. Framing members shall be spaced not to exceed 24 in. (610 mm) on center in such a manner to allow a balanced layout of pre-decorated gypsum board joints. Where pre-decorated gypsum boards are less than ½ in. (12.7 mm) thick, or are for ceiling application, framing shall not exceed 16 in. (406 mm) on center.
- ii. Solid substrates shall be free from all protrusions and any chemicals that prevent proper adhesive bond.
- iii. All metal framing members shall be free from oils that prevent proper adhesive bond.

C. Cutting

- i. Edges and ends to be covered with trim (molding or battens) shall be cut with a saw or with a sharp knife through the face and into the core, snapping the board away from the cut and then snapping the board in the reverse direction.
- ii. When cut edge joints of sheet or film covered board are to be left exposed, the face material shall be cut not less than 1 in. (25 mm) wider than the gypsum core to form a flap not less than 1 in. (25 mm) wide. The core shall be scored and snapped from the back side to the pre-decorated gypsum board and removed from the flap — not the sheet or film from the core.
- iii. The core shall be trimmed straight and beveled on the face side edge under the flap, as necessary to match factory edges.
- iv. The paper left adhered to the flap shall be removed and the flap shall be pulled around the edges and fastened to the back of the board with either adhesive or staples and adhesive.

D. Trim

- i. Corner Beads: attach corner beads to outside corners.
 - Attach metal corner bead with staples spaced 4 inches 100 mm on center maximum and flat taped over edges of corner bead. Also, apply screw through edge of corner bead where wood trim will overlay corner bead.
 - Set paper-faced trim in solid bed of taping compound.
- ii. Edge Trim: Apply where gypsum board abuts dissimilar material in accordance with Manufacturer's instructions. Hold channel and 'L' trim back from exterior metal window and metal door frames 1/8 inch (3mm) to allow for calking.

E. Single Layer Application

- Apply ceilings first using minimum of two men.
- Use board of length to give minimum number of joints.
- On ceilings, apply board perpendicular to support.
- Stagger end joints. End and edge joints of board applied on ceilings shall occur over framing members or be back blocked with 2x4 (38mm by 89mm) blocking. End joints of board horizontally applied on walls shall occur over framing members. Edge joints of board vertically applied on walls shall occur over framing members.
- Butt edges in moderate contact. Do not force in place. Shim to level.

- Leave facings true with joint, finishing flush. Vertical work shall be plumb and ceiling surfaces level.
- Scribe work closely. Keep joints as far from openings as possible. If joints occur near an opening, apply board so vertical joints are centered over openings. No vertical joints shall occur within 8 inches (200mm) of external corners or openings.
- Install board tight against support with joints even and true. Tighten loose screws.
- Calk perimeter joints in sound insulated rooms with specified acoustical sealant.

F. Double Layer Application

- Apply base layer as specified for single layer application, except edge joints need not occur over framing members or be back blocked.
- Apply face layer with joints staggered in relationship to base and occurring over supports. Use combination of adhesive and screws if required to meet Manufacturer's specifications for fire-rated assembly. Apply screws attaching face layer through base layer into support for specified penetration.

G. Fastening

i. Using Screws

- Apply from center of board towards ends and edges.
- Apply screws 3/8 inch (10mm) minimum from ends and edges, one inch (25mm) maximum from edges, and 1/2 inch (13mm) maximum from ends.
- Spacing:
 - a. Ends: Screws not over 7 inches (175mm) on center at edges where blocking or framing occurs.
 - b. Wood Framed Walls And Ceilings: Screws 7 inches (175mm) on center in panel field.
 - c. Metal Framed Walls: Screws 12 inches (300mm) on center in panel field.
- Set screw heads 1/32 inch (0.8mm) below plane of board, but do not break face paper. If face is accidentally broken, apply additional screw 2 inches (50mm) away.
- Screws on adjacent ends or edges shall be opposite each other.
- Drive screws with shank perpendicular to face of board.

ii. Using Nails

- For fire-rated or sound-rated assemblies, application shall conform to construction tested.
- Nails used at edges or ends of the boards shall be located not more than 1 in. (25 mm) and not less than 3/8 in. (10 mm) from those edges and ends. While driving nails, the board shall be held in firm contact with the underlying support.

- Application of nails shall proceed from the center, or field, of the board to the ends and edges. Heads shall not be dimpled or set below surface of pre-decorated gypsum board.
 - Color pin nails shall be driven 8 in. (200 mm) on center at edges and intermediate studs and shall penetrate framing not less than $\frac{7}{8}$ in. (22 mm). Color pin nails shall be driven using a plastic or padded hammer to prevent chipping the paint from the nail head.
- iii. Using Adhesives (Mechanical Attachment)
- Pre-decorated gypsum board shall be permitted to be pre-bowed lengthwise (concave face) to aid in assuring continued contact with the framing/backing while adhesive bond strength develops.
 - A bead of adhesive $\frac{3}{8}$ in. (10 mm) in diameter shall be applied to the face of all wood framing members, except plates, that support the gypsum board. With the application of the gypsum board, the adhesive shall spread to an average width of $\frac{3}{4}$ in. (19 mm) approximately $\frac{1}{16}$ in. (1.5 mm) thick.
 - Where a joint occurs, two parallel beads of adhesive $\frac{3}{8}$ in. (10 mm) in diameter shall be applied, one near each edge of the framing members.
- iv. Fastener Spacing
- For walls, if adhesive properties are such as to assure bridging between pre-decorated gypsum board and framing, permanent fasteners 16 in. (400 mm) on center maximum are required only at the top and bottom. If adhesive properties are such that there is no positive bridging between board and framing, temporary bracing shall be required to ensure contact between board, adhesive, and stud face until adhesive bond strength develops. Nails shall provide not less than $\frac{7}{8}$ in. (22 mm) penetration into wood framing. Screws shall provide not less than $\frac{5}{8}$ in. (16 mm) penetration into wood framing and $\frac{3}{8}$ in. (10 mm) penetration into steel framing.
 - Staples shall be driven with crowns parallel to the framing member and only where they will not be left exposed. Staples shall be spaced not to exceed 8 in. (200 mm) on center and penetrate the framing not less than $\frac{5}{8}$ in. (16 mm).
- v. Lamination to Solid Backing
- Over a gypsum board or smooth plaster surface, $\frac{3}{8}$ in. (10 mm) diameter beads of adhesive shall be applied not less than 16 in. (400 mm) on center to the pre-decorated gypsum board or substrate with continuous beads approximately 1 in. (25 mm) from edges.
 - Over interior masonry or concrete, adhesive shall be applied either as specified in 7.6.1, with beads spaced 12 in. (300 mm) on center throughout, or in daubs not less than 2 in. (50 mm) in diameter, $\frac{1}{2}$ in. (13 mm) thick, spaced 12 in. (300 mm) to 16 in. (400 mm) each way with a row located 1 in. (25 mm) from each edge of all vertical joint locations.

- Pre-decorated gypsum board shall be positioned not less than ¼ in. (6 mm) from the floor and shall provide a tight fit at abutting edges. Pre-decorated gypsum board shall not be slid into place. Either pre-bowed board shall be used, or mechanical fasteners or temporary bracing shall be used as required to support the pre-decorated gypsum board until the adhesive sets.

H. Finishing

i. General

- Tape and finish joints and corners throughout building as specified below to correspond with final finish material to be applied to gypsum board. When sanding, do not raise nap of gypsum board face paper or paper-faced trim.
- First Coat:
 - a. Apply tape over center of joint in complete, uniform bed of specified taping compound and wipe with a joint knife leaving a thin coating of joint compound. If metal corner bead is used, apply reinforcing tape over flange of metal corner bead and trim so half of tape width is on flange and half is on gypsum board.
 - b. Completely fill gouges, dents, and fastener dimples.
 - c. Allow to dry and sand lightly if necessary to eliminate high spots or excessive compound.
- Second Coat:
 - a. Apply coat of specified joint compound over embedded tape extending 3-1/2 inches 88 mm on both sides of joint center. Use finishing compound only if applied coat is intended as final coat.
 - b. Re-coat gouges, dents, and fastener dimples.
 - c. Allow to dry and sand lightly to eliminate high spots or excessive compound.
- Third Coat: Apply same as second coat except extend application 6 inches 150 mm on both sides of joint center. Allow to dry and sand with fine sandpaper or wipe with damp sponge.
- Fourth Coat: Apply same as second coat except extend application 9 inches 425 mm on both sides of joint center. Allow to dry and sand with fine sandpaper or wipe with damp sponge.

ii. Finishing Levels

- Gypsum Board Surfaces not painted or finished:
 - a. GA-214-96 Level One: Joints and interior angles shall have tape set in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable.
 - b. INFORMATION: In all ceilings, it is critical that ceiling be smooth before installing ceiling tile. Drywall joints must be taped as specified in this Section.
- Gypsum Board Surfaces to Receive and Painted Texturing.
 - a. Joints and interior angles shall have tape embedded in joint compound and two separate coats of joint compound applied over flat joints and one separate coat of joint compound applied over interior angles.

- b. Cover fastener heads, and accessories with three separate coats of joint compound.
 - c. Joint compound shall be smooth and free of tool marks and ridges.
 - d. Coat prepared surface with specified primer/surfacer.
- I. Cleaning: Remove from site debris resulting from work of this Section including taping compound spills.

C.1.2. Fiber Cement Drywall Systems

❖ Performance Requirements

- A. Fiber Cement Board for Ceiling: Refer to Supplier's technical specifications for description, required equipment, application and testing procedures, etc. Submit sample for Architect's approval.
- B. Ceiling Board Accessories
- i. Carrying Channel: C-channel, 38mm x 12mm or as per Manufacturer's standard
 - ii. Furring Channel: Gauge 24 galvanized steel with Channel clips. Dimension as per Manufacturer's standard
 - iii. Angle Plate: 3mm x 50mm x 50mm
 - iv. Hanger rod: 6mm at 1200mm on center along carrying channel
 - v. Fasteners:
 - Angle to concrete Wall: Drive pins for use of power driven tools
 - Board to Framing: Type S Bugle Head for use with power driven tools
 - Sealant and Caulking: As recommend by ceiling board manufacturer
- C. Fiber Cement Board Walls
- i. Stud framing: minimum of 0.60mm BMT (Base Metal Thickness) galvanized steel. Dimension as per Manufacturer's standard
 - ii. Maximum fastener spacing shall be 200mm.
 - iii. Frame members shall have a minimum width of 38mm; maximum stud spacing of 610mm and max. noggling spacing of 1220mm.
 - iv. Use 6mm thick fiber cement board for walls on L25 x 25 x 4.5 mm thick vertical angle bar and 25 x 4.5 mm thick for downspout chase. 12mm thick fiber cement to base/under sheeting on stone cladding on exterior wall.
- D. Fixings: Shall be rust proof, galvanized screws or nails; or proprietary fixings from approved ceiling manufacturer.
- E. Concealment Treated Material
- i. Include joint tape, and embedding and finished types of joint compound, concealment treatment materials shall be the product of single manufacturer.

- ii. Note: Where wood nailers are to be used in lieu galvanized steel framing as indicated on the drawings, refer to SECTION 06110 -- Wood Framing of the MasterFormat.

❖ Execution

A. Fixing (For Ceiling)

- i. Install galvanized steel framing system according to manufacturer's standard.
- ii. Boards are to be fixed on galvanized steel framing spaced as shown on plans. For coastal area fix galvanized steel furring shall be painted with rust-inhibitive epoxy primer.
- iii. Fasteners for fixing should be self-embedding head.
- iv. Joints shall be with 6mm open groove.
- v. See details of the drawings for the installation of fiber cement board where it is applied as finishes.

B. Finishing: The fiber cement board panels are to be treated with one coat alkali resisting primer sealer to each face before installation and finished with two coats acrylic emulsion paint, or as otherwise shown on plans or as directed by the consultant.

C. Fiber cement wall boards shall be installed with a gap of 6mm from the finish floor and finished with a suitable sealant and gap filler.

C.1.3. Mineral wool Insulation.

For thermal and sound insulation, with inherent fire resistance. 50mm material thickness. Rockwool or approved equivalent.

Application: For all types of drywall installations requiring sound insulation.

C.2. Woodwork

C.2.1. Interior Finishing Carpentry

❖ Performance Requirements

- Architectural Woodwork Quality Standards (AWI) Custom Grade is minimum acceptable standard, except where explicitly specified otherwise, for installation of architectural woodwork.
- Provide cabinet hardware and accessory materials associated with architectural cabinets.
- Anchors: Selected material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed – steel expansion sleeves for drilled-in-place anchors.
- Adhesives, General: Do not use adhesives that contain urea formaldehyde.
- Adhesive for Bonding Plastic Laminate: Unpigmented contact cement.

- Adhesive for Bonding Edges: Hot-melt adhesive or adhesive specified above for faces
- Use maximum lengths possible, but not required to exceed 10 feet or 3 meters without joints. No joints shall occur closer than 72 inches or 1.80 m in straight runs exceeding 18 feet or 3.60 m. Runs between 18 feet or 3.60 m and 10 feet or 3 meters may have no more than one joint. No joints shall occur within 72 inches or 1.80 m of outside corners, nor within 18 inches or 450 mm of inside corners.
- Moisture content shall be 6 % maximum at fabrication. No opening of joints due to shrinkage is acceptable.
- ❖ Delivery, Handling, and Storage
 - Do not deliver woodwork until painting and similar operations that could damage the woodwork have been completed in installation areas.
 - Protect architectural woodwork from moisture and damage while in transit to job site. Unload and store in place where it will be protected from moisture and damage and convenient to use.
- ❖ Installation
 - Install Architectural Woodwork after wall and ceiling painting is completed in areas where Architectural Woodwork is to be installed.
 - Fabricate work in accordance with measurements taken on Project site.
 - Scribe, miter, and join accurately and neatly to conform to details.
 - Exposed surfaces shall be machine sanded, ready for finishing.
 - Allow for free movement of panels.
 - Countersink nails. Countersink screws and plug those exposed to view.
 - Install cabinets without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.
 - Install cabinets with no more than 3mm in 2400mm sag, bow, or other variation from a straight line.
- ❖ Adjustments and Cleaning
 - Replace interior finish carpentry that is damaged or does not comply with requirements. Interior carpentry may be repaired or refinish if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery for uniform appearance.
 - Replace interior finish carpentry on exposed and semi-exposed surfaces. Touch-up factory-applied finishes to restore damaged or soiled areas.
- ❖ Protection
 - Protect installed products from damage from weather and other causes during remainder of the construction period.
 - Remove and replace finish carpentry materials that are wet, moisture damaged, and mold damaged.

- Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging or irregular shape.
- Indications that materials are mold damage include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

C.3. Waterproofing

C.3.1. Liquid Applied Flexible Cementitious Acrylic Membrane

- a. All surface preparation and application of materials shall strictly follow the manufacturer's specifications.
- b. All waterproofing works shall have a minimum guarantee of five (5) years and a certificate must be issued to client upon completion.
- c. Scope. This specification covers the requirements relating to waterproofing treatment of concrete & masonry structures, both above and below grade; vertical and horizontal as specified herein.
- d. Materials. Unless otherwise specified in the drawings, accepted types of waterproofing are listed below. Submit product technical specifications, required equipment, application & methodology, testing procedures, and samples for Architect's approval.

C.4. Doors and Windows

C.4.1. Aluminum Doors and Frames

A. Performance Requirements

- i. Frames and panel members shall be the fabricated from extruded aluminum sections true to the details with clean, straight, defined profiles and free from defects impairing strength, durability and appearance.
- ii. Extruded aluminum sections shall conform to the specification requirements of ASTM B-211.
- iii. Screws, nuts, washers, bolts, rivets and other miscellaneous fastening devices shall be made of non-corrosive materials such as aluminum and stainless steel.
- iv. Hardware for fixing and locking devices shall be closely matched to the extruded aluminum section and adaptable to the type and method of opening.
- v. Vinyl weather strip shall be first class quality flexible vinyl forming an effective seal and without adverse deformation when installed.
- vi. Pile weather strip shall be silicon treated and free from residual wetting agents and made of soft fine hair as on wool, fur, etc.
- vii. Glazing shall conform to the requirement specified in Item - Glass and Glazing Specifications.

B. Fabrication and Installation

- i. For all assembly and fabrication works, the cut ends shall be true to line and accurately jointed, free of burrs and rough edges.
- ii. Cut-out recesses, mortising, grinding operation for hardware shall be accurately made and properly reinforced when necessary.

- iii. Main frame shall consist of head, sill and jamb stiles specifically designed and machined to inter-fit and be joined at comers with self-threading screws.
- iv. Frame sill shall be stepped and sloped with offset weep holes for efficient drainage to the exterior.
- v. Door panel shall be accurately joined at comers assembled and fixed rigidly to ensure weather tightness.
- vi. Aluminum glass door and main frame shall be installed in a prepared opening to be set plumb, square, level and true to details.
- vii. All joints between metal surface and masonry shall be fully caulked to ensure weather tightness.
- viii. Sliding type door panel shall be equipped with concealed roller overhead tracks with bottom guide.
- ix. Double action type door panel shall be equipped with heavy duty hinges that will control the door leaf in a close or open position.
- x. Weather strip shall be furnished on edges at the meeting stiles of doors.
- xi. Where aluminum is to be in contact with steel, concrete, cinder, block, tile, plaster or other similar masonry construction, the aluminum surface shall be back painted with bituminous paint before erection.
- xii. Exposed Aluminum surface shall be electro-type anodized or powder-coated or as indicated in the drawings.

C. Protection

- i. All aluminum parts shall be protected adequately to ensure against damaged during transit and construction operations.
- ii. Aluminum parts in contact with steel members shall be properly insulated by a coat of zinc chromate primer applied to the steel or by application of bituminous paint.

D. Cleaning: The Contractor shall protect all entrance units during construction and shall be responsible for removal of protective materials and cleaning of all aluminum surfaces.

E. Hardware: Ball bearing hinges for side hung doors and overhead pocket hardware for track and roller types, and, door seals, door stoppers, door closers, barrel bolts, cane bolts, foot bolts, handle bars, screens, latches, hooks, locksets shall be suitable for the service required and subject to the approval of the supervising Architect.

C.4.2. Wooden Doors

A. Performance Requirements

- i. Verify specifications according to Manufacturer and submit samples subject to approval of the Architect.
- ii. Solid Wood Panel Doors
Lumber shall be kiln-dried, S4S, sound, hard and free of defects. Use one color or shade for assembly framings that are exposed.

Maximum moisture content, 12% for lumber with thickness of 25mm (1") or less; 16% moisture content for all others.

iii. Plywood Flush Doors: Submit sample for Architect's approval.

B. Delivery, Storage, and Handling

- i. Do not have doors delivered to building site until after plaster, cement, and taping compound are dry. If doors are to be stored at job-site for more than one week, seal top and bottom edges if not factory sealed.
- ii. Store flat on a level surface in a dry, well ventilated building. Cover to keep clean but allow air circulation.
- iii. Handle with clean gloves and do not drag doors across one another or across other surfaces.
- iv. Do not subject doors to abnormal heat, dryness, or humidity or sudden changes therein. Condition doors to average prevailing humidity of locality before hanging.

C.4.3. Aluminum Windows

A. Performance Requirements

- i. Aluminum extrusions must conform to ASTM Specification 6063-15.
- ii. Accessories: Provide for neat fixation to one another using concealed hardware connectors and stiffeners at mullions.
- iii. Fastening devices: cadmium or zinc plated
- iv. Anchor bolts, pressed or rolled anchor accessories: galvanized
- v. Casement and Projected Type handles: Zinc alloy high pressure die-cast with solid stem

B. Fabrication

- i. Factory-prefabricate all frames in accordance to the designs and dimensions indicated in the drawings.
- ii. Cut, join and fit rails and stiles to hairline joints securely reinforced and jointed by means of concealed fastening wherever possible.
- iii. Protective Coating: Clean all surfaces and apply a protective coating of clear, water-white methacrylate-type lacquer, resistant to alkaline, mortar and plaster immediately after fabrication and may not be removed even after completion of installation.

C. Installation

- i. Set and anchor as shown in details and in approved shop drawings.
- ii. Set frames plumb and square and brace where necessary to prevent distortion. Windows shall not be forced and shall be securely anchored into the supporting construction.
- iii. Wedge clear of masonry all frames set in prepared openings 4.5mm (3/16") to 6mm (1/4") to allow for caulking.
- iv. Install hardware to fit details as shown in the drawings and as per manufacturer's specification. Supply all necessary templates and instructions required.

D. Adjustments

- i. Adjust all frames and attach hardware before glazing.
- ii. Secure all windows to be watertight and all hardware operating free & easy.
- iii. Surfaces, stains and discoloration shall be cleaned and restored or the window shall be replaced.

C.4.4. Hardware

❖ Common Finish Hardware Requirements

A. Performance Requirements

- i. Finishes for steel, brass, or bronze hardware items shall be US26D, Chromium plated, satin, except flat goods which may be US32D, stainless steel, satin. Materials other than steel, brass, or bronze shall be finished to match the appearance of US26D / 32D.
- ii. Fasteners shall be of suitable types, sizes and quantities to properly secure hardware. Fasteners shall be of same material and finish as hardware unless otherwise specified. Fasteners exposed to weather shall be non-ferrous or corrosion resisting steel.
- iii. For doors that will strike an object, provide rubber bumper or door stop. Type and location of installation shall be approved by the Consultant.
- iv. For heavy frequently-used doors with closer and mortise locks provide stainless steel plates.
- v. For double leaf wooden door provide 2 flush bolts 450mm (18") long.
- vi. For silencing the door when it strikes the stop strip and to prevent rattles, install three (3) silencers on the top of the frames.
- vii. Provide rubber silencer installed at jambs.

B. Delivery, Storage, and Handling

Neatly and securely package hardware items by hardware group and identify for individual door with specified group number and set number used on Supplier's hardware schedule. Include fasteners and accessories necessary for installation and operation of finish hardware in same package.

C. Installation and Protection

- i. Install hardware to fit details as shown in the drawings and as per manufacturer's specifications. Supply all necessary templates and instructions required.
- ii. Hinges:
Center of top hinge not more than 20cm below top of door; Center of bottom hinge not more than 20cm above finished floor; Intermediate hinges shall be equidistant between top and bottom hinges.

- iii. Door closers: unless otherwise indicated, install door closers on the interior side (room side) of doors opening to a hallway or corridor.
- iv. After installation, protect hardware from paint, stains and discoloration until acceptance of work. All hardware shall be checked and adjusted such that they operate properly or else shall be replaced by Contractor. Keys shall be identified and labeled and submitted to the Owner.

❖ Closing Devices

A. Performance Requirements

- i. Closers provided under this Section shall be from same Manufacturer.
- ii. Provide parallel arms on closers unless door position in relation to adjacent wall requires otherwise. Provide covers.
- iii. Closers shall allow for 180 degree opening and not be used as a stop.
- iv. Closers shall have following features:
 - v. Adjustable sweep speed & backcheck
 - vi. Non-handed, non-sized.

B. Installation and Adjusting

- i. Mount closers on stop side of door wherever conditions permit.
- ii. Through-bolt hardware-to-door connections.
- iii. Adjust closers to provide maximum opening force as required by governing code authority and proper back-check and sweep speed.

❖ Stops and Holders

A. Performance Requirements

- i. Use stainless steel magnetic wall and floor stops.
- ii. Provide model appropriate for substrate.
- iii. Stops shall be stainless steel.

B. Installation

Interface with other work: When using overhead stops, coordinate installation with door closer and other door hardware.

C.5. Glass and Glazing

C.5.1. For Doors and Windows

❖ Performance Requirements

- A. Caulking, Sealing and Glazing Compound: Perimeter sealing of aluminum window frames shall be silicone sealant transparent, as manufactured by DOW CORNING or approved equivalent.
- B. Caulking and Weather Stripping: Rubberized vinyl for all aluminum windows.
- C. Glass Putty: Imported, good grade, to be tested prior to installation for steel windows.
- D. Refer to drawings for glass schedule, sizes, dimension, and location.

- ❖ Preparation and Installation
 - A. Safety precautions and procedures shall be observed in determining the sizes and in providing the required clearances by measuring the actual opening to receive the glass.
 - B. All glass shall be accurately cut to fit openings and set with equal bearing on the entire width of plane.
 - C. Movable items or parts shall be kept in a closed and locked position until after the glazing compound has thoroughly set.
 - D. All glass sheets shall be bedded, back puttied, secured in place and face puttied. Secure glass in aluminum frame with non-corrosive clips except where glazing beads are required.
 - E. Place spring wire or angle glazing clips and run face putty. Remove excess putty from other side flush with edge of rebate.
 - F. Apply a thin layer of putty to rebate and set glass. Apply putty by pressing into an even bed secured.
 - G. Apply putty in uniformly straight lines, parallel with inside of glazing rebate, with accurately formed bevels and clean cut corners then remove excess putty from glass and frames.
 - H. Set glass in hollow metal doors and in metal frames of interior partitions in felt channel insets or bedded in putty to prevent any rattle.
 - i. Secure glass in wood doors and wooden frames with glazing stops.
 - ii. Secure stops on doors with screws.
 - I. Corners shall be carefully made. All excess putty shall be removed and surfaces left clean.
 - J. Glass breakage caused in executing the work or by faulty installation shall be replaced by the Contractor without extra cost.
 - K. Improperly installed glass which does not fully meet the requirements of its grade, will not be accepted and shall be replaced without extra cost.
 - L. The Contractor shall provide and install complete set, ready-to-use mirrors in all comfort rooms and elsewhere shown on the plans. The sizes and location for each mirror shall be as indicated on the plans or as directed by the Architect.

C.6. Finishing

C.6.1 Tiling

- ❖ Ceramic Tiling
 - A. Performance Requirements

Ceramic tiles and trims shall be made of clay, or a mixture of clay and other materials which is called the body of the tile classified by ASTM C-242 as to their degree of water absorption. The component should be manufactured either by dust pressed process or by plastic process in which the clays are made plastic by mixing with water, shaped by extrusion or in molds and then fired.

 - i. Standard grade tile, solid throughout, graded in accordance with ANSI A137.1-1988.

- ii. Coefficient of Friction when tested in accordance with ASTM C1028: 0.6 (wet) minimum and 0.8 (wet) at ramps.
- iii. Glazed Tile
 - Glazed tiles and trims shall have an impervious face of ceramic materials fused on to the body of the tiles and trims.
 - The glazed surface may be clear white or colored depending on the color scheme approved by the Architect.
 - Standard glaze may be bright (glossy) semi-matte (less glossy) matte (dull) or crystalline (mottled and textured), good resistance to abrasion.
 - Glazed tiles shall be used for walls. Crystalline glazed tiles may be used for floors provided that these are used as light duty floors.
- iv. Unglazed Tile
 - Unglazed tiles shall be hard dense tile of homogeneous composition. Its color and characteristics are determined by the materials used in the body, the method of manufacture and the thermal treatment. Unless otherwise specified, used unglazed tiles for all floors as indicated on the Plan.
 - Trims are manufactured to match wall tile color, texture and to coordinate with it in dimension.
 - These are shaped in various ceramic trim units such as caps, bases, coves, bull-nose, corners, angles, etc. that are necessary for edging or making a transition between intersecting surfaces.

B. Surface Preparation

- i. Mortar mix for scratch coat and setting bed shall consist of one part Portland cement, ¼ part lime and 3 parts sand by volume.
- ii. Surface to receive tile must be level, true to elevation, dry, free from dirt, oil and other kinds of ointments.
- iii. Allow at least seven days curing of scratch coat and setting bed. Installation work shall not be allowed to proceed until unsatisfactory conditions are corrected.
- iv. Thoroughly dampen surfaces of masonry or concrete before scratch coat is applied.
- v. On masonry surface apply first a thin coat with pressure then bring it out sufficiently to compensate for the major irregularities of the surface to a thickness not less than 10 mm at any point.
- vi. Evenly rake the scratch coat to provide good mechanical key before the mortar mix has fully hardened.

C. Installation

- i. Ceramic Glazed Wall Tiles
 - Ceramic tiles shall be soaked in clean water prior to installation for a minimum of hour.
 - Determine and mark layout of ceramic tiles as to joint location, position of trims and fixtures so as to minimize cutting less than one half size of the tile.
 - Thoroughly dampen surface of wall but not to saturate the surface.

- Apply a bond coat mix with consistency of cream paste 1.5 mm thick to the wall surface or to the back of the tile to be laid.
 - Lay the tiles true to profile then exert pressure and tamp tile surface before the bond coat mix has initially set.
 - Continue with the next full tile to be laid and pressed firmly upon the setting bed tamped until flush and in place of the other tiles.
 - Intersections and returns shall be formed accurately using the appropriate trim.
 - All lines shall be kept straight and true to profiles, plumbed and internal comers rounded using the appropriate trims.
- ii. Vitrified Unglazed Floor Tiles
- Before tile is laid to the floor, surface shall be tested for levelness or uniformity of slope by flooding it with water. Area where water ponds are filled and leveled, shall be tested again before the setting bed is applied.
 - Establish the lines of borders and center of the walls at the field work in both directions to permit the pattern to be laid with a minimum cutting of tiles.
 - Clean concrete sub-floor then moisten but do not soak. Then, sprinkle dry cement over the surface and spread the mortar on the setting bed.
 - Apply and spread mortar mix for setting bed and tamp to assure good bond over the entire area to be laid with tile.
 - Pitch floor to drain as shown on Plans or as directed by the Architect or Engineer.
 - Allow the setting bed to set sufficiently, then spread a bond coat over the surface and lay the tile.

D. Grouting and Pointing

- i. Before grouting of joints, tiles shall have been laid in place for at least 24 hours. Grouting mortar shall be white Portland cement or blended with pigments to acquire the color appropriate for the ceramic tiles.
- ii. Grouting mortar shall be applied over the tile by float or squeegee stroked diagonally across the joints.
- iii. Remove excess mortar with a wet sponge stroked diagonally or in a circular motion after 12-15 minutes.
- iv. Follow with a barely damp or dry sponge to remove remaining haze while smoothing all grouted joints.

E. Cleaning

- i. Clean ceramic tiles surface thoroughly as possible upon completion of grouting.
- ii. Remove all grout haze, observing tile manufacturer's instructions as to the use of acid or chemical cleaners.
- iii. Rinse tile thoroughly with clean water before and after using chemical cleaners.
- iv. Polish surface of tile with soft cloth.

F. Protection

- i. Prohibit foot and wheeled traffic from floors for a minimum of 3 days. Where traffic is unavoidable, provide large flat boards in walkways and wheelways for a minimum of 7 days after installation
- ii. Apply a protective coat of neutral cleanser solution diluted with water in the proportion of 1:4 or one liter cleanser concentrate to one gallon of water.
- iii. In addition, cover tile flooring with heavy duty non-staining construction paper, taped in place.
- iv. Just before final acceptance of the work, remove paper and rinse the protective coat of neutral cleaner from the tile surface.
- v. Do not let protective paper get tom or removed.

❖ Tile Adhesives and Grouts

A. Performance Requirements

- i. **Use tile adhesives, tile grout, and grout sealer by ABC, MORTABOND or BETONIT or other approved equivalent supplier.**
- ii. Adhesives, grouting, and grout sealer shall be best suited for the type of application, vertical or horizontal, and compatible with the type of tiles to be used with..
- iii. Regular ceramic floor and wall tiles shall use regular-grade tile adhesive conforming to ANSI 118.1 and PNS ISO 13007 – 1:2005 Type C1 (PH).
- iv. Large format ceramic / homogeneous tiles shall use heavy-duty single - component Polymer-Modified grade tile adhesive conforming to ANSI 118.4 and PNS ISO 13007 – 1:2005 Type C2 (PH).

B. Delivery, Storage, and Handling

Deliver and store packaged materials in their original unopened containers with labels intact until time of use. Store and handle materials in a manner to prevent damage or contamination by water, freezing, or foreign matter.

C. Execution

i. Surface Preparation

- Surfaces must be structurally sound, stable and rigid enough to support ceramic / stone and similar finishes. Substrate deflection under all live, dead, and impact loads, must not exceed industry standards of $L / 360$ for thin bed tile installation.
- All surfaces must be plumb and true to within 1/4" in 10 feet (6mm in 3m).
- The concrete backing or substrate must be fully cured, structurally sound, clean and free from dirt, oils or waxy films, loose materials, concrete sealers, curing compounds and other chemicals.
- Rough or uneven surfaces must be made smooth and may require the use of leveling, patching, or underlayment material.

ii. Mortar

- Mixing of Adhesive Mortar

- a. Mix in any non-absorbent mixing container such as plastic, steel or iron sheet.
- b. Mix with sufficient quantity of adhesive mortar that may be used in within the pot life of 3 to 4 hours. A 25-kg. of adhesive mortar with 6-8 liters of clean water. Stir and mix again briefly after 15 minutes.
- Application
 - a. Dampen the concrete backing or substrate, especially when installing in temperatures over 35°C.
 - b. Lay the mortar with thickness of 3mm or more depending upon the surface finish and type of tile used. To speed up the work, the tile adhesive may be laid over a wide area that can be worked on within 15 minutes.
 - c. Periodically check back of tile to ensure proper coverage. (Interior – 80% minimum; Exterior or wet – 95% minimum).
 - d. Use the paste within 3 hours or while the paste is sticky. For as long as the paste sticks to the fingers, it is still active and usable. Otherwise, it has expired and must be discarded.
 - e. Wipe off excess mortar with a wet cloth until the tiles are clean.
 - f. Keep all foot traffic off the installation until the tile is firmly set (approximately 24 hours).
 - g. Apply grout at least one (1) day after the tiles have been installed.
- Cleaning
 - Remove excess mortar on tools and tile surface while mortar is still fresh, using clean water.

iii. Grout

- Place a quantity of colored grout sufficient to cover five (5) square meters of tiled area at a time.
- Mixing
 - a. Gradually add water and mix with a spatula until a uniform thick pasty consistency is attained. On average, 0.40 x 0.40m, 0.30 x 0.30m, 0.20 x 0.20m with about 3mm joint width requires ½ kilo per square meter of Mortar Grout. For every 2 ½ kilos of mortar grout, slightly less than a liter of clean tap water should be added.
 - b. Use immediately the mixed grouting paste.
- Application
 - a. Joints may be filled after tiles have set overnight. Areas laid with non-vitrified or unglazed tiles must be dampened with water prior to grouting to avoid staining and premature drying.
 - b. Use rubber faced float; spread the prepared paste diagonally across the tile joints, pressing deeply to ensure that the joints are thoroughly filled. With a second stroke, remove any excess deposited on the tile faces.
 - c. After about 5 minutes, when the filled is still moist, but sufficiently set, and the residue on the tile faces begins to form into a haze, apply a very wet sponge to even out the filled joints, employing repeated light diagonal strokes, until the filled is flush with the tiles. Wash the sponge, wring out as much water as

possible, then tool the filled joints by lightly running the sponge along the lines of the joints.

- **Cleaning**

Wipe any remaining residue with a soft dry cloth to restore the tiles true gloss and texture.

C.6.2 Paints and Coatings

- ❖ **Performance Requirements**

All paint materials shall be delivered on the job-site in their original containers with labels and seals unbroken. Manufacturer or brand of painting materials to be used shall either be **Davies, Boysen, or an approved equal**. All schedule/mixing shall strictly follow the manufacturer's instructions and specifications.

A. Paint Applications

- White and Tinted Ready-Mix Paint: Finished coat on wood, metal, and concrete surface
- Enamel (alkyd) paint, White and Tinted: For interior wood walls and ceiling
- Latex-based / Acrylic Emulsion Paint, Flat, White, and Tinted: For exterior & interior concrete and masonry surfaces and properly primed wood and metals.
- Elastomeric Paint: For application on interior & exterior masonry

B. Tinting Color

Tinting colors shall be first grade pigments ground in alkyd resin, which disperse and mix easily with paint to produce the colors desired.

C. Patching Compound

Patching compound shall be fine powder material that can be mixed into putty consistency with oil base primers and paints to fill minor surface dents and imperfections.

D. Natural Wood Paste Filler

Wood paste filler shall be quality filler ready mixed in can for filling and sealing open grains of interior wood. It shall produce a level finish for succeeding coats of paint, varnish or lacquer and other related products.

E. Wood Stain

Wood stain shall contain colored pigments and oil which penetrate the wood and provide a rich and lasting protective stain.

F. Varnish

Varnish shall be extremely durable clear coating, highly resistant to wear and tear without cracking, peeling, whitening, spotting, with minimum loss of gloss for a maximum period of time.

G. Lacquer

Lacquer shall be clear gloss, solid nitrocellulose base specifically formulated for use in the tropics. It shall exhibit fast solvent release and dries to a hard but flexible film with high gloss effect.

H. Sanding Sealer

Sanding sealer shall be quality for wood surfaces that provides a non-absorbent base for color treatment which are applied on it. It shall exhibit hold out and sealing properties, fast drying and easy to smooth by sandpaper.

I. Glazing Putty

Putty shall be an alkyd-type product for filling minor surface unevenness.

J. Concrete Neutralizer

Neutralizer shall be quality surface conditioner to be diluted with water to neutralize lime activity in new exterior concrete surfaces improving paint adhesion and durability.

K. Silicone Water Repellent

Silicone water repellent shall be transparent water shield especially formulated to repel rain and moisture on exterior masonry surfaces;

❖ Execution

A. Surface Preparation

i. Surface Examination

No exterior paint or interior finishing shall be done under conditions which may jeopardize the quality or appearance of the painting or finishing.

ii. Preparation

- All surface to receive paint should be cleaned and in proper condition. Wood work shall be sanded and dusted clean. All knot holes, pitch pockets, or sappy portions shall be shellacked or sealed with knot-sealer.
- Nail holes, cracks or defects shall be carefully puttied after the first coat with putty matching color of the stain or paint.

iii. Interior Woodwork

Finishes shall be sanded between coats. Cracks, holes or imperfections in plaster shall be filled with patching plaster and smoothed off to match adjoining surfaces.

iv. Plaster or Masonry

- Masonry or plaster shall be completely dried before any sealer or paint is applied.
- After the primer sealer coat is dried, all visible suction spots shall be toughed up before the succeeding coats are applied.
- Work shall not be continued until after all spots have been sealed. In the presence of high alkali conditions, surfaces shall be washed to neutralize the alkali.

v. Metals

- Metal shall be clean, dry and free from mill scale, oil, grease and rust.
 - Unprimed galvanized metal shall be washed with metal etching solution and allowed to dry before applying primer.
 - Cleaned metal shall be primed with quality epoxy metal primer paint, red oxide primer or zinc-chromate primer.
- vi. Concrete and Brick Surface
- The surface shall be wire brushed clean. Glazed surface and those with traces of patching compound shall be sandpapered or acid etched before applying a primer.
- vii. Cleaning Methods
- Sandblasting: There are three general methods used in sandblasting:
 - a. Conventional Dry Sandblasting – The sand is not recycled. However, dust respirators and other safety precautions shall be observed since environment restrictions on dry blasting are becoming increasingly severe.
 - b. Vacuum Sandblasting – This method reduces health hazard, the sand is recovered outright. It is however costlier and less efficient compared with the dry blasting method. The vacuum method is useful inside shops and in areas where dust might damage machineries.
 - c. Wet Sandblasting – This method reduces the hazard of dust and may be required by legal restrictions. The wet sand and paint residues accumulate on ledges and other flat areas where rinsing operation is necessary.
 - Wire Brushing and Scraping: Power and hand wire brushing shall be used on small jobs in cleaning areas after sandblasting and on surfaces where sandblasting is not feasible.
 - Power Tools: Power tools such as rotary wire and disc tools, rotary impact chippers, and needle scalers shall be used if sandblasting is not feasible.
 - Water Blasting: Water blasting shall be used in cleaning and removing old paint from large masonry surfaces. It is generally used and acceptable for health and environmental requirements.
 - Acid-etching: Use an acid solution with or without detergent to roughen a dense glazed surface. Rinse thoroughly the acid-etched surface to remove the residual soluble reaction of calcium and magnesium chloride which affect the adhesion and stability of latex paint in particular.
 - Paint Remover: Both the conventional solvent based and the water rinseable type of paint remover may be used to remove old paint. Most paint removers contain wax, and this wax shall be removed completely before painting, for it could destroy adhesion and inhibit the drying of paint.
 - Alkali Cleaning
 - a. Alkali cleaners shall not be used on masonry surfaces adjacent to aluminum, stainless steel or galvanized metal.

- b. Surfaces which are cleaned with alkali cleaners must be thoroughly rinsed and cleaned with water. Residual alkali and detergents can cause greater damage to paint if they are not removed completely.
- viii. Surface Conditioning
 - All surfaces shall be in proper condition to receive the paint finish. Woodwork shall be hand-sanded smooth and dusted clean, with knotholes pitch pockets or sappy portions scaled with natural wood filler.
 - Nail holes, cracks or defects shall be carefully puttied after the first coat matching the color of paint.
 - Interior woodworks shall be sand-papered between coats. Cracks holes or imperfections in plaster shall be filled with patching plaster and smoothed off to match adjoining surfaces
 - Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer is applied.
 - When surface is dried, apply first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected, apply the finish coats as specified on the Plan in accordance with the approved color scheme.
 - Metals shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvanized metal with etching solution and allow it to dry.
 - Metal surfaces shall be primed with red oxide, red lead or epoxy primer as specified before final coat is applied.
 - Voids, cracks, and all other kinds of defects, shall be repaired with proper patching materials and finished flush with the surrounding surfaces.
 - Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer.
 - No painting and varnishing works shall be done during rainy or damp weather.
 - Varnish should not be applied when the temperature is too hot or cold. Allow appropriate ventilation during application and drying period.
 - All hardware shall be protected or removed prior to painting and varnishing operations.

B. Application

- i. Paints when applied by brush shall be non-fluid, and thick enough to lay down an adequate film of wet paint. Brush marks shall be flawed out after the application of paint.
- ii. Paints prepared for application by roller must be similar to brushing paint. It must be non-sticky when thinned to spraying viscosity to break up easily into droplets.

- iii. Paint is atomized by high pressure pumping rather than broken up by the large volume of air mixed with it. This procedure changes the required properties of the paint.

C. Workmanship

- i. All works shall be performed by experienced and skilled craftsmen to assure finished work of first class quality, appearance and durability.
- ii. All paints and other coatings shall be mixed and applied strictly in accordance with the manufacturers printed instructions.

D. Mixing and Thinning

- i. At the time of application, paint shall show no sign of deterioration. Paint shall be thoroughly stirred, strained and kept at a uniform consistency during application.
- ii. When thinning is necessary, this may be done immediately prior to application in accordance with the manufacturer's directions, but not in excess of 1 pint of suitable thinner per gallons of paint.
- iii. Kerosene shall not be used as paint thinner. Paints of different manufacturer shall not be mixed together.

E. Storage

- i. All materials to be used under this Item shall be stored in a single place to be designated by the Architect and such place shall be kept neat and clean at all time.
- ii. Necessary precautions to avoid fire must be observed by removing oily rags, waste, etc. at the end of daily work.

F. Cleaning

- i. All cloths and cotton waste which are fire hazards shall be placed in metal container or destroyed at the end of daily works.
- ii. Upon completion of work, all staging, scaffolding, and paint containers shall be removed and disposed.
- iii. Paint drips, oil, or stains on adjacent surfaces shall be removed and the entire job left clean and acceptable to the supervising Architect or Engineer.

C.6.3 Aluminum Composite Paneling System

❖ Performance Requirements

A. Panel system includes the following components:

- i. Aluminum faced composite panels with mounting system. Panel mounting system including anchorages, shims, furring, fasteners, gaskets and sealants, related flashing adapters, and masking (as required) for a complete watertight installation.
- ii. Parapet coping, column covers, soffits, sills, border, and filler items indicated as integral components of the panel system or as designed.

B. Maximum deviation from vertical and horizontal alignment of erected panels: 1/4 inch in 20 feet (6 mm in 6 m) non-accumulative.

C. Shop drawings shall show the preferred joint details providing a watertight and structurally sound wall panel system that allows no uncontrolled water penetration on the inside face of the panel system as determined by ASTM E 331. Systems not utilizing a construction sealant at the panel joints (i.e. Rout and Return Dry and Rear Ventilated System) shall provide a means of concealed drainage with baffles and weeps for water which may accumulate in members of the system.

D. Material compliance with ASTM D-3363 for hardness, ASTM D-4145 for flexibility, ASTM D-2247-87 for Humidity, ASTM E8 for tensile strength & elongation, ASTM C393 for flexural elasticity.

E. Panels

- i. Panel thickness shall be minimum 3mm for interior use and 4mm for exterior cladding use.
- ii. Aluminum alloy sheet thickness shall be a minimum of 0.3mm for interior applications and 0.5mm for exterior applications.
- iii. Two sheets of aluminum sandwiching a rigid core material.
- iv. Core Material: Polyethylene core (LDPE) or Class 1 non-combustible mineral-filled core.
- v. Finishes
 - Coil Coated Finishes: Coil coated in conformance with the following general requirements of AAMA 2605 and AAMA 620.
 - Finish coating shall be PVDF-based fluorocarbon or FEVE-based fluorocarbon coating, or as specified in the drawings.
 - Color: Color as selected from manufacturer's color palette or as custom matched by the panel supplier.

F. Accessories

- i. Extrusions, formed members, sheet, and plate shall conform to ASTM B 209 and the recommendations of the manufacturer.
- ii. Panel stiffeners, if required, shall be structurally fastened or restrained at the ends and shall be secured to the rear face of the composite panel with silicone of sufficient size and strength to maintain panel flatness. Stiffener material and/or finish shall be compatible with the silicone.
- iii. Sealants and gaskets within the panel system shall be as per manufacturer's standards to meet performance requirements.
- iv. Fabricate flashing materials from 0.030 inch (0.76 mm) minimum thickness aluminum sheet painted to match the adjacent curtain wall / panel system where exposed. Provide a lap strap under the flashing at abutted conditions and seal lapped surfaces with a full bed of non-hardening sealant.
- v. Fasteners (concealed, exposed and non-corrosive): Fasteners as recommended by panel manufacturer. Do not expose fasteners

except where unavoidable and indicated on the approved shop drawings. Match finish of adjoining metal.

- ❖ **Scope of Work**

The scope of work in this section includes the metal wall cladding materials including flashings, trims, cappings, sills, reveals support structures.
- ❖ **Submittals**
 - A. Prior to ordering any materials, submit the samples of all materials and finishes and fixings together with supporting technical data.
 - B. Prepare sample panel showing method of joining and corners.
 - C. Prepare and submit for approval shop drawings showing:
 - i. set out of panels
 - ii. construction details, including corners, returns, sills, reveal linings
 - iii. method of assembly
 - iv. connections and positioning to other materials and structures
- ❖ **Quality Assurance**
 - A. Comply with the following Standards unless otherwise noted.
 - B. All materials shall be approved, of the types indicated and specified, the best obtainable quality, free from all defects and shall conform to standards.
- ❖ **Delivery, Storage, and Handling**
 - A. Handle, store, and deliver all materials with methods that protect all items from damage and deterioration including temperature variations and excess wetting.
 - B. Remove and do not use any material with any damage or defect.
- ❖ **Project Conditions**
 - A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
 - B. Field measurements shall be taken prior to the completion of shop fabrication whenever possible. However, coordinate fabrication schedule with construction progress as directed by the Contractor to avoid delay of work. Field fabrication may be allowed to ensure proper fit. Field fabrication shall be kept to an absolute minimum with the majority of the fabrication being done under controlled shop conditions.
- ❖ **Panel System Fabrication**
 - A. Tolerances
 - i. Panel Bow: Maximum 0.8 percent of any 72 inches (1828 mm) panel dimension.

- ii. Panel Dimensions: Field fabrication shall be allowed where necessary, but shall be kept to an absolute minimum. All fabrication shall be done under controlled shop conditions unless indicated on approved shop drawings.
- iii. Panel lines, breaks, and angles shall be sharp, true, and surfaces free from warp and buckle.
- iv. Maximum deviation from panel flatness shall be 1/8 inch in 60 inches (3 mm in 1524 mm) on panel in any direction for assembled units. (Non-accumulative - No Oil Canning).

B. System Characteristics

- i. System shall not have any visible fasteners, telegraphing or fastening on the panel faces or any other exposed surface that compromises a neat and flat appearance.
- ii. System shall comply with the applicable provisions of the "Metal Curtain Wall, Window, Storefront, and Entrance Guide Specifications Manual" by AAMA and ANSI/AAMA 302.9 requirements for aluminum windows.
- iii. Fabricate panel system to dimension, size, and profile indicated on the drawings based on a design temperature of 70 degree F (21 degree C).
- iv. Fabricate panel system so that no restraints can be placed on the panel, which might result in compressive skin stresses. The installation detailing shall be such that the panels remain flat regardless of temperature change and at all times remain air and water tight.
- v. The finish side of the panel shall have a removable plastic film applied prior to fabrication, which shall remain on the panel during fabrication, shipping, and erection to protect the surface from damage. Remove masking as soon as possible after installation.

C. System Type

- i. Rout and Return Wet: system must provide a wet seal (caulked) reveal joint as detailed on drawings. The sealant type shall be as specified in Section 07920 and with foamed type backer rod as indicated or specified.
- ii. Rout and Return Dry:
 - System must provide a perimeter aluminum extrusion with integral weather-stripping as detailed on drawings.
 - No field sealant required in joints unless specifically noted on drawings.
- iii. Rear Ventilated Rain Screen: system must provide a reveal joint as detailed on drawings. Provide moisture barrier and sheathing as shown on drawings.
- iv. Pressure Equalized Rain Screen System: system must provide air/vapor barrier as indicated in AAMA 508.

❖ Execution

A. Examination

- i. Surfaces to receive panels shall be even, smooth, sound, clean, dry and free from defects detrimental to work.
- ii. Do not begin installation until substrates have been properly prepared. If substrate preparation is the responsibility of another installer, notify Contractor and Architect of unsatisfactory preparation before proceeding.

B. Installation

- i. Erect panels in accordance with manufacturer's requirements and approved shop drawings, plumb, level, and true.
- ii. Attachment system shall allow for the free and noiseless vertical and horizontal thermal movement due to expansion and contraction for a material temperature range of -20 degree F to +180 degree F (-29 degree C to 82 degrees C). Buckling of panels, opening of joints, undue stress on fasteners, failure of sealants or any other detrimental effects due to thermal movement will not be permitted. Fabrication, assembly, and erection procedure shall account for the ambient temperature at the time of the respective operation.
- iii. Panels shall be erected in accordance with an approved set of shop drawings.
- iv. Anchor panels securely per engineering recommendations and in accordance with approved shop drawings to allow for necessary thermal movement and structural support.
- v. Conform to panel fabricator's instructions for installation of concealed fasteners.
- vi. Do not install component parts that are observed to be defective, including warped, bowed, dented, abraded, and broken members.
- vii. Do not cut, trim, weld, or braze component parts during erection in a manner which would damage the finish, decrease strength, or result in visual imperfection or a failure in performance. Return component parts which require alteration to shop for rework, if possible, or for replacement with new parts.
- viii. Separate dissimilar metals and use gasket fasteners where needed to eliminate the possibility of corrosive or electrolytic action between metals.

C. Adjusting and Cleaning

- i. Remove and replace panels damaged beyond repair as a direct result of the panel installation.
- ii. Repair panels with minor damage as acceptable to the Architect.
- iii. Remove masking (if used) as soon as possible after installation.
- iv. Ensure weep holes and drainage channels are unobstructed and free of dirt and sealants.

D. Protection

- i. Protect installed products until completion of project.
- ii. Touch-up, repair or replace damaged products before Substantial Completion.

I **CERTIFY** that I have read the Technical Specifications of this project: Repair / Renovation of the 3rd Floor of the ECC Building with Reference no. PB-ECC-2023-10 and I **commit to deliver all the specifications enumerated therein:**

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____

Section VII. Drawings

[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]

PROPOSED THIRD FLOOR RENOVATION

Employees' Compensation Commission, 355 Senator Gil
Puyat Avenue, Makati City

Project Owner:
Employees' Compensation Commission

Project Architect:
Nikka N. Vinagrera

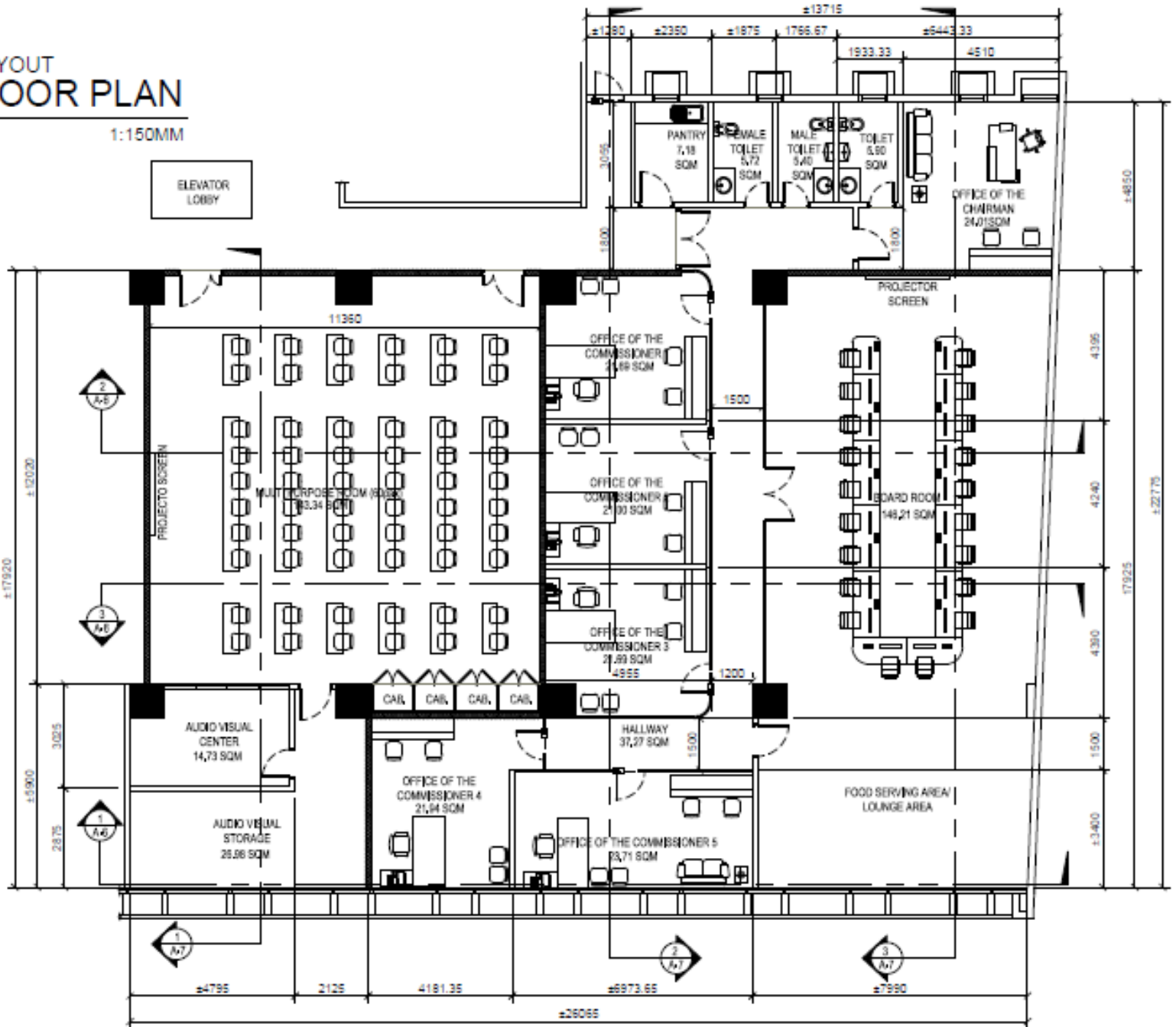
Date:
OCTOBER 2023

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A-1

FURNITURE LAYOUT THIRD FLOOR PLAN

SCALE: 1:150MM

AREA TABULATION		
1.	MULTIPURPOSE ROOM	145,34 SQM
2.	AUDIO VISUAL CENTER	14,73 SQM
3.	AUDIO VISUAL STORAGE	26,86 SQM
4.	PANTRY	7,18 SQM
5.	FEMALE TOILET	5,72 SQM
6.	MALE TOILET	5,40 SQM
7.	OFFICE OF THE CHAIRMAN	24,01 SQM
8.	CHAIRMAN'S TOILET	5,90 SQM
9.	BOARDROOM	148,21 SQM
10.	HALLWAY (BOARDROOM)	37,27 SQM
11.	OFFICE OF THE COMMISSIONER 1	21,69 SQM
12.	OFFICE OF THE COMMISSIONER 2	21,20 SQM
13.	OFFICE OF THE COMMISSIONER 3	21,69 SQM
14.	OFFICE OF THE COMMISSIONER 4	21,94 SQM
15.	OFFICE OF THE COMMISSIONER 5	23,71 SQM
TOTAL:		526,77 SQM

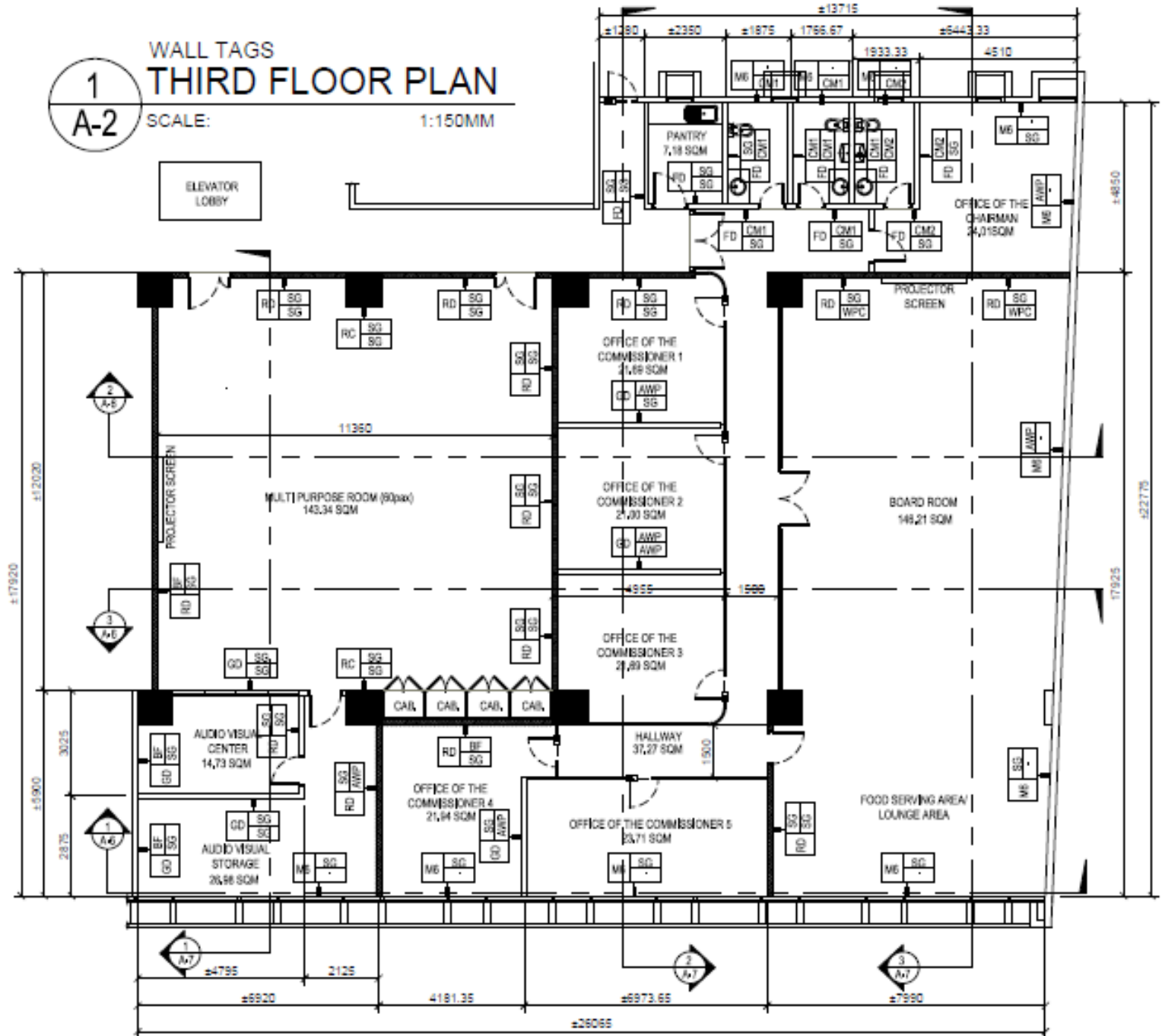


CODE	SPECIFICATIONS
FD-	100mm THK (9mm/9mm/12mm) FIRE-RESISTANT BOARD DRYWALL
GD-	100mm THK (9mm/12mm/16mm) GYPSUM BOARD DRYWALL
RD-	100mm THK (9mm/12mm/16mm) GYPSUM BOARD DRYWALL W/ 50MM THK ROCKWOOL INSULATION
M6-	150mm THK CHB WALL (EXISTING)
RC-	REINFORCED CONCRETE COLUMN/WALL (EXISTING)
WALL FINISHES:	
CODE	SPECIFICATIONS
BF	BARE FINISH
SG	PLAIN CEMENT PLASTERED WALL/DRYWALL/COLUMN IN SEMI-GLOSS LATEX PAINT FINISH SYSTEM (VERIFY COLOR) W/ 60mm HIGH SPC BASEBOARD
CM1	PLAIN CEMENT PLASTERED WALL/DRYWALL IN SEMI-GLOSS LATEX PAINT FINISH WITH 1.20MTS. HIGH 100mmx200mm POLISHED CERAMIC SUBWAY TILES WITH ANTI-BACTERIAL GROUTING (VERIFY COLOR & DESIGN)
CM2	PLAIN CEMENT PLASTERED WALL/DRYWALL IN SEMI-GLOSS LATEX PAINT FINISH WITH 1.20MTS. HIGH CERAMIC SUBWAY TILES WITH ANTI-BACTERIAL GROUTING (VERIFY COLOR & DESIGN)
AWP	PLAIN CEMENT PLASTERED WALL/DRYWALL/RC COLUMN IN BASIC SAND ACCENT WALLPAPER FINISH (VERIFY DESIGN) W/ 60mm HIGH SPC BASEBOARD
WPC	PLAIN CEMENT PLASTERED WALL/DRYWALL/RC COLUMN IN WOOD PLASTIC COMPOSITE (WPC) FLUTED WALL PANEL (VERIFY DESIGN) W/ 60mm HIGH SPC BASEBOARD

1
A-2

WALL TAGS THIRD FLOOR PLAN

SCALE: 1:150MM

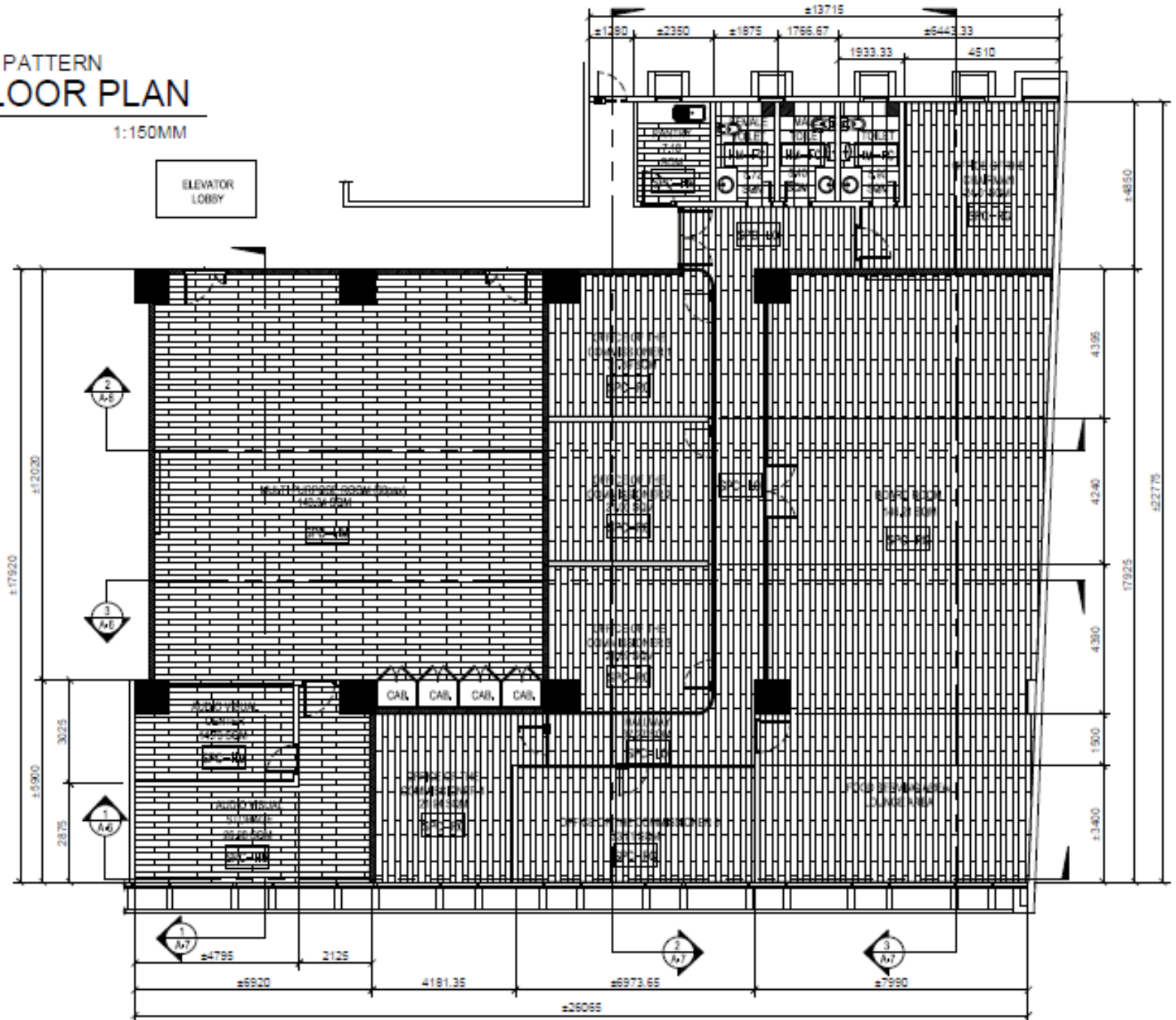


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A-3

FINISH FLOOR PATTERN THIRD FLOOR PLAN

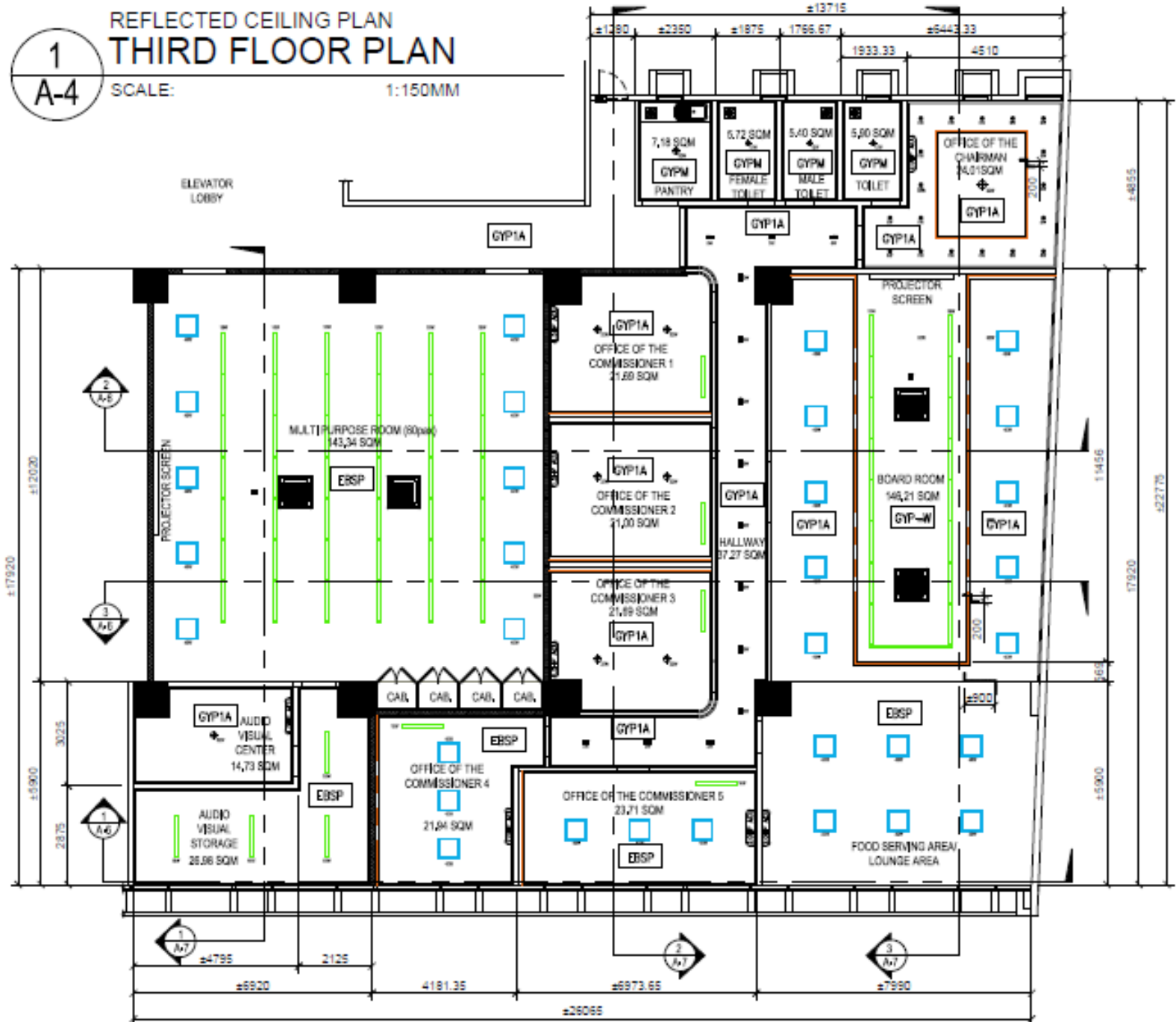
SCALE: 1:150MM

FLOOR FINISHES:	
CODE	SPECIFICATIONS
SPC-HW	1220mmX180mm STONE PLASTIC COMPOSITE FLOORING WITH DXPPE UNDERLAY (IN HONEY MAPLE COLOR)
SPC-LO	1220mmX180mm STONE PLASTIC COMPOSITE FLOORING WITH DXPPE UNDERLAY (IN LIGHT OAK COLOR)
SPC-RG	1220mmX180mm STONE PLASTIC COMPOSITE FLOORING WITH DXPPE UNDERLAY (IN RUSTIC GRAY COLOR)
HW-FC	400mmX400mm MATTE HOMOGENOUS FLOOR TILES (3mm TILE SPACING TYP.& 6mm EXPANSION GAP @ EVERY 10 TILES OR COLUMN TO COLUMN) WITH 3 COATS FLEXIBLE CEMENTIOUS WATERPROOFING WITH FIBERMESH



FLOOR FINISHES:	
CODE	SPECIFICATIONS
GYP1A	12mm THK GYPSUM BOARD IN FLAT LATEX PAINT FINISH (VERIFY COLOR) ON STANDARD METAL FURRING ASSEMBLY (G.A.22 FURRING CHANNEL & WALL ANGLES, G.A.20 CARRYING CHANNEL, 6mmØ FULLY THREADED HANGER W/ EXPANSION SHIELD) W/ 50X50MM SHADOW GROVE
GYP-W	SEAMLESS PVC CEILING SPANDREL (WALNUT) ON STANDARD METAL FURRING ASSEMBLY (G.A.22 FURRING CHANNEL & WALL ANGLES, G.A.20 CARRYING CHANNEL, 6mmØ FULLY THREADED HANGER W/ EXPANSION SHIELD)
GYPM	12mm THK. MOISTURE-RESISTANT GYPSUM BOARD IN FLAT LATEX PAINT FINISH (VERIFY COLOR) ON STANDARD METAL FURRING ASSEMBLY (G.A.22 FURRING CHANNEL & WALL ANGLES, G.A.20 CARRYING CHANNEL, 6mmØ FULLY THREADED HANGER W/ EXPANSION SHIELD) W/ 50X50MM SHADOW GROVE
EDSP	EXPOSED BEAMS AND SLAB IN FLAT LATEX PAINT FINISH
LEGENDS:	
	CASSETTE TYPE AIRCONDITIONING UNIT
	SPLIT TYPE AIRCONDITIONING UNIT
	CEILING EXHAUST FAN
	LED CEILING MOUNTED LIGHT (DL)
	RECESSED PINLIGHT (SM, DL)
	2 BULB RECESSED DOWNLIGHT (SM, DL)
	60x60cm LED PANEL LIGHT (40W, DAYLIGHT)
	1200MM LED HANGING TYPE LINEAR LIGHTING (18W, DAYLIGHT)
	STRIP LIGHTING (24W, WARM WHITE)
	120" WHITE PROJECTOR SCREEN
	SUSPENDED LCD PROJECTOR

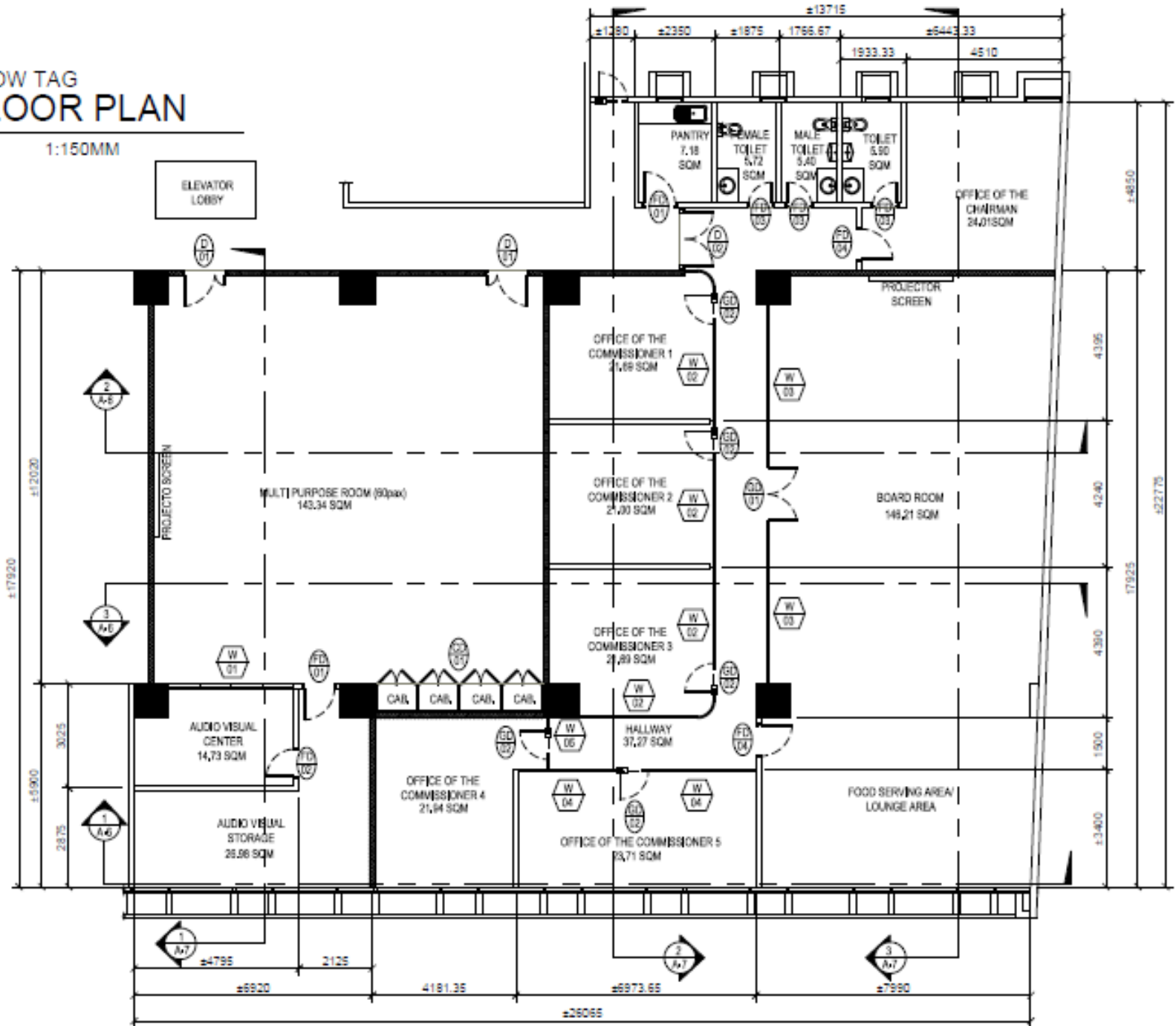
REFLECTED CEILING PLAN
THIRD FLOOR PLAN
 SCALE: 1:150MM

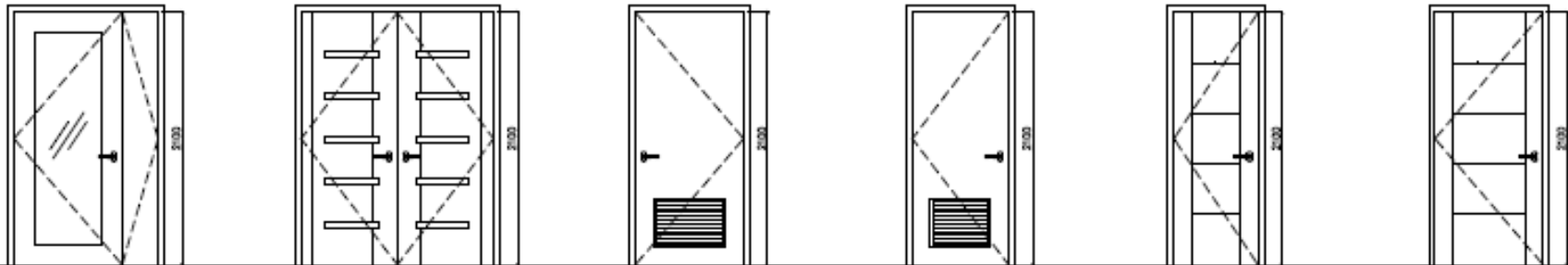
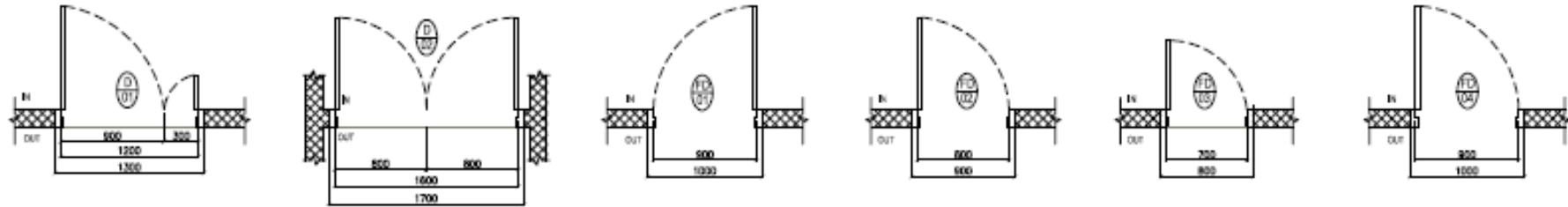


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A-5.1

DOOR & WINDOW TAG THIRD FLOOR PLAN

SCALE: 1:150MM





FINISH FLOORLINE

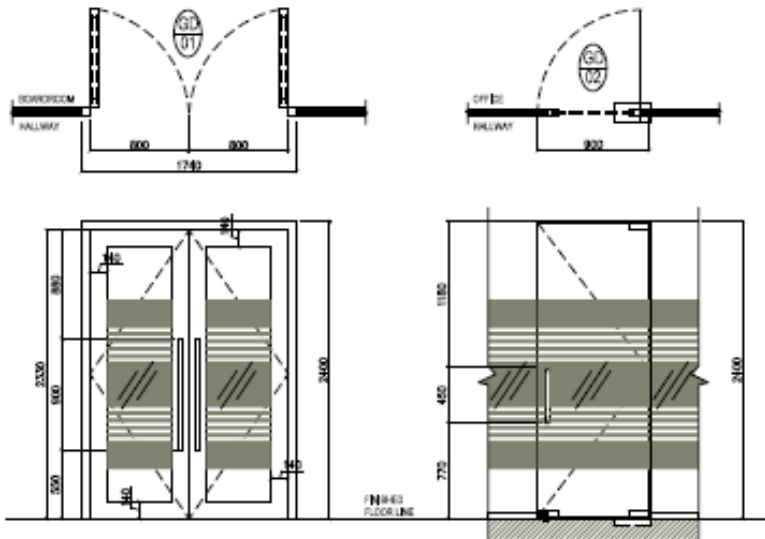
UNEQUAL DOUBLE LEAF DOOR	DOUBLE LEAF SWING DOOR	FLUSH DOOR WITH LOUVER	FLUSH DOOR WITH LOUVER	FLUSH DOOR WITH GROOVING	FLUSH DOOR WITH GROOVING
DESCRIPTION: UNEQUAL DOUBLE LEAF SWING DOOR WITH 6MM THK. TEMPERED GLASS PANEL IN 2'7 1/2" DOOR JAMB	DESCRIPTION: 40MM THK. SOLID WOOD DOUBLE LEAF SWING DOOR WITH GROOVE LINE DESIGN IN 2'7 1/2" DOOR JAMB	DESCRIPTION: SWING-TYPE, 40MM THK. WOODEN FLUSH DOOR WITH BOTTOM DOOR LOUVER IN 2'7 1/2" DOOR JAMB	DESCRIPTION: SWING-TYPE, 40MM THK. WOODEN FLUSH DOOR WITH BOTTOM DOOR LOUVER IN 2'7 1/2" DOOR JAMB	DESCRIPTION: SWING-TYPE, 40MM THK. WOODEN FLUSH DOOR WITH GROOVE LINE DESIGN IN 2'7 1/2" DOOR JAMB	DESCRIPTION: SWING-TYPE, 40MM THK. WOODEN FLUSH DOOR WITH GROOVE LINE DESIGN IN 2'7 1/2" DOOR JAMB
MATERIAL: VENEER DRIED SOLID WOOD PANEL IN ACRYLIC SOLVENT BASED PAINT SYSTEM FINISH (VERIFY COLOR)	MATERIAL: VENEER DRIED SOLID WOOD DOOR IN ACRYLIC SOLVENT BASED PAINT SYSTEM FINISH (VERIFY COLOR)	MATERIAL: MARINE PLYWOOD IN MEGAMAT WOOD FINISH IN ACRYLIC SOLVENT BASED PAINT SYSTEM FINISH (VERIFY COLOR)	MATERIAL: MARINE PLYWOOD IN MEGAMAT WOOD FINISH IN ACRYLIC SOLVENT BASED PAINT SYSTEM FINISH (VERIFY COLOR)	MATERIAL: MEGAMAT WOOD IN HIGH PRESSURE LAMINATE FINISH (HPL)	MATERIAL: MEGAMAT WOOD IN HIGH PRESSURE LAMINATE FINISH (HPL)
ACCESSORIES: LAMINATE DOOR LEAF - 2SETS LEVER TYPE HANDLE - 6PCS BALL BEARING BUTT HINGES INACTIVE SMALLER LEAF - 2SETS BOTTOM FLUSH BOLT - 6PCS BALL BEARING BUTT HINGES	ACCESSORIES: - DOUBLE DOOR HANDLE LOCKSET w/ DUMMY INACTIVE HANDLE SET - 1SET BOTTOM DOOR FLUSH BOLT - 6PCS BALL BEARING BUTT HINGES	ACCESSORIES: - 6PCS BALL BEARING BUTT HINGES - 2SETS LEVER HANDLE LOCKSET	ACCESSORIES: - 6PCS BALL BEARING BUTT HINGES - 1SET LEVER HANDLE LOCKSET	ACCESSORIES: - 6PCS BALL BEARING BUTT HINGES - 2SETS LEVER HANDLE LOCKSET	ACCESSORIES: - 6PCS BALL BEARING BUTT HINGES - 2SETS LEVER HANDLE LOCKSET
QUANTITY: 2 SETS	QUANTITY: 1 SET	QUANTITY: 2 SETS - 1 LEFT HAND - 1 RIGHT HAND	QUANTITY: 1 SET (LEFT HAND)	QUANTITY: 3 SETS - 1 LEFT HAND - 2 RIGHT HAND	QUANTITY: 2 SETS - 1 LEFT HAND - 1 RIGHT HAND
LOCATION: MULTIPURPOSE ROOM	LOCATION: BOARDROOM HALLWAY	LOCATION: - AUTO VISUAL STORAGE - PRIVATE	LOCATION: AUTO VISUAL CENTER	LOCATION: TOILETS	LOCATION: - OFFICE OF THE CHAIRMAN - BOARDROOM LOUNGE AREA

3RD FLOOR RENOVATION DOOR SCHEDULE

1
A-5.2

SCALE:

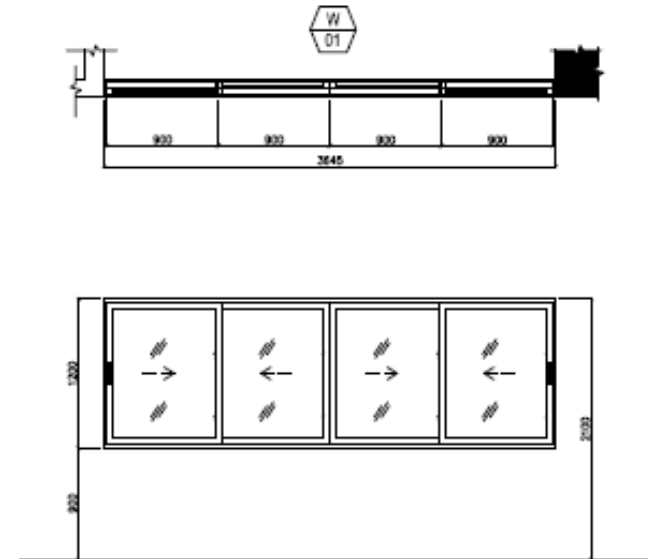
1:50MM



DOUBLE LEAF ACACITE GLASS SWING DOOR	
DESCRIPTION:	DOUBLE LEAF, DOUBLE GLAZED DOOR WITH 32MM AIR SPACE SET GLASS PANELS IN ALUMINUM DOOR FRAMING SYSTEM
MATERIAL:	6MM THK. CLEAR TEMPERED GLASS ON EACH SIDE (W/ GLASS MOUNTING SYSTEM); ALUMINUM GLASS FRAMING SYSTEM
ACCESSORIES:	- 4 SETS DOUBLE GLAZING DOOR PLUG WINGS - 2 PAIRS STAINLESS STEEL H-TYPE DOUBLE GLAZED DOOR HANDLE (LENGTH 900MM)
QUANTITY:	1 SET
LOCATION:	BOARDROOM

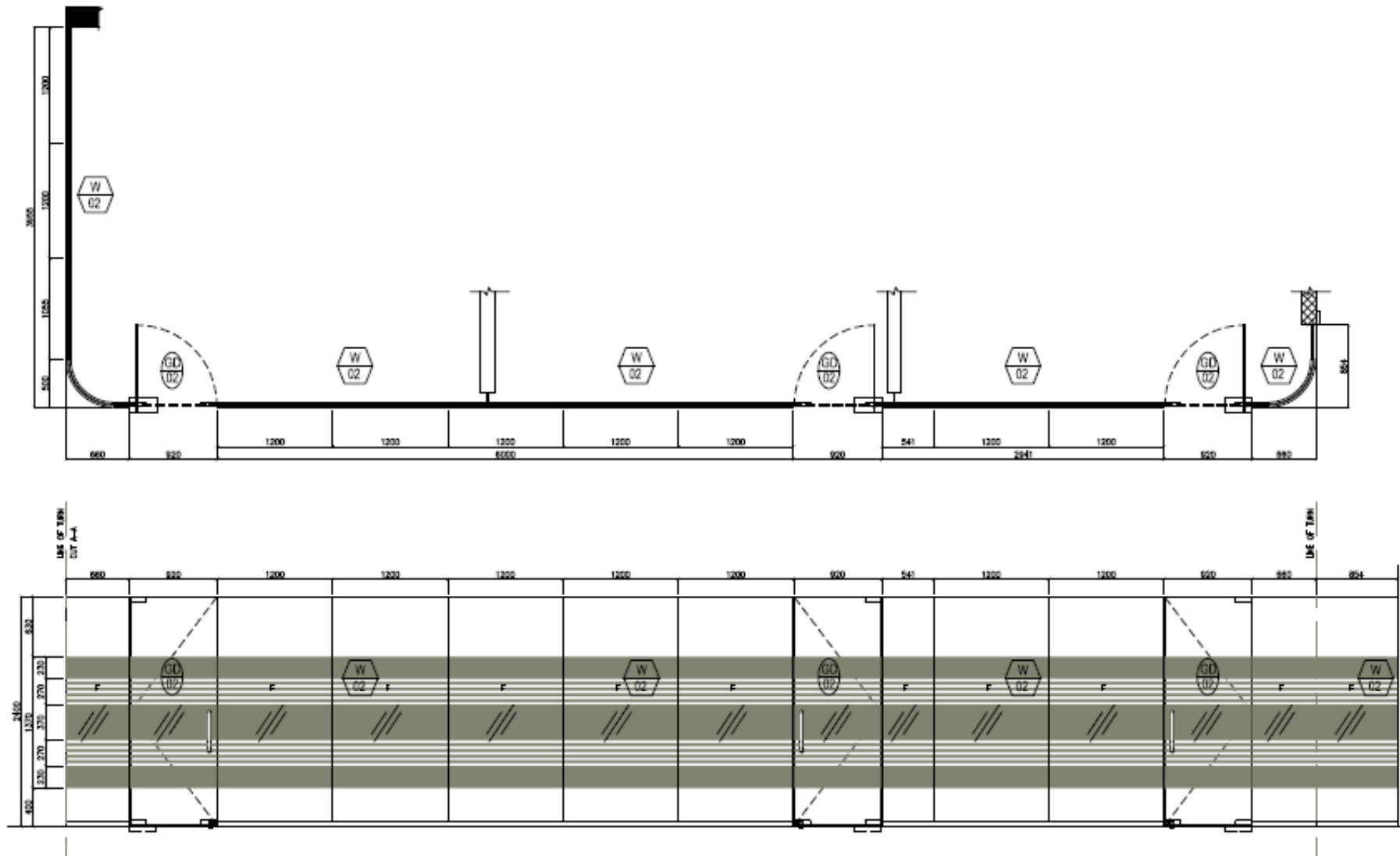
Pivotless GLASS PIVOT SWING DOOR	
DESCRIPTION:	PIVOTLESS GLASS DOOR WITH TOP AND BOTTOM DOOR PIVOT FINISH
MATERIAL:	10MM THK. (CLEAR TEMPERED) PIVOTLESS GLASS (W/ GLASS MOUNTING SYSTEM)
ACCESSORIES:	- SETS RECESSED FLOOR CLOSER - W/ DOUBLE ACTION FLOOR SPRING - SETS OVERHEAD CLOSER - SETS PATCH LOCK - SETS SS D-HANDLE (LENGTH 450MM)
QUANTITY:	5 SETS
LOCATION:	OFFICE OF THE COMMISSIONER

3RD FLOOR RENOVATION
1 DOOR SCHEDULE
 A-5.3 SCALE: 1:50MM

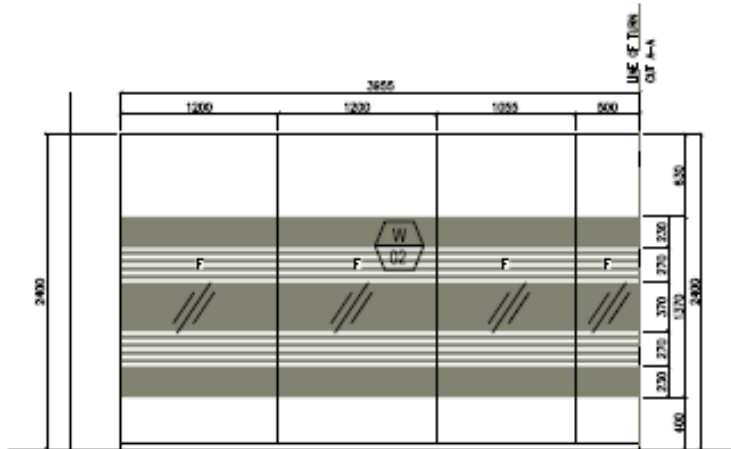


SLIDING GLASS WINDOW	
DESCRIPTION:	6MM THK. CLEAR TEMPERED GLASS WINDOW IN ALUMINUM FRAMING SYSTEM
QUANTITY:	1 SET
LOCATION:	AUDIO VISUAL CENTER

3RD FLOOR RENOVATION
2 WINDOW SCHEDULE
 A-5.3 SCALE: 1:50MM



3RD FLOOR RENOVATION
1 WINDOW SCHEDULE
 A-5.4 SCALE: 1:50MM



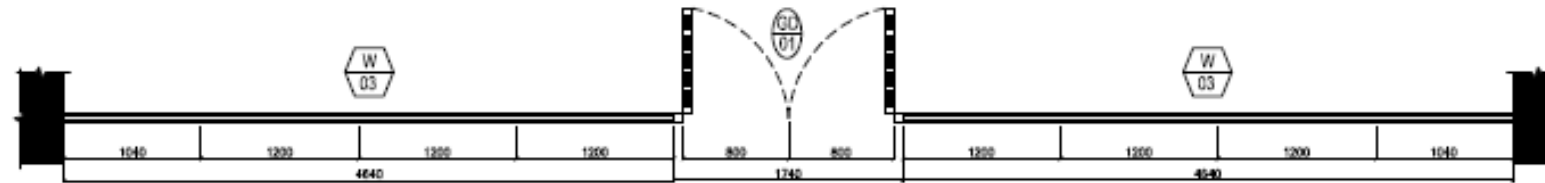
FRAMELESS GLASS WALL PARTITION	
DESCRIPTION:	12MM THK. CLEAR TEMPERED FRAMELESS GLASS (W/ GLASS FIXING STRIPS) IN ALUMINUM U CHANNEL ASSEMBLY
QUANTITY:	4 SETS - 1200MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS 1 SET - 1000MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS 1 SET - 941MM X 2400MM 12MM THK. CLEAR TEMPERED GLASS 2 SETS - CURVED GLASS ON CORNER
LOCATION:	OFFICE OF THE COMMISSIONERS 1.2 & 3

1
A-5.5

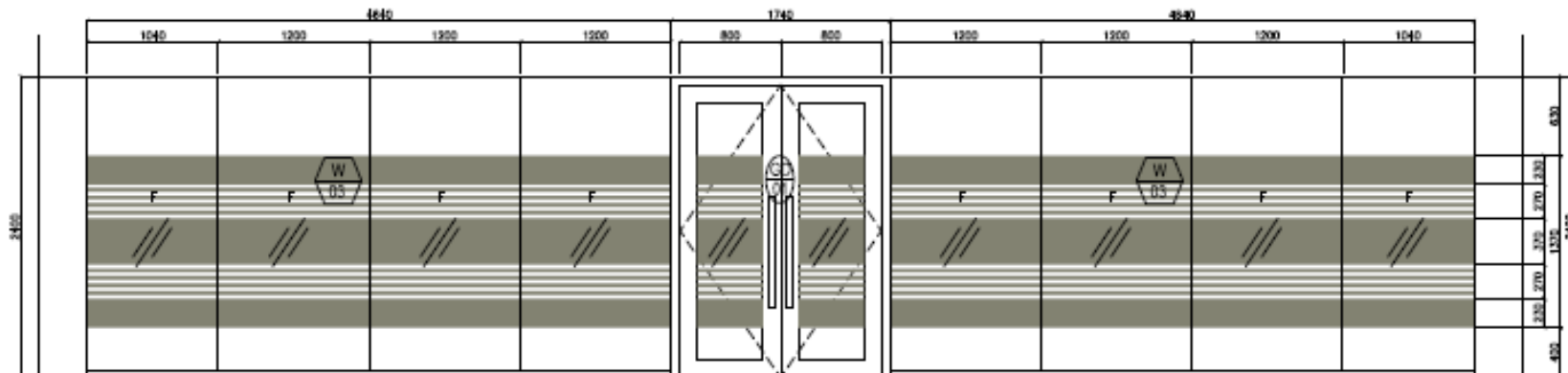
3RD FLOOR RENOVATION WINDOW SCHEDULE

SCALE:

1:50MM

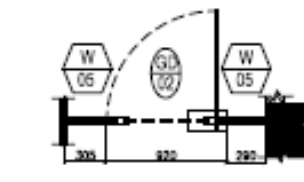
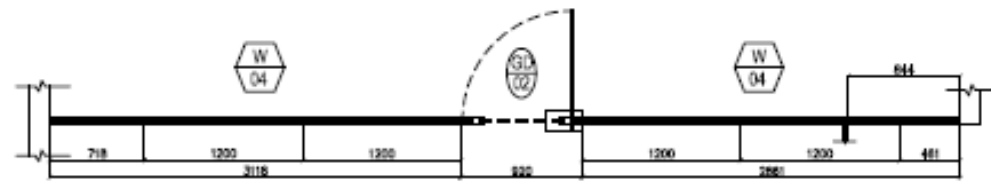


FRAMELESS GLASS WALL PARTITION	
DESCRIPTION:	12MM THK. DOUBLE GLAZED CLEAR TEMPERED FRAMELESS GLASS (W/ GLASS FIXING STRIPS) IN ALUMINUM U CHANNEL ASSEMBLY
QUANTITY:	6 SETS - 1200MM X 2400MM DOUBLE GLAZED CLEAR TEMPERED GLASS 2 SETS - 1000MM X 2400MM DOUBLE GLAZED CLEAR TEMPERED GLASS
LOCATION:	BOARDROOM



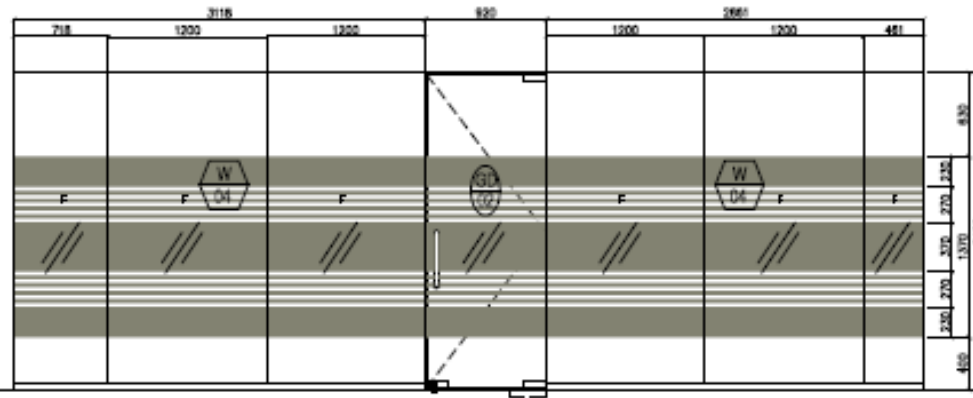
2400

1100
370
370
370
1300
400

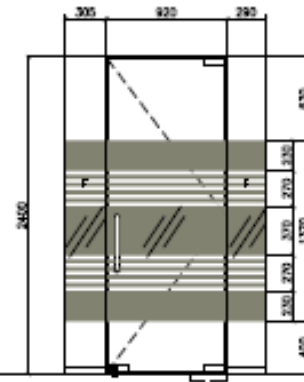


W
04

W
05

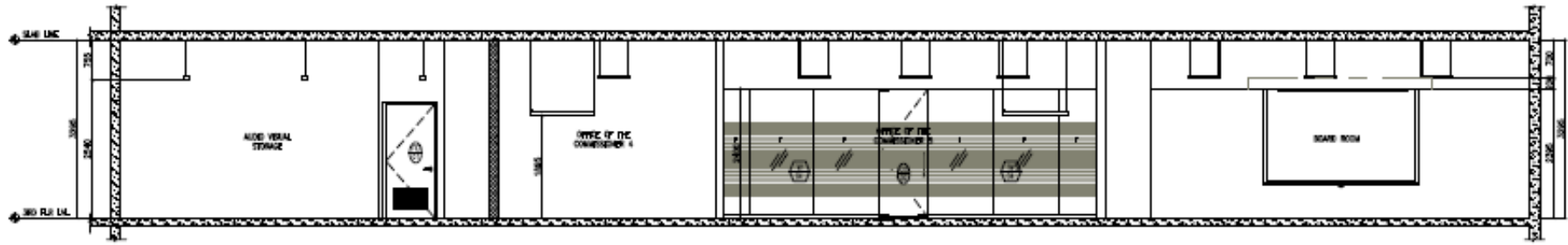


FRAMELESS GLASS WALL PARTITION	
DESCRIPTION:	12MM THK. CLEAR TEMPERED FRAMELESS GLASS (W/ GLASS FIXING STRIPS) IN ALUMINUM U CHANNEL ASSEMBLY
QUANTITY:	4 SET - 1200MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS 1 SET - 718MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS 1 SET - 481MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS
LOCATION:	OFFICE OF THE COMMISSIONER 5

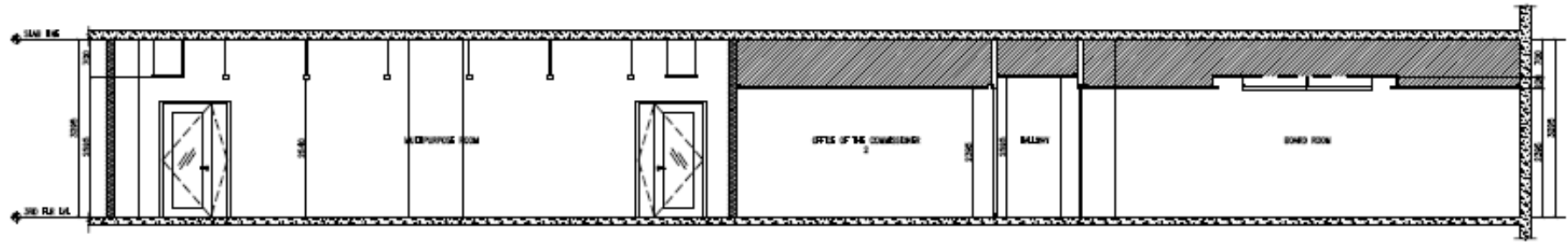


FRAMELESS GLASS WALL PARTITION	
DESCRIPTION:	12MM THK. CLEAR TEMPERED FRAMELESS GLASS (W/ GLASS FIXING STRIPS) IN ALUMINUM U CHANNEL ASSEMBLY
QUANTITY:	1 SET - 305MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS 1 SET - 280MM X 2400MM X 12MM THK. CLEAR TEMPERED GLASS
LOCATION:	OFFICE OF THE COMMISSIONER 4

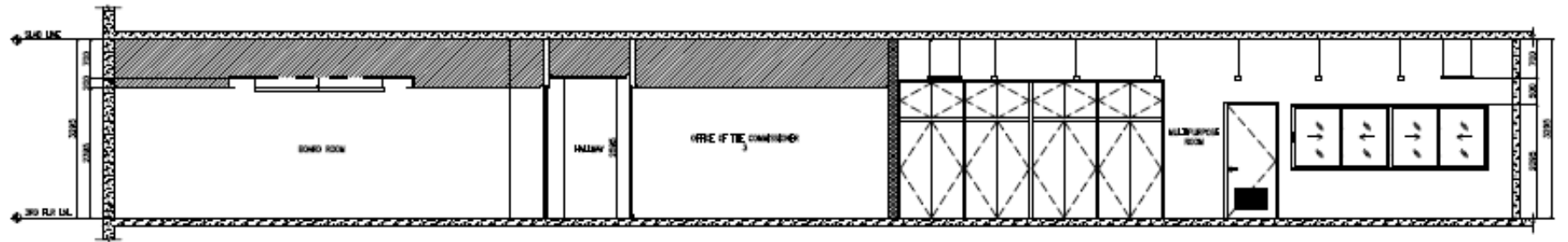
3RD FLOOR RENOVATION
1 WINDOW SCHEDULE
 A-5.6 SCALE: 1:50MM



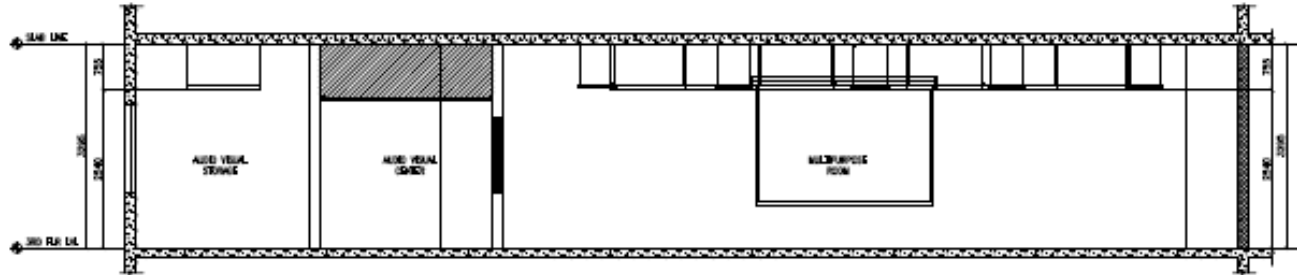
1
A-6
3RD FLOOR RENOVATION
LONGITUDINAL SECTION 1
SCALE: 1:100MM



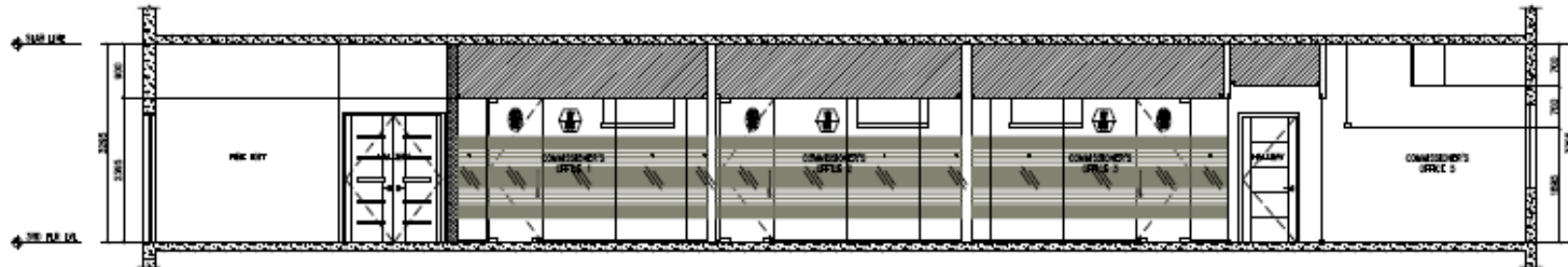
2
A-6
3RD FLOOR RENOVATION
LONGITUDINAL SECTION 2
SCALE: 1:100MM



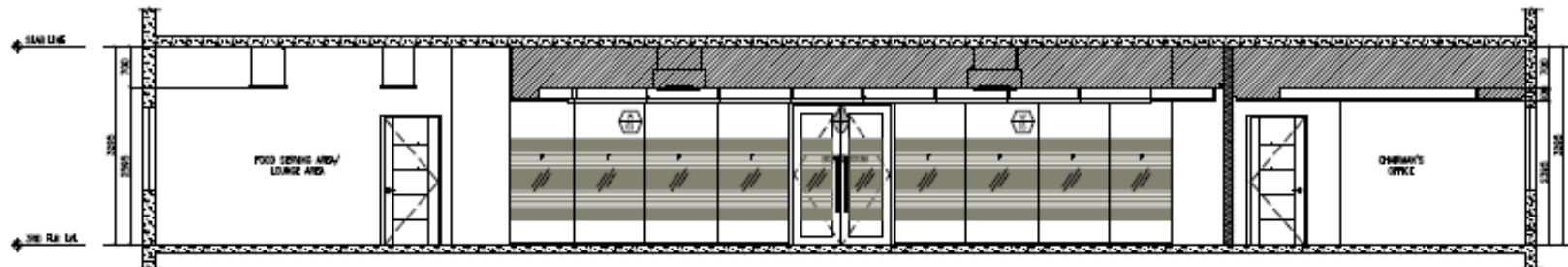
3
A-6
3RD FLOOR RENOVATION
LONGITUDINAL SECTION 3
SCALE: 1:100MM



1
A-7
3RD FLOOR RENOVATION
LONGITUDINAL SECTION 1
SCALE: 1:100MM



2
A-7
3RD FLOOR RENOVATION
LONGITUDINAL SECTION 2
SCALE: 1:100MM



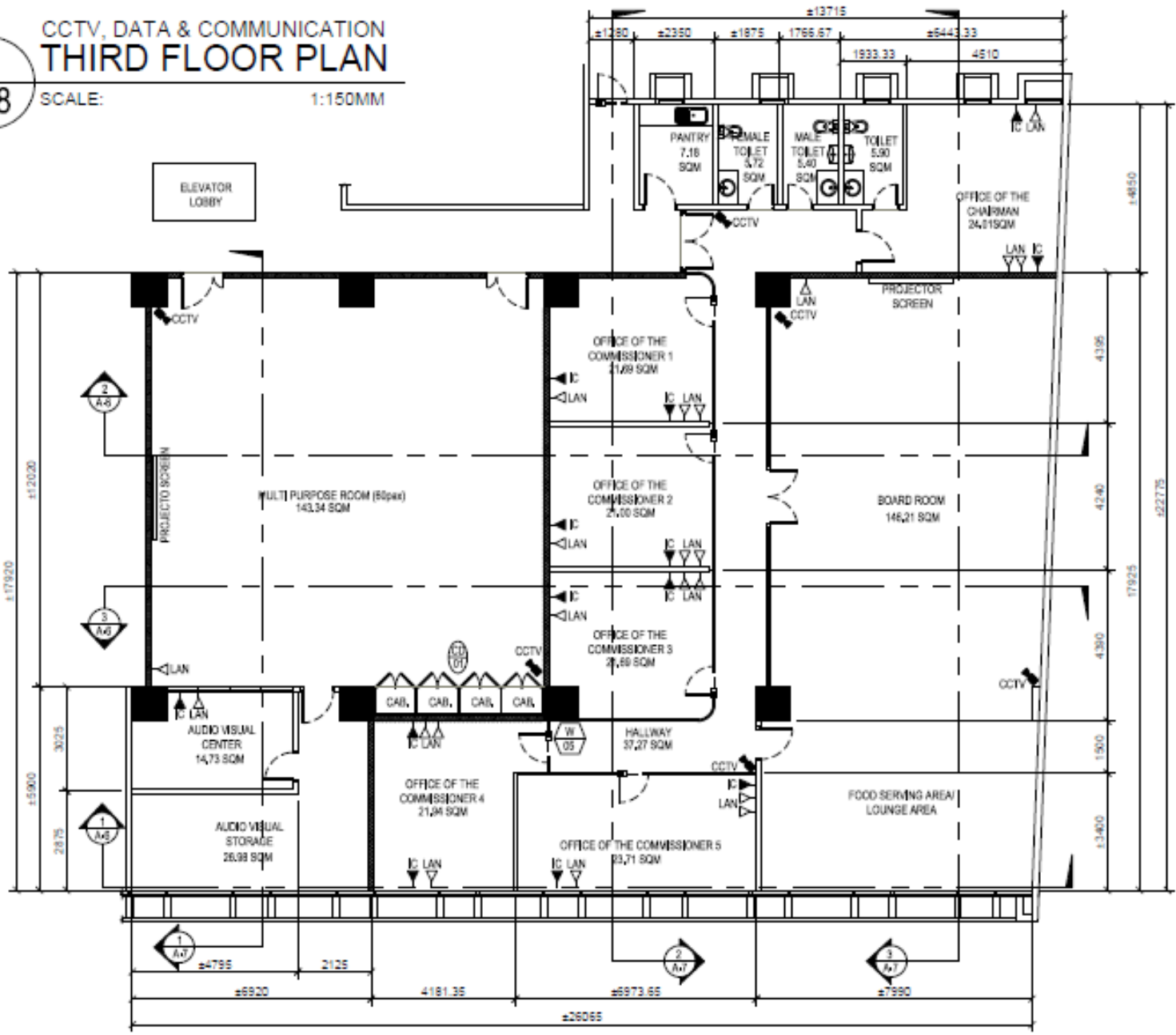
3
A-7
3RD FLOOR RENOVATION
LONGITUDINAL SECTION 3
SCALE: 1:100MM

1
A-8

CCTV, DATA & COMMUNICATION THIRD FLOOR PLAN

SCALE: 1:150MM

FLOOR FINISHES	
CODE	SPECIFICATIONS
■	CCTV
▽	LAN
▽	INTERCOM



Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

- a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

Daywork Schedule

A Daywork Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Entity of the realism of rates quoted by the Bidders, the Daywork Schedule should normally comprise the following:

- a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.
- b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the

Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

Signature Box

A signature box shall be added at the bottom of each page of the Bill of Quantities where the authorized representative of the Bidder shall affix his signature. Failure of the authorized representative to sign each and every page of the Bill of Quantities shall be a cause for rejection of his bid.

These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final documents.

BILL OF QUANTITIES (General Contractor)

PROJECT: Renovation of 3rd floor ECC Office

LOCATION: 3rd Floor, ECC Building, 355 Sen. Gil J. Puyat Ave., Makati City

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
I. GENERAL REQUIREMENTS								
1	Mobilization/Demobilization	1.00	lot					
2	Temporary Facilities/Housing	1.00	lot					
3	Bonds & Insurance	1.00	lot					
4	Proposed Plan and Design (Mechanical/Electrical/Plumbing&Sanitary/Fire Protection)	1.00	lot					
5	Site Supervision	1.00	lot					
6	Health & Safety	1.00	lot					
7	Building Permits & Fees (Renovation/Alteration/Repair:Interior)	1.00	lot					
II. DEMOLITION WORKS								
1	Removal of Existing Partition Walls	255.89	sqm					
2	Removal of Existing Acoustic Ceiling	533.54	sqm					
3	Removal of Existing Doors	15.00	sets					
4	Dismantling and Removal of Existing Utilities (e.g. ducting, electrical, plumbing & sanitary)	1.00	lot					
III. ARCHITECTURAL WORKS								
A CEILING WORKS								
1 Audio Visual Center & Storage								
	a. Metal Furring							
	> Shadowline W Angle/Moulding (50mmx50mmx50mmx50mmx1.2mmthk)	14.49	lm					
	> G.A. 20 Metal Carrying Channel	8.40	lm					
	> G.A. 22 Metal Double Furring Channel	25.87	lm					
	b. Ceiling Boards							
	> Gypsum Board (4'x8'x 12mm thk)	5.00	pcs					
	c. Miscellaneous							
	> Fully Threaded Rod Hanger		pcs					

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Expansion Shield		pcs						
2 Toilets & Pantry								
a. Metal Furring								
> Shadowline W Angle/Moulding	35.98	lm						
(50mmx50mmx50mmx50mmx1.2mmthk)								
> G.A. 20 Metal Carrying Channel	23.24	lm						
> G.A. 22 Metal Double Furring Channel	28.70	lm						
b. Ceiling Boards								
> Moisture Resistant Gypsum Board (4'x8'x 12mm thk)	11.00	pcs						
c. Miscellaneous								
> Fully Threaded Rod Hanger		pcs						
> Expansion Shield		pcs						
3 Hallway								
a. Metal Furring								
> Shadowline W Angle/Moulding	51.93	lm						
(50mmx50mmx50mmx50mmx1.2mmthk)								
> G.A. 20 Metal Carrying Channel	26.11	lm						
> G.A. 22 Metal Double Furring Channel	90.31	lm						
b. Ceiling Boards								
> Gypsum Board (4'x8'x 12mm thk)	14.00	pcs						
c. Miscellaneous								
> Fully Threaded Rod Hanger		pcs						
> Expansion Shield		pcs						
4 Office of the Commissioner 1,2,&3								
a. Metal Furring								
> Shadowline W Angle/Moulding	51.17	lm						
(50mmx50mmx50mmx50mmx1.2mmthk)								
> G.A. 20 Metal Carrying Channel	49.33	lm						
> G.A. 22 Metal Double Furring Channel	82.99	lm						
b. Ceiling Boards								
> Gypsum Board (4'x8'x 12mm thk)	24.00	pcs						
c. Miscellaneous								

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Fully Threaded Rod Hanger		pcs						
> Expansion Shield		pcs						
5 Office of the Chairman								
a. Metal Furring								
> Shadowline W Angle/Moulding (50mmx50mmx50mmx50mmx1.2mmthk)	20.74	lm						
> G.A. 20 Metal Carrying Channel	16.50	lm						
> G.A. 22 Metal Double Furring Channel	20.20	lm						
b. Ceiling Boards								
> Gypsum Board (4'x8'x 12mm thk)	10.00	pcs						
c. Miscellaneous								
> Fully Threaded Rod Hanger		pcs						
> Expansion Shield		pcs						
6 Boardroom								
a. Metal Furring								
> Shadowline W Angle/Moulding (50mmx50mmx50mmx50mmx1.2mmthk)	61.01	lm						
> G.A. 20 Metal Carrying Channel	47.48	lm						
> G.A. 22 Metal Double Furring Channel	47.50	lm						
b. Ceiling Boards								
> Gypsum Board (4'x8'x 12mm thk)	21.00	pcs						
> PVC Ceiling Spandrel (3mx.20mx8mm thk)	70.00	pcs						
c. Miscellaneous								
> Fully Threaded Rod Hanger		pcs						
> Expansion Shield		pcs						
B WALL WORKS								
1 Multipurpose Room								
rockwool insulation in standard metal stud support								
> 3m Metal Tracks (100mm x 50mm x 0.6mm thk)	50.00	pcs						
> 3m Metal Studs (100mm x 50mm x 0.6mm thk)	108.00	pcs						
> Gypsum Board (4'x8'x 12mm thk)	67.00	pcs						
> Rockwool Insulation, (460kgx0.6mx5mx50mm thk)	87.00	rolls						
b. Miscellaneous								
> Blind Rivets		pcs						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Concrete Nails		kg						
> Teckscrew 2-1/2"		pcs						
2 Audio Visual Center & Storage								
stud support								
> 3m Metal Tracks (100mm x 50mm x 0.6mm thk)	14.00	pcs						
> 3m Metal Studs (100mm x 50mm x 0.6mm thk)	25.00	pcs						
> Gypsum Board (4'x8'x 12mm thk)	26.00	pcs						
rockwool insulation in standard metal stud support								
> Rockwool Insulation, (460kgx0.6mx5mx50mm thk)	13.00	rolls						
c. Miscellaneous								
> Blind Rivets		pcs						
> Concrete Nails		kg						
> Teckscrew 2-1/2"		pcs						
3 Toilets & Pantry								
standard metal stud support								
> 3m Metal Tracks (100mm x 50mm x 0.6mm thk)	17.00	pcs						
> 3m Metal Studs (100mm x 50mm x 0.6mm thk)	50.00	pcs						
> Fibercement Board (4'x8'x 9mm thk)	36.00	pcs						
b. Miscellaneous								
> Blind Rivets		pcs						
> Concrete Nails		kg						
> Teckscrew 2-1/2"		pcs						
> Portland Cement		bags						
> Washed Sand		cu.m						
4 Hallway								
stud support								
> 3m Metal Tracks (100mm x 50mm x 0.6mm thk)	32.00	pcs						
> 3m Metal Studs (100mm x 50mm x 0.6mm thk)	31.00	pcs						
> Gypsum Board (4'x8'x 12mm thk)	26.00	pcs						
standard metal stud support								
> Fibercement Board (4'x8'x 9mm thk)	4.00	pcs						
c. Miscellaneous								
> Blind Rivets		pcs						
> Concrete Nails		kg						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Teckscrew 2-1/2"		pcs						
5 Office of the Commissioner 1,2,3,4, & 5								
stud support								
> 3m Metal Tracks (100mm x 50mm x 0.6mm thk)	18.00	pcs						
> 3m Metal Studs (100mm x 50mm x 0.6mm thk)	48.00	pcs						
> Gypsum Board (4'x8'x 12mm thk)	54.00	pcs						
rockwool insulation in standard metal stud support								
> Rockwool Insulation, (460kgx0.6mx5mx50mm thk)	4.00	rolls						
c. Miscellaneous								
> Blind Rivets		pcs						
> Concrete Nails		kg						
> Teckscrew 2-1/2"		pcs						
6 Boardroom								
rockwool insulation in standard metal stud support								
> 3m Metal Tracks (100mm x 50mm x 0.6mm thk)	14.00	pcs						
> 3m Metal Studs (100mm x 50mm x 0.6mm thk)	29.00	pcs						
> Gypsum Board (4'x8'x 12mm thk)	22.00	pcs						
> Rockwool Insulation, (460kgx0.6mx5mx50mm thk)	15.00	rolls						
c. Accent Wallpaper Finish	28.48	sq.m						
d. Miscellaneous								
> Blind Rivets		pcs						
> Concrete Nails		kg						
> Teckscrew 2-1/2"		pcs						
C WALL FINISHING								
1 Office of the Commissioner 1,2,3,4, & 5								
> Accent Wallpaper Finish	60.86	sq.m						
2 Office of the Chairman								
> Accent Wallpaper Finish	11.64	sq.m						
3 Boardroom								
> Accent Wallpaper Finish	28.48	sq.m						
> WPC Fluted Wall Panel (2.9mx21.9cmx26mm)	39.00	pcs						
D PAINTING WORKS								
1 Multipurpose Room								
a. Wall Paint Finish	134.92	sq.m						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS	
	#	Unit	Price/unit	Cost	Price/unit	Cost			
b. Ceiling Paint Finish	143.34	sq.m							
2 Audio Visual Center & Storage									
a. Wall Paint Finish	104.32	sq.m							
b. Ceiling Paint Finish	41.71	sq.m							
3 Toilets & Pantry									
a. Wall Paint Finish	56.82	sq.m							
b. Ceiling Paint Finish	24.20	sq.m							
4 Hallway									
a. Wall Paint Finish	38.93	sq.m							
b. Ceiling Paint Finish	37.27	sq.m							
5 Office of the Commissioner 1,2,3,4, & 5									
a. Wall Paint Finish	125.41	sq.m							
b. Ceiling Paint Finish	110.03	sq.m							
6 Office of the Chairman									
a. Wall Paint Finish	31.39	sq.m							
b. Ceiling Paint Finish	24.01	sq.m							
7 Boardroom									
a. Wall Paint Finish	65.78	sq.m							
b. Ceiling Paint Finish	54.52	sq.m							
E TILING WORKS									
a. Floor Tiles									
> Matte Homogenous Tiles (400mm x 400mm)	38.00	pcs							
b. Wall Tiles									
> Polished Ceramic Subway Tiles (100mmx200mm)	1290.00	pcs							
c. Waterproofing									
> Flexible Cementitious Waterproofing Membrane	17.02	sq.m							
d. Miscellaneous									
> Tile Adhesive		bags							
> Anti-Bacterial Tile Grout		bags							
> Others									
F CARPENTRY WORKS									
a. Built-in Cabinet									
> Marine Plywood in Laminate Finish	18.00	pcs							
> Soft Close Concealed Hinges	20.00	sets							

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Concealed Door Handle	16.00	pcs						
b. Miscellaneous								
> PVC Edge Banding		roll						
> Finishing Nails		kgs						
> Screw		pcs						
G DOORS								
a. Wood Doors with complete accessories								
> D-01: Unequal Double Leaf Swing Door	2.00	sets						
> D-02: Double Leaf Swing Door	1.00	set						
> FD-01: Flush Door w/ Louver (900mm)	2.00	sets						
> FD-02: Flush Door w/ Louver (800mm)	1.00	set						
> FD-03: Flush Door (700mm)	3.00	sets						
> FD-03: Flush Door (900mm)	2.00	sets						
III. MECHANICAL WORKS								
1	Ventilation System							
	> Ceiling Mounted Exhaust Fans	4.00	sets					
	> Fresh Air Motor		sets					
	> Diffuser		pcs					
	> Ducting with Hanger and Support	1.00	lot					
2	Others							
	a. Testing and Commissioning	1.00	lot					
NOTE : Materials used may vary depending on the Contractor's Mechanical Design and layout. Design should include fresh air supply and exhaust to the rooms without natural ventilation.								
IV. ELECTRICAL WORKS								
1	Feederlines, panelboards & Equipment							
	a. Electronic Circuit Breaker	1.00	assy.					
	b. Panel Board	1.00	assy.					
	c. THWN Wires							
	> 30mm ² THWN Wire (Line & Neutral)		mtrs					
	> 14mm ² THWN Wire (Ground)		mtrs					
	d. IMC Pipes & Fittings							
	> 32mm \emptyset IMC Pipe		lm					
	> 32mm \emptyset IMC Elbow		pcs					

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> 32mmØ IMC Coupling		pcs						
> 32mmØ Locknut & Bushing		pcs						
(for ECB Electrical Provision to Panel 'PPLP')								
> Pullout Box (200mm(L) x 200mm(W) x 200mm(D)		pcs						
(for ECB Electrical Provision to Panel 'PPLP')								
> Hanger and Support	1.00	lot						
> Consumables	1.00	lot						
2	Power layout							
a. THWN Wires								
> 3.5mm² THWN Wire (Line & Neutral)		mtrs						
> 3.5mm² THWN Wire (Ground)		mtrs						
b. Convenience Outlet								
> Floor Mounted Duplex C.O.		pcs						
> Duplex C.O.		pcs						
> GFCI Outlet		pcs						
c. IMC Pipes & Fittings								
> 15mmØ IMC Pipe		lm						
> 15mmØ IMC Elbow		pcs						
> 15mmØ IMC Coupling		pcs						
> 15mmØ Locknut & Bushing		pcs						
d. Electrical Boxes								
> Utility boxes		pcs						
> Junction boxes		pcs						
> Pull boxes		pcs						
> Pull boxes		pcs						
e. Miscellaneous								
> Hanger and Support	1.00	lot						
> Consumables	1.00	lot						
3	Lighting Layout							
a. THWN wires								
> 3.5mm² THWN Wire (Line & Neutral)		mtrs						
> 3.5mm² THWN Wire (Ground)		mtrs						
b. Lighting Switch								
> Switch, 1-gang, with plate & cover		set						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Switch, 3-gang, with plate & cover		set						
> Switch, 1-gang, 3-way, with plate & cover		set						
c. Multimedia Projector & Screen								
> Suspended LCD Projector (5000 Lumens)	2	sets						
Location: Multipurpose room	2	sets						
d. IMC Pipes & Fittings								
> 15mmØ IMC Pipe		lm						
> 15mmØ IMC Elbow		pcs						
> 15mmØ IMC Coupling		pcs						
> 15mmØ Locknut & Bushing		pcs						
> 15mmØ Flexible Metallic Conduit		pcs						
> 15mmØ Straight Connector		pcs						
e. Electric Box								
> Junction Boxes		pcs						
f. Miscellaneous								
> Exit Lights		pcs						
> Hanger and Support	1.00	lot						
> Consumables	1.00	lot						
4 Telecommunications/ Electronics/ Auxiliary System								
a. Supply and Installation of CCTV Equipments	1.00	assy.						
b. CCTV Camera	6.00	sets						
c. Supply and Installation of Data and Voice Outlet								
> DATA Outlet (Single)	8.00	sets						
> DATA and VOICE Outlet (Double)	13.00	sets						
h. IMC Pipes & Fittings								
> 20mmØ IMC Pipe		lm						
> 20mmØ IMC Elbow		pcs						
> 20mmØ IMC Coupling		pcs						
> 20mmØ Locknut & Bushing		pcs						
i. Electric boxes and tray								
> Cable Tray (300mmW x 50mmD x 2400mmL)		pcs						
> Cable Tray Elbow (300mmW x 50mmD)		pcs						
> Utility boxes		pcs						
> Junction boxes		pcs						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
j. Miscellaneous								
> Hanger and Support	1.00	lot						
> Consumable Materials	1.00	lot						
5 Others								
> Chipping Works & Restoration	1.00	lot						
> Testing & Commissioning (Electrical)	1.00	lot						
NOTE : No. of units of materials and the materials used may vary depending on the Contractor's Electrical Design and layout.								
V. PLUMBING AND SANITARY WORKS								
1 Water Line System								
a. PPR Pipes, PN-20								
> 25mm Φ"		pcs						
> 20mm Φ"		pcs						
>15mm Φ"		pcs						
> PPR Fittings		lot						
b. Gate Valve								
> 20mm (3/4")		pcs						
> 20mm (1/2")		pcs						
c. Check Valve								
> 20mm (3/4")		pc						
2 Sewer Line System								
a. PVC Pipes Series 1000								
> 100mm Φ"		pcs						
> 75mm Φ"		pcs						
> 50mm Φ"		pcs						
> PVC Fittings		lot						
3 Plumbing Fixtures, Fittings & Accessories								
a. Pantry	1.00	lot						
> Stainless Steel Sink Tab	1.00	pc						
> Goose neck Faucet	1.00	pc						
> 5gpm Grease Trap	1.00	pc						
b. Toilet								
> Lavatory Wall Hung Cabinet w/ Mirror	3.00	sets						
> Lavatory Faucet (extended)	3.00	sets						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
> Urinal w/ Sensor	2.00	sets						
(2.6/4L per flush)	3.00	sets						
> Floor Drain (SS, 4x4)	4.00	pcs						
> Floor Clean Out	1.00	pc						
4 Miscellaneous								
a. Hanger Support	1.00	lot						
b. Coring Works	1.00	lot						
c. Concrete Slab Scanning	1.00	lot						
d. Gravity Test	1.00	lot						
e. Leak Hydrotest	1.00	lot						
NOTE : No. of units of materials and the materials used may vary depending on the Contractor's Plumbing and Sanitary Design and layout.								
VI. FIRE PROTECTION WORKS								
1 B.I. Pipes & Fittings								
a. Black Iron Pipes								
> 25mm B.I Pipe		lm						
> 32mm B.I Pipe		lm						
> 40mm B.I Pipe		lm						
> 50mm B.I Pipe		lm						
> 75mm B.I Pipe		lm						
> 100mm B.I Pipe		lm						
b. Pipe Fittings (welded & threaded)	1.00	lot						
c. Recessed mounted type; including glass fronted recessed type cabinet with access handle; 40mm diameter angle valve; 65mm diameter x 30m long hose; pressure restricting device; 5lbs. Dry chemical fire extinguisher; interconnecting pipeworks, connectors and all necessary accessories.	1.00	lot						
2 Automatic Sprinkler System								
a. Sprinkler Head								
> Pendant Type		pcs						
b. Slight test connections								
> 25mm diameter		pcs						
c. Inspection test valves								

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS	
	#	Unit	Price/unit	Cost	Price/unit	Cost			
> 25mm diameter		pcs							
d. Auxiliary drain valves									
> 32mm diameter		pcs							
e. Butterfly valve, indicating type									
> 100mm diameter		pcs							
f. Gate valve									
> 25mm diameter		pcs							
> Mounting on 100mm diameter black iron pipes		pcs							
g. Pressure gauges		pcs							
3 Fire Detector and Alarm System	1.00	lot							
4 Miscellaneous									
a. Consumables	1.00	lot							
b. Hydro Test	1.00	lot							
NOTE : No. of units of materials and the materials used may vary depending on the Contractor's Fire Protection Design and layout.									
GRAND TOTAL									

BILL OF QUANTITIES (SPC Flooring)

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
I. SPC FLOORING								
1 Multipurpose Room; Audio Visual Center; Storage; Pantry								
a. SPC Flooring (honey maple) - 122cmx18cmx4mm (LxWxH) minimum - honey maple or any similar color - Area: 198 sq.m w/ 3% Contingency	902	pcs						
b. SPC T-Moulding (2.4m, honey maple)	2	pcs						
c. SPC End Profile (2.4m, honey maple)	3	pcs						
d. SPC Baseboard (2.4mx60mm, honey maple) - 93 linear meter	39	pcs						
2 Boardroom Hallway								
a. SPC Flooring (light oak) - 122cmx18cmx4mm (LxWxH) minimum - light oak or any similar color - Area: 38.38 sq.m w/ 3% Contingency	175	pcs						
b. SPC End Profile (2.4m, light oak)	20	pcs						
3 Boardroom; Commissioner's Office; Chairman's Office								
a. SPC Flooring (Rustic Gray) - 122cmx18cmx4mm (LxWxH) minimum - Rustic Gray or any similar color - Area: 288.65 sq.m w/ 3% Contingency	1315	pcs						
b. SPC T-Moulding (2.4m, Rustic Gray)	6	pcs						
c. SPC Baseboard (2.4mx60mm, Rustic Gray) - 93 linear meter	62	pcs						
TOTAL								

BILL OF QUANTITIES (Lighting Fixtures)

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
I. Lighting Fixtures								
1 Pantry								
32W, Ø290mmx54mm Ceiling Mounted LED Lights in Black Round Casing (Daylight)	1	pc						
2 Toilets								
12W, 120mmx120mmx55mm Frameless Ceiling Mounted Surface Downlight (Daylight)	3	pcs						
3 Office of the Chairman								
5W, Ø90mmx150mm White Recessed Pinlights with GU10 Bulb (Daylight)	18	pcs						
32W, Ø290mmx54mm Ceiling Mounted LED Lights in Black Round Casing (Daylight)	1	pc						
14.4W/m LED Striplight (Warm White)	3	reels						
350W LED Driver for Striplight	1	pc						
4 Hallway								
5W, 183mmx97mmx24mm 2-Bulb Recessed Directional Downlight in Black Aluminum Die-cast material with GU10 Bulb (Daylight)	14	pcs						
5 Boardroom								
40W, 600mmx600mmx35mm Suspended Backlit LED Panel Light (Daylight)	16	pcs						
18W, 1200mm T8 Daylighting in 1233mmx60mmx53mm Hanging Linear Fixture	18	pcs						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
14.4W/m LED Striplight (Warm White)	6	reels						
350W LED Driver for Striplight	2	pcs						
6 Office of the Commisioners 1,2,3,4 & 5								
32W, Ø290mmx54mm Ceiling Mounted LED Lights in Black Round Casing (Daylight)	6	pcs						
18W, 1200mm T8 Daylighting in 1233mmx60mmx53mm Hanging Linear Fixture	5	pcs						
14.4W/m LED Striplight (Warm White)	5	reels						
100W LED Driver for Striplight	5	pcs						
40W, 600mmx600mmx35mm Suspended Backlit LED Panel Light (Daylight)	6	pcs						
7 Multipurpose Room								
40W, 600mmx600mmx35mm Suspended Backlit LED Panel Light (Daylight)	10	pcs						
18W, 1200mm T8 Daylighting in 1233mmx60mmx53mm Hanging Linear Fixture	42	pcs						
8 Audio Visual Center & Storage								
32W, Ø290mmx54mm Ceiling Mounted LED Lights in Black Round Casing (Daylight)	1	pc						
18W, 1200mm T8 Daylighting in 1233mmx60mmx53mm Hanging Linear Fixture	4	pcs						
TOTAL								

BILL OF QUANTITIES (Glass Works)

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
I. GLASS WORKS								
1 GD-01 Double Leaf Acoustic Glass Swing Door								
Description: 2.4m (h) x 1.75m (w) Framed Swing Glass Door Double Glazed 6mm (12mm THK.) w/ Frosted Sticker Location: Boardroom	1	set						
2 GD-02 Frameless Glass Pivot Swing Door								
Description: 2.40m (h) x 0.90m (w) Frameless Glass Door 12mm THK Tempered Clear Glass w/ Frosted Sticker Location: Office of Commissioners	5	sets						
3 W-01 Sliding Glass Window								
Description: 1.20m (h) x 3.65m (w) Sliding Glass Window Alum. Framed 6mm THK. Tempered Glass Location: Audio Visual Center	1	set						
4 W-02 Frameless Glass Wall Partition								
Description: Frameless Glass Wall Partition 12mm THK. Clear Tempered Glass w/ Frosted Sticker Location: Office of Commissioners 1,2 & 3	1	set						

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS	
	#	Unit	Price/unit	Cost	Price/unit	Cost			
5 W-03 Frameless Glass Wall Partition									
Description: Frameless Glass Partition 12mm THK. Clear Tempered Glass Double Glaze (24mm THK.) w/ Frosted Sticker Location: Boardroom	1	set							
6 W-04 Frameless Glass Wall Partition									
Description: Frameless Glass Wall Partition 12mm THK. Clear Tempered Glass w/ Frosted Sticker Location: Office of Commissioners 5	1	set							
7 W-05 Frameless Glass Wall Partition									
Description: Frameless Glass Wall Partition 12mm THK. Clear Tempered Glass w/ Frosted Sticker Location: Office of Commissioners 4	1	set							
TOTAL									

BILL OF QUANTITIES (AIR-CONDITIONING UNIT)

DESCRIPTION	QTY		MATERIAL COST		LABOR COST		TOTAL	REMARKS
	#	Unit	Price/unit	Cost	Price/unit	Cost		
I. AIR CONDITIONING SYSTEM (VRF)								
1 INDOOR UNITS								
a. 2.0 HP Split Type ACU, Inverter	4.00	sets						
b. 1.5 HP Split Type ACU, Inverter	3.00	sets						
c. 1.0 HP Split Type ACU, Inverter	1.00	sets						
d. 4.0 HP Cassette Type ACU	4.00	sets						
2 OUTDOOR UNIT								
a. 20.0 HP Variable Refrigerant Flow	2.00	sets						
3 PIPES								
a. Copper Pipes		lm						
b. Drain Pipes		lm						
4 OTHERS								
a. Brackets & Support	1.00	lot						
b. Enclosed Supply Breaker	12.00	sets						
TOTAL								

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
or
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;
and
- (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
and
- (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- (e) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (f) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules;
and
- (g) Philippine Contractors Accreditation Board (PCAB) License;
or
Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid; **and**
- (h) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**
- (i) Project Requirements, which shall include the following:
 - a. Organizational chart for the contract to be bid;
 - b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
 - c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
- (j) Original duly signed Omnibus Sworn Statement (OSS);
and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of

Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- (k) The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**
- (l) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

- (m) If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence; **or**
duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

- (n) Original of duly signed and accomplished Financial Bid Form; **and**

Other documentary requirements under RA No. 9184

- (o) Original of duly signed Bid Prices in the Bill of Quantities; **and**
- (p) Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; **and**
- (q) Cash Flow by Quarter.

GUIDANCE ON THE PREPARATION OF BID FOLDERS

I. TABBING OF ELIGIBILITY DOCUMENTS:

A. The **ELIGIBILITY/ TECHNICAL COMPONENT** shall be arranged and tabbed as follows:

TAB	Eligibility/ Technical/ Financial Document
A	<p>PhilGEPS Certificate of Registration (Platinum)</p> <p>Under TAB A, the bidder <i>may</i> also include the following:</p> <ul style="list-style-type: none"> • SEC/ DTI/ CDA Registration • Mayor’s Permit 2021 • BIR Tax Clearance
B	<p>Statement of all Ongoing Government and Private Contracts</p> <p>Under TAB B, the bidder <i>may</i> include the following:</p> <ul style="list-style-type: none"> • Contracts, Purchase Orders, Invoices etc.
C	<p>Statement of the bidder’s Single Largest Completed Contract (SLCC)</p> <p>Under TAB C, the bidder <i>may</i> include the Certificate of Acceptance/ Satisfactory Completion of the contract listed</p>
D	Philippine Contractors Accreditation Board (PCAB) License
E	Bid Security
F	Project Requirements
G	<p>Omnibus Sworn Statement</p> <p>Under TAB G, include any of the following, if applicable:</p> <ul style="list-style-type: none"> • Secretary’s Certificate – for corporations, partnership, cooperative • Special Power of Attorney
H	Audited Financial Statement (AFS) stamped received by the BIR

I	Computation of Net Financial Contracting Capacity
J	Other documents (JVA, DTI Certification – Domestic Bidder Preference etc.), <i>if applicable</i>

B. The **FINANCIAL COMPONENT** shall be arranged and tabbed as follows:

TAB	Eligibility/ Technical/ Financial Document
A	Bid Form
B	Bill of Quantities Detailed Estimates Form Cash Flow

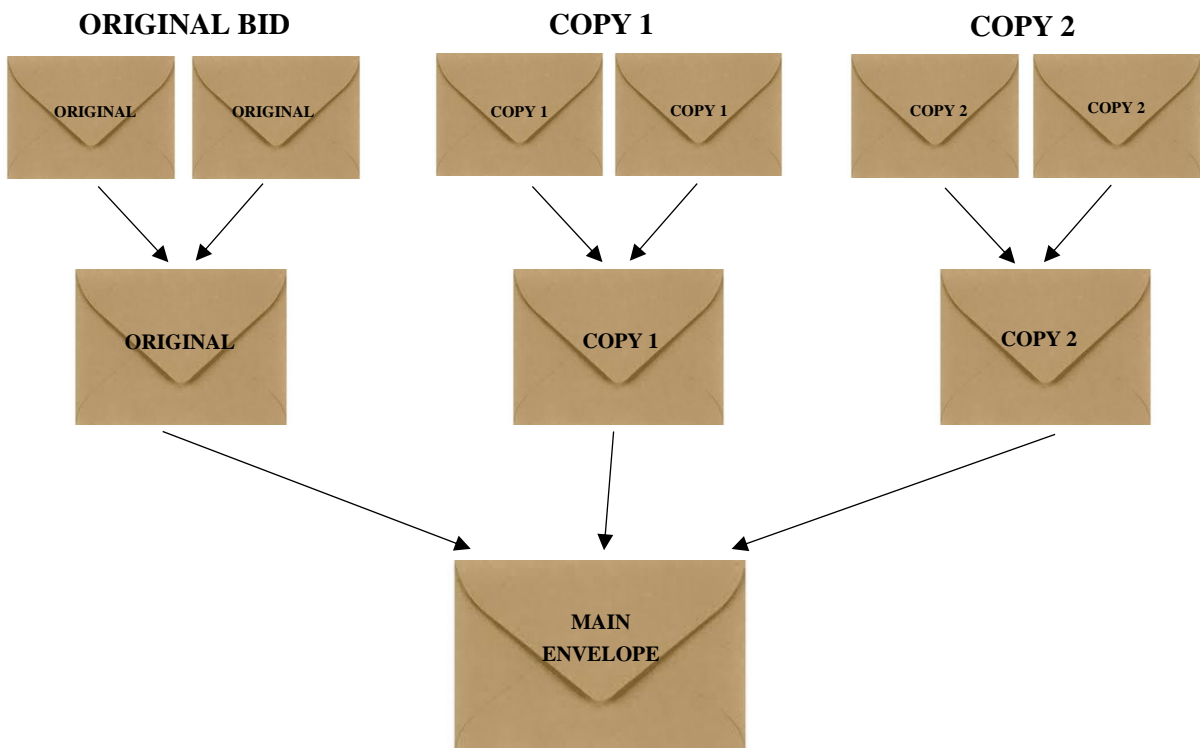
II. SEALING AND MARKING OF BIDS

A. The sets of technical / eligibility and financial components shall be submitted in **three (3) sets/copies** (1 ORIGINAL and 2 COPIES) sealed and marked as follows:

- **ORIGINAL BID ENVELOPE** (Sealed and Marked as ORIGINAL) which contains the following:
 - Sealed Envelope marked as ORIGINAL- TECHNICAL COMPONENT which contains the technical and eligibility documents, ring or book bound with tab markings/labels
 - Sealed Envelope marked as ORIGINAL – FINANCIAL COMPONENT which contains the Financial Component (Bid Form and Bill of Quantities), ring or book bound with tab markings/labels
- **COPY 1 BID ENVELOPE** (Sealed and Marked as Copy 1) which contains the following:
 - Sealed Envelope marked as COPY 1 – TECHNICAL COMPONENT which contains the technical and eligibility documents, ring or book bound with tab markings/labels

- Sealed Envelope marked as COPY 1 – FINANCIAL COMPONENT which contains the Financial Component (Bid Form and Bill of Quantities), ring or book bound with tab markings/labels.
- **COPY 2 BID ENVELOPE** (Sealed and Marked as Copy 2) which contains the following:
 - Sealed Envelope marked as COPY 2 – TECHNICAL COMPONENT which contains the technical and eligibility documents, ring or book bound with tab markings/labels
 - Sealed Envelope marked as COPY 2 – FINANCIAL COMPONENT which contains the Financial Component (Bid Form and Bill of Quantities), ring or book bound with tab markings/labels.

These envelopes containing the original and the copies shall then be enclosed in one single envelope. Please see below illustration:



PROPER MARKING OF MAIN ENVELOPE

**FOR: ATTY. EVELYN R. RAMOS
CHAIRPERSON, ECC BAC**

**PUBLIC BIDDING FOR THE REPAIR/ RENOVATION
OF THE 3RD FLOOR OF THE ECC BUILDING
REF. NO.: PB-ECC-2023-10**

**BIDDER'S NAME
BIDDER'S ADDRESS**

**DO NOT OPEN BEFORE
NOVEMBER 23, 2023, 1:30 P.M.**

Bid Form for the Procurement of Infrastructure Projects
[shall be submitted with the Bid]

BID FORM

Date : _____
Project Identification No. : **PB-ECC-2023-10**

To: The Employees' Compensation Commission (ECC)

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: **Repair/ Renovation of the ECC 3rd Floor Building**;
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: _____
_____ ; PhP _____
- d. The discounts offered and the methodology for their application are: *[insert information]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines² for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included

² currently based on GPPB Resolution No. 09-2020

in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and

- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].
- l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____

**NFCC COMPUTATION FOR ELIGIBILITY CHECK
FOR CY 2022**

	Amount
I. CURRENT ASSETS	
II. LESS: CURRENT LIABILITIES	
III. NET WORKING CAPITAL (I – II)	
IV. NET WORKING CAPITAL x 15	
V. LESS: VALUE OF ALL OUTSTANDING OR UNCOMPLETED PORTIONS OF THE PROJECTS UNDER ONGOING CONTRACTS, INCLUDING AWARDED CONTRACTS YET TO BE STARTED, COINCIDING WITH THE CONTRACT TO BE BID	
VI. NET FINANCIAL CONTRACTING CAPACITY (NFCC)	

The values of the domestic bidder’s current assets and current liabilities shall be based on **the latest Audited Financial Statements** submitted to the BIR (with stamp received by BIR).

Submitted by:

Name: _____

Legal capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Tel. No./Cellphone No./Email Address: _____

Date: _____

STATEMENT OF SINGLE LARGEST COMPLETED CONTRACT/S SIMILAR TO THE CONTRACT TO BE BID

This is to certify that _____ has the following completed contracts within the period CY _____ and up to the day before the deadline for submission of bids to the project – Repair/ Renovation of the 3rd Floor Building of the ECC Building:

Date of the Contract	Contracting Party	Name of Contract	Kind of Goods Sold	Amount of Contact	Date of Delivery/ End-User’s Acceptance	Date of Official Receipt	Bidder is A. Manufacturer B. Supplier C. Distributor

Printed Name and Signature of Authorized Representative

Date

***Instructions:**

- a) Cut-off date as of: (i) Up to the day before the deadline of submission of bids.
- b) In the column under “Dates”, indicate the dates of Delivery/ End-user’s Acceptance and Official Receipt.
- c) “Name of Contract”. Indicate here the Nature/ Scope of the Contract for the Procuring Entity to determine the relevance of the entry with the Procurement at hand. Example: “Supply and Delivery of Generator Set”

STATEMENT OF ONGOING CONTRACTS AND AWARDED BUT NOT YET STARTED CONTRACTS

This is to certify that _____ has the following ongoing contracts and awarded but not yet started contracts:

Date of the Contract	Contracting Party	Name of Contract	Kind of Goods Sold	Amount of Contact	Value of Outstanding Contracts	Bidder is A. Manufacturer B. Supplier C. Distributor

Printed Name and Signature of Authorized Representative

Date

*Instructions:

- a) State all ongoing contracts including those awarded but not yet started (government and private contracts which may be similar or not similar to the project called for bidding) as of: **i. The day before the deadline of submission of bids.**
- b) If there is no ongoing contract including awarded but not yet started as of the aforementioned period, state none or equivalent term.
- c) The total amount of the ongoing and awarded but not yet started contracts should be consistent with those used in the Net Financial Contracting Capacity (NFCC) in case an NFCC is submitted as an eligibility document.
- d) “Name of Contract”. Indicate here the Nature/ Scope of the Contract for easier tracking of the entries/ representations. Example: “Supply and Delivery of Generator Set”

Bid Securing Declaration Form

[shall be submitted with the Bid if bidder opts to provide this form of bid security]

REPUBLIC OF THE PHILIPPINES)
CITY OF _____) S.S.

BID SECURING DECLARATION **Project Identification No.: *[Insert number]***

To: *[Insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
 - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of *[month]* *[year]* at *[place of execution]*.

*[Insert NAME OF BIDDER OR ITS AUTHORIZED
REPRESENTATIVE]*

[Insert signatory's legal capacity]

Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Contract Agreement Form for the Procurement of Infrastructure Projects (Revised)

[not required to be submitted with the Bid, but it shall be submitted within ten (10) days after receiving the Notice of Award]

CONTRACT AGREEMENT

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *[name and address of PROCURING ENTITY]* (hereinafter called the “Entity”) and *[name and address of Contractor]* (hereinafter called the “Contractor”).

WHEREAS, the Entity is desirous that the Contractor execute *[name and identification number of contract]* (hereinafter called “the Works”) and the Entity has accepted the Bid for *[contract price in words and figures in specified currency]* by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Agreement, *viz.*:
 - a. Philippine Bidding Documents (PBDs);
 - i. Drawings/Plans;
 - ii. Specifications;
 - iii. Bill of Quantities;
 - iv. General and Special Conditions of Contract;
 - v. Supplemental or Bid Bulletins, if any;
 - b. Winning bidder’s bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;

Bid form, including all the documents/statements contained in the Bidder’s bidding envelopes, as annexes, and all other documents submitted (*e.g.*, Bidder’s response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity’s bid evaluation;

- c. Performance Security;
- d. Notice of Award of Contract and the Bidder’s conforme thereto; and
- e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. **Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.**

3. In consideration for the sum of *[total contract price in words and figures]* or such other sums as may be ascertained, *[Named of the bidder]* agrees to *[state the object of the contract]* in accordance with his/her/its Bid.
4. The *[Name of the procuring entity]* agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

[Insert Name and Signature]

[Insert Name and Signature]

[Insert Signatory's Legal Capacity]

[Insert Signatory's Legal Capacity]

for:

for:

[Insert Name of Supplier]

[Insert Procuring Entity]

Acknowledgment

[Format shall be based on the latest Rules on Notarial Practice]

Omnibus Sworn Statement (Revised)
[shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other:]*

[If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

[If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other:]*

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 20__ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]
Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

